



**TOWN OF AMHERST, NY - AMHERST
CENTRAL PARK**

**FINAL SUPPLEMENTAL GENERIC
ENVIRONMENTAL IMPACT STATEMENT**

December 01, 2023

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Acronyms / Abbreviations

Acronym	Term
ac	acres
ACP	Amherst Central Park
BNHV	Buffalo Niagara Heritage Village
DSGEIS	Draft Supplemental Generic Environmental Impact Statement
ECDPW	Erie County Department of Public Works
EIS	Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FSGEIS	Final Supplemental Generic Environmental Impact Statement
GP	General Permit
IFC	International Fire Code
IPaC	Information for Planning and Consultation
LWRP	Local Waterfront Revitalization Program
NOI	Notice of Intent
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOS	New York State Department of State
NYSDOT	New York State Department of Transportation
OPRHP	NYS Office of Parks, Recreation and Historic Preservation
PUD	Planned Unit Development
RC	Recreation Conservation
SABAH	Skating Association for the Blind and Handicapped
SEQR(A)	State Environmental Quality Review (Act)
SF	square feet
SHPO	State Historic Preservation Office
SWPPP	Stormwater Pollution Prevention Plan
TIS	Traffic Impact Study
UPK	Universal Pre-Kindergarten
USACE / ACOE	United States Army Corps of Engineers
USFWS	US Fish and Wildlife Service
WPCF	Water Pollution Control Facility
ZBA	Zoning Board of Appeals



1 Introduction

The purpose of this environmental review is to evaluate adoption of a conceptual development plan for a planned unit development (“PUD”) for the conversion of an approximately 170.5± acre parcel located at 772 North Forest Road and 385 & 391 Maple Road (“Property”) to a community park to include cultural, recreational and civic public spaces (“Amherst Central Park”, “ACP”).

This document, in combination with the Draft Supplemental Generic Environmental Impact Statement (DSGEIS), accepted for public review by the Amherst Town Board, acting as the Lead Agency, on October 16, 2023, comprises the Final Supplemental Generic Environmental Impact Statement (FSGEIS) for the Park. The purpose of the FSGEIS is to incorporate all substantive comments received on the DSGEIS during the public comment period and to provide responses to them.

This FSGEIS and the associated appendices include modifications to the Amherst Central Park that are in response to comments received during the public comment period that ran from October 16 to November 20, 2023. Comments were received from Town Departments, interested/involved public agencies, and the public.

1.1 Summary of SEQRA Process to Date

Section 1 of the DSGEIS contains a description and chronology of the Planned Unit Development (“PUD”) Application and subsequent SEQRA process up to the October 16, 2023 acceptance of the DSGEIS for public review.

The period for public comments on the DSGEIS closed on November 20, 2023. The Town Board, as Lead Agency, is responsible for reviewing the FSGEIS. Next steps are summarized in Section 1.4.

1.2 Summary of Project

The Amherst Central Park PUD Conceptual Development Plan (sometimes referred to herein as the “PUD Plan”) is summarized below.

Using an existing entrance with access to North Forest Road and a proposed entrance to Sheridan Drive, the Plan proposes the following features moving from the southeast to the southwest portion of the parcel:

- Ice Ribbon and Ice Rink, approximately 25,000 SF
- Inclusive Playground, approximately 12,500 SF
- Splash Pad, approximately 6,100 SF
- Public Plaza, approximately 20,000 SF, including a Winter Market, approximately 5,000 SF (buildings)



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- Renovation of the former clubhouse into a Community Building, approximately 2,500 SF addition to existing (approximately 44,500 SF total at completion, including basement and all floors), to provide services including space for a Universal Pre-Kindergarten (UPK) program
- Outdoor Amphitheater, approximately 3,300 SF
- Community Theater Building, approximately 31,600 SF
- New building for the Buffalo Niagara Heritage Village Museum – approximately 36,000 SF, as well as relocation of historical buildings associated with the museum, totaling approximately 20,000 SF
- Enhancement of an existing wetland as a decorative pond and associated onsite mitigation (if required) and filling or modification of non-regulated wetlands
- Ancillary park improvements such as playgrounds, gardens/greenhouses, pedestrian access/pathways, educational kiosks and access drives as shown conceptually on the PUD Plan
- Construction of required mechanical buildings, public restrooms, parking lots, and supportive utilities such as storm sewers and stormwater management features, sanitary sewers, water, fiber optic cables, electric and natural gas service

The northern portion of Amherst Central Park is planned for natural-passive recreation along with preservation of existing ponds, wetlands and hardwood areas. From the southern portion, moving to the north, a proposed main loop drive provides access to features such as maintained trails and bike paths, natural playgrounds, and a variety of community gardens and tree plantings.

The Applicant anticipates that the implementation of the proposed Amherst Central Park will occur over the course of the June 2024 through June 2034 time period. The southern portion of the Park, which will have the most intensive development with cultural, recreational and civic facilities, will be completed first.

1.3 Updated Project Analyses and Information

The Applicant provided updates to various studies and analyses to support the proposed Amherst Central Park. A listing of the supporting studies and analyses follows. Specific comments and responses on those studies are presented in Section 3 by subject matter/topic.

Transportation: An updated Traffic Impact Study (“TIS”) prepared by C&S Engineers, Inc. was provided to the Town on October 14, 2023.

Wetlands: The wetland delineation maps prepared by Earth Dimensions, Inc. were revised and provided to the United States Army Corps of Engineers (USACE) on November 21, 2023. The maps were revised to include a culvert crossing for Stream 2. The Stream 3 label was removed from the map and replaced with the ID of “Wetland 11” per discussions with the USACE. Wetland 11 (0.303 ac) and Wetland 12 (0.17 ac) will be altered for the theater/roadway.



The jurisdictional determination for the waterbodies onsite is currently outstanding as of the date of this report.

Local Waterfront Revitalization Program: The Town will follow the requirements of Chapter 205: Local Waterfront Revitalization Program (LWRP) during the Facility Improvement Plan process.

1.4 SEQRA Process Moving Forward

As Lead Agency, the Amherst Town Board is charged with the preparation of the FSGEIS. The Town Board is responsible for:

1. Notifying the involved and interested agencies, the Town Supervisor, and the applicant that the FSGEIS has been issued;
2. Sending the FSGEIS to the NYS Department of Environmental Conservation (NYSDEC); and
3. Submitting the Notice of Completion in the NYSDEC Environmental Notice Bulletin.

No sooner than 10 days and no later than 30 days after completion of the FSGEIS, the Lead Agency is required to adopt a Findings Statement. The Findings Statement affirms that all SEQR requirements for making decisions on an action have been met and states the Lead Agency's findings. A positive findings statement means that, after consideration of the final FSGEIS, the project or action can be approved, and the action chosen is the one that minimizes or avoids environmental impacts to the maximum extent practicable. If the action cannot be approved based on analyses in the final FSGEIS, a negative findings statement must be prepared, documenting the reasons for the denial.



2 Summary of Comments Received

2.1 Comment Summary and Description

Comments were received from various Town of Amherst Departments, regional agencies, and the public. Comments were reviewed and categorized according to their main concerns. Each comment was given an identification (ID) of a letter followed by a 3-digit number. Comments received by agencies are identified by an “A”, comments from the Town with a “T”, comments from the public with a “P”, and comments received from informal outlets such as The Amherst Bee are identified with an “I”. Comments are numbered in the order in which they were received. Appendix A.2 provides a summary of all the received comments and the sections of this FSGEIS that the comment applied to. Appendix A.2 also lists comments by commenter ID number and by commenter last name, respectively. Within the text, applicable excerpts of comments are referenced in each section of the document. At the end of the excerpt the comment ID is referenced as, e.g. “A-001” followed by the date the comment was received and name of the individual commenter.

The Town received comments on the DSGEIS, as well as general comments on the underlying PUD Application. The SEQRA comments to the DSGEIS are addressed in Section 3.0, followed by responses to comments made to the PUD Application in Section 4.0



3 Response to SEQR Comments

3.1 Overall Project Statements

3.1.1 AGENCY COMMENTS

1. The New York State Department of Environmental Conservation (NYSDEC) has reviewed the Draft Supplemental Generic Environmental Impact Statement (DSGEIS) prepared for the above-referenced project. The DSGEIS appears to cover all of the environmental issues and impacts that are of a concern to this agency. (A-005, Denk, NYSDEC, 11/20/2023) The NYSDEC letter included comments on other substantive areas, which were separated into comments A-008 through A-011, which are addressed in the following sections.

Comment	Section
A-006	3.9.1
A-007	3.9.1
A-008	3.9.1
A-009	3.9.1
A-010	3.8.1
A-011	3.1.1

Comment acknowledged.

2. NYSDEC encourages the Town to coordinate with all involved and interested agencies as future projects are better defined. Thank you for the opportunity to comment on the DSGEIS. (A-011, Denk, NYSDEC, 11/20/2023).

Comment acknowledged.

3.1.2 PUBLIC COMMENTS

1. This plan should NOT be approved by the Planning Board due to the numerous illegalities and deficiencies outlined herein. Thank you in advance for considering my comments. (P-032, Snyder-Haas, Public, 11/16/2023).

Comment acknowledged.

3.2 SEQR Process

3.2.1 PUBLIC COMMENTS

1. We are the attorneys for Concerned Residents for Amherst Central Park, a group of Amherst residents advocating for the promise of a world-class Amherst Central Park.



It was noted today that the DEC's Environmental Notice Bulletin published a SEQRA "negative declaration" for the SEQRA review of the Amherst Central Park Conceptual Development Plan Planned Unit Development (meaning there are no adverse environmental impacts). See https://www.dec.ny.gov/enb/20231011_not9.html. This is contrary to the "positive declaration" (meaning there may be adverse environmental impacts) that appears in the meeting minutes for the October 2 Town Board meeting (<https://amherstny.iqm2.com/Citizens/FileOpen.aspx?Type=12&ID=3628&Inline=True>). One or the other is in error and you are the contact person identified in the DEC notice. Please clarify what SEQRA determination was reached and which record will be corrected. Thank you. (P-001, Kanyuck, Knauf Shaw, 10/12/2023).

The October 11, 2023 issue of the Environmental Notice Bulletin mistakenly listed the Amherst Central Park project located in the Town of Amherst as a Negative Declaration. The ENB form that [was] submitted Wed. Oct. 4, documents a notice for a Positive Declaration (for a Supplemental GEIS).

This was republished on October 18th as a correction by the ENB.

3.3 PUD Process

3.3.1 PUBLIC COMMENTS

1. Although the DEIS purports to preserve 115 acres of the mid- to northern section of the parcel as natural space, Section 6.2 reads: "The establishment of thresholds for the future environmental review of related improvements in the Amherst Central Park that are not set forth in Appendix A is an important component of this SGEIS. Examples of possible future related actions (aka improvements) may include development in the northern section of the Property in a manner that is not entirely consistent with the approved Conceptual Development Plan in Appendix A. This may occur given that the layout of the improvements as depicted on the Conceptual Development Plan is conceptual in nature. Instead, the layout as depicted on the Conceptual Development Plan is meant to depict the anticipated components of the Amherst Central Park and the maximum potential development that could occur without the need for additional environmental review(s) pursuant to SEQRA. The precise layout of improvements will be the subject of an ACP Application process for this Town-owned PUD. The future improvements will be reviewed in accordance with the process established in the PUD application." The following "process" that is outlined significantly limits environmental review of the Town's future actions. This makes one wonder about the Town's true intentions for the northern section of the property. If the Town is pledging to keep 115 acres undeveloped, why is this pledge not cemented in the document, with no future "improvements" of any kind banned in this area? (P-031, Snyder-Haas, Public, 11/16/2023).

As noted in the DSGEIS, the northern portion of the Property is slated for natural-passive recreation along with preservation of existing ponds, wetlands and hardwood areas. In general, the Conceptual Plan also provides for ancillary park improvements such as



playgrounds, gardens/greenhouses, pedestrian access/pathways, educational kiosks and access drives as shown conceptually on the PUD plan. Other proposed improvements would be subject to the ACP Facility Improvement Review process.

3.4 Alternative Analysis

3.4.1 PUBLIC COMMENTS

1. Section 3.4 for Alternative Sites states: "While some of the proposed improvements in the Amherst Central Park could be provided in other areas of the Town, there is no other parcel or combination of parcels owned by the Town that would offer a suitable combination of location, existing natural beauty, overall location, and potential for a cohesive, comprehensive park plan that would be comparable to the proposed Amherst Central Park. This Alternative is therefore not further evaluated in this DSGEIS". This is also patently false. (P-014, Snyder-Haas, Public, 11/16/2023).

Comment Acknowledged. Also see response to Comment #2 in this section.

2. The Town in fact alienated 90 acres parkland across Maple Road on Audubon and has already allowed the construction of a large medical office complex on Audubon. The 90 acres included only three holes of the current municipal golf course on Audubon, leaving other ample alienated land. In prior park proposals that were put before the Central Park Task Force, Audubon was considered as the "active" recreation portion of a park that spanned both the Audubon and Westwood properties, with extensive development of Audubon that included housing and commercial uses anticipated. Audubon fronts a major road on Maple that is not nearly as heavily trafficked as Sheridan Drive, is close to the State University at Buffalo North Campus, and is not surrounded by residential homes. The PUD application should include an extensive consideration of this alternate site, particular for the theater, universal and prekindergarten programs and relocation of Buffalo Niagara Heritage Village (if this is to be seriously entertained at all, considering the proposed cost in excess of \$7 million with little chance of recouping any financial benefit). (P-015, Snyder-Haas, Public, 11/16/2023).

The North Town Recreation Center and Audubon Golf Course will continue to be utilized for recreational purposes and as a golf course for the foreseeable future.

3. Also, the Buffalo Niagara Heritage Village is located next to other Town-owned land. Its expansion in its current, much more appropriate setting should be considered. (P-016, Snyder-Haas, Public, 11/16/2023).

The Town of Amherst currently has budget lines that support the Buffalo Niagara Heritage Village including a maintenance budget and capital improvements budget. Relocating the Buffalo Niagara Heritage Village provides opportunity for consolidation of maintenance and capital improvement budgets while providing a centralized location within the Town to promote increased accessibility to Town Residents.



4. Further, Section 3.5 for Alternative Uses states: “As set forth in the GEIS, the full development of the Property for mixed use commercial and/or residential purposes would result in significant impacts related to traffic, utility infrastructure, and community character. Industrial uses of the site would result in similar impacts. A significantly less intense residential development would reduce traffic and infrastructure impacts relative to the Mixed Use Alternative but would be inconsistent with existing zoning and the Town Comprehensive Plan. None of these alternative uses would meet the Purpose and Need identified in this SGEIS. This Alternative is therefore not further evaluated in this DSGEIS”. The foregoing posits a false choice – the massive, totally inappropriate Mixed Use Alternative or the Park Concept Plan. How about a park that complies with the applicable zoning, with the elements that do not moved to an appropriate location? (P-017, Snyder-Haas, Public, 11/16/2023).

As the commenter alludes, the original Mixed-Use Alternative was ultimately denied based on the impacts cited. The point of the referenced text was to screen additional alternative uses of the property for further evaluation, including industrial and less intense residential development. As noted, these Alternatives failed the first screen based on inconsistency with zoning and the Town Comprehensive plan as well as failure to meet the identified Purpose and Need. The Town believes that the proposed uses are consistent with the intents and purpose of the recreation conservation zoning district.

5. How about making Westwood the municipal golf course (which at least would be revenue-producing as opposed to the museum) as part of a larger public park with the other park elements on Audubon? (P-018, Snyder-Haas, Public, 11/16/2023).

The Town is committed to the mixture of uses shown on the Conceptual Development Plan, as developed through a 5+ year planning process. The Town is also committed to maintaining golf activities at Audubon for the foreseeable future.

6. At the Central Park Task Force meetings, doing a cost/benefit analysis for the alternative was proposed but never followed, and meetings ceased abruptly with no follow through, the concept plan now pitched apparently hatched by the Town Board and developers. Members of the Task Force were asked to submit comments and did so, with Supervisor Kulpa telling those members that he “was not even going to pretend” that he shared those with the architectural firm of Dover Kohl. Although the DEIS purports to state that public engagement was robust, it only looks that way on paper. A review of the Task Force meetings would show that member ideas that did not comport with what had already been drawn up were dismissed (and the plans that were drawn up then differ markedly from what is now proposed, which had no input from the long-defunct Task Force). (P-019, Snyder-Haas, Public, 11/16/2023).

The Town has considered input from a variety of stakeholders, including the Task Force members. Based on that input, the Town has determined that acquisition of the property and development for recreation/education/civic use will benefit the community.



3.5 Zoning

3.5.1 PUBLIC COMMENTS

1. Here are my comments in opposition to aspects of the proposed Planned Unit Development (PUD) for Amherst Central Park and its Draft Environmental Impact Statement (DEIS).

First and foremost, this proposal is defective because it states that no change to the current recreation conservation (RC) is necessary. Section 1.2.1 states: “The Property envisioned for the Amherst Central Park is zoned as Recreation Conservation (RC), a district whose purpose is to provide for public, private, and civic uses related to recreation and conservation. Planning for the Amherst Central Park is specifically focused on supporting these uses. The Town’s Bicentennial Comprehensive Plan also recommends the Property be used for recreation, open space and greenways. The Property is a component of the LWRP, given its location along Ellicott Creek. The Amherst Central Park is a featured project for recreation and waterfront enhancement in the Town”. Section 4.2 states, under the heading “Consistency with Community Character”, states that per the Town’s Comprehensive Plan, Land Use and Development section 6 identifies the Property as Recreation, Open Space and Greenways”; “the Property is consistent with the Land Use in the Comprehensive Plan”; and “the Property is zoned Recreation Conservation [and] the Amherst Central Park will not be subject to a rezoning or Comprehensive Plan amendment. The foregoing is patently false. (P-011-012, Snyder-Haas, Public, 11/16/2023).

The Town believes that the proposed uses are consistent with the intent and purpose of the Recreation Conservation zoning district. The open uses associated with the Buffalo Niagara Heritage Village (BNHV) living museum will be approved as part of the PUD process.

2. The RC zoning district does not include the construction of an indoor theater in a residential neighborhood, let alone one over 30,000 square feet with extensive pavement for parking. Nor does it include the construction of a museum building of over 30,000 square feet and the displays of livestock and poultry that are slated for the proposed relocation of Buffalo Niagara Heritage Village. It certainly does not include the construction of a new addition for a universal prekindergarten program. While all potentially laudable goals, none fall within the RC zoning code or the identification of the property for “recreation, open space and greenways” as envisioned in the Comprehensive Plan. None of these is consistent with a true park. So, this application cannot go forward without addressing rezoning, which would not be consistent with the Comprehensive Plan in any event. (P-013, Snyder-Haas, Public, 11/16/2023).

Under the provision of the PUD the Town Board may elect to adjust some provisions of the zoning to permit development in accordance with the intent and goals for the Amherst Central Park. The Town believes that the proposed uses are consistent with the intent and purpose of the recreation conservation zoning district.



3.6 Transportation

3.6.1 AGENCY COMMENTS

1. Traffic Impact Study Comments

- NYSDOT policy requires developments to utilize minor street access points when they are available. After reviewing the TIS and the proposed internal circulation patterns, an entrance to the Amherst Town Park will not be permitted on Sheridan Drive (NY 324). Additional access points should be considered along Frankhauser Road and North Forest Road. Additional access points along the local road network will provide safer access points to the park and the state/county highway system via existing 3-color traffic signals at Frankhauser Road/Sheridan Drive, North Forest Road/Sheridan Drive and North Forest/Maple Road.
- Based on the signal warrant analysis provided in the TIS, a signal will not be considered at the intersection of Fenwick Road and Sheridan Drive. The analysis did not identify any MUTCD warrants that would be met based on current or projected traffic volumes.
- After corrections to the Synchro model are made, tables 2, 3, and 7 of the TIS will need to be updated.
- Section 4: The Westwood Mixed Use development will not be constructed, and therefore has no part in the analysis for this location.
- Table 7 (continued) uses lower case letters for LOS for NYS Route 324 at Fenwick Road. For consistency purposes all LOS should be capital letters.
- Based on the area's development potential, further justification for the growth rate reductions of 1%-2% will need to be provided. (A-001, Albayed, NYSDOT, 11/22/2023).

The Town will work with NYSDOT on providing acceptable access and driveway locations to and from the Amherst Central Park. Final locations are typically identified during the Facilities Improvement plan review. There were no growth rate reductions made to the future analysis. C&S did not use a growth rate based on the GBNRTC regional model, which also took into consideration surrounding development in the Amherst area. Further pedestrian and bicycle access will be developed in consultation with NYSDOT and ECDPW.

2. Synchro Analysis Comments

Sheridan & Harlem

- Signal phasing will need to be corrected such that phase 4 of this signal is a pedestrian exclusive phase to cross Sheridan Drive on the western side of the intersection. Phase 1 is



a westbound left/thru with the northbound right turn overlap. Please correct the phasing of this signal.

- The northbound approach on Harlem Road is only two lanes that widens out to four lanes at the intersection. The left lanes should be modeled as storage. Not showing this storage limitation will greatly affect how queueing and storage affects traffic.
- The signal detection should be changed from synchro default to two 20' loops with a 10' gap allowing for 50' of detection near the signal.
- Pedestrian cross times will be required for phases 2 and 4 of the signal. Phase 2 has 35 seconds of pedestrian clearance with 7 seconds of walk and phase 4 has 27 seconds of pedestrian clearance with 7 seconds of walk.

Sheridan & I-290

- The I-290 Westbound off ramp is only one lane coming off the I-290 that widens out to 3 lanes closer to the intersection. Change the model to have the left lane and right lane to be modeled as storage lanes.
- The signal detection model should be two 20' loops with a 10' gap extending 1' in front of the stop bar.
- The existing model shows 3 westbound travel lanes on Sheridan Drive west of Frankhauser. However, at Frankhauser, there are only 2 westbound lanes with the third lane not opening until after Sunrise. The model will need to be corrected to accurately depict the existing condition.
- Pedestrian cross times will be required for phases 2 and 6 of the signal. Phase 2 has 15 seconds of pedestrian clearance with 7 second walk and phase 6 has 19 seconds of pedestrian clearance with 7 seconds of walk.

Sheridan & Frankhauser

- The signal detection model should be two 20' loops on the Frankhauser approach. There is currently no signal detection on the Sheridan Drive approaches.
- Pedestrian cross times will be required for phases 1 and 3 of the signal. Phase 1 has 17 seconds of pedestrian clearance with 7 seconds of walk and phase 3 has 27 seconds of pedestrian clearance with 7 seconds of walk.

Sheridan and North Forest

- The signal detection model should be two 20' loops with a 10' gap between them in each lane.



- Pedestrian cross times will be required for phases 2,4,6, and 8 of the signal. Phase 2 has 21 seconds of pedestrian clearance with 7 seconds of walk, phase 4 has 32 seconds of pedestrian clearance with 7 second walk, phase 6 has 32 seconds of pedestrian clearance with 7 seconds of walk, and phase 8 has 28 seconds of pedestrian clearance with 7 seconds of walk.

Synchro Build Conditions

- All Synchro comments above will need to be applied to the build conditions model. (A-004, Albayed, NYSDOT, 11/22/2023).

These changes will be made in the Synchro model; however, based on review by the Town's traffic consulting engineer, they will not result in any changes that impact the conclusions of the traffic analysis and impacts.

3. Erie County Department of Public Works has reviewed the conceptual plan for the proposed Amherst Central Park located at 772 North Forest Road (CR-294) and 385, 391 Maple Road (CR-192) in the Town of Amherst, and has the following comments:
 - Include a left turn lane on North Forest Road (CR-294) at the driveway to the Park.
 - Realign the existing curb and drainage structure on the west side of North Forest Road (CR-294) to accommodate the proposed left turn lane.
 - A stormwater management report and drainage plans shall be provided for our review. Stormwater drainage for this site shall be designed in accordance with the New York State stormwater management design manual and local Town requirements. (A-013, Hacker, Erie County Department of Public Works, 11/22/2023).

The Town will work with NYSDOT, ECDPW, as well as the Town Traffic Safety Board on the configuration of the intersection, including a potential left turn lane at North Forest Road. Stormwater design will meet regulatory requirements.

4. Further review by this department will commence upon receipt of a stormwater management report and final design drawings. (A-016, Hacker, Erie County Department of Public Works, 11/22/2023).

Comment acknowledged.

3.6.2 PUBLIC COMMENTS

1. Safety at the proposed Sheridan Drive entrance/exit - The Sheridan Drive entrance/exit is near the planned theatre and its parking lots, and it will also serve as a park entrance/exit. Due to the heavy traffic on Sheridan Drive and the bicyclists, pedestrians and jay-walkers, this entrance/exit has the potential for serious accidents. It will be a dangerous entrance/exit, and it should be removed from the Concept Plan. Another entrance/exit along Sheridan Drive will be just as



dangerous and should not be added to the Concept Plan. The theatre and its parking lots can be moved to a safer location within the park. (P-002, Boehm, Public, 11/8/2023, resubmitted 11/27/2023).

The access point at Sheridan Drive provides two forms of access. This is particularly important from a fire safety perspective. The Snyder Fire Department will have a primary and secondary access in the event of an emergency to access the Amherst Central Park as per NYS code. In addition, as the NYSDOT is responsible for Sheridan Drive, the Town will be collaborating with the NYSDOT on park access points. Any access to Sheridan Drive will be reviewed by the NYSDOT for approval, with consideration for impacts to operations and safety.

2. Pedestrian/bike entrance/exit on Frankhauser Road - This entrance/exit also has the potential for serious accidents. It is located at the beginning of Fairways and the bend in Frankhauser Road, where there is considerable vehicular traffic. This entrance/exit is especially dangerous for children, pedestrians and bicyclists, and it should be removed from the Concept Plan. (P-003, Boehm, Public, 11/8/2023, resubmitted 11/27/2023).

One intent of the Amherst Central Park design is to provide access to the adjacent/surrounding selected neighborhoods. All access points will be further analyzed during any Facilities Improvement Review. Further analysis will include ensuring there is adequate sight distances for vehicles and buses to safely turn into and out of the park driveway. Infrastructure will be in place for the safety of all modes of transportation leading up to the park entrances/exits, and may be in the form of turn lanes and sidewalk.

3. The construction of a paved roadway around the Central Meadow - The Central Meadow is a natural preserve filled with trees and paths. There is no need for an expensive paved roadway for vehicular traffic around the Central Meadow. This paved roadway should be removed from the Concept Plan. (P-004, Boehm, Public, 11/8/2023, resubmitted 11/27/2023).

The paved roadway within the central portion of the site will be considered a park road and not a public local road. The park road will be closed off to the public and will be opened intermittently for public events.

4. Safety? The potential pitfalls are again obvious. The slick, feel-good language in the PUD, while purporting to be about public needs and wants, is really about the need to satisfy developers. The inclusion of a pedestrian entrance off Frankhauser, where there is a blind curve, is tone-deaf to pedestrian/bicyclist safety. The preferred set-up for any park on Westwood is to limit vehicular access to the existing North Forest/Sheridan with plentiful parking available, and possibly a parking lot entrance on the Maple side, with no vehicles allowed into the interior of the site. Although the PUD is silent on the effects on wildlife, once traffic is allowed onto the site, it would never be the same, eliminating its natural character, which this PUD ostensibly seeks to protect. (P-021, Snyder-Haas, Public, 11/16/2023).



Any pedestrian entrance to Frankhauser Road will be designed for safe ingress/egress. The Amherst Central Park development plan proposes active land uses for the southern section to limit vehicle traffic in the central and northern sections of the Park.

5. Per the DEIS, a collision analysis was conducted by C&S to evaluate the collision history of signalized intersections of Sheridan Drive at Frankhauser Road and Sheridan Drive at North Forest Road. Collision data was Amherst Central Park Affected Environmental Resources, Impacts, and Mitigation October 12, 2023 4.14 compiled, from January 2018 through December 2022. As detailed in the TIS, a total of 79 collisions were documented with 17 collisions at the Frankhauser Road intersection and 62 collisions at the North Forest Road intersection. Of these, 39% were reportable with injuries. Despite the significant amount of accidents identified, this plan notes significant increased traffic, largely due to the non-zoning appropriate uses. "Table 6 Trip Generation Park Facility ITE Land Use Code PM Peak Trips Saturday Midday / Peak Trips
Entering Exiting Total Entering Exiting Total Park 411 Public Park 18 15 33 33 34 61 Community Building 495 Recreational Community Center 40 46 86 36 31 67 Theater N/A 70 17 87 70 17 87 Ice Rink/Ribbon 465 Ice Skating Rink 31 26 57 60 53 113 Peak Hour Trips 159 104 263 200 128 328 Trip distribution was based on existing traffic patterns in the study area. The main entrance of the Park is proposed to be off of Sheridan Drive, across from Fenwick Road. It was assumed the majority of the trips (70%) will be entering and exiting from the main entrance, and 30% will use the entrance on N. Forest Road". As previously noted, Maple Road is significantly less trafficked than Sheridan. (P-024, Snyder-Haas, Public, 11/16/2023).

Also, the proposal notes that a traffic signal should be considered at the proposed park entrance across from Fenwick "at the Amherst Central Park driveway on Sheridan Drive due to the long delays and vehicle queues expected at the site driveway and at Fenwick Road located across from the driveway." There are already long queues at Sheridan and Frankhauser where there is a traffic signal, which would be very close to any traffic signal at Fenwick – the plan does not indicate whether a signal at the park entrance would mean the removal of the signal at Frankhauser, which would of course have significant negative effects for the residents utilizing this existing light. (P-025, Snyder-Haas, Public, 11/16/2023).

Any decision on points of access along Sheridan Drive or modifications to signalization are under the permit authority of the NYSDOT. The Town will work closely with the DOT on implementation of the points of access along Sheridan Drive.

3.7 Historic and Archaeological

3.7.1 AGENCY COMMENTS

1. Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that



may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617). Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project. Project Number: 23PR09036. (A-003, SHPO, 11/22/2023).

Comment acknowledged.

3.7.2 PUBLIC COMMENTS

1. The transfer of the Buffalo Niagara Heritage Village - The Buffalo Niagara Heritage Village has a lovely home on Tonawanda Creek Road. Moving the old wooden buildings from this site and constructing a new Heritage Village Museum will be very expensive. This is an unnecessary financial burden for taxpayers, and it should also be removed from the Concept Plan. (P-005, Boehm, Public, 11/08/2023, resubmitted 11/27/2023).

Comment acknowledged. The Town of Amherst currently has budget lines that support the Buffalo Niagara Heritage Village including a Maintenance Budget and Capital Improvements Budget. Relocating the Buffalo Niagara Heritage Village provides opportunity for consolidation of Maintenance and Capital Improvement Budgets while providing other benefits to the facility and promote increased accessibility to Town Residents.

3.8 Human Health

3.8.1 AGENCY COMMENTS

1. Section 4.7.1, Existing Conditions: This section states that “A comprehensive environmental assessment of the Property revealed the presence of contamination in soils at the site that exceed New York State Department of Environmental Conservation (“NYSDEC”) Soil Cleanup Objectives for commercial, passive and active remediation land use.” This statement is inaccurate, investigations to characterize potential impacts to environmental media have been limited and focused on a few former golf course holes. This statement should be revised to accurately reflect the extent of the completed environmental assessment. (A-010, Denk, NYSDEC, 11/20/2023).

An environmental assessment of the Property conducted by a prior owner revealed the presence of contamination in soils at the Site that exceed New York State Department of Environmental Conservation (“NYSDEC”) Soil Cleanup Objectives for commercial, passive and active remediation land use. The Town will be executing a regulatory Consent Order with the NYSDEC to conduct ongoing investigations and remediation consistent with the Town’s construction schedule under the oversight of the NYSDEC.



3.8.2 PUBLIC COMMENTS

1. The removal of toxic waste from the site - A few years ago, the soil on this site was tested, and harmful chemicals were found. How and when is this remediation taking place? Thank you for addressing these matters. (P-006, Boehm, Public, 11/8/2023, resubmitted 11/27/2023).

The Town will follow NYSDEC Requirements. The previous owner terminated its application into the Brownfield Program with NYSDEC in April of 2023. Thereafter, the Town commenced communications with NYSDEC to test and remediate soils exceeding NYSDEC standards. Remediation will commence in 2024.

3.9 Water Resources

3.9.1 AGENCY COMMENTS

1. Section 2.3 Description of Required Approvals and Permits:
 - a. If stormwater outfalls are to be connected to Ellicott Creek (water classification and standard of B, pursuant to 6 NYCRR Part 837, Item 25), a Protection of Waters Permit (Article 15, Title 5 of the Environmental Conservation Law) will be required from NYSDEC.
 - b. If any of the project activities will involve land disturbance of 1 acre or more, the project sponsor, owner or operator is required to obtain a State Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001). This General Permit requires the project sponsor, owner or operator to control stormwater runoff according to a Stormwater Pollution Prevention Plan (SWPPP), which is to be prepared prior to filing a Notice of Intent (NOI) and prior to commencement of the project.

The Town of Amherst is designated as an MS4 community. The project sponsor, owner or operator of a construction activity that is subject to the requirements of a regulated, traditional land use control MS4 shall have their SWPPP reviewed and accepted by the MS4 community. The "MS4 SWPPP Acceptance" form must be signed by the principal executive officer or ranking elected official from the MS4 community, or by a duly authorized representative of that person, and submitted along with the NOI, to the Department at NOTICE OF INTENT, NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505, telephone: 518/402-8111 to receive Department approval before construction commences. (A-006, Denk, NYSDEC, 11/20/2023).

Comment noted. The Project will comply with regulatory requirements.

2. Section 4.3, Impacts Assessed as None/Small, Flood Hazard Zones:
 - a. Flood Control: The portion of Ellicott Creek within the proposed work area is part of the Ellicott Creek Flood Control Project. An Article 16 Flood Control Land Use Permit from the Department and a Section 408 Permission may be required for work near or within the creek.



b. Floodplain Management: Any work done in a floodplain will require a Floodplain Management Permit which can be obtained through the Town of Amherst Floodplain Manager. Please note that the proposed work area includes both floodplain and floodway, the latter of which is more restrictive. Also, projects are state-financed, NYCCRR Part 502 may apply and must meet all FEMA floodplain management criteria. (A-007, Denk, NYSDEC, 11/20/2023).

Comment noted. The Project will comply with regulatory requirements.

3. Section 4.5.1, Surface Waters Existing Conditions:

a. Freshwater Wetlands: There are no NYSDEC Regulated Freshwater Wetlands mapped on the property. Prior to undertaking a project, a Request for Wetlands Determination, Verification, or Delineation should be submitted to NYSDEC to confirm that the wetlands are not jurisdictional.

b. Freshwater Mussels: Ellicott Creek is identified as having New York State listed threatened and endangered mussel species and critically imperiled (S1) and imperiled (S2) mussel species. If the proposed project involves any activity within or adjacent to Ellicott Creek, additional consultation with NYSDEC will be necessary to determine if a freshwater mussel survey is required. (A-008, Denk, NYSDEC, 11/20/2023).

Comment noted. The Project will comply with regulatory requirements.

4. Section 4.5.2, Surface Waters Potential Impacts: Ellicott Creek, has a water classification and standard of B, pursuant to 6 NYCRR Part 837, Item 25. Therefore, any physical alteration (i.e. land clearing, filling, drainage pipe/ditch installation, etc.) to the bed or banks (within 50 feet of the stream) will require an Article 15, Title 5, Protection of Waters Permit from this Department. (A-009, Denk, NYSDEC, 11/20/2023).

Comment noted. The Project will comply with regulatory requirements.

3.9.2 PUBLIC COMMENTS

1. The proposed benefits also tout the Town of Amherst Local Waterfront Revitalization Program, which “celebrates the beauty and uniqueness of the extensive waterfront along Tonawanda Creek/Erie Canal and Ellicott Creek, and the local history and the community’s desire to build upon existing strengths for the future”, with the Town identifying the following goals for its local waterfront revitalization plan: “increase public access to Town waterways, enhance amenities at existing public parks”.

Yet, for the construction of the non-zoning appropriate theater, the Town plans on disturbing the waterway running across the southern portion of the property, acknowledging that “the canal feature located in the southwestern portion of the Property and identified in the Amherst Central Park Plan for expansion into a larger pond may be subject to federal and state permitting if that water is connected to other waters” and “the outlet of the canal feature and discharge location of those waters would be identified to determine any regulatory requirements, which could include



enhancement of other wetlands onsite, offsite mitigation, or other mitigation as required by the ACOE and/or NYSDEC". (P-022, Snyder-Haas, Public, 11/16/2023).

The majority of wetlands/waterbodies will remain untouched (10.09 acres) with the exception of the tributary within the lower southern portion of the site. This tributary known as UNT is 0.17 acres and will be altered for the proposed theater and main roadway. The Town will alter this tributary to accommodate proper stormwater run-off. Of the 10.26 acres of wetlands on site, 0.17 acres will be altered. Further, The Town will secure all necessary permits with the federal, state and county agencies prior to construction.

2. Furthermore, Westwood has no navigable sections of Ellicott Creek, but Audubon does – which one would think this would be a major consideration for considering Audubon as an alternate site. (P-023, Snyder-Haas, Public, 11/16/2023).

In either location, the Town will not be altering the Ellicott Creek corridor. There will be no proposed foreshore features.

3.10 Sanitary Sewer

3.10.1 PUBLIC COMMENTS

1. Additionally, per Section 4.3: "The Amherst Central Park improvements are estimated to generate up to 80,000 gallons/day of sanitary wastewater, primarily from recreational water features, i.e. splash pad spray and backwash water for swimming pool. Wastewater will be treated at the Town of Amherst Water Pollution Control Facility (WPCF), which has existing capacity to convey and treat these uses. In contrast, projected average usage for the Mixed Use Alternative in the GEIS, 245,000 gallons/day, was approximately three times greater than the Park average use, with peak hourly flow rates up to approximately 1,000,000 gallons/day. The projected sewer flow rates exceeded the sanitary system flow capacities and were a key basis for the denial of the Westwood Neighborhood (Mixed Use) application." Given that the mixed use alternative was so massive and incompatible with the surrounding neighborhood, one-third of its proposed water usage remains a very high amount. (P-029, Snyder-Haas, Public, 11/16/2023).

Sewer capacity was one of many issues that formed the basis of denial of the proposed Westwood mixed use project. The proposed mixed use project was to be constructed within the wet weather constrained West Side Interceptor system. As such, peak flows generated by the development would have potentially exacerbated or extended sanitary sewer overflows caused by wet weather events. It is anticipated that the peak flows generated by the recreational facilities detailed in the proposed Amherst Central Park plan will occur during dry weather patterns (consistent with supporting outdoor activities) which will correspond to lower flow periods in the West Side Interceptor. In summation, the proposed 80,000 gallons per day sewer demand is not anticipated to cause capacity issues and hence is not at all similar to the sewer capacity issues potentially generated by the proposed Westwood mixed use project.



3.11 Noise, Odor, and Light

3.11.1 PUBLIC COMMENTS

1. The plan also notes: “As part of the design plan for the Amherst Central Park, it is proposed that the Buffalo Niagara Heritage Village Museum would relocate its outdoor living displays to the Amherst Central Park. These displays may include livestock and poultry which could produce odors and noise. The Town will place these displays approximately 150 feet from the nearest occupied structures to the west of the Park and will maintain them such that potential impacts due to odors and noise are anticipated to be small.” It should be obvious that agricultural displays should not be located behind residential homes. The museum currently has an appropriate location in a more agricultural setting, with plenty of nearby Town-owned land for its expansion. (P-030, Snyder-Haas, Public, 11/16/2023).

Comment acknowledged. Operational limitations including limiting hours of outdoor access, number of animals and good sanitary management practices will be employed for the living displays to mitigate potential for odor and noise nuisances.

3.12 Consistency with Community Plans

3.12.1 PUBLIC COMMENTS

1. The project benefits extolled in Section 4.2 also include: “Develop new recreation amenities and opportunities for residents with a focus on expanding trails and opportunities for walking and biking; “pursue opportunities to create new sidewalks and pathways that connect the places people live, work, shop, and play in Amherst”; “seek to enhance opportunities for residents to safely walk and bike for exercise, leisure, and transportation purposes”.

Connectivity? The proposed pedestrian/bike paths on Westwood do not connect to anything. Despite trail connectivity being the top public desire per the recreation survey the Town did, the Town has been totally non-responsive to it. The benefits of extending the Ellicott Creek Path that currently dead-ends at the Audubon Golf Course across Maple and through Westwood, and then to Amherst State Park, Glen Park and the Village of Williamsville are numerous and obvious. Yet this plan focuses on vehicular traffic moving into unspoiled greenspace. While Buffalo has eliminated traffic on its “ring road” in the crown jewel of Delaware Park, the Town seeks to create a traffic circle in the middle of Westwood, intersecting with pedestrian paths. (P-020, Snyder-Haas, Public, 11/16/2023).

Connectivity for pedestrian and bicycle circulation will be explored through the ACP Facility Improvement Review process as New York State Department of Transportation (NYSDOT)/Erie County Department of Public Works (ECDPW) permits are considered. There are no plans for a traffic circle in the middle of the Amherst Central Park, only a Park drive for maintenance purposes and so that users can access park features such as playgrounds.



3.13 Cumulative Impacts

3.13.1 PUBLIC COMMENTS

1. Section 3.3 of the GEIS identifies several of the problems found with the previous mixed use development for which a re-zone was denied, including insufficient sanitary sewer capacity and significant constraints on increasing that capacity; traffic impacts associated with new development in an area not previously planned for such development; extensive new roadway and signal construction to address traffic impacts; impacts associated with wetlands, hardwood swampland, floodplains, and Ellicott Creek; conversion of land zoned RC to higher-density uses; Incompatibility of the proposed uses with surrounding neighborhoods; loss of open space; and a protracted construction period. (P-026, Snyder-Haas, Public, 11/16/2023).

Comment acknowledged.

2. The plan goes on to say how much better the current proposal is. However, per Section 2.4, Project Schedule: “The Town anticipates that the implementation of the Amherst Central Park will occur over the course of a 10-year period (June 2024-June 2034). Construction will begin with improvements within the southern portion of the Property, which will include the most intensive development of recreation, community, and civic facilities”. THIS IS THE SAME AMOUNT OF CONSTRUCTION TIME THAT WAS CITED FOR THE MASSIVE MIXED-USE DEVELOPMENT. 10 YEARS. This is an incredibly long period of time for a construction period in a heavy residential area with homes literally backing up to the construction site. (P-027, Snyder-Haas, Public, 11/16/2023).

The timing of the Amherst Central Park construction is to be determined. While a 10-year period was cited as a conservative duration, total amount and intensity of construction will be much less than was proposed for the Mixed-Use Alternative. Construction noise mitigation measures will be implemented in accordance with Town Code.

3. Remember the “lighter, cheaper, faster” mantra that Buffalo so successfully employed at Canalside? This project is entirely too development-heavy, particularly on the Westwood site. It does not have to be this way. There are other land options available that would cause significantly less environmental impact for the items that do not belong in this RC-zoned property. (P-028, Snyder-Haas, Public, 11/16/2023).

The Town has determined that acquisition of the property and development of recreation/education/civic uses within this section of Town will benefit the community. The northern portion of Amherst Central Park is planned for natural-passive recreation along with preservation of existing ponds, wetlands and hardwood areas.



4 Response to Amherst Central Park General Comments¹

4.1 Overall Project Statements

4.1.1 AGENCY COMMENTS

1. Site Plan or Zoning Referral to County of Erie, N.Y. and Reply to Municipality - No Recommendation; proposed action has been reviewed and determined to be of local concern. (A-012, Hall, Erie County Environment and Planning, 11/20/2023).

Comment acknowledged.

4.1.2 TOWN COMMENTS

1. There are no comments on the submitted proposed Conceptual Development Plan for a new community park. (T-001, Szatkowski, Planning Department, 10/18/2023)².

Comment acknowledged.

2. Due to inflation and material/labor cost escalations, some sizing flexibility may be required in order to ensure the viability of some of the park improvements and as such, we may want to include some size ranges as follows:

- Ice Ribbon and Ice Rink, approximately 15,000 – 25,000 SF

- Inclusive Playground, approximately 10,000 – 12,500 SF

- Splash Pad, approximately 3,000 – 6,000 SF

(T-050, Engineering Department, 11/20/2023).

Comment acknowledged. Sizing revisions would be handled according to the PUD review process outlined in Section 6 of the DSGEIS. Downsizing of improvements would likely be categorized as a Type II Action for purposes of SEQRA and revisions would be assessed for implementation by the ACP Planning Team.

¹ The comments discussed in this Section are not SEQRA comments to the DSGEIS, and instead relate to the underlying PUD Application. Notwithstanding, the Town compiled the comments received during the comment period and provide responses to each.

² Response from Town representative regarding the PUD Conceptual Development Plan pertaining to the specific department.



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3. Site Plan is Approved as Submitted. Note Floodplains Development Permit required and Wetlands on property. (T-002, Gesel, Building Department, 10/24/2023).³

A floodplain development permit and all building permits will be obtained prior to construction.

4. This office has reviewed the materials submitted by your correspondence dated October 17, 2023, and has no comments. We are returning copies of the materials for your file. (T-003, Robshaw, Attorney's Office, 10/25/2023).

Comment acknowledged.

5. Approved as submitted. (T-004, Halt, Building Department – Fire Safety, 10/30/2023).

Comment acknowledged. See also Section 4.12.

6. The Proposed PUD Application Review is Approved as Submitted. – Plumbing Dept. (T-005, Herberger, Building Department - Plumbing, 10/31/2023).

Comment acknowledged.

7. Site plan approved once properties are merged. (T-019, Arnold, Assessor's Office, 11/9/2023).

Comment acknowledged. Town staff will merge the properties prior to submitting Facility Improvement Plan.

8. The Town of Amherst Industrial Development Agency has reviewed the documents related to Amherst Central Park and does not have any comments. (T-049, Mingoia, Industrial Development Agency, 11/20/2023).

Comment acknowledged.

4.1.3 PUBLIC COMMENTS

1. The current Westwood proposal seems to be another convoluted play to effectively suppress information... thereby the voice and will of the people...and a variation of what was attempted months ago by amending the zoning code. Seems to be Kulpa's Westwood plan has been a tangle of smoke and mirrors, obfuscation and lies, from the start. Much of the process has been truncated and/or eliminated. (P-033, Ferraro, Public, 11/15/2023).

Comment acknowledged.

³ The Town compiled comments to the PUD Application from its internal departments using its standard forms utilized for development projects. It should be noted that references to "approved" and/or "site plan approved" merely mean that the department had no comments to the PUD application reference. The term "approved" does not constitute a formal approval of the proposal.



2. I hope the Town will withdraw this proposal until such time as an Amherst Central Park Plan has been accepted by the Town Board or that this Board will remove it from your agenda until such time as the application is complete and able to be reviewed against PUD Development Standards and SEQRA completed. (P-065, Shapiro, Public, 11/16/2023).

On October 2, 2023 the Town Board issued a SEQR Positive Declaration as part of its self-initiated PUD Application. On October 16, 2023 the Town Board subsequently amended its PUD application, such application was deemed complete at the same time the Town Board accepted the DSGEIS as complete.

3. How much is this park plan going to cost and where will Amherst be getting the money? (P-077, Boje, Public, 11/18/2023).

The Town includes expenses in its annual Capital Improvement Budget, which includes projects proposed in the Park.

4. After the initial capital cost, what is the proposed annual maintenance & upkeep costs and where is that money coming from? (P-078, Boje, Public, 11/18/2023).

The Town will include funding for its maintenance and upkeep expenses in its annual Operating and Capital Improvement Budgets.

5. Are BNHV and Music Fare Theater paying for their new facilities? If not, I'm not sure it's legal for the public to pay for facilities for private parties. (P-079, Boje, Public, 11/18/2023).

BNHV facilities are Town owned and are therefore a Town purpose. BNHV is a non-profit-corporation which manages the facilities under an operating agreement with the Town. Occupancy of Community Theater Building will be memorialized by a lease agreement or other contract which will outline Town use as well as the occupant's financial contribution toward the construction of the Community Theater Building in the form of rent or other financial contributions.

4.2 PUD Process

4.2.1 TOWN COMMENTS

1. Once, if we were to make a recommendation today and it goes to the town board, it's ultimately the Town Board that will facilitate the development of this parcel. Will the Planning Board see future development plans for the Park? (T-044, Planning Board, 11/16/2023).

The Town Board will be reviewing future improvement plans in the Amherst Central Park as outlined in the ACP Facility Improvement Review Process. As detailed in the DSGEIS Section 1.1 and Section 6, the Director of Facilities will work with the Planning Director to prepare a Facilities Improvement Plan application ("ACP Application") for the ACP Planning Team to review. The ACP Application will be posted on the Town website and distributed to Town departments and other agencies as appropriate. The ACP Planning



Team's recommendations will be reviewed at a Town Board meeting, including a public hearing if required. The Town Board will issue a SEQRA determination, if required, and decide whether to approve and fund the proposed improvement.

2. This is really to provide a set of guidelines and some flexibility for what's supposed to be a very lengthy construction period if/when it's approved and would I be correct to understand that with individual parts that are coming up there'll be additional opportunities for input, for change, for making sure that local residents are protected, things of that nature. (T-045, Planning Board, 11/16/2023).

Yes, there will be, as outlined in the ACP Facility Improvement Review Process (DSGEIS Section 1.1 and Section 6).

3. It's a very large project with so many components to it. This is a very large undertaking which is going to take, it has a lot of components in it and some major components. You have shown us a flowchart of how the approving process will go for each major item. Is that right? (T-046, Planning Board, 11/16/2023).

The Town Board will be reviewing future improvement plans as outlined in the ACP Facility Improvement Review Process (DSGEIS Section 1.1 and Section 6).

4. Is there a timeline in mind as to, or a sequence of what these components are going to be implemented? When and on a calendar? (T-047, Planning Board, 11/16/2023).

The specific timeline will be developed following completion of the SEQR process, based on permitting requirements and construction logistics. However, in general, development is anticipated to begin on the southern section of the property, likely starting on the eastern side.

5. Just to emphasize that any major component, when we start implementing it, there will be several opportunities for the public which are more concerned of what's happening to voice their concerns, to give their ideas, to provide input to help the project along? There will be many such opportunities in the future? (T-048, Planning Board, 11/16/2023).

As noted in the ACP Facility Review Process (Section 1.1 of the DSGEIS), all ACP applications will be posted to the Town "Pending Development Projects" webpage and noticed when placed on the Town Board agenda. Section 6 sets forth thresholds for improvements requiring additional review.

4.2.2 PUBLIC COMMENTS

1. PUD (Planned Unit Development) standards requires details of the development be made available to the public...in its entirety. Segmenting is not an option and requires more than a map for information. How can anyone approve this vague, haphazard, hodgepodge proposal? (P-034, Ferraro, Public, 11/15/2023).



Comment acknowledged.

2. Each significant addition to this property needs a public hearing where all stakeholders are included and have all relevant facts and costs available to them. That has not and is not happening. Manipulation behind closed doors with selected attendees clearly bypasses community oversight and input. It is purposeful and reprehensible. (P-035, Ferraro, Public, 11/15/2023).

The Town Board will be reviewing future improvement plans in the Amherst Central Park as outlined in the ACP Facility Improvement Review Process. As detailed in the DSGEIS Section 1.1 and Section 6, the Director of Facilities will work with the Planning Director to prepare a Facilities Improvement Plan application (“ACP Application”) for the ACP Planning Team to review. The ACP Application will be posted on the Town website and distributed to Town departments and other agencies as appropriate. The ACP Planning Team’s recommendations will be reviewed at a Town Board meeting, including a public hearing if required. The Town Board will issue a SEQRA determination, if required, and decide whether to approve and fund the proposed improvement. Significant improvements to the Amherst Central Park will require funding that must be approved by the Town Board. The Board may be required, or elect, to hold a public hearing prior to approval.

3. Building Musical Fare, a pre-K day care, an amphitheater, moving the museum, including the animals are being pushed on residents with no transparency, no short and long term costs and no serious discussion of the feasibility of locating all of this in a residential neighborhood with inevitable consequences. (P-036, Ferraro, Public, 11/15/2023).

Starting in 2018 the proposed ACP Plan was the product of a multi-year participatory planning process involving municipal leaders, residents, community stakeholders and consultants. Several meetings and discussions have been held. The Town published the plan in the Amherst Bee in May 2023 and provided a QR code to access more information on the plan. The Amherst Central Park is a component of the Amherst LWRP Plan (Section 4).

4. Please consider doing the right thing for this prime piece of greenspace...that some seem to be hellbent on destroying...incrementally. Please make an effort to read the entire proposal...and ask yourself if it makes sense environmentally, economically...in a financially strapped town/county/state, and in the best interest of ordinary citizens? You might start by revisiting the traffic safety issues of the entire area in 2023. Not earlier. Such negligence demonstrates either appalling ignorance or willful blindness. (P-037, Ferraro, Public, 11/15/2023).

Comment acknowledged. An updated (October 2023) traffic study was prepared for the DSGEIS.

5. I am here to request that the Town withdraw this application or that the Planning Board removes it from their agenda until such time as the application is complete. To date the Town Board has not presented, accepted or approved an actual "Amherst Central Park Plan." This is the first actual



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public hearing addressing any part of the plan. So this proposal for a Planned Unit Development seems premature, vague and incomplete. It's not clear under what authorization this petition was even submitted. No authorizing resolution from the Town Board is included in the application.

The Planning Board is tasked with making a recommendation to the Town Board based on whether the Central Park Development Plan described is consistent with the Comprehensive Plan and the Zoning ordinance, including the stringent development standards for a Planned Unit Development. The Board also needs to consider whether the Plan is compatible with uses allowable in the current RC (Recreation Conservation) zoning district and conforms to the character of surrounding neighborhoods, as well as determining if there are adequate services and utilities, etc. prior to formulating a recommendation to the Town Board. SEQRA requirements also needs to be fulfilled, as this is a Type I action, highly likely to produce negative environmental effects.

Unfortunately, the PUD application is incomplete, with only a vague visual concept plan included, and an even vaguer SGEIS to assist you in your task of review. The zoning code for PUD only mentions a requirement for the inclusion of a Conceptual Development Plan, but that is not the only required submittal. As I said earlier, this Park Plan has never been presented to the public at a prior hearing. If this Board was meant to review it at this stage, you would have a complete plan to compare to the PUD Development Standards in the code. The development standards, although allowing for flexibility in choice of how to meet the standards, still must be met. Nowhere in the standards does it give an opportunity to change or alter the Development Approval Process, set forth in Town Code, but that is what's being proposed here tonight. What's missing: (P-052, Shapiro, Public, 11/16/2023) [See comments P-053 through P-065 which are addressed in the following sections]

Comment	Section
P-053	4.4.1
P-054	4.7.1
P-055	4.5.3
P-056	4.5.3
P-057	4.13.2
P-058	4.9.1
P-059	4.13.2
P-060	4.13.2
P-061	4.12.2
P-062	4.3.1
P-063	4.2.2
P-064	4.13.2
P-065	4.1.3

Starting in 2018 the proposed ACP Plan was the product of a multi-year participatory planning process involving municipal leaders, residents, community stakeholders and



consultants. Several meetings and discussions have been held. The Town published the plan in the Amherst Bee in May 2023 and provided a QR code to access more information on the plan. The Amherst Central Park is a component of the Amherst LWRP Plan (Section 4). The Amherst Central Park, with its location along Ellicott Creek is a featured project for recreation and waterfront enhancement in the Town. The New York State Department of State (NYS DOS) LWRP plan is adopted by the Town Board and New York Secretary of State.

On October 2, 2023, the Town Board issued a SEQR Positive Declaration as part of its self-initiated PUD application. On October 16, 2023 the Town Board amended its PUD application, such application was deemed completed the same time the Town Board accepted the DS GEIS as complete. All of which were made publicly available as required. The PUD process required the Planning Board to issue a recommendation to the Town Board. On November 16, the Planning Board, in accordance with Section 8-4-4 of the Zoning Ordinance, recommended approval of the PUD application and Conceptual Development Plan.

6. Development Phasing Plan - It's impossible to know what to expect as there is no narrative or phasing plan available. (P-063, Shapiro, Public, 11/16/2023).

The Amherst Central Park southern portion will be developed as shown in the PUD plan as individual projects. The northern area is not planned for development at this time.

7. Regarding the Amherst Central Park project, my understanding is the zoning for this parcel remains RC (Recreation Conservation), with no zoning district change, however, adjustments are proposed as part of the PUD application. There is a leap of faith involved as the purpose of the PUD Process is to permit coordinated development that allows flexibility to respond to market demands. And the intent is to adjust the regulations, standards and criteria of the Zoning Ordinance as part of the PUD Process for the Amherst Central Park to implement the Conceptual Development Plan and future improvements that are not part of the Conceptual Development Plan. (P-066, Hochberg, Public, 11/16/2023).

Comment acknowledged.

4.3 Alternative Analysis

4.3.1 PUBLIC COMMENTS

1. Rationale for an alternate Development Approval Process - There is simply no rationale given to create a unique Development Approval Process for this Park development. Initiating projects on this Town owned property needs to be done in the daylight, in front of the Public. Initiating projects that require the use of town employee time or consultants result in expenditure of taxpayer dollars and the Director of Facilities has not been given that authority by the Town Board. Our Town Code is pretty specific that the power rests with our elected Town Board in a public process. Recently the CIP process has been bastardized to fund segmented aspects of



this development process without proper disclosure to the public and SEQRA review of the whole development. It should not be used to initiate projects which will segment the review process, stealing from Peter to pay Paul.

The Town Board is able right now to create an Amherst Central Park Task Force with entity made up of the Town employees listed in their proposed process. This is usual practice in the TOA, but it's not clear why they want to subvert public involvement as early in the project as possible and feel the need to hide behind an internal structure. Creating this one of kind development process, would set a dangerous precedent, and would be counter to SEQRA. A Planned Unit Development approval is not the way to accomplish changing the Development Approval Process. The Town Board tried to avoid having this development go through the time-tested Development approval process by exempting "certain public properties," but ended up withdrawing their resolution after residents rejected this proposed hidden process. This Town has a history of working with town officials and residents together to create community amenities that suit everyone. No special approval process necessary. Why should this one be any different? (P-062, Shapiro, Public, 11/16/2023).

The Director of Facilities will be acting on the direction of the Town Board in accordance with the Amherst Central Park development plans and funding available. The proposed ACP Planning Team is comprised of agency representatives that currently review site development plans. The public will have opportunities to comment. Town Board approval of ACP applications will be considered in tandem with budget approvals. As discussed in Section 6 of the DSGEIS, proposed projects not properly evaluated in the DSGEIS would still be subject to the usual requirements of SEQRA.

4.4 Zoning

4.4.1 PUBLIC COMMENTS

1. Variances Required: The Central Park property is zoned RC (Recreational Conservation). The following uses displayed on the concept plan are not allowed in this zoning district:
 - Livestock is not permitted (Livestock is noted on the site of a relocated museum)
 - Chickens are not permitted (Chickens may be included on the site of a relocated museum)
 - Commercial uses are not permitted {Commercial use is indicated in the EAF, but not elaborated upon). It's not clear if "Winter Market" will include commercial uses. Food and Beverage solid waste in large numbers are also indicated. It's not clear if the BNHV is a commercial use and whether the public will have to pay admission, as well as the Theatre indicated.
 - Schools and daycares are not permitted as a primary use (they are only permitted as an accessory to a place of worship).



The Town still needs to comply with use restrictions in this current zoning district. PUD application does not change this.

As you're aware, Variances are gained via another public process at the ZBA and not part of a PUD approval. (P-053, Shapiro, Public, 11/16/2023).

The Conceptual Development Plan meets the purpose and objectives of the RC-Recreation Conservation zoning district by providing public and private civic uses related to recreation and conservation. The Conceptual Development Plan and Facility Improvement Plans will be consistent with any applicable use regulations, or as adjusted by the Town Board under Section 8-4-6(F) of the ordinance. The Conceptual Development Plan and the proposed uses, which comprise the proposed community park are consistent with the policies of the comprehensive plan.

4.5 Transportation

4.5.1 AGENCY COMMENTS

1. The project sponsor will be required to apply for and obtain an Erie County Highway Work Permit for Utility Work Perm-2 prior to construction within the North Forest Road (CR-294) and Maple Road (CR-192) highway right-of-way. (A-014, Hacker, Erie County Department of Public Works, 11/22/2023).

Comment acknowledged.

2. The project sponsor will be required to apply for and obtain an Erie County Highway Work Permit for Non-Utility Work, Perm 3 prior to construction within the North Forest Road (CR-294) and Maple Road (CR-192) highway right-of-way. (A-015, Hacker, Erie County Department of Public Works, 11/22/2023).

Comment acknowledged.

4.5.2 TOWN COMMENTS

1. Reconsider altering the location and geometry of the N. Forest Road curb-cut as proposed. The proximity of the bends along N. Forest Road at this curb-cut location present challenges given the number trips expected, particularly coming from the north as there is not a proposed access from either Maple Road or Frankhauser Road. Reconsideration of the roundabout configuration is suggested. (T-006, Schregel, Traffic Safety Board, 11/2/2023).

The Town will work with the ECDPW, as well as the Town Traffic Safety Board on the configuration of the intersection at North Forest Road. Initial Park access plans maintain the existing curb-cut from the former Country Club.



2. Provide a pedestrian connection between the public sidewalk along the south side of Maple Road and the internal walking paths that loop near Maple Road. (T-007, Schregel, Traffic Safety Board, 11/2/2023).

Future connections will be considered through the ACP Facility Improvement Review process. The Par 3 golf course is intended to be redesigned, at that time a connection to nearby sidewalks and Maple Road could be evaluated.

3. Similar to comment #2, it is expected that park users will utilize the internal pathway system from the north end. Suggested that the Audubon Par 3 parking lot be utilized as a location for park users to park and access the paths within Amherst Central Park (ACP). As such, provide a pedestrian connection between the existing Par 3 parking lot and the internal walking paths within ACP within the golf course. Consider expanding parking at the Par 3 to accommodate this new “trail head”. (T-008, Schregel, Traffic Safety Board, 11/2/2023).

Future connections will be considered through the ACP Facility Improvement Review process. The Par 3 golf course is intended to be redesigned, at that time a connection to nearby sidewalks and Maple Road could be evaluated.

4. Provide additional internal parking near key park features. Consider utilizing parallel parking along areas where park users may want to access by vehicle, e.g. playgrounds, outdoor exercise area, etc. (T-009, Schregel, Traffic Safety Board, 11/2/2023).

Internal parking areas are included in the PUD Conceptual Development Plan. Specific parking details will be determined during the ACP Facility Improvement Review Process.

5. Traffic Safety Board agrees with the Draft [SGEIS] that while the signal warrants are not met, that a traffic signal still be considered for the ACP driveway on Sheridan Drive at Fenwick to address the projected long delays and queues out of both the site driveway and Fenwick Road. Further providing for an improved pedestrian crossing to the residential subdivision across Sheridan Drive. (T-010, Schregel, Traffic Safety Board, 11/2/2023).

Comment Acknowledged.

6. The N. Forest entry can be modified during the “Facility Improvement Plan” within the confines of the overall Conceptual Development Plan. (T-013, Traffic Safety Board, 11/3/2023).

Comment Acknowledged.

7. TSB is requesting pedestrian access from Maple Road at the northern most part of the site. (T-014, Traffic Safety Board, 11/3/2023).

Comment Acknowledged.

8. TSB is requesting access/parking from the adjacent Par 3 Golf Course. (T-015, Traffic Safety Board, 11/3/2023).



A connection could be considered during a redesign of the Par 3 Golf Course.

9. TSB requests additional parking throughout the park. These smaller parking areas can be achieved during the "Facility Improvement Plan" process. (T-016, Traffic Safety Board, 11/3/2023).

Comment acknowledged.

10. TSB requests a signal at the new Sheridan Drive entry. (T-017, Traffic Safety Board, 11/3/2023).

Comment acknowledged.

11. Considerations for park access via public transit or non-vehicular modes of transportation would be beneficial. (T-042, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

The Town will work with public transportation providers to provide access by transit and other modes.

4.5.3 PUBLIC COMMENTS

1. I would like to state that I am supportive of the overall Westwood Concept as part of the Amherst Central Park but I have some concerns about the proposed 'Pedestrian and Bike Entrance' to Frankhauser at the South West area of Westwood. A 'Pedestrian and Bike Entrance' in that space does not make logical sense and also raises a number of traffic and safety concerns. I am writing to you today not only on behalf of my family but for many of our neighbors in the Frankhauser/Fairways neighborhood who have expressed similar concerns as well. Some of the biggest concerns being: ... (P-038, Vaughan, Public, 11/16/2023) [see comments 39-49 listed below].

Why is there a need for a Pedestrian and Bike Entrance? Why aren't the main entrances adequate? (P-039, Vaughan, Public, 11/16/2023).

There are no other Pedestrian and Bike Entrances anywhere else on the Concept Plan so why put one there leading to/from Frankhauser? (P-040, Vaughan, Public, 11/16/2023).

It is important to note that where the Pedestrian and Bike Entrance would be, there are no sidewalks on that East side of Frankhauser from Sheridan leading up to the proposed Pedestrian and Bike Entrance, and then through the Frankhauser/Fairways intersection. The sidewalk does not begin until you are directly in front of my house at 11 Fairways' that is a long stretch where pedestrians would be forced to walk in the road to get to a sidewalk. (P-041, Vaughan, Public, 11/16/2023).

This means that pedestrians leaving the park and utilizing the proposed Pedestrian and Bike Entrance would be immediately put into an unsafe situation at the Frankhauser/Fairways intersection as there is nowhere for them to safely walk. The same safety concerns for



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pedestrians would also be true for people entering the park at that proposed location. (P-042, Vaughan, Public, 11/16/2023).

On a personal note, because pedestrians leaving the park would want to avoid the unsafe intersection, they would utilize my yard (directly adjacent to the proposed Pedestrian and Bike Entrance) as a cut through to get to Fairways Blvd. As I mentioned, I have two young children and we play in our yard on a daily basis; having strangers cutting through my yard and being in close proximity to my children, I believe, is also problematic and presents additional safety issues. (P-043, Vaughan, Public, 11/16/2023).

In June of 2020, the town reconfigured the intersection of Frankhauser and Fairways after recommendation from the Amherst Traffic and Safety Board due to traffic and safety issues and it being deemed an unsafe intersection - why would we include a design in the Concept Plan that would offset the work done to help mitigate the traffic/speeding/safety issues? (P-044, Vaughan, Public, 11/16/2023).

If the intersection was deemed unsafe for vehicles, why would we want pedestrians and bicyclists to utilize that same intersection? Wouldn't it also be unsafe for them? (P-045, Vaughan, Public, 11/16/2023).

Even with the intersection redesign, it is still a difficult intersection with safety and speeding issues persisting. Vehicles continue to use Fairways/Frankhauser as a cut-through between Sheridan and Maple, speeding through the intersection causing unsafe traffic conditions; on a daily basis there are quite a few 'near miss' car accidents, with vehicles speeding through the intersection/not stopping at the STOP sign on Fairways at Frankhauser. (P-046, Vaughan, Public, 11/16/2023).

Since the intersection was redesigned, we have also had multiple instances of vehicles speeding down Frankhauser, losing control of their vehicle, and driving right onto the new grassy area the town installed at the intersection, getting their vehicle stuck. This has happened most often at night and in inclement weather, but has also happened in ordinary driving conditions. Recently, the town removed the guide rail that paralleled the intersection (separating the road from my yard), so the next time this happens the vehicle that loses control and leaves the road will be in my yard. Again, with the additional traffic that will be seen from this, this puts my family at risk. (P-047, Vaughan, Public, 11/16/2023).

Adding the additional pedestrian and bike traffic, vehicle traffic, and cars parked on Frankhauser and Fairways, it will make an already unsafe intersection even more unsafe. (P-048, Vaughan, Public, 11/16/2023).

The Town will evaluate pedestrian connectivity to Frankhauser Road and determine what improvements are necessary for a safe connection to the Frankhauser Road neighborhood.

2. On behalf of my family and our neighbors, I respectfully ask you to reconsider and remove the Pedestrian and Bike Entrance at Frankhauser/Fairways from the Concept Plan. The questions



raised here, and other safety concerns, should all be considered when looking at this possible Pedestrian and Bike Entrance at Frankhauser/Fairways. If the plan were to move forward as shown in the Concept Plan and a Pedestrian and Bike Entrance is placed where it is currently proposed, there will be far more burdens than benefits as a result of that Pedestrian and Bike Entrance, causing increased traffic and safety issues. Thank you for your time and I appreciate you considering this request. Have a great day. (P-049, Vaughan, Public, 11/16/2023).

The Town will evaluate pedestrian connectivity to Frankhauser Road and determine what improvements are necessary for a safe connection to the Frankhauser Road neighborhood.

3. Also, where is the 300+ parking lot going to be placed and how will street parking be prevented. Look forward to hearing from you. (P-051, Koerber, Public, 11/16/2023).

Parking lots are proposed at the southeast corner of the project site, near the existing lot, east of the existing clubhouse and west of North Forest Road. The largest parking lot is proposed for the southeast corner of the site.

4. Internal and external pedestrian, bicycle and vehicular circulation plans. PUD standards require safe passage and separation for all of these entities, yet no details were given. How will safe passage, for all of the users of the park, be maintained at entrances/exits or via adjacent neighborhoods? It's impossible to assess compliance with the PUD standards and adverse effects without this information. (P-055, Shapiro, Public, 11/16/2023).

The plan proposes roadways, bicycle and pedestrian paths. The nature and location of these paths will be finalized during Facility Improvement Review.

5. A more complete Traffic Study with real alternatives and mitigations:

The flawed supplemental traffic study provided, shows traffic counts from days when Sheridan Drive, itself, was under extended construction. This caused various lanes on Sheridan and Harlem to be coned off at different times, altering traffic flow. As this construction was present for a while before and after the date counts were carried out, commuters may have found alternate paths to and from the area, altering traffic patterns. Even still Levels of Service at the southern entrance were unacceptable with LOS down to E and F.

The only "mitigations" suggested in the Traffic Study were to put up a light at the proposed Sheridan/Fenwick entrance with crosswalk or put in a Hawk signal that would be dangerous in the context of 5 lanes of Sheridan drive for pedestrians or bicyclists alike. It's required in PUD standards that people are not relying on crossing busy arterial roads to access the site. It was noted that there is currently no safe passage for bicyclists at the site. A more comprehensive traffic study needs to be completed with more detail. (P-056, Shapiro, Public, 11/16/2023).

The construction occurring on Sheridan Drive occurred west of the study area. Review of the video used to take the traffic counts showed there was no active construction in the study area or any identified anomalies in traffic. To determine if counts were impacted by



construction, historical count data from other sources and projects was used to compare those to the counts taken for this traffic study. It was found that the counts taken for this study were representative of an average day in the area, and there were no impacts due to construction.

6. My comments & concerns tonight focus largely on the impact of traffic on North Forest Rd, County Section between Maple Road & Sheridan Drive, and multi-modal ingress and egress in general.

We are far more residential here now and want to ensure that all efforts will be made, so our stretch of roadway does not bear the brunt of traffic for this project, passive to the north, but pretty busy to the south. For this reason, it is imperative that there be a second means of vehicular ingress and egress. If the proposed entrance on Sheridan Drive cannot work out, it alternatively must be Maple Road. (P-067, Hochberg, Public, 11/16/2023).

According to the Traffic Impact Study the percentage of users entering/existing Sheridan Drive is 70% and North Forest is 30%.

The proposed PUD Conceptual Development Plan does not include a connection to Maple Road. The Town is not including a vehicular connection to Maple Road that passes through the park. The Town will continue to coordinate with the Erie County Department of Environment and Planning, NYSDOT, Greater Buffalo-Niagara Regional Transportation Council and Niagara Frontier Transportation Authority on long-range planning along corridors accessing the Park.

7. We would also need a 2nd entrance to be available immediately at the start of construction, so that the North Forest entrance and roadway in general is not the primary means of access. (P-068, Hochberg, Public, 11/16/2023).

Efforts will be made to incorporate a proposed Sheridan Drive entry into the initial construction phase to minimize construction vehicle usage of North Forest Road.

8. We also want to be sure that this isn't a park that you have to drive to in order to enjoy it. I have introduced into the record a letter prepared following the Dec. 2020 Traffic Safety sidewalk feasibility meeting. Residents of North Forest Road north and south of Sheridan Drive are represented in the comments regarding pedestrian access to and through the park.

There doesn't look to be much ingress and egress from the surrounding neighborhoods for pedestrians and bicycles. With Maple Road shut off, our central park is not continuous or connected with the Audubon side or the Amherst Bike path. And is there a way for people to park on the Maple Road end to use pedestrian access on that end only? There should be creative solutions to mitigate these concerns. (P-069, Hochberg, Public, 11/16/2023).

Details of access to the Amherst Central Park for pedestrians and bicyclists will be further developed as Facility Improvement plans are reviewed and permits are sought from the



NYS DOT and Erie County Department of Public Works. Access to the Amherst Central Park by external walkways and bike facilities can be considered for the surrounding area.

9. As many of you know, the residents of North Forest worked very hard with Erie County and The Town of Amherst between 1998 and 2008 to retain the character and integrity of North Forest Road. There was talk of widening the road, adding turn lanes, straightening the curves, and adding sidewalks. It was determined by Erie County and approved by the Town of Amherst to keep the road as it is. (P-074, Schmitt, Public, 11/16/2023).

There are no plans for significant geometric changes to North Forest Road in the Amherst Central Park plans. The ECDPW has a requested that a left turn lane into the Park be provided at the driveway along North Forest Road.

10. I understand that there is not an ingress or egress on Maple Road to the park because of concern that the road would become a North- South throughfare which is something the Town doesn't want. I would ask that you consider an entrance on Maple Road to service a parking area for the residents using the walking and biking trails on the northern portion of the park. I'm not requesting a road through the park but simply an entrance and parking lot off Maple Road. This would mitigate some of the increased traffic that will be directed onto North Forest now that all the parking for the new park is located off North Forest and Sheridan Drive.

Thank you for your time, please include my comments for the record. (P-075, Schmitt, Public, 11/16/2023).

The proposed PUD Conceptual Development Plan does not include a vehicular connection to Maple Road. The Town does not want to encourage vehicular traffic through the Amherst Central Park to Maple Road. Future connections can be considered through the Facility Improvement Review process. Currently, the Par 3 golf course is intended to be redesigned, at which time a connection to nearby sidewalks and Maple Road could be evaluated.

11. Is there going to be a new traffic light added on Sheridan Drive for the entrance/exit located across from Fenwick Road? Would it be too close to the traffic light at Frankhauser? (P-080, Boje, Public, 11/18/2023).

The Town is collaborating and will continue to collaborate with NYS DOT on the Sheridan Drive access. At this time, NYS DOT has stated that a signal will not be permitted at the Sheridan Drive access.

12. Has a traffic study been done for the entrance/exit located off of North Forest Road? That two-lane road backs up numerous times a day so I'm not sure how a major park entrance/exit would work without adding to that congestion. (P-081, Boje, Public, 11/18/2023).

The access to North Forest Road was studied. A left turn lane has been requested by Erie County on North Forest Road to accommodate left turns into the park. This will prevent



any queuing for northbound left from North Forest Road. The park is not expected to create any queuing on North Forest Road.

4.6 Historic and Archaeological

4.6.1 PUBLIC COMMENTS

1. Additionally, I noted the following omissions in the application:
 - 829 North Forest Road is identified as a very important historic resource, but omitted is the clubhouse itself at 772 North Forest Road as well.
 - The millrace on North Forest Road near the site was omitted as being clearly identified as a significant archeological site. (P-070, Hochberg, Public, 11/16/2023).

829 North Forest contains no local landmark designation but is considered an eligible property for the NYS and National Register according to the Cultural Resource Information System. The proposed project will not alter 829 North Forest Road.

The Town is aware of the historic nature of 772 North Forest Road (the Clubhouse). In reference to the NYS Office of Recreation and Historic Preservation (SHPO) evaluation of the 772 North Forest Road property (the Clubhouse), their November 22, 2023 letter states that “it is the opinion of the OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project”.

4.7 Human Health

4.7.1 PUBLIC COMMENTS

1. Brownfield Remediation Plan: Amherst Central Park is a contaminated Brownfield. Other than a couple of vague mentions in the EAF and SEIS, including the removal of 1000's of cf of soil, no detail is given on required remediation. What Standard of clean-up will be done? Will it be done piecemeal as portions of the Park are developed or all at once, prior to development? Will fencing remain up where clean-up has been postponed? It doesn't appear that the Town has initiated the steps required to assess or begin clean-up. No consultants have been identified other to say, "The Town is currently in negotiations with the NYSDEC." This is not adequate information to determine if there are adverse effects to neighboring residents, or if the Park will only be partially accessible for long periods of time. (P-054, Shapiro, Public, 11/16/2023).

The Property will be cleaned up to regulatory standards for active and passive recreation, dependent upon use within the Amherst Central Park. The work will be completed as the Park is developed; all under oversight of NYSDEC. Fencing will be installed and remain as required by NYSDEC. C&S Engineers has been retained as consultants to the Town.



Accessibility to portions of the Park, as it is developed, will be determined with input from NYSDEC.

4.8 Biological Resources

4.8.1 AGENCY COMMENTS

A list of threatened and endangered species that may occur in the proposed project location was requested through the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) website. A response was received from the USFWS on October 25, 2023. The following species were identified for the Amherst Central Park:

- Northern Long-eared Bat (*Myotis septentrionalis*), Endangered;
- Salamander Mussel (*Simpsonia ambigua*), Proposed Endangered; and
- Monarch Butterfly (*Danaus plexippus*), Candidate.

No critical habitats were identified within the Park that are under federal jurisdiction.

An Amherst Central Park Biological Analysis (prepared using IPaC) was submitted for USFWS review on October 25, 2023.

1. Report with subject "List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project" (A-002, USFWS, 10/25/2023).

As noted above, a Biological Assessment was submitted for USFWS review. Salamander Mussel is not anticipated to be impacted by the Project. The Northern Long-eared Bat potential impacts, if any, are typically managed by time-of-year restrictions on construction. Monarch Butterfly habitat is proposed to be enhanced by a pollinator garden and the majority of the site habitat will be preserved.

4.8.2 TOWN COMMENTS

1. What kind of trees is the Town planning for the perimeter? A member expressed concern that trees with falling leaves may cause clean-up and safety concerns for skaters. (T-021, Rodman, Committee on Disabilities, 11/06/2023).

The plan is to use conifer (non-deciduous) trees to shade the ice in winter. This will reduce solar heat gain on the ice surface which helps keep the ice cooler in winter. There is a precedent for many "natural" ice trails in the US and Canada – and when the leaves fall on the ice, they just get captured within the ice the next time the Zamboni goes around.

4.8.3 PUBLIC COMMENTS

1. There are forests on this property. Trees that are very old. Are they going to be spared? Any forest or wildlife being sacrificed? (P-007, Hudak, Public, 11/12/2023).



The vegetation within the lower southern area near Sheridan Drive will be removed for the cultural, recreation, and community facilities. The mature vegetation within the central and northern part of the project site will remain preserved (14.97 acres) in total. A small percentage of existing large mature trees will be preserved in open spaces and near the Amherst Central Park features.

2. Will wildlife be preserved? (P-008, Hudak, Public, 11/12/2023).

There will be over 100 acres left as open space on the project site. The entire Ellicott Creek corridor will remain untouched. The majority of wetlands/waterbodies will remain untouched, a total of 14.39 acres, 14.97 acres of existing mature vegetation will be preserved.

3. Any forest or wildlife being sacrificed? (P-010, Hudak, Public, 11/12/2023).

The majority of trees on the project site will remain with the exception of trees removed within the lower southern area near Sheridan Drive that could be removed for the cultural, recreation, and community facilities. There will be approximately 110+ acres left as open space on the project site.

4.9 Water Resources

4.9.1 PUBLIC COMMENTS

1. Will wetlands be preserved? (P-009, Hudak, Public, 11/12/2023)

The majority of wetlands/waterbodies will remain untouched (10.09 acres) with the exception of the tributary within the lower southern portion of the site. This tributary known as UNT is 0.17 acres and will be altered for the proposed theater and main roadway. The Town will alter this tributary to accommodate proper stormwater run-off. Of the 10.26 acres of wetlands on site, 0.17 acres will be altered.

2. [Commenter states the following is missing] SWPPP/Drainage/Floodway/Floodplain plan, as related to Development. (P-058, Shapiro, Public, 11/16/2023).

Detailed plans will be prepared when Facility Improvement Plans are prepared for the ACP Planning Team.

4.10 Sanitary Sewer

4.10.1 TOWN COMMENTS

1. The lines on Frankhauser that drain the park have been flushed and cameraed and are clear. (T-011, Schregel, Engineering Services, 11/3/2023).

Comment acknowledged.



2. The sewer maintenance division agrees with the review process detailed in the PUD Application, sewer flow related approvals shall be given during specific project related site plan reviews. Please note that the splash pad needs to be isolated from sanitary sewer when not in use by adding a valve/diverter, so rainwater can be collected and used for irrigation purposes if needed. (T-018, Reberholt, Engineering Department, 11/6/2023).

The splash pad will be isolated from the sanitary sewer. As per Erie County Water Director of Environmental Health: NYS Subpart 6-3, Title: Sub Part 6-3 - Recreational Aquatic Spray Grounds | New York Codes, Rules and Regulations (ny.gov), regulates recreational aquatic spray grounds. Due to the potential for human contamination of the water and bacterial/virus growth, water used at aquatic spray grounds cannot be recirculated and reused for the aquatic spray ground. The used water from an aquatic spray ground would be considered wastewater and due to the potential for human contamination may not be used the purposes of irrigation. Erie County Sanitary Code Article IV definitions for Sewage and Offensive Material would be applied here and then Section 2.1 would be applicable.

4.11 Noise, Odor, and Light

4.11.1 PUBLIC COMMENTS

1. Are proposed BNHV livestock really going to be located less than 100' from Frankhauser? If so, what are the noise and odor solutions for those living on Frankhauser? (P-082, Boje, Public, 11/18/2023).

Comment acknowledged. Operational limitations including limiting hours of outdoor access, number of animals and good sanitary management practices will be employed for the living displays to mitigate potential for odor and noise nuisances.

4.12 Fire Protection/Access

4.12.1 TOWN COMMENTS

1. B. 503.1.1 – provide for the fire apparatus access road to within 150 feet of all portions of the building or within 300 feet if the building is sprinkled. Clubhouse, Restroom and Skate Rental, museum buildings are the ones in question. (T-028, Halt, Fire Chief's Association, 11/7/2023).

The proposed project will comply with Section 503.

2. D. 503.2 – specifications – fire apparatus access roads shall be installed and arranged in accordance with section 503.2.1 through 503.2.7
 1. 503.2.1 – fire apparatus access road must be an unobstructed width of not less than 20 feet and a vertical clearance of 13 feet 6 inches.



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2. 503.2.2 – increase width of fire apparatus access road to __26__ feet to be adequate for fire or rescue operations. Where access roads contain a hydrant and where aerial access is needed.
3. 503.2.4 – the turning radius for fire apparatus access roads is 22 inside and 45 outside.
4. 503.3 – fire apparatus access roads must be marked as fire lanes per the signage specification established by Appendix D IFC 2015
5. Appendix D – Access Roads: Width, Distance from bldgs. Remoteness requiring 2 separate access roads. Distance from Buildings > 30' H should be 15' min. and 30' max.
6. Appendix D 103.2 Grade: Fire apparatus access roads. Shall not exceed 10 percent in grade. Particularly at the Musical Fare Building. (T-029, Halt, Fire Chief's Association, 11/7/2023).

The proposed project will comply with Section 503.

3. 2. Section 506 IFC 2015 – Key Boxes – A fire department Knox key box is required for access to building keys. (T-030, Halt, Fire Chief's Association, 11/7/2023).

The proposed project will comply with Section 506.

4. 3. Section 507 IFC 2015 – Fire Protection Water Supplies
 - A. Indicate all existing Fire Hydrants on plans. Provide a water plan that shows Fire Main connections w/RPZ and Hotbox, fire line to sprinklered buildings and new and existing hydrants.
 - B. All waterlines with numerous hydrants should be looped or on a grid system. (T-031, Halt, Fire Chief's Association, 11/7/2023).

The proposed project will comply with Section 507.

5. E. [B] Section 912 - This project may be required to install a Fire Sprinkler system, if so, indicate the location of the fire department connection for the sprinkler system, which must be located on the street side of the building. Fire Dept. connections should be located on fire access road side. (T-032, Halt, Fire Chief's Association, 11/7/2023).

The proposed project will comply with Section 912.

6. Due to the size of the site, Snyder Fire Chief is requesting a garage/tool room for storage of fire equipment. (This was discussed at a meeting with Dan Rizzo and Anne Dafchik). A concrete pad with a hydrant for training is also desirable. (T-033, Halt, Fire Chief's Association, 11/7/2023).

The proposed project accommodates storage for fire equipment. The proposed project will accommodate garage style storage for ATV's and tools in the existing Maintenance



Garage, centrally located within the Amherst Central Park. A concrete pad with hydrant location will be considered and designed when the new Maintenance Garage is designed.

4.12.2 PUBLIC COMMENTS

1. [There is] No Fire and Emergency Vehicle Plan - Unreviewable (P-061, Shapiro, Public, 11/16/2023).

Detailed plans, which will include utilities required for fire access will be prepared when Facility Improvement Plans are prepared for the ACP Planning Team.

4.13 Miscellaneous

4.13.1 TOWN COMMENTS

1. The highway [department] will have no maintenance responsibilities in town park. (T-012, Blocher, Highway Department, 11/3/2023).

Comment acknowledged.

2. Suggest collaborating with SABAH (Skating Association for the Blind and Handicapped) to get their input on accessibility concerns. Member Rachel Martin has a contact at SABAH she can reach out to. (T-020, Rodman, Committee on Disabilities, 11/06/2023).

Stakeholders and user groups with specialized insights can be consulted to provide guidance to the ACP Planning Team.

3. Are there plans for a protective barrier around the perimeter of the rink? If yes, will that barrier have a wall and/or handle for skaters to hold on to? (T-022, Rodman, Committee on Disabilities, 11/06/2023).

Please see response to 4.13.1 Comment #2.

4. Suggest accessible items for skaters such as walkers/orange cones/reflective labeled vests (i.e., blind skater) made available for skaters. (T-023, Rodman, Committee on Disabilities, 11/06/2023).

Please see response to 4.13.1 Comment #2.

5. Will the rink be "skate only" or will there be the option to use other equipment on the rink such as a sled that can be pulled (to increase opportunity for all to experience). (T-024, Rodman, Committee on Disabilities, 11/06/2023).

Please see response to 4.13.1 Comment #2.

6. Will there be rest places/benches around the perimeter and multiple exits/entrances? (T-025, Rodman, Committee on Disabilities, 11/06/2023).



Please see response to 4.13.1 Comment #2.

7. Are there plans for an emergency phone/first aid center/indoor area with a family restroom? (T-026, Rodman, Committee on Disabilities, 11/06/2023).

Please see response to 4.13.1 Comment #2.

8. The Committee would like to have more information about the fire ring and its purpose in this context. This concept was new to the members. A member asked what kind of protective safety barrier would be around the ring. (T-027, Rodman, Committee on Disabilities, 11/06/2023).

Please see response to 4.13.1 Comment #2.

9. The location monuments or projects that celebrate the diversity of Amherst would be best located in a visible plaza or public place. Could the big meadow area centrally located between the theater museum and clubhouse be ideal? Even though it is spread out it seems like an appropriate location. Perhaps an additional, smaller location might be near the Winter Market. (T-034, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

Please see response to 4.13.1 Comment #2.

10. Question from committee members on how these types of projects (often considered as art or separate from buildings) would be funded if they are included as part of a larger project or if they are standalone budgets? (T-035, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

Please see response to 4.13.1 Comment #2.

11. Could the Buffalo Niagara Heritage Village museum, once relocated, also include a permanent exhibit that celebrates the beginning and current diversity and makeup of the town? (T-036, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

Please see response to 4.13.1 Comment #2.

12. Whatever form the exhibit or monuments take it should have the ability to grow over time as diversity grows in the Town... Suggestions for flags, benches, murals, pavers/tiles or monuments... Perhaps there is an opportunity for members of the public to sponsor individual components of the design. A circular layout to the project may be favorable, however the order of the individual components should be such that importance isn't implied from one area over another. (T-037, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

Please see response to 4.13.1 Comment #2.

13. Any monuments or plaza components honoring diversity should not only include nationalities but also cultures, religions, faiths, and ethnicity. (T-038, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

Please see response to 4.13.1 Comment #2.



14. A request was made to consider the need for large picnic shelters or pavilions similar to the Governor's Lodge at Chestnut Ridge... There are very few Town parks that have large park pavilions. Spaces that enables a large crowd to come together promote "coming together" and interaction. The ability to connect and gather together is important for growing diversity and appreciation of others. (T-039, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

Please see response to 4.13.1 Comment #2.

15. Several committees would benefit from regular updates from the Amherst Central Park planning group. Those committees include the Diversity Committee, Committee on Disabilities, and the Arts and Culture in Public Places board. Perhaps regular quarterly updates would be an appropriate interval. (T-040, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

Please see response to 4.13.1 Comment #2.

16. A request was made to re-engage the Amherst Central Park task force; public input is important for public support. (T-041, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

Please see response to 4.13.1 Comment #2.

17. The committee will send via email examples of good exhibits or public spaces that celebrate diversity. (T-043, Dafchik, Diversity Committee-Meeting Notes, 11/14/2023).

Comment acknowledged.

4.13.2 PUBLIC COMMENTS

1. What type of fence is being planned for the perimeter of the Park since there is an entry gate on Frankhauser? (P-050, Koerber, Public, 11/16/2023).

Screening in the form of vegetation or fencing will be evaluated during the preparation of the Facility Improvement Plans. Such screening/buffering will be incorporated when necessary to mitigate for noise and/or light glare.

2. Overall Conceptual Landscaping Plan: PUDs rely heavily on landscaping for buffering of different portions of developments, from neighbors, roadways, paths, etc, within the unified development. Not enough detail has been given in order to review an actual plan with development standards. (P-057, Shapiro, Public, 11/16/2023).

Screening in the form of vegetation or fencing will be evaluated during the preparation of the Facility Improvement Plans. Such screening/buffering will be incorporated when necessary to mitigate for noise and/or light glare.

3. Overview Lighting Plan: No lighting plan is included. This will be a very important part of review required to assess potential negative effects of the development on the surrounding neighborhoods and public safety. (P-059, Shapiro, Public, 11/16/2023).



Detailed plans, which will include lighting, will be prepared when Facility Improvement Plans are prepared for the ACP Planning Team.

4. [Commenter states that this item is missing from the DSGEIS] No Dumpster/Utility Plan: Unreviewable (P-060, Shapiro, Public, 11/16/2023).

Detailed plans, which will include utilities, will be prepared when Facility Improvement Plans are prepared for the ACP Planning Team.

5. ETC.... (P-064, Shapiro, Public, 11/16/2023).

Comment Acknowledged.

6. 10 year build out, starting at the south end. Omission in application is any timeline for when the north end will be available. Please do not make us wait towards the end of the build out to enjoy the passive section of the park.

Approximately 26 years ago residents of North Forest Rd, County Section between Maple Road & Sheridan Drive stood for the first time before an Amherst Board to voice concern and stand in solidarity to protect the character & integrity of our area. In that moment we started to paint the picture of what we wanted here with success. I am proud to be a leader in that over the many years.

It has expanded beyond just us in wanting to preserve this central area, and brings us to today, with the many neighborhoods surrounding the project invested in the outcome of the proposed Amherst Central Park.

Thanks to Daniel Howard and his team in the Planning Department on their hard work. Everyone wants a good result. (P-071, Hochberg, Public, 11/16/2023).

The timing of the Amherst Central Park construction is to be determined during the Facility Improvement Plan process.

7. I would like to thank the Town of Amherst for proposing a park setting on this property. I have 3 concerns I would like to express for the record and bring to your attention this evening.

The first is a request for an 8-foot-high maintenance free fence running the entire property line between [address removed] North Forest and the park property, specifically 4 feet from the street to the creek. I have lived on North Forest for 37 years and have always enjoyed my privacy and am concerned that visitors to the park could easily wander into my yard as they meander through the walking and biking paths. I'm asking for 8 foot high, so it is not easily scaled and asking for maintenance free, so the Town of Amherst doesn't have to be attentive to regular maintenance such as painting or staining. (P-072, Schmitt, Public, 11/16/2023).

The ACP Planning Team will evaluate what form of screening/buffering may be necessary to minimize any potential impacts to adjacent residents.



**Town of Amherst, NY - Amherst Central Park
Response to Amherst Central Park General Comments0F
December 1, 2023**

8. Next, I would ask that all parking lot and area lighting that is adjacent to my homes be positioned facing away from my properties and that the proposed new maintenance garage, that is within 100 feet of my property, only has service hours between 7:00am and 6:00pm. (P-073, Schmitt, Public, 11/16/2023).

Any proposed lighting will be dark sky compliant and be designed to minimize impacts to adjacent properties. Facility programming and timing is premature, the ACP Planning Team will consider this request. The Town will establish reasonable hours which will minimize impacts to adjacent users.

9. My name is [Name] and I've lived at [Address] in Williamsville for the last 30 years, where we've enjoyed the open, green, peaceful setting of what used to be Westwood Country Club.

In the last few years it has become an eyesore with Northtown Dealerships using the tennis courts as a parking lot.

My home is directly across from the current entrance of Amherst Central Park and where the planned skating rink, restrooms, winter market, etc. are to be placed.

The issue my husband and I have with this plan is that you currently do not show on your map any division between the roadway (North Forest) and the planned sites; such as burms, trees and/or fences.

This is desperately needed to cut down on noise, lighting that may be directed towards our homes and most importantly for safety reasons. Since we have lived in our home there have been numerous times that cars come around the curve on North Forest and veer off directly into that piece of land. Without the safety of burms/trees/fence the children/adults that may be using the site could be seriously injured.

We ask that you take these points into consideration while finalizing your plans. (P-076, Fillipponi, Public, 11/20/2023)

The design of the playground, splash pad and restroom building will include landscaping and stormwater control areas that will create additional natural buffers, beyond the physical distance between the roadway and the buildings/park components.



APPENDICES



Appendix A Comments

A.1 Written Comments

A.1.1 AGENCY



From: [Howard, Dan](#)
To: [Audino, Kate](#); [Wendy A. Marsh](#); [Wagner, Barbara](#); [Kelsey Wessel](#)
Cc: [Szatkowski, Jeffrey](#); [Schregel, Chris](#); [Polowy, Martin](#); [Burakowski, Elizabeth](#); dchoward60@gmail.com
Subject: FW: Amherst Central Park - Notice of Completion SDGEIS
Date: Wednesday, November 22, 2023 4:14:09 PM
Attachments: [image001.png](#)

See response letter from the NYSDOT below.

Looks like we will have an issue with a Sheridan access.

Several comments on the TIS.

I can be reached at 716-957-4764 or my gmail address over the weekend.

From: dot.sm.r05.SEQR <dot.sm.r05.SEQR@dot.ny.gov>
Sent: Wednesday, November 22, 2023 1:46 PM
To: Howard, Dan <DHOWARD@amherst.ny.us>
Cc: Carrato, Amy <acarrato@amherst.ny.us>; Polowy, Martin <mpolowy@amherst.ny.us>; Burakowski, Elizabeth <eburakowski@amherst.ny.us>; Ismail, Haris (DOT) <Haris.Ismail@dot.ny.gov>; Hill, David J. (DOT) <David.Hill@dot.ny.gov>; Richards, Thomas J. (DOT) <Thomas.Richards@dot.ny.gov>; Ulatowski, Daniel <dulatowski@amherst.ny.us>
Subject: RE: Amherst Central Park - Notice of Completion SDGEIS

CAUTION: This email originated from outside of the organization.
Please do not click links or open attachments unless you recognize the sender and know the content is safe.
Hello,

The New York State Department of Transportation (NYSDOT) has reviewed the documentation provided for **Amherst Central Park – 772 North Forest Rd** and has the following comments:

- NYSDOT concurs with Town of Amherst for it to act as the Lead Agency
- **Traffic Impact Study Comments**
 - - NYSDOT policy requires developments to utilize minor street access points when they are available. After reviewing the TIS and the proposed internal circulation patterns, an entrance to the Amherst Town Park will not be permitted on Sheridan Drive (NY 324). Additional access points should be considered along Frankhauser Road and North Forest Road. Additional access points along the local road network will provide safer access points to the park and the state/county highway system via existing 3-color traffic signals at Frankhauser Road/Sheridan Drive, North Forest Road/Sheridan Drive and North Forest/Maple Road.
 - Based on the signal warrant analysis provided in the TIS, a signal will not be considered at the intersection of Fenwick Road and Sheridan Drive. The analysis did not identify any MUTCD warrants that would be met based on

current or projected traffic volumes.

- o After corrections to the Synchro model are made, tables 2, 3, and 7 of the TIS will need to be updated.
- o Section 4: The Westwood Mixed Use development will not be constructed, and therefore has no part in the analysis for this location.
- o Table 7 (continued) uses lower case letters for LOS for NYS Route 324 at Fenwick Road. For consistency purposes all LOS should be capital letters.
- o Based on the area's development potential, further justification for the growth rate reductions of 1%-2% will need to be provided.

- **Synchro Analysis Comments**

-

- o Sheridan & Harlem

- Signal phasing will need to be corrected such that phase 4 of this signal is a pedestrian exclusive phase to cross Sheridan Drive on the western side of the intersection. Phase 1 is a westbound left/thru with the northbound right turn overlap. Please correct the phasing of this signal.
- The northbound approach on Harlem Road is only two lanes that widens out to four lanes at the intersection. The left lanes should be modeled as storage. Not showing this storage limitation will greatly affect how queueing and storage affects traffic.
- The signal detection should be changed from synchro default to two 20' loops with a 10' gap allowing for 50' of detection near the signal.
- Pedestrian cross times will be required for phases 2 and 4 of the signal. Phase 2 has 35 seconds of pedestrian clearance with 7 seconds of walk and phase 4 has 27 seconds of pedestrian clearance with 7 seconds of walk.

- o Sheridan & I-290

- The I-290 Westbound off ramp is only one lane coming off the I-290 that widens out to 3 lanes closer to the intersection. Change the model to have the left lane and right lane to be modeled as storage lanes.
- The signal detection model should be two 20' loops with a 10' gap extending 1' in front of the stop bar.
- The existing model shows 3 westbound travel lanes on Sheridan Drive west of Frankhauser. However, at Frankhauser, there are only 2 westbound lanes with the third lane not opening until after Sunrise. The model will need to be corrected to accurately depict the existing condition.
- Pedestrian cross times will be required for phases 2 and 6 of the signal. Phase 2 has 15 seconds of pedestrian clearance with 7 second walk

and phase 6 has 19 seconds of pedestrian clearance with 7 seconds of walk.

o Sheridan & Frankhauser

- The signal detection model should be two 20' loops on the Frankhauser approach. There is currently no signal detection on the Sheridan Drive approaches.
- Pedestrian cross times will be required for phases 1 and 3 of the signal. Phase 1 has 17 seconds of pedestrian clearance with 7 seconds of walk and phase 3 has 27 seconds of pedestrian clearance with 7 seconds of walk.

o Sheridan and North Forest

- The signal detection model should be two 20' loops with a 10' gap between them in each lane.
- Pedestrian cross times will be required for phases 2,4,6, and 8 of the signal. Phase 2 has 21 seconds of pedestrian clearance with 7 seconds of walk, phase 4 has 32 seconds of pedestrian clearance with 7 second walk, phase 6 has 32 seconds of pedestrian clearance with 7 seconds of walk, and phase 8 has 28 seconds of pedestrian clearance with 7 seconds of walk.

• Synchro Build Conditions

- o All Synchro comments above will need to be applied to the build conditions model

- Please update the NYSDOT contact info for future SEQR processes, Site Plan reviews, Zoning updates and changes, variances, or other similar review requests to the NYSDOT Region 5 SEQR Coordinator Group at the following:

SEQR Coordinator Group
Planning and Program Management
New York State Department of Transportation Region 5
100 Seneca Street, Buffalo, NY 14203
dot.sm.r05.SEQR@dot.ny.gov

At your earliest convenience, please submit a comment resolution letter along with the updated traffic impact study and synchro model for review. Additional comments may follow after the review of the Synchro model and the revised TIS.

A NYSDOT Highway Work Permit is required to work within the State's right-of-way. This

correspondence does not constitute approval for the purposes of the Highway Work Permit.

Mohammad Albayed

Assistant Engineer – Planning & Program Management

NYS Department of Transportation, Region 5

100 Seneca Street, Buffalo, NY 14203

(716) 847-3519 | mohammad.albayed@dot.ny.gov

www.dot.ny.gov



From: Ulatowski, Daniel <dulatowski@amherst.ny.us>

Sent: Tuesday, October 17, 2023 4:26 PM

To: 'FW5ES_NYFO@fws.gov' <FW5ES_NYFO@fws.gov>;

'LRB.Regulatory.NewYork_Actions@usace.army.mil'

<LRB.Regulatory.NewYork_Actions@usace.army.mil>; Denk, David (DEC) <david.denk@dec.ny.gov>;

Hill, David J. (DOT) <David.Hill@dot.ny.gov>; Castle, Daniel (ERIE) <daniel.castle@erie.gov>;

Walkowski, Jennifer (PARKS) <Jennifer.Walkowski@parks.ny.gov>; Geary, William E. (ERIE)

<william.geary@erie.gov>; 'media@ecwa.org' <media@ecwa.org>; 'sfdistrict@snyderfd.com'

<sfdistrict@snyderfd.com>; Delaney, Jennifer (ERIE) <jennifer.delaney@erie.gov>;

'trmaturski@williamsvillek12.org' <trmaturski@williamsvillek12.org>; dmingoia@amherstida.com;

Burroughs, Jeffrey <jburroughs@amherst.ny.us>; mberke@amherst.ny.us; Lucey, Patrick G.

<plucey@amherst.ny.us>; Murphy, Emily <emurphy@amherst.ny.us>; khalt@amherst.ny.us;

cschregel@amherst.ny.us; aherberger@amherst.ny.us; vreberholt@amherst.ny.us;

'dcopeland@roadrunner.com' <dcopeland@roadrunner.com>

Cc: Carrato, Amy <acarrato@amherst.ny.us>; Polowy, Martin <mpolowy@amherst.ny.us>;

Burakowski, Elizabeth <eburakowski@amherst.ny.us>

Subject: Amherst Central Park - Notice of Completion SDGEIS

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Dear Interested/Involved Agency:

Please see attached notice pursuant to Part 617 of the State Environmental Quality Review Act.

Sincerely,

Daniel J. Ulatowski, AICP

Assistant Planning Director/ZEO

Town of Amherst Planning Department

5583 Main Street
Williamsville, New York 14221
O: 716.631.7051
E: dulatowski@amherst.ny.us

Caution: This email originated from outside of Stantec. Please take extra precaution.

Attention: Ce courriel provient de l'extérieur de Stantec. Veuillez prendre des précautions supplémentaires.

Atención: Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov

In Reply Refer To:
Project Code: 2024-0008434
Project Name: Amherst Central Park

October 25, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office

3817 Luker Road

Cortland, NY 13045-9385

(607) 753-9334

PROJECT SUMMARY

Project Code: 2024-0008434
Project Name: Amherst Central Park
Project Type: Recreation - New Construction
Project Description: Adoption of a conceptual development plan for a planned unit development for the conversion of a former private golf course to a community park to include cultural, recreational and civic public spaces on an approximately 170.5 +/- acre parcel (see attached description). And, a Supplemental Final Environmental Impact Statement for the proposed project site.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.99217065,-78.7733148465993,14z>



Counties: Erie County, New York

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

CLAMS

NAME	STATUS
Salamander Mussel <i>Simpsonaias ambigua</i> There is proposed critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Amherst town
Name: Jeffrey Szatkowski
Address: 5583 Main Street
City: Williamsville
State: NY
Zip: 14221
Email: jszatkowski@amherst.ny.us
Phone: 7166317051



**New York State
Parks, Recreation and
Historic Preservation**

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

November 22, 2023

Daniel Howard
Planning Director
Town of Amherst
5583 Main St
Williamsville, NY 14221

Re: DEC
Amherst Central Park Planned Unit Development
772 N Forest Rd, Amherst, NY 14221
23PR09036

Dear Daniel Howard:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

rev: S. Snyder

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 9
700 Delaware Avenue, Buffalo, NY 14209
P: (716) 851-7165 | F: (716) 851-7168
www.dec.ny.gov

SENT VIA EMAIL

November 20, 2023

Daniel Howard, Planning Director
Town of Amherst
5583 Main Street
Williamsville, NEW York 14221

Dear Daniel Howard:

**Draft Supplemental Generic
Environmental Impact Statement**
Amherst Central Park
772 North Forest Road, 385 & 391 Maple Road
Town of Amherst, Erie County

The New York State Department of Environmental Conservation (NYSDEC) has reviewed the Draft Supplemental Generic Environmental Impact Statement (DSGEIS) prepared for the above-referenced project. The DSGEIS appears to cover all of the environmental issues and impacts that are of a concern to this agency. However, please note the following:

1. Section 2.3 Description of Required Approvals and Permits:

- a. If stormwater outfalls are to be connected to Ellicott Creek (water classification and standard of B, pursuant to 6 NYCRR Part 837, Item 25), a Protection of Waters Permit (Article 15, Title 5 of the Environmental Conservation Law) will be required from NYSDEC.
- b. If any of the project activities will involve land disturbance of 1 acre or more, the project sponsor, owner or operator is required to obtain a State Pollutant Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001). This General Permit requires the project sponsor, owner or operator to control stormwater runoff according to a Stormwater Pollution Prevention Plan (SWPPP), which is to be prepared prior to filing a Notice of Intent (NOI) and prior to commencement of the project.

The Town of Amherst is designated as an MS4 community. The project sponsor, owner or operator of a construction activity that is subject to the requirements of a regulated, traditional land use control MS4 shall have their SWPPP reviewed and accepted by the MS4 community. The "MS4 SWPPP Acceptance" form must be signed by the principal executive officer or ranking elected official from the MS4 community, or by a duly authorized representative of that person, and submitted along with the NOI, to the Department at NOTICE OF INTENT,



NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505, telephone: 518/402-8111 to receive Department approval before construction commences.

2. Section 4.3, Impacts Assessed as None/Small, Flood Hazard Zones:

- a. Flood Control: The portion of Ellicott Creek within the proposed work area is part of the Ellicott Creek Flood Control Project. An Article 16 Flood Control Land Use Permit from the Department and a Section 408 Permission may be required for work near or within the creek.
- b. Floodplain Management: Any work done in a floodplain will require a Floodplain Management Permit which can be obtained through the Town of Amherst Floodplain Manager. Please note that the proposed work area includes both floodplain and floodway, the latter of which is more restrictive. Also, projects are state-financed, NYCCRR Part 502 may apply and must meet all FEMA floodplain management criteria.

3. Section 4.5.1, Surface Waters Existing Conditions:

- a. Freshwater Wetlands: There are no NYSDEC Regulated Freshwater Wetlands mapped on the property. Prior to undertaking a project, a Request for Wetlands Determination, Verification, or Delineation should be submitted to NYSDEC to confirm that the wetlands are not jurisdictional.
- b. Freshwater Mussels: Ellicott Creek is identified as having New York State listed threatened and endangered mussel species and critically imperiled (S1) and imperiled (S2) mussel species. If the proposed project involves any activity within or adjacent to Ellicott Creek, additional consultation with NYSDEC will be necessary to determine if a freshwater mussel survey is required.

4. Section 4.5.2, Surface Waters Potential Impacts: Ellicott Creek, has a water classification and standard of B, pursuant to 6 NYCRR Part 837, Item 25. Therefore, any physical alteration (i.e. land clearing, filling, drainage pipe/ditch installation, etc.) to the bed or banks (within 50 feet of the stream) will require an Article 15, Title 5, Protection of Waters Permit from this Department.

5. Section 4.7.1, Existing Conditions: This section states that *“A comprehensive environmental assessment of the Property revealed the presence of contamination in soils at the site that exceed New York State Department of Environmental Conservation (“NYSDEC”) Soil Cleanup Objectives for commercial, passive and active remediation land use.”* This statement is inaccurate, investigations to characterize potential impacts to environmental media have been limited and focused on a few former golf course holes. This statement should be revised to accurately reflect the extent of the completed environmental assessment.

Daniel Howard
November 20, 2023
Page 3

NYSDEC encourages the Town to coordinate with all involved and interested agencies as future projects are better defined. Thank you for the opportunity to comment on the DSGEIS.

Please do not hesitate to contact me or Lisa Connors with any questions or comments regarding this letter at (716) 851-7165 or lisa.connors@dec.ny.gov.

Sincerely,

David S. Denk

David S. Denk
Regional Permit Administrator

LDC

ecc: Daniel Ulatowski, Town of Amherst Assistant Planning Director

**SITE PLAN OR ZONING REFERRAL TO COUNTY OF ERIE, N.Y.
AND REPLY TO MUNICIPALITY**

Submit this form with full statement of proposed action (as described in GML 239-m(c)) at www.Erie.gov/IRonline, OR mail a hard copy (retain a copy for your files) to: Erie County Division of Planning, 95 Franklin Street, Room 1053, Buffalo, N.Y., 14202

DO NOT WRITE IN THIS SPACE

Case No.: M617-23-610

Postmark/Delivery Date: 10-18-23

The proposed action described herein is referred in accordance with the provisions of NYS General Municipal Law §239 I - nn
A Municipal Referral Map is available to help determine whether an applicable action is subject to referral.

Description of Proposed Action

1. Name of Municipality: Town of Amherst

§239-m(4)(b) provides that the county shall have 30 days after receipt of a full statement of the proposed action to reply.
If the county fails to reply within such period, the referring body may take final action.
However, any county reply received after 30 days but 2 or more days prior to final action by the referring body shall be subject to §239-m(5)
The referring body shall file a report of its final action with the county within 30 days per §239-m(6).

2. Hearing Schedule: Date 12/4/2023 Time 7PM Location 5583 Main Street, Williamsville

3. Action is before: Legislative Body Board of Appeals Planning Board

4. Action consists of: New Ordinance Rezone/Map Change Ordinance Amendment

Site Plan Variance Special Use Permit Other: PUD Application

5. Location of Property: Entire Municipality Address: 772 North Forest Road, 385 & 391 Maple Road

5a. S.B.L. of Property: 68.01-1-1.2,55.18-4-9&10

6. Referral required as site is within 500' of: State or County Property/Institution Municipal Boundary Farm Operation located in an Agricultural District

Expressway County Road State Highway Proposed State or County Road, Property, Building/Institution, Drainageway

7. Proposed change or use: adoption of a planned unit development and implementation of a conceptual development plan for 171+/- acre community park.
(specify the action, such as the scope of variances or site plans)

8. Other remarks: date prepared: 10/17/2023

9. Submitted by: Daniel J. Ulatowski, AICP, Assistant Planning Dir. Email: dulatowski@amherst.ny.us

10. Return Address: Amherst Town Hall, 5583 Main Street, Williamsville, NY 14221

Reply to Municipality by Erie County Division of Planning

Receipt of the above-described proposed action is acknowledged on 10/18/23. The Division herewith submits its review and reply under the provisions of applicable state and local law, based on the information submitted with this referral.

1. The proposed action is not subject to review under the law.
2. Comment on proposed action is attached hereto.
3. The proposed action is subject to review; Recommendation on Proposed Action is attached hereto.
4. No Recommendation; proposed action has been reviewed and determined to be of local concern.

By the Division of Planning: 

Date: 11/20/23



COUNTY OF ERIE

WILLIAM E. GEARY, JR.
COMMISSIONER

DEPARTMENT OF PUBLIC WORKS
RATH BUILDING 14TH FLOOR

TELEPHONE: 716.858.8300
FAX: 716.858.8228

November 22, 2023

Mr. Daniel Howard, AICP
Planning Director
Town of Amherst Planning Department
5583 Main Street
Williamsville, New York 14221

Re: Proposed Amherst Central Park
772 North Forest Road (CR-294)
385 & 391 Maple Road (CR-192)
(T) of Amherst, County of Erie

Dear Mr. Howard:

Erie County Department of Public Works has reviewed the conceptual plan for the proposed Amherst Central Park located at 772 North Forest Road (CR-294) and 385, 391 Maple Road (CR-192) in the Town of Amherst, and has the following comments:

1. Include a left turn lane on North Forest Road (CR-294) at the driveway to the Park.
2. Realign the existing curb and drainage structure on the west side of North Forest Road (CR-294) to accommodate the proposed left turn lane.
3. A stormwater management report and drainage plans shall be provided for our review. Stormwater drainage for this site shall be designed in accordance with the New York State stormwater management design manual and local Town requirements.

Permit Requirements

1. The project sponsor will be required to apply for and obtain an Erie County Highway Work Permit for Utility Work Perm-2 prior to construction within the North Forest Road (CR-294) and Maple Road (CR-192) highway right-of-way.
2. The project sponsor will be required to apply for and obtain an Erie County Highway Work Permit for Non-Utility Work, Perm 3 prior to construction within the North Forest Road (CR-294) and Maple Road (CR-192) highway right-of-way.

Attn: Mr. Daniel Howard, AICP
Planning Director
Town of Amherst Planning Department
Re: Proposed Amherst Central Park
Date: November 22, 2023
Page: 2 of 2

Further review by this department will commence upon receipt of a stormwater management report and final design drawings.

Sincerely,

ERIE COUNTY DEPARTMENT OF PUBLIC WORKS



Garrett M. Hacker, P.E.
Senior Civil Engineer

cc: Karen Hoak, Deputy Commissioner – Highways
Darlene Svilokos, P.E., Director of Engineering
Gina Wilkolaski, P.E., Traffic Safety Engineer
Joseph Donlon, Senior Highway Maintenance Engineer
David Hall, DEP - Planner
File: CR-192

A.1.2 TOWN





TOWN OF AMHERST

BUILDING DEPARTMENT

ERIE COUNTY, NEW YORK

5583 MAIN STREET

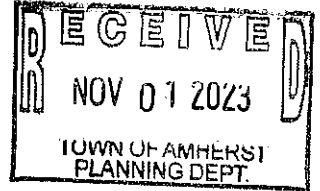
WILLIAMSVILLE, NEW YORK 14221

PHONE: (716) 631-7080

FAX: (716) 631-7192

Mark S. Berke, P.E.
Commissioner of Building

DATE: October 24, 2023
TO: Planning Department
FROM: Doug Gesel Supervising Code Enforcement Officer
RE: Conceptual Plan SP-2023-11 for 772 N Forest Rd, 385 & 391 Maple Rd



- Site Plan is: Subdivision is: ODA is: CSP is:
- Approved as Submitted
- Approved with the following conditions or changes:
- Denied for the following reasons:
- Not reviewable at this stage because the following information is not provided:
- Not applicable to this department at this time.

NOTE:

- Floodplain Development Permit required.
- Wetlands on property.
-

*This review was for site compliance only.

*Approval does not grant permission to start construction.


Douglas Gesel

Supervising Code Enforcement Officer
Town of Amherst Building Department

PUD



AMHERST FIRE CHIEFS' ASSOCIATION INC.

To: Dan Howard, Planning Director

Date: 10/30/23

From: Krista Halt, Liaison to Amherst Fire Safety Committee

RE: Site Plan Review: PUD APPLICATION REVIEW SP-2023-11 PROPOSED CONCEPTUAL DEVELOPMENT PLAN FOR A NEW COMMUNITY PARK

Address: 772 NORTH FOREST RD. 385 & 391 MAPLE RD.

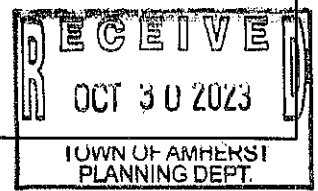
Petitioner: TOWN OF AMHERST

The above referenced Site Plan is Subdivision is Minor Modification is:

Approved as Submitted

Denied due to the following:

Not reviewable at this time due to the following:



- 1. Section 503 FCNYS 2020 – Fire Apparatus Access Road
 - A. Section 503 Firelanes (fire apparatus access roads) be provided in accordance with the FCNYS 2020
 - B. 503.1.1 – provide for the fire apparatus access road to within 150 feet of all portions of the building or within 300 feet if the building is sprinkled.
 - C. 503.1.2 – provide an additional fire apparatus access road
 - D. 503.2 – specifications – fire apparatus access roads shall be installed and arranged in accordance with section 503.2.1 through 503.2.7
 - 1. 503.2.1 – fire apparatus access road must be an unobstructed width of not less than 20 feet and a vertical clearance of 13 feet 6 inches.
 - 2. 503.2.2 – increase width of fire apparatus access road to ____ feet to be adequate for fire or rescue operations.
 - 3. 503.2.4 – the turning radius for fire apparatus access roads is 22 inside and 45 outside.
 - 4. 503.2.5 – dead end fire apparatus access roads in excess of 150 feet, shall be provided with an approved area for turning around fire apparatus.
 - 5. 503.3 – fire apparatus access roads must be marked as firelanes per the signage specification established by Appendix D FCNYS 2020
 - 6. Appendix D – Access Roads: Width, Distance from bldgs. Remoteness requiring 2 separate access roads.
 - 7. Appendix D 103.2 Grade: Fire apparatus access rds. Shall not exceed 10 percent in grade.
- 2. Section 506 FCNYS 2020 – Key Boxes – A fire department Knox key box is required for access to building keys.
- 3. Section 507 FCNYS 2020 – Fire Protection Water Supplies
 - A. Indicate all existing Fire Hydrants on plans.
 - B. All waterlines with numerous hydrants should be looped or on a grid system.
 - C. All fire hydrants must be within 500 feet of each other. (Subdivisions)
 - D. Section 507.5.1 – provide an additional Fire Hydrant within 400 feet of the most remote point of the building (as the fire hose would be laid out) or within 600 feet if the building is equipped with a Fire Sprinkler system.
 - E. [B] Section 912 - This project may be required to install a Fire Sprinkler system, if so, indicate the location of the fire department connection for the sprinkler system, which must be located on the street side of the building

COMMENTS:

Szatkowski, Jeffrey

From: Szatkowski, Jeffrey
Sent: Wednesday, October 18, 2023 4:29 PM
To: Szatkowski, Jeffrey
Subject: LA Review SP-2023-11_10182023

There are no comments on the submitted proposed conceptual development plan for a new community park.

Thanks,
Jeff

Jeffrey Szatkowski, Landscape Architect
Town of Amherst Planning Department
5583 Main St.
Williamsville, NY 14221
P: (716) 631-7051



TOWN OF AMHERST

BUILDING DEPARTMENT

ERIE COUNTY, NEW YORK

5583 MAIN STREET

WILLIAMSVILLE, NEW YORK 14221

PHONE: (716) 631-7080

FAX: (716) 631-7192

Mark S. Berke, P.E., CFM
Commissioner of Building

Date: October 31, 2023

To: Daniel Ulatowski, AICP- Asst. Planning Director

From: Alan D. Herberger, Sr. Plumbing Inspector

Re: SP-2023-11; Proposed Conceptual Development Plan; New Community Park;
772 North Forest Rd., 385 & 391 Maple Rd. Town of Amherst, Petitioner

The Proposed PUD Application Review is Approved as Submitted. – Plumbing Dept.

cc: Engineering Dept.
Building Dept.



TOWN OF AMHERST

ERIE COUNTY, NEW YORK

5583 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221
(716) 631-7030
FAX (716) 631-7101
www.amherst.ny.us

Martin A. Polowy
Town Attorney

Elizabeth A. Burakowski
Director of Special Projects

Nicole M. Burroughs
Senior Paralegal

Samuel A. Alba
Sr. Deputy Town Attorney

Nora B. Robshaw
Sr. Deputy Town Attorney

Brittanylee Penberthy
Town Prosecutor

TO: Scott Marshall, Planning Department

FROM: Nora B. Robshaw, Senior Deputy Town Attorney *NBR/rms*
Right-of-Way Review

DATE: October 25, 2023

RE: Proposed PUD Application Review
SP-2023-11; Proposed Conceptual Development Plan for a New
Community Park
772 North Forest Road, 385 & 391 Maple Road
Town of Amherst, Petitioner

This office has reviewed the materials submitted by your correspondence dated October 17, 2023, and has no comments.

We are returning copies of the materials for your file.

NBR:hs

c: Douglas Gesel, Senior Code Enforcement Officer, *(w/o attachment)*
Brian J. Armstrong, EIT, Director of Engineering Services, *(w/o attachment)*
Jeffrey Burroughs, PE, Town Engineer, *(w/o attachment)*
Mary-Diana Pouli, Executive Director of Youth & Recreation *(w/o attachment)*

TOWN OF AMHERST

TRAFFIC-SAFETY BOARD

ENGINEERING DEPARTMENT – 1100 NORTH FOREST ROAD, WILLIAMSVILLE, NEW YORK 14221
TRAFFIC SAFETY COORDINATOR - TELEPHONE 631-7154 - FAX 631-7222

MICHAEL SZUKALA
*Councilmember &
Liaison Officer*

November 2, 2023

ERIC FRAAS
Chairman

TO: Scott Marshall – Principal Planner
Mark S. Berke – Commissioner of Buildings

GREGORY DIONNE
Vice Chairman

FROM: Christopher P. Schregel – Traffic Safety Coordinator

CHRISTOPHER P. SCHREGEL
*Traffic Safety
Coordinator*

SUBJECT: PUD Application Review, **SP-2023-11**
Proposed Conceptual Development plan for a New
Community
TOA Job # 2023.16

ADDRESS: 772 North Forest Road, 385 & 391 Maple Road

PETITIONER: Town of Amherst

MEMBERS

DANIEL J. RIDER, P.E.
KENNETH A. SMITH
J. MICHNIEWICZ, P.E., P.T.O.E.
MARK STORCH
MAXWELL KAHN
KEVIN CANTWELL
KRISTIN GOSS
PATRICK WANAMAKER, P.E.

PUD APPLICATION REVIEW IS

APPROVED WITH CONDITIONS

DEPT. LIAISONS

THOMAS VOIGT
Planning

CAPT. CHARLES PERSONS
Police

WILLIAM PRENEVAU
Building

AL SPOTH
Highway

1. Reconsider altering the location and geometry of the N. Forest Road curb-cut as proposed. The proximity of the bends along N. Forest Road at this curb-cut location present challenges given the number trips expected, particularly coming from the north as there is not a proposed access from either Maple Road or Frankhauser Road. Reconsideration of the roundabout configuration is suggested.
2. Provide a pedestrian connection between the public sidewalk along the south side of Maple Road and the internal walking paths that loop near Maple Road.
3. Similar to comment #2, it is expected that park users will utilize the internal pathway system from the north end. Suggested that the Audubon Par 3 parking lot be utilized as a location for park users to park and access the paths within Amherst Central Park (ACP). As such, provide a pedestrian connection between the existing Par 3 parking lot and the internal walking paths within ACP within the golf course. Consider expanding parking at the Par 3 to accommodate this new "trail head".
4. Provide additional internal parking near key park features. Consider utilizing parallel parking along areas where park users may want to access by vehicle, e.g. playgrounds, outdoor exercise area, etc.
5. Traffic Safety Board agrees with the Draft SGIES that while the signal warrants are not met, that a traffic signal still be considered for the ACP driveway on Sheridan Drive at Fenwick to address the projected long delays and queues out of both the site driveway and Fenwick Road. Further providing for an improved pedestrian crossing to the residential subdivision across Sheridan Drive.



CPS/ch
Cc: Jeff Burroughs, Town Engineer
Mary-Diana Pouli, Exec. Director of Youth and Recreation



TOWN OF AMHERST

ASSESSOR'S OFFICE

5583 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221
PHONE: 716-631-7038

Emily A. Murphy

Assessor

emurphy@amherst.ny.us

MEMORANDUM

TO: Daniel Ulatowski, AICP, Associate Planning Director
Douglas Gesel, Supervising Code Enforcement Officer
Jeff Burroughs, Town Engineer
Scott Marshall, Principle Planner

FROM: Bonnie B. Arnold, Real Property Appraiser

DATE: November 9, 2023

SUBJECT: PUD Application Review: **SP-2023-11**
Proposed: Conceptual Development Plan for a New Community Park
Property Location: **772 North Forest Rd., 385 & 391 Maple Rd**
Petitioner: Town of Amherst

Site plan approved once properties are merged.

cc: Jeff Burroughs, Town Engineer
Mary-Diana Pouli, Exec Dir. Youth and Recreation

Committee on Disabilities...

Notes for 11/6 meeting.

CAUTION: This email originated from outside of the organization.
Please do not click links or open attachments unless you recognize the sender and know the content is safe.

From: Dafchik, Anne

Sent: Tuesday, October 3, 2023 10:00:38 PM

To: Erica Rodman

Cc: Bucki, Debbie ; McCarthy, Robert ; David Wantuck ; Berke, Mark S. ; Rizzo, Daniel J. ; Bushen, Michael

Subject: RE: Follow up Amherst Central Park

Hi Erica – thank you for reaching out. These are all really great suggestions and comments. We are still early in the design process overall, but I believe I can respond to most of your comments.

I'm not yet sure which meeting would be best for me to join. Would you mind please forwarding the calendar invitation for both the October and November meetings? I'm leaning towards November, but I'm not totally sure yet.

Thank you again – these ideas will help make the park a more welcoming place.

Respectfully,

Anne Dafchik, AIA, NCARB

Architect

Facilities

Town of Amherst

1. Suggest collaborating with SABAH (Skating Association for the Blind and Handicapped) to get their input on accessibility concerns. Member Rachel Martin has a contact at SABAH she can reach out to.
 - a. *SABAH is an excellent group and we'd be happy to work with them to see what expertise they can share. Would Rachel be able to setup a meeting with SABAH? For me, I'd appreciate if it could be during traditional business hours 9-5, but I can be flexible if absolutely necessary. Typically Monday/Wednesday/Friday afternoons work well for me, or Tuesday mornings.*
2. What kind of trees is the Town planning for the perimeter? A member expressed concern that trees with falling leaves may cause clean-up and safety concerns for skaters.
 - a. *The plan is to use conifer (non-deciduous) trees to shade the ice in winter. This will reduce solar heat gain on the ice surface which*

helps keep the ice cooler in winter. There is a precedent for many “natural” ice trails in the US and Canada – and when the leaves fall on the ice, they just get captured within the ice the next time the Zamboni goes around. Please see photos below which show leaves captured within the ice and deciduous trees directly adjacent to ice ribbons.



b.



3. Are there plans for a protective barrier around the perimeter of the rink? If yes, will that barrier have a wall and/or handle for skaters to hold on to?
 - a. *Yes, the protective barrier will double as railing along the outer perimeter of the ice surface. The inner perimeter of the ice surface will have opportunities for seating.*
 - b. *A link to a YouTube video below shows Maple Grove ice loop in Minneapolis which serves as an exemplary model. I hope the audio in the video sufficiently describes the images on screen – if not, I am happy to clarify further for folks who may want a better description.*

<https://www.youtube.com/watch?app=desktop&v=fsUNbinbmxg>

4. Suggest accessible items for skaters such as walkers/orange cones/reflective labeled vests (ie., blind skater) made available for skaters.
 - a. *This is a great idea, and we would like to review this again when we get further along into the operations side of this.*
5. Will the rink be "skate only" or will there be the option to use other equipment on the rink such as a sled that can be pulled (to increase opportunity for all to experience).
 - a. *Again – another good idea. Is this something SABAH can advise on? Perhaps we need a better understanding on which types of adaptive equipment would be appropriate to make available from the skate rental area so we can offer an inclusive set of options.*
6. Will there be rest places/benches around the perimeter and multiple exits/entrances?
 - a. *Yes, with regards to benches, please see the response and video from Question 3 above. With regards to the multiple exits/entrances, we really need to limit it to a maximum of two points of entry/exit. Our facilities team will need to make sure the ice is clear and that people will not re-enter the ice when the Ice Resurfacers (AKA Zamboni) is out cleaning the ice. Where we do have those entry points onto the ice, we will include railings or hand-holds that help people transition onto the ice.*
7. Are there plans for an emergency phone/first aid center/indoor area with a family restroom?

- a. *The restroom facility building does include two family restrooms, along with family changing rooms – 1 of which will include a 72-inch x 30-inch bench which will allow for diaper needs for older children and adults who need that option.*
 - b. *The skate rental building includes a Main Lobby that has indoor seating, drinking fountains, etc. I'd like to discuss more how we can include an emergency phone. We do not have space for a dedicated first aid room, but I'm sure we find a solution where people can meet with a paramedic once called, or can self-help with a first aid kit? We are still reviewing the levels of staffing that will be required to make this area of the park functional.*
8. The Committee would like to have more information about the fire ring and its purpose in this context. This concept was new to the members. A member asked what kind of protective safety barrier would be around the ring.
- a. *As shown in the example video, a low wall with a glass barrier creates an aesthetic that allows people to view the fire without being close enough that it creates a danger. All fire rings in public spaces require safety shut-off buttons that would allow any park user to immediately shut off the gas supply should there be a problem. In the image below, the safety shut-off is the yellow and black "stand" at the left of the seating ring.*



From: Erica Rodman

Sent: Monday, October 2, 2023 1:37 PM

To: Dafchik, Anne

Cc: Bucki, Debbie ; McCarthy, Robert ; David Wantuck ; Berke, Mark S.

Subject: Follow up Amherst Central Park

CAUTION: This email originated from outside of the organization.

Please do not click links or open attachments unless you recognize the sender and know the content is safe.

Happy Monday, Anne -

Thank you for reaching out last month to share more insight into the Amherst Central Park project. The Committee met a couple of weeks ago and compiled a list of questions and comments for consideration. They are listed below. Our next meeting is Tuesday, October 17th at 6:30 on Zoom. I'd love to share your thoughts with the Committee at that time. If you think it would be beneficial to join us before the end of the year, please let me know. Our last two meetings of the year will be Tuesday, October 17th and Monday, November 6th .

1. Suggest collaborating with SABAH (Skating Association for the Blind and Handicapped) to get their input on accessibility concerns. Member Rachel Martin has a contact at SABAH she can reach out to.
2. What kind of trees is the Town planning for the perimeter? A member expressed concern that trees with falling leaves may cause clean-up and safety concerns for skaters.
3. Are there plans for a protective barrier around the perimeter of the rink? If yes, will that barrier have a wall and/or handle for skaters to hold on to?
4. Suggest accessible items for skaters such as walkers/orange cones/reflective labeled vests (ie., blind skater) made available for skaters.
5. Will the rink be "skate only" or will there be the option to use other equipment on the rink such as a sled that can be pulled (to increase opportunity for all to experience).
6. Will there be rest places/benches around the perimeter and multiple exits/entrances?
7. Are there plans for an emergency phone/first aid center/indoor area with a family restroom?
8. The Committee would like to have more information about the fire ring and its purpose in this context. This concept was new to the members.

A member asked what kind of protective safety barrier would be around the ring.

Thank you again, Anne, for your consideration and willingness to include the Committee on Disabilities in discussion during the planning of this exciting project.

Talk soon,

Erica

Erica Rodman

Ph: 716.348.7898

Town of Amherst Committee on Disabilities | *Chair*

Niagara University Disability Awareness Training Program | *Project Assistant*

AMHERST FIRE CHIEFS' ASSOCIATION INC.

To: Dan Howard, Planning Director

Date: 11/7/23

From: Krista Halt, Liaison to Amherst Fire Safety Committee

RE: Concept Plan: Amherst Central Park

Address: 772 North Forest

Petitioner: Town Of Amherst

The above referenced Site Plan is Subdivision is Minor Modification is:

See comments

Denied due to the following:

Not reviewable at this time due to the following:

1. Section 503 FCNYS 2020 – Fire Apparatus Access Road

A. Section 503 Firelanes (fire apparatus access roads) be provided in accordance with the FCNYS 2020

B. 503.1.1 – provide for the fire apparatus access road to within 150 feet of all portions of the building or within 300 feet if the building is sprinkled. **Clubhouse, Restroom and Skate rental, museum buildings are the ones in question.**

C. 503.1.2 – provide an additional fire apparatus access road

D. 503.2 – specifications – fire apparatus access roads shall be installed and arranged in accordance with section 503.2.1 through 503.2.7

1. 503.2.1 – fire apparatus access road must be an unobstructed width of not less than 20 feet and a vertical clearance of 13 feet 6 inches.

2. 503.2.2 – increase width of fire apparatus access road to 26 feet to be adequate for fire or rescue operations. **Where access roads contain a hydrant and where aerial access is needed.**

3. 503.2.4 – the turning radius for fire apparatus access roads is 22 inside and 45 outside. **Provide a truck turning plan through the site.**

4. 503.2.5 – dead end fire apparatus access roads in excess of 150 feet, shall be provided with an approved area for turning around fire apparatus.

5. 503.3 – fire apparatus access roads must be marked as firelanes per the signage specification established by Appendix D FCNYS 2020

6. Appendix D – Access Roads: Width, Distance from bldgs. Remoteness requiring 2 separate access roads. **Distance from buildings > 30'H should be 15'min. and 30' max.**

7. Appendix D 103.2 Grade: Fire apparatus access rds. Shall not exceed 10 percent in grade. **Particularly at the Musical Fare Building**

2. Section 506 FCNYS 2020 – Key Boxes – A fire department Knox key box is required for access to building keys.

3. Section 507 FCNYS 2020 – Fire Protection Water Supplies

A. Indicate all existing Fire Hydrants on plans. **Provide a water plan that shows Fire Main connections w/RPZ and Hotbox, fire line to sprinklered buildings and new and existing hydrants.**

B. All waterlines with numerous hydrants should be looped or on a grid system.

C. All fire hydrants must be within 500 feet of each other. (Subdivisions)

D. Section 507.5.1 – provide an additional Fire Hydrant within 400 feet of the most remote point of the building (as the fire hose would be laid out) or within 600 feet if the building is equipped with a Fire Sprinkler system.

E. [B] Section 912 - This project may be required to install a Fire Sprinkler system, if so, indicate the location of the fire department connection for the sprinkler system, which must be located on the street side of the building. **Fire Dept. connections should be located on fire access rd. side.**

COMMENTS: Due to the size of the site, Snyder Fire Chief is requesting a garage/tool room for storage of fire equipment. (This was discussed at a meeting with Dan Rizzo and Anne Dafchik.) A concrete pad w/ a hydrant for training is also desirable.

Szatkowski, Jeffrey

From: Howard, Dan
Sent: Friday, November 17, 2023 4:53 PM
To: Szatkowski, Jeffrey
Subject: FW: Diversity Commission Contributions to Amherst Central Park

From: Zhen Liu <zl24@buffalo.edu>
Sent: Friday, November 17, 2023 12:01 AM
To: Dafchik, Anne <adafchik@amherst.ny.us>; Bucki, Debbie <dbucki@amherst.ny.us>
Cc: devgunms@buffalostate.edu; gulattiq95@hotmail.com; Taggart, Martha <mtaggart@amherst.ny.us>; Kulpa, Brian J. <bkulpa@amherst.ny.us>; Howard, Dan <DHOWARD@amherst.ny.us>; Rizzo, Daniel J. <drizzo@amherst.ny.us>
Subject: Re: Diversity Commission Contributions to Amherst Central Park

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Anne, I really appreciate the notes. I will take my time reading it, but at the first sight I don't see anything missing.

Thank you.

Zhen

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From: Dafchik, Anne <adafchik@amherst.ny.us>
Sent: Tuesday, November 14, 2023 7:30:30 PM
To: Bucki, Debbie <dbucki@amherst.ny.us>
Cc: devgunms@buffalostate.edu <devgunms@buffalostate.edu>; gulattiq95@hotmail.com <gulattiq95@hotmail.com>; Zhen Liu <zl24@buffalo.edu>; Taggart, Martha <mtaggart@amherst.ny.us>; Kulpa, Brian J. <bkulpa@amherst.ny.us>; Howard, Dan <DHOWARD@amherst.ny.us>; Rizzo, Daniel J. <drizzo@amherst.ny.us>
Subject: RE: Diversity Commission Contributions to Amherst Central Park

Thank you again to the Diversity Committee for inviting me to tonight's meeting. Below are the feedback notes I took regarding the Amherst Central Park design. Please let me know if I missed anything.

1. The location monuments or projects that celebrate the diversity of Amherst would be best located in a visible plaza or public place. Could the big meadow area centrally located between the theater museum and clubhouse be ideal? Even though it is spread out it seems like an appropriate location. Perhaps an additional, smaller location might be near the Winter Market.

2. Question from committee members on how these types of projects (often considered as art or separate from buildings) would be funded if they are included as part of a larger project or if they are standalone budgets?

3. Could the Buffalo Niagara Heritage Village museum, once relocated, also include a permanent exhibit that celebrates the beginning and current diversity and makeup of the town?
4. Whatever form the exhibit or monuments take it should have the ability to grow over time as diversity grows in the Town... Suggestions for flags, benches, murals, pavers/tiles or monuments... Perhaps there is an opportunity for members of the public to sponsor individual components of the design. A circular layout to the project may be favorable, however the order of the individual components should be such that importance isn't implied from one area over another.
5. Any monuments or plaza components honoring diversity should not only include nationalities but also cultures, religions, faiths, and ethnicity.
6. A request was made to consider the need for large picnic shelters or pavilions similar to the Governor's Lodge at Chestnut Ridge... There are very few Town parks that have large park pavilions. Spaces that enables a large crowd to come together promote "coming together" and interaction. The ability to connect and gather together is important for growing diversity and appreciation of others.
7. Several committees would benefit from regular updates from the Amherst Central Park planning group. Those committees include the Diversity Committee, Committee on Disabilities, and the Arts and Culture in Public Places board. Perhaps regular quarterly updates would be an appropriate interval.
8. A request was made to re-engage the Amherst Central Park task force; public input is important for public support.
9. Considerations for park access via public transit or non-vehicular modes of transportation would be beneficial.
10. The committee will send via email examples of good exhibits or public spaces that celebrate diversity.

Thank you again for your input, looking forward to meeting with the Committee again in the future.

Anne Dafchik, AIA
Town of Amherst

On Oct 27, 2023 11:09 AM, "Bucki, Debbie" <dbucki@amherst.ny.us> wrote:

Dear Anne,
Thank you for your message and for your offer to attend the next Diversity Meeting. For me, I think that a paper copy is good, but defer to the Diversity Commission Members as to their preference.
As always, your assistance and consideration are greatly appreciated.

Gratefully,
Deborah Bruch Bucki
Amherst Deputy Supervisor
Diversity Commission Liaison

On Oct 23, 2023 1:56 PM, "Dafchik, Anne" <adafchik@amherst.ny.us> wrote:

Thank you Debbie – I will be there on 11/14 at 5:30 pm. Would the Commission prefer paper or digital versions of the ACP plans? If we do a large paper version, we can add notes and comments in a group format. Or we can do digital format up on a screen...

Thanks, Anne

From: Bucki, Debbie <dbucki@amherst.ny.us>
Sent: Sunday, October 22, 2023 1:35 PM
To: Dafchik, Anne <adafchik@amherst.ny.us>
Cc: devgunms@buffalostate.edu; gulattig95@hotmail.com; zl24@buffalo.edu; Taggart, Martha <mtaggart@amherst.ny.us>; Kulpa, Brian J. <bkulpa@amherst.ny.us>
Subject: RE: Diversity Commission Contributions to Amherst Central Park

Dear Anne,

Thank you for your kind message.

The next meeting of the Amherst Community Diversity Commission is scheduled in person at Town Hall on Tuesday, November 14th at 5:30 PM.

The Commission cordially invites you to attend that meeting if you are available.

As always, your assistance and consideration are greatly appreciated.

Sincerely,

Deborah Bruch Bucki

Amherst Deputy Supervisor

Diversity Commission Liaison

On Oct 18, 2023 9:20 PM, "Dafchik, Anne" <adafchik@amherst.ny.us> wrote:

Hi Councilmember Bucki and Diversity Commission leadership – Thank you for reaching out. I appreciate the opportunity to collaborate with you as we develop plans for Amherst Central Park. When does the Commission meet next? I'd be happy to attend a meeting (either virtually or in-person) with the group to review park concept plans and understand how we can design a more inclusive and welcoming environment for all community members and visitors.

Please let me know your next upcoming meeting dates and times so I can connect with you.

Looking forward to it and thank you,

Anne Dafchik, AIA, NCARB

Architect | Facilities

Town of Amherst

From: Bucki, Debbie <dbucki@amherst.ny.us>
Sent: Friday, October 13, 2023 9:38 AM
To: Dafchik, Anne <adafchik@amherst.ny.us>
Cc: devgunms@buffalostate.edu; gulattig95@hotmail.com; zl24@buffalo.edu; Taggart, Martha <mtaggart@amherst.ny.us>; Kulpa, Brian J. <bkulpa@amherst.ny.us>
Subject: Diversity Commission Contributions to Amherst Central Park

Good morning..

This week, the Amherst Community Diversity Commission met with the Supervisor regarding future planning for the group.

Supervisor Kulpa suggested that the Diversity Commission meet with you to discuss how their input could be incorporated into the Park Development, most especially regarding inclusion in the areas of ethnicity and culture.

I am copying the Diversity Commission Leadership on this message. Please reach out to them at your earliest convenience.

A format for participation of the Diversity Commission in this initiative might be similar to that used with the Disabilities Committee.

As always, your assistance is greatly appreciated.

Sincerely,

Deborah Bruch Bucki
Amherst Deputy Supervisor
Diversity Commission Liaison

Szatkowski, Jeffrey

From: Howard, Dan
Sent: Monday, November 20, 2023 10:20 AM
To: Szatkowski, Jeffrey
Subject: FW: Amherst Central Park

Jeff – please note and forward.

From: Dave Mingoia <DMingoia@amherstida.com>
Sent: Monday, November 20, 2023 10:19 AM
To: Howard, Dan <DHOWARD@amherst.ny.us>
Subject: Amherst Central Park

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The Town of Amherst Industrial Development Agency has reviewed the documents related to Amherst Central Park and does not have any comments.

Regards,

David S. Mingoia, CEcD
Executive Director/CEO

Town of Amherst Industrial Development Agency

4287 Main Street

Amherst, New York 14226

(716)688-9000

(716)688-0205 (fax)

www.AmherstIDA.com



TOWN OF AMHERST


ENGINEERING DEPARTMENT

ERIE COUNTY – NEW YORK

JEFFREY S. BURROUGHS, P.E., TOWN ENGINEER

November 6, 2023

TO: Daniel J. Ulatowski, Assistant Planning Director/ZEO

REVIEWER: Vaishali Reberholt, P.E, CPESC – Assistant Town Engineer 

SUBJECT: PUD Application Review; SP-2023-11
Proposed Conceptual Development Plan for a New Community Park

ADDRESS: 772 North Forest Rd, 385 & 391 Maple Rd

PETITIONER: Town of Amherst

PUD Application Sanitary Review

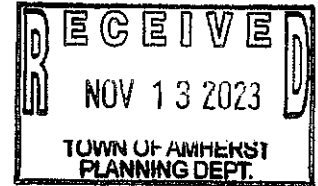
- The sewer maintenance division agrees with the review process detailed in the PUD Application, sewer flow related approvals shall be given during specific project related site plan reviews. Please note that the splash pad needs to be isolated from sanitary sewer when not in use by adding a valve/diverter, so rainwater can be collected and used for irrigation purposes if needed.

A.1.3 PUBLIC



191 Fairways Blvd.
Williamsville NY 14221
November 8, 2023

Mr. Daniel C. Howard
Town of Amherst
5583 Main Street
Williamsville NY 14221



RE: The SGEIS Draft

Dear Mr. Howard,

I am a Town of Amherst resident and taxpayer, and I think the Amherst Central Park will be great addition to the Town of Amherst. However, after carefully studying the October 2023 Concept Plan, I have several concerns about this Concept Plan

1. Safety at the proposed Sheridan Drive entrance/exit

The Sheridan Drive entrance/exit is near the planned theatre and its parking lots, and it will also serve as a park entrance/exit. Because of its location, the heavy traffic on Sheridan and the possibility of bicyclists and jay-walkers, this entrance/exit has the potential for serious accidents. It will be a dangerous entrance/exit, and it should be removed from the Concept Plan. The theatre and its parking lots can be relocated.

2. Pedestrian/bike entrance/exit on Frankhauser Road

This entrance/exit also has the potential for serious accidents. It is located at the beginning of Fairways and the bend in Frankhauser Road, where there is considerable vehicular traffic. This entrance/exit is especially dangerous for children, pedestrians and bicyclists, and it should be removed from the Concept Plan.

3. The construction of a paved roadway around the Central Meadow

The Central Meadow is a natural preserve filled with trees and paths. There is no need for an expensive paved roadway for vehicular traffic around the Central Meadow. This paved roadway should be removed from the Concept Plan.

4. The transfer of the Buffalo Niagara Heritage Village

The Buffalo Niagara Heritage Village has a lovely home on Tonawanda Creek Road. Moving the old wooden buildings from this site and constructing a new Heritage Village Museum will be very expensive. This is an unnecessary financial burden for taxpayers, and it should also be removed from the Concept Plan.

5. The removal of toxic waste from the site

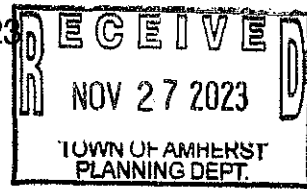
A few years ago, the soil on this site was tested, and harmful chemicals were found. How and when is this remediation taking place?

Thank you for addressing these matters.

Sincerely yours.

(Mrs.) Mary K. Boehm
mkboehm@roadrunner.com

November 27, 2023



To: Robert J. Gilmour, Chairman
Town of Amherst Planning Board

RE: **The October 2023 Concept Plan for the Amherst Central Park**

I am a Town of Amherst resident and taxpayer, and I think the Amherst Central Park will be great addition to the Town of Amherst. However, after carefully studying the October 2023 Concept Plan for the Amherst Central Park, I am very concerned about parts of this plan.

1. Safety at the proposed Sheridan Drive entrance/exit

The Sheridan Drive entrance/exit is near the planned theatre and its parking lots, and it will also serve as a park entrance/exit. Due to the heavy traffic on Sheridan Drive and the bicyclists, pedestrians and jay-walkers, this entrance/exit has the potential for serious accidents. It will be a dangerous entrance/exit, and it should be removed from the Concept Plan. Another entrance/exit along Sheridan Drive will be just as dangerous and should not be added to the Concept Plan. The theatre and its parking lots can be moved to a safer location within the park.

2. Pedestrian/bike entrance/exit on Frankhauser Road

This entrance/exit also has the potential for serious accidents. It is located at the beginning of Fairways and the bend in Frankhauser Road, where there is much vehicular traffic. This entrance/exit is especially dangerous for children, pedestrians and bicyclists, and it should be removed from the Concept Plan.

3. The construction of a paved roadway around the Central Meadow

The Central Meadow is a natural preserve filled with trees and paths. There is no need for an expensive paved roadway for vehicular traffic around the Central Meadow. This paved roadway should be removed from the Concept Plan.

4. The transfer of the Buffalo Niagara Heritage Village

The Buffalo Niagara Heritage Village has a lovely home on Tonawanda Creek Road. Moving the old wooden buildings from this site and constructing a new Heritage Village Museum will be very expensive. This is an unnecessary financial burden for taxpayers, and it should also be removed from the Concept Plan.

5. The removal of toxic waste from the site

A few years ago, the soil on this site was tested, and harmful chemicals were found. How and when is this remediation taking place?

Thank you for addressing these issues.

Mary Boehm
(Mrs.) Mary Boehm
191 Fairways Blvd.
Williamsville NY 14221

Szatkowski, Jeffrey

From: burst@emailmeform.com on behalf of EmailMeForm <burst@emailmeform.com>
Sent: Saturday, November 18, 2023 3:13 PM
To: Melski, Emily
Subject: Amherst Central Park - Submission ID# 18

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For best security and privacy of your information, we recommend viewing this entry in the Data Manager

[View Entry](#)

Type*: Question

**Question,
Comment, or
Concern*:**

1. How much is this park plan going to cost and where will Amherst be getting the money?
2. After the initial capital cost, what is the proposed annual maintenance & upkeep costs and where is that money coming from?
3. Are BNHV and Music Fare Theater paying for their new facilities? I not, I'm not sure it's legal for the public to pay for facilities for private parties.
4. Is there going to be a new traffic light added on Sheridan Drive for the entrance/exit located across from Fenwick Road? Would it be too close to the traffic light at Frankhauser?
5. Has a traffic study been done for the entrance/exit located off of North Forest Road? That two-lane road backs up numerous times a day so I'm not sure how a major park entrance/exit would work without adding to that congestion.
6. Are proposed BNHV livestock really going to be located less than 100' from Frankhauser? If so, what are the noise and odor solutions for those living on Frankhauser?

Name*: James Boje

Address*: 42 Brookdale Drive

Phone: 716-440-0493

Email*: jimaboje@gmail.com

Szatkowski, Jeffrey

From: Howard, Dan
Sent: Monday, November 20, 2023 9:34 AM
To: Szatkowski, Jeffrey
Subject: FW: SP-2023-11

Comment

From: buffalomotor@verizon.net <buffalomotor@verizon.net>
Sent: Monday, November 20, 2023 9:23 AM
To: Howard, Dan <DHOWARD@amherst.ny.us>
Subject: RE: SP-2023-11

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Dear Mr. Howard,

My name is Patricia Fillipponi and I've lived at 805 N. Forest Road in Williamsville for the last 30 years, where we've enjoyed the open, green, peaceful setting of what used to be Westwood Country Club. In the last few years it has become an eyesore with Northtown Dealerships using the tennis courts as a parking lot.

My home is **directly across** from the current entrance of Amherst Central Park and where the planned skating rink, restrooms, winter market, etc. are to be placed.

The issue my husband and I have with this plan is that you currently **do not** show on your map any division between the roadway (North Forest) and the planned sites; such as burms, trees and/or fences. This is **desperately** needed to cut down on **noise, lighting** that may be directed towards our homes and **most importantly for safety reasons**. Since we have lived in our home there have been numerous times that cars come around the curve on North Forest and veer off directly into that piece of land. Without the safety of burms/trees/fence the children/adults that may be using the site could be seriously injured.

We ask that you take these points into consideration while finalizing your plans.

Respectfully,

Patricia Fillipponi
805 North Forest Road
Williamsville, NY 14221

Patricia Fillipponi
Co-owner / VP

Buffalo Motor & Generator Corp.
175 Ohio Street

Buffalo, New York 14203
(716) 854-4588



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From: Dwight Kanyuck <dkanyuck@nyenvlaw.com>

Sent: Thursday, October 12, 2023 2:27 PM

To: Howard, Dan <DHOWARD@amherst.ny.us>

Subject: SEQRA Determination-Amherst Central Park Conceptual Development Plan Planned Unit Development

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Dear Mr. Howard,

We are the attorneys for Concerned Residents for Amherst Central Park, a group of Amherst residents advocating for the promise of a world-class Amherst Central Park.

It was noted today that the DEC's Environmental Notice Bulletin published a SEQRA "negative declaration" for the SEQRA review of the Amherst Central Park Conceptual Development Plan Planned Unit Development (meaning there are no adverse environmental impacts). See https://www.dec.ny.gov/enb/20231011_not9.html . This is contrary to the "positive declaration" (meaning there *may* be adverse environmental impacts) that appears in the meeting minutes for the October 2 Town Board meeting (<https://amherstny.iqm2.com/Citizens/FileOpen.aspx?Type=12&ID=3628&Inline=True>). One or the other is in error and you are the contact person identified in the DEC notice. Please clarify what SEQRA determination was reached and which record will be corrected. Thank you.

Regards,


Dwight Kanyuck
Attorney at Law

***NOTE OUR NEW ADDRESS:**

Knauf Shaw LLP
2600 Innovation Square
100 South Clinton Avenue
Rochester, New York 14604
585.546.8430 Ext. 106
[vCard](#) • [Website](#)

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Szatkowski, Jeffrey

From: Armstrong, Brian
Sent: Wednesday, November 8, 2023 11:25 AM
To: Howard, Dan; Szatkowski, Jeffrey
Cc: Ulatowski, Daniel
Subject: Proposed Conceptual Development Plan for a New Community Park - SP-2023-11
Attachments: PUD Application Review Comments - BJA 11-8-23.docx

Dan and Jeff,

In the interest of expedience, please consider this my formal response to your request for comments associated with SP-2023-11.

With respect to the section titled; "The Amherst Central Park PUD Plan", due to inflation and material/labor cost escalations, some sizing flexibility may be required in order to ensure the viability of some of the park improvements and as such, we may want to include some size ranges (assuming you agree it would be appropriate to include them):
Ice Ribbon and Ice Rink, approximately 15,000 – 25,000 SF
Inclusive Playground, approximately 10,000 – 12,500 SF
Splash Pad, approximately 3,000 – 6,000 SF

Additionally and for your consideration, I have also made revisions (using the track changes utility), on the attached portions of the PUD process.

Otherwise, I believe the balance of the PUD Application to be complete and appropriate.

Thanks,

Brian J. Armstrong
Director of Engineering Services
Town of Amherst
Engineering Department
1100 North Forest Road
Williamsville, NY 14221
716.631.7154 ext. 7412 office
716.631.7222 fax
barmstrong@amherst.ny.us

From: Howard, Dan <DHOWARD@amherst.ny.us>
Sent: Tuesday, November 7, 2023 12:28 PM
To: Bushen, Michael <mbushen@amherst.ny.us>; Dafchik, Anne <adafchik@amherst.ny.us>; Burakowski, Elizabeth <eburakowski@amherst.ny.us>; Hitzel, Michael <mhitzel@amherst.ny.us>; Juul, Lynda <ljuul@amherst.ny.us>; Armstrong, Brian <BArmstrong@amherst.ny.us>; Szatkowski, Jeffrey <jszatkowski@amherst.ny.us>; Rizzo, Daniel J. <drizzo@amherst.ny.us>; Polowy, Martin <mpolowy@amherst.ny.us>; Berke, Mark S. <mberke@amherst.ny.us>
Cc: Ulatowski, Daniel <dulatowski@amherst.ny.us>

Szatkowski, Jeffrey

From: Howard, Dan
Sent: Wednesday, November 15, 2023 4:55 PM
To: Szatkowski, Jeffrey
Subject: FW: Westwood Proposal..Planning Board review/Nov. 16..

-----Original Message-----

From: Carrato, Amy <acarrato@amherst.ny.us>
Sent: Wednesday, November 15, 2023 4:42 PM
To: Brittany Penberthy <bpenberthy@thepenlawgroup.com>; Carrie Kahn <carrie.kahn@gmail.com>; Dal Giuliani <dcg5719@verizon.net>; Harbinder Gill <hsgill@usa.net>; Joseph Raffaele Jr <Jraffaele@tcco.com>; Michael J. Chmiel <mchmiel@cheluslaw.com>; Robert Gilmour <rgilmour@roadrunner.com>
Cc: Howard, Dan <DHOWARD@amherst.ny.us>; Ulatowski, Daniel <dulatowski@amherst.ny.us>; Marshall, Scott <SMarshall@amherst.ny.us>; Voigt, Thomas J. <tvoigt@amherst.ny.us>; Palumbo, Gary <gpalumbo@amherst.ny.us>
Subject: FW: Westwood Proposal..Planning Board review/Nov. 16..

Please see the email below regarding SP-2023-11, 772 N. Forest Road, 385 & 391 Maple Road.

-----Original Message-----

From: Judith Ferraro <jferraro@roadrunner.com>
Sent: Wednesday, November 15, 2023 2:18 PM
To: Carrato, Amy <acarrato@amherst.ny.us>
Subject: RE: Westwood Proposal..Planning Board review/Nov. 16..

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Amy,
Please forward the following message to all Planning Board members and Dan Howard.
Thank you.
Judy Ferraro

The current Westwood proposal seems to be another convoluted play to effectively suppress information.. thereby the voice and will of the people...and a variation of what was attempted months ago by amending the zoning code. Seems to be Kulpa's Westwood plan has been a tangle of smoke and mirrors, obfuscation and lies, from the start. Much of the process has been truncated and/or eliminated.

PUD (Planned Unit Development) standards requires details of the development be made available to the public..in its entirety. Segmenting is not an option and requires more than a map for information. How can anyone approve this vague, haphazard, hodgepodge proposal?

Each significant addition to this property needs a public hearing where all stakeholders are included and have all relevant facts and costs available to them.

That has not and is not happening. Manipulation behind closed doors with selected attendees clearly bypasses community oversight and input. It is purposeful and reprehensible.

Building Musical Fare, a preK day care, an amphitheater, moving the museum, including the animals are being pushed on residents with no transparency, no short and long term costs and no serious discussion of the feasibility of locating all of this in a residential neighborhood with inevitable consequences.

Please consider doing the right thing for this prime piece of greenspace..that some seem to be hellbent on destroying..incrementally. Please make an effort to read the entire proposal..and ask yourself if it makes sense environmentally, economically...in a financially strapped town/county/state, and in the best interest of ordinary citizens? You might start by revisiting the traffic safety issues of the entire area in 2023. Not earlier. Such negligence demonstrates either appalling ignorance or willful blindness. Thank you.
Judy Ferraro

Szatkowski, Jeffrey

From: Ulatowski, Daniel
Sent: Monday, November 13, 2023 6:33 PM
To: Szatkowski, Jeffrey
Subject: FW: Central Park - Westwood

FYI

From: Carrato, Amy <acarrato@amherst.ny.us>
Sent: Monday, November 13, 2023 9:25 AM
To: Brittany Penberthy <bpenberthy@thepenlawgroup.com>; Carrie Kahn <carrie.kahn@gmail.com>; Dal Giuliani <dcg5719@verizon.net>; Harbinder Gill <hsgill@usa.net>; Joseph Raffaele Jr <Jraffaele@tcco.com>; Michael J. Chmiel <mchmiel@cheluslaw.com>; Robert Gilmour <rgilmour@roadrunner.com>
Cc: Howard, Dan <DHOWARD@amherst.ny.us>; Ulatowski, Daniel <dulatowski@amherst.ny.us>; Marshall, Scott <SMarshall@amherst.ny.us>; Voigt, Thomas J. <tvoigt@amherst.ny.us>; Palumbo, Gary <gpalumbo@amherst.ny.us>
Subject: FW: Central Park - Westwood

[See email below regarding SP-2023-11, Amherst Central Park](#)

From: Joan Hudak <joanhudak@hotmail.com>
Sent: Sunday, November 12, 2023 9:50 AM
To: Carrato, Amy <acarrato@amherst.ny.us>
Subject: Central Park - Westwood

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I have a few questions on this project.

- There are forests on this property. Trees that are very old. Are they going to be spared? Any forest or wildlife being sacrificed?
- Will wild life be preserved?
- Will wet lands be preserved

Joan Hudak

Be the change you wish to see in the world..... Gandhi

11/16/202

Amherst Planning Board
5583 Main Street
Williamsville, NY 14221

Planning Board Members,

Regarding the Amherst Central Park project, my understanding is the zoning for this parcel remains RC (Recreation Conservation), with no zoning district change, however, adjustments are proposed as part of the PUD application. There is a leap of faith involved as the purpose of the PUD Process is to permit coordinated development that allows flexibility to respond to market demands. And the intent is to adjust the regulations, standards and criteria of the Zoning Ordinance as part of the PUD Process for the Amherst Central Park to implement the Conceptual Development Plan **and future improvements that are not part of the Conceptual Development Plan.**

My comments & concerns tonight focus largely on the impact of traffic on North Forest Rd, County Section between Maple Road & Sheridan Drive, and multi-modal ingress and egress in general.

We are far more residential here now and want to ensure that all efforts will be made, so our stretch of roadway does not bare the brunt of traffic for this project, passive to the north, but pretty busy to the south. For this reason, it is imperative that there be a second means of vehicular ingress and egress. If the proposed entrance on Sheridan Drive cannot work out, it alternatively must be Maple Road.

We would also need a 2nd entrance to be available immediately at the start of construction, so that the North Forest entrance and roadway in general is not the primary means of access.

We also want to be sure that this isn't a park that you have to drive to in order to enjoy it. I have introduced into the record a letter prepared following the Dec. 2020 Traffic Safety sidewalk feasibility meeting. Residents of North Forest Road north and south of Sheridan Drive are represented in the comments regarding pedestrian access to and through the park.

There doesn't look to be much ingress and egress from the surrounding neighborhoods for pedestrians and bicycles. With Maple Road shut off, our central park is not continuous or connected with the Audubon side or the Amherst Bike path. And is there a way for people to park on the Maple Road end to use pedestrian access on that end only? There should be creative solutions to mitigate these concerns.

Additionally, I noted the following omissions in the application:

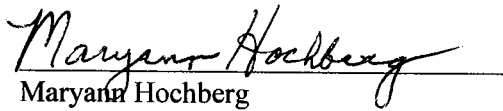
- 829 North Forest Road is identified as a very important historic resource, but omitted is the clubhouse itself at 772 North Forest Road as well.
- The millrace on North Forest Road near the site was omitted as being is clearly identified as a significant archeological site.
- 10 year build out, starting at the south end. Omission in application is any timeline for when the north end will be available. Please do not make us wait towards the end of the build out to enjoy the passive section of the park.

Approximately 26 years ago residents of North Forest Rd, County Section between Maple Road & Sheridan Drive stood for the first time before an Amherst Board to voice concern and stand in solidarity to protect the character & integrity of our area. In that moment we started to paint the picture of what we wanted here with success. I am proud to be a leader in that over the many years.

It has expanded beyond just us in wanting to preserve this central area, and brings us to today, with the many neighborhoods surrounding the project invested in the outcome of the proposed Amherst Central Park.

Thanks to the Daniel Howard and his team in the Planning Department on their hard work. Everyone wants a good result.

Respectfully,

A handwritten signature in cursive script that reads "Maryann Hochberg". The signature is written in black ink and is positioned above a horizontal line.

Maryann Hochberg
1075 North Forest Rd
Williamsville, NY 14221

cc: Amherst Town Boad members

12/22/2020

Eric Fraas, Chair
Amherst Traffic Safety Board
Amherst Municipal Building
5583 Main Street
Williamsville, NY 14221

Dear Chairman Fraas,

Writing as follow-up to the Dec. 2, 2020 Traffic Safety Board Meeting regarding Townwide Sidewalks to request clarification on the final recommendation made specifically for North Forest Rd /Sheridan Drive. For the meeting, this area was split into 2 separate locations for discussion and consideration:

- 3a) North Forest from Morgan Parkway to Indian Trial Road (County jurisdiction)
- 3b) North Forest from Wiltshire to Meadowbrook (State jurisdiction)

Decision made was to remove North Forest /Sheridan Drive encompassing both sections, but resident input was only heard from those living on the County section that evening. The agenda listing was vague on this topic, as no specific locations were clearly identified, and residents from the State section did not join in. For North Forest south of Sheridan Drive there is overwhelming resident interest in having sidewalks to fill the gap, in part given that placement would lead residents to the new Amherst Central Park. For this reason, request that the Traffic Safety Board re-evaluate their 12/2/2020 decision for the State section only.

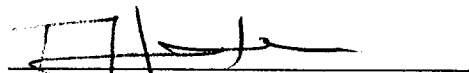
For item 3a) North Forest (County jurisdiction) – Removal of this item should stand, not recommending sidewalks here. Appreciate the Traffic Safety Board taking into consideration the concerns of residents living on the County section regarding impact of sidewalks on those properties, potential property owner hardship, pedestrian safety, and concerns impacting physical implementation issues. Ideally, pedestrian connectivity for this area will be safely through the new Amherst Central Park as mentioned.

For item 3b) North Forest (State jurisdiction) – Request that sidewalks for this area be recommended to move forward to next steps. There is interest, and residents here would then have another opportunity to provide their input.

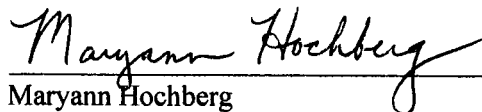
The wants, needs and feasibility of implementing sidewalks to fill gaps may differ for the County and State sections of North Forest. Together these two options would lead pedestrians to and through the new park.

Residents of the North Forest areas north and south of Sheridan Drive stand together in solidarity in protecting and preserving the integrity of this area overall. Thank you for your attention to this matter.

Sincerely,



Nathan Hartlich, President
Morningside Home Owners Association
47 Meadowbrook Rd
Williamsville, NY 14221



Maryann Hochberg
1075 North Forest Rd
Williamsville, NY 14221

cc: Amherst Traffic Safety Board members
Christopher P. Schregel
Francina J. Spoth, Amherst Town Clerk

Szatkowski, Jeffrey

From: Ulatowski, Daniel
Sent: Thursday, November 16, 2023 10:26 AM
To: Wendy A. Marsh; Wagner, Barbara; Howard, Dan; Szatkowski, Jeffrey; Dafchik, Anne; Polowy, Martin; Burakowski, Elizabeth
Subject: FW: Amherst Central Park - email inquiry

All,

See below .

Dan U

From: SANDRA KOERBER <smk54f@verizon.net>
Sent: Thursday, November 16, 2023 9:16 AM
To: Ulatowski, Daniel <dulatowski@amherst.ny.us>
Subject: Amherst Central Park

CAUTION: This email originated from outside of the organization.
Please do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning Dan:
Hope all is well.
What type of fence is being planned for the perimeter of the Park since there is an entry gate on Frankhauser?
Also, where is the 300+ parking lot going to be placed and how will street parking be prevented.
Look forward to hearing from you.
Thank you.
Sandra Koerber
54 Frankhauser Road

[Sent from Yahoo Mail on Android](#)

Maureen T. Schmitt
866 North Forest Rod
Williamsville, New York 14221

11-16-23

To: Amherst Town Planning Board and Amherst Town Board

Good evening, my name is Maureen Schmit and I reside at 866 North Forest Road. I also own homes at 860 and 850 North Forest. 850 North Forest is directly adjacent to the proposed Amherst Central Park. I would like to thank the Town of Amherst for proposing a park setting on this property.

I have 3 concerns I would like to express for the record and bring to your attention this evening.

The first is a request for an 8-foot-high maintenance free fence running the entire property line between 850 North Forest and the park property, specifically 4 feet from the street to the creek. I have lived on North Forest for 37 years and have always enjoyed my privacy and am concerned that visitors to the park could easily wander into my yard as they meander through the walking and biking paths. I'm asking for 8 foot high, so it is not easily scaled and asking for maintenance free, so the Town of Amherst doesn't have to be attentive to regular maintenance such as painting or staining.

Next. I would ask that all parking lot and area lighting that is adjacent to my homes be positioned facing away from my properties and that the proposed new maintenance garage, that is within 100 feet of my property, only has service hours between 7:00am and 6:00pm.

As many of you know, the residents of North Forest worked very hard with Erie County and The Town of Amherst between 1998 and 2008 to retain the character and integrity of North Forest Road. There was talk of widening the road, adding turn lanes, straightening the curves, and adding sidewalks. It was determined by Erie County and approved by the Town of Amherst to keep the road as it is.

I understand that there is not an ingress or egress on Maple Road to the park because of concern that the road would become a North- South throughfare which is something the Town doesn't want. I would ask that you consider an entrance on Maple Road to service a parking area for the residents using the walking and biking trails on the northern portion of the park. I'm not requesting a road through the park but simply an entrance and parking lot off Maple Road. This would mitigate some of the increased traffic that will be directed onto North Forest now that all the parking for the new park is located off North Forest and Sheridan Drive.

Thank you for your time, please include my comments for the record.

Comments re:

Proposed Planned Unit Development-Amherst Central Park, SP-2023-11

772 N Forest Rd and 385 & 391 Maple Rd Public hearing, TOA Planning Board

Good evening members of the Planning Board. My name is Mary Shapiro, residing at 16 Royalwoods Ct.

I am here to request that the Town withdraw this application or that the Planning Board removes it from their agenda until such time as the application is complete. To date the Town Board has not presented, accepted or approved an actual "Amherst Central Park Plan." This is the first actual public hearing addressing any part of the plan. So this proposal for a Planned Unit Development seems premature, vague and incomplete. It's not clear under what authorization this petition was even submitted. No authorizing resolution from the Town Board is included in the application.

The Planning Board is tasked with making a recommendation to the Town Board based on whether the Central Park Development Plan described is consistent with the Comprehensive Plan and the Zoning ordinance, including the stringent development standards for a Planned Unit Development. The Board also needs to consider whether the Plan is compatible with uses allowable in the current RC (Recreation Conservation) zoning district and conforms to the character of surrounding neighborhoods, as well as determining if there are adequate services and utilities, etc. prior to formulating a recommendation to the Town Board. SEQRA requirements also needs to be fulfilled, as this is a Type I action, highly likely to produce negative environmental effects.

Unfortunately, the PUD application is incomplete, with only a vague visual concept plan included, and an even vaguer SGEIS to assist you in your task of review. The zoning code for PUD only mentions a requirement for the inclusion of a Conceptual Development Plan, but that is not the only required submittal. As I said earlier, this Park Plan has never been presented to the public at a prior hearing. If this Board was meant to review it at this stage, you would have a complete plan to compare to the PUD Development Standards in the code. The development standards, although allowing for flexibility in choice of how to meet the standards, still must be met. Nowhere in the standards does it give an opportunity to change or alter the Development Approval Process, set forth in Town Code, but that is what's being proposed here tonight.

What's missing:

1. Variances Required:

The Central Park property is zoned **RC (Recreational Conservation)**. The following uses displayed on the concept plan are not allowed in this zoning district:

- Livestock is not permitted** (Livestock is noted on the site of a relocated museum)
- Chickens are not permitted** (Chickens may be included on the site of a relocated museum)

-**Commercial uses are not permitted** (Commercial use is indicated in the EAF, but not elaborated upon). It's not clear if "Winter Market" will include commercial uses. Food and Beverage solid waste in large numbers are also indicated. It's not clear if the BNHV is a commercial use and whether the public will have to pay admission, as well as the Theatre indicated.

-**Schools and daycares are not permitted** as a primary use (they are only permitted as an accessory to a place of worship).

The Town still needs to comply with use restrictions in this current zoning district. PUD application does not change this.

As you're aware, Variances are gained via another public process at the ZBA and not part of a PUD approval.

2. **Brownfield Remediation Plan:** Amherst Central Park is a contaminated Brownfield. Other than a couple of vague mentions in the EAF and SEIS, including the removal of 1000's of cf of soil, no detail is given on required remediation. What Standard of clean-up will be done? Will it be done piecemeal as portions of the Park are developed or all at once, prior to development? Will fencing remain up where clean-up has been postponed? It doesn't appear that the Town has initiated the steps required to assess or begin clean-up. No consultants have been identified other to say, "The Town is currently in negotiations with the NYSDEC." This is not adequate information to determine if there are adverse effects to neighboring residents, or if the Park will only be partially accessible for long periods of time.
3. **Internal and external pedestrian, bicycle and vehicular circulation plans.** PUD standards require safe passage and separation for all of these entities, yet no details were given. How will safe passage, for all of the users of the park, be maintained at entrances/exits or via adjacent neighborhoods? It's impossible to assess compliance with the PUD standards and adverse effects without this information.
4. **A more complete Traffic Study with real alternatives and mitigations:**
The flawed supplemental traffic study provided, shows traffic counts from days when Sheridan Drive, itself, was under extended construction. This caused various lanes on Sheridan and Harlem to be coned off at different times, altering traffic flow. As this construction was present for a while before and after the date counts were carried out, commuters may have found alternate paths to and from the area, altering traffic patterns. Even still Levels of Service at the southern entrance were unacceptable with LOS down to E and F.
The only "mitigations" suggested in the Traffic Study were to put up a light at the proposed Sheridan/Fenwick entrance with crosswalk or put in a Hawk signal that would be dangerous in the context of 5 lanes of Sheridan drive for pedestrians or bicyclists alike. It's required in PUD standards that people are not relying on crossing busy arterial

roads to access the site. It was noted that there is currently no safe passage for bicyclists at the site. A more comprehensive traffic study needs to be completed with more detail.

5. **Overall Conceptual Landscaping Plan:** PUDs rely heavily on landscaping for buffering of different portions of developments, from neighbors, roadways, paths, etc, within the unified development. Not enough detail has been given in order to review an actual plan with development standards.
6. **SWPPP/Drainage/Floodway/Floodplain plan, as related to Development**
7. **Overview Lighting Plan**
No lighting plan is included. This will be a very important part of review required to assess potential negative effects of the development on the surrounding neighborhoods and public safety.
8. **No Dumpster/Utility Plan**
Unreviewable
9. **No Fire and Emergency Vehicle Plan**
Unreviewable
10. **Rationale for an alternate Development Approval Process**
There is simply no rationale given to create a unique Development Approval Process for this Park development. Initiating projects on this Town owned property needs to be done in the daylight, in front of the Public. Initiating projects that require the use of town employee time or consultants result in expenditure of taxpayer dollars and the Director of Facilities has not been given that authority by the Town Board. Our Town Code is pretty specific that the power rests with our elected Town Board in a public process. Recently the CIP process has been bastardized to fund segmented aspects of this development process without proper disclosure to the public and SEQRA review of the whole development. It should not be used to initiate projects which will segment the review process, stealing from Peter to pay Paul.

The Town Board is able right now to create an Amherst Central Park Task Force with entity made up of the Town employees listed in their proposed process. This is usual practice in the TOA, but it's not clear why they want to subvert public involvement as early in the project as possible and feel the need to hide behind an internal structure. Creating this one of kind development process, would set a dangerous precedent, and would be counter to SEQRA. A Planned Unit Development approval is not the way to accomplish changing the Development Approval Process. The Town Board tried to avoid having this development go through the time-tested Development approval process by exempting "certain public properties," but ended up withdrawing their resolution after residents rejected this proposed hidden process. This Town has a history of working

with town officials and residents together to create community amenities that suit everyone. No special approval process necessary. Why should this one be any different?

11. Development Phasing Plan

It's impossible to know what to expect as there is no narrative or phasing plan available.

12. ETC....

I hope the Town will withdraw this proposal until such time as an Amherst Central Park Plan has been accepted by the Town Board or that this Board will remove it from your agenda until such time as the application is complete and able to be reviewed against PUD Development Standards and SEQRA completed.

Thank you, Mary Shapiro, 16 Royalwoods Ct

**COMMENTS ON THE PROPOSED PLANNED UNIT DEVELOPMENT
AMHERST CENTRAL PARK (FILE NO. SP-2023-11)**

Dear Amherst Town Board and Planning Board,

My name is Jennifer Snyder-Haas and I live at 185 Fairways Blvd. Here are my comments in opposition to aspects of the proposed Planned Unit Development (PUD) for Amherst Central Park and its Draft Environmental Impact Statement (DEIS).

(1) ZONING

First and foremost, this proposal is defective because it states that no change to the current recreation conservation (RC) is necessary. Section 1.2.1 states: “The Property envisioned for the Amherst Central Park is zoned as Recreation Conservation (RC), a district whose purpose is to provide for public, private, and civic uses related to recreation and conservation. Planning for the Amherst Central Park is specifically focused on supporting these uses. The Town’s Bicentennial Comprehensive Plan also recommends the Property be used for recreation, open space and greenways. The Property is a component of the LWRP, given its location along Ellicott Creek. The Amherst Central Park is a featured project for recreation and waterfront enhancement in the Town”. Section 4.2 states, under the heading “Consistency with Community Character”, states that per the Town’s Comprehensive Plan, Land Use and Development section 6 identifies the Property as Recreation, Open Space and Greenways”; “the Property is consistent with the Land Use in the Comprehensive Plan”; and “the Property is zoned Recreation Conservation [and] the Amherst Central Park will not be subject to a rezoning or Comprehensive Plan amendment.

The foregoing is patently false. The RC zoning district does not include the construction of an indoor theater in a residential neighborhood, let alone one over 30,000 square feet with extensive pavement for parking. Nor does it include the construction of a museum building of over 30,000 square feet and the displays of livestock and poultry that are slated for the proposed relocation of Buffalo Niagara Heritage Village. It certainly does not include the construction of a new addition for a universal prekindergarten program. While all potentially laudable goals, none fall within the RC zoning code or the identification of the property for “recreation, open space and greenways” as envisioned in the Comprehensive Plan. None of these is consistent with a true park. So, this application cannot go forward without addressing rezoning, which would not be consistent with the Comprehensive Plan in any event.

(2) ALTERNATE SITES/USES

Section 3.4 for Alternative Sites states: “While some of the proposed improvements in the Amherst Central Park could be provided in other areas of the Town, there is no other parcel or combination of parcels owned by the Town that would offer a suitable combination of location, existing natural beauty, overall location, and potential for a cohesive, comprehensive park plan that would be comparable to the proposed Amherst Central Park. This Alternative is therefore not further evaluated in this DSGEIS”.

This is also patently false. The Town in fact alienated 90 acres parkland across Maple Road on Audubon and has already allowed the construction of a large medical office complex on Audubon. The 90 acres included only three holes of the current municipal golf course on Audubon, leaving other ample alienated land. In prior park proposals that were put before the Central Park Task Force, Audubon was considered as the “active” recreation portion of a park that spanned both the Audubon and Westwood properties, with extensive development of Audubon that included housing and commercial uses anticipated. Audubon fronts a major road on Maple that is not nearly as heavily trafficked as Sheridan Drive, is close to the State University at Buffalo North Campus, and is not surrounded by residential homes. The PUD application should include an extensive consideration of this alternate site, particular for the theater, universal and prekindergarten programs and relocation of Buffalo Niagara Heritage Village (if this is to be seriously entertained at all, considering the proposed cost in excess of \$7 million with little chance of recouping any financial benefit).

Also, the Buffalo Niagara Heritage Village is located next to other Town-owned land. Its expansion in its current, much more appropriate setting should be considered.

Further, Section 3.5 for Alternative Uses states: “As set forth in the GEIS, the full development of the Property for mixed use commercial and/or residential purposes would result in significant impacts related to traffic, utility infrastructure, and community character. Industrial uses of the site would result in similar impacts. A significantly less intense residential development would reduce traffic and infrastructure impacts relative to the Mixed Use Alternative but would be inconsistent with existing zoning and the Town Comprehensive Plan. None of these alternative uses would meet the Purpose and Need identified in this SGEIS. This Alternative is therefore not further evaluated in this DSGEIS”.

The foregoing posits a false choice – the massive, totally inappropriate Mixed Use Alternative or the Park Concept Plan. How about a park that complies with the applicable zoning, with the elements that do not moved to an appropriate location? How about making Westwood the municipal golf course (which at least would be revenue-producing as opposed to the museum) as part of a larger public park with the other park elements on Audubon?

At the Central Park Task Force meetings, doing a cost/benefit analysis for the alternative was proposed but never followed, and meetings ceased abruptly with no follow through, the concept plan now pitched apparently hatched by the Town Board and developers. Members of the Task Force were asked to submit comments and did so, with Supervisor

Kulpa telling those members that he “was not even going to pretend” that he shared those with the architectural firm of Dover Kohl. Although the DEIS purports to state that public engagement was robust, it only looks that way on paper. A review of the Task Force meetings would show that member ideas that did not comport with what had already been drawn up were dismissed (and the plans that were drawn up then differ markedly from what is now proposed, which had no input from the long-defunct Task Force).

(3) CONNECTIVITY/WATERFRONT REVITALIZATION

The project benefits extolled in Section 4.2 also include: “Develop new recreation amenities and opportunities for residents with a focus on expanding trails and opportunities for walking and biking; “pursue opportunities to create new sidewalks and pathways that connect the places people live, work, shop, and play in Amherst”; “seek to enhance opportunities for residents to safely walk and bike for exercise, leisure, and transportation purposes”.

Connectivity? The proposed pedestrian/bike paths on Westwood do not connect to anything. Despite trail connectivity being the top public desire per the recreation survey the Town did, the Town has been totally non-responsive to it. The benefits of extending the Ellicott Creek Path that currently dead-ends at the Audubon Golf Course across Maple and through Westwood, and then to Amherst State Park, Glen Park and the Village of Williamsville are numerous and obvious. Yet this plan focuses on vehicular traffic moving into unspoiled greenspace. While Buffalo has eliminated traffic on its “ring road” in the crown jewel of Delaware Park, the Town seeks to create a traffic circle in the middle of Westwood, intersecting with pedestrian paths. Safety? The potential pitfalls are again obvious. The slick, feel-good language in the PUD, while purporting to be about public needs and wants, is really about the need to satisfy developers. The inclusion of a pedestrian entrance off Frankhauser, where there is a blind curve, is tone-deaf to pedestrian/bicyclist safety. The preferred set-up for any park on Westwood is to limit vehicular access to the existing North Forest/Sheridan with plentiful parking available, and possibly a parking lot entrance on the Maple side, with no vehicles allowed into the interior of the site. Although the PUD is silent on the effects on wildlife, once traffic is allowed onto the site, it would never be the same, eliminating its natural character, which this PUD ostensibly seeks to protect.

The proposed benefits also tout the Town of Amherst Local Waterfront Revitalization Program, which “celebrates the beauty and uniqueness of the extensive waterfront along Tonawanda Creek/Erie Canal and Ellicott Creek, and the local history and the community’s desire to build upon existing strengths for the future”, with the Town identifying the following goals for its local waterfront revitalization plan: “increase public access to Town waterways, enhance amenities at existing public parks”.

Yet, for the construction of the non-zoning appropriate theater, the Town plans on disturbing the waterway running across the southern portion of the property, acknowledging that “the canal feature located in the southwestern portion of the Property and identified in the

Amherst Central Park Plan for expansion into a larger pond may be subject to federal and state permitting if that water is connected to other waters” and “the outlet of the canal feature and discharge location of those waters would be identified to determine any regulatory requirements, which could include enhancement of other wetlands onsite, offsite mitigation, or other mitigation as required by the ACOE and/or NYSDEC”. Furthermore, Westwood has no navigable sections of Ellicott Creek, but Audubon does – which one would think this would be a major consideration for considering Audubon as an alternate site.

(4) TRAFFIC

Per the DEIS, a collision analysis was conducted by C&S to evaluate the collision history of signalized intersections of Sheridan Drive at Frankhauser Road and Sheridan Drive at North Forest Road. Collision data was Amherst Central Park Affected Environmental Resources, Impacts, and Mitigation October 12, 2023 4.14 compiled, from January 2018 through December 2022. As detailed in the TIS, a total of 79 collisions were documented with 17 collisions at the Frankhauser Road intersection and 62 collisions at the North Forest Road intersection. Of these, 39% were reportable with injuries.

Despite the significant amount of accidents identified, this plan notes significant increased traffic, largely due to the non-zoning appropriate uses. “Table 6 Trip Generation Park Facility ITE Land Use Code PM Peak Trips Saturday Midday / Peak Trips Entering Exiting Total Entering Exiting Total Park 411 Public Park 18 15 33 33 34 61 Community Building 495 Recreational Community Center 40 46 86 36 31 67 Theater N/A 70 17 87 70 17 87 Ice Rink/Ribbon 465 Ice Skating Rink 31 26 57 60 53 113 Peak Hour Trips 159 104 263 200 128 328 Trip distribution was based on existing traffic patterns in the study area. The main entrance of the Park is proposed to be off of Sheridan Drive, across from Fenwick Road. It was assumed the majority of the trips (70%) will be entering and exiting from the main entrance, and 30% will use the entrance on N. Forest Road”.

As previously noted, Maple Road is significantly less trafficked than Sheridan. Also, the proposal notes that a traffic signal should be considered at the proposed park entrance across from Fenwick “at the Amherst Central Park driveway on Sheridan Drive due to the long delays and vehicle queues expected at the site driveway and at Fenwick Road located across from the driveway.” There are already long queues at Sheridan and Frankhauser where there is a traffic signal, which would be very close to any traffic signal at Fenwick – the plan does not indicate whether a signal at the park entrance would mean the removal of the signal at Frankhauser, which would of course have significant negative effects for the residents utilizing this existing light.

(5) OVERALL IMPACTS AS TOO SIMILAR TO MIXED USE DEVELOPMENT

Section 3.3 of the GEIS identifies several of the problems found with the previous mixed use development for which a re-zone was denied, including insufficient sanitary sewer capacity and significant constraints on increasing that capacity; traffic impacts associated with new development in an area not previously planned for such development; extensive new roadway and signal construction to address traffic impacts; impacts associated with wetlands, hardwood swampland, floodplains, and Ellicott Creek; conversion of land zoned RC to higher-density uses; Incompatibility of the proposed uses with surrounding neighborhoods; loss of open space; and a protracted construction period.

The plan goes on to say how much better the current proposal is. However, per Section 2.4, Project Schedule: “The Town anticipates that the implementation of the Amherst Central Park will occur over the course of a 10-year period (June 2024-June 2034). Construction will begin with improvements within the southern portion of the Property, which will include the most intensive development of recreation, community, and civic facilities”.

THIS IS THE SAME AMOUNT OF CONSTRUCTION TIME THAT WAS CITED FOR THE MASSIVE MIXED USE DEVELOPMENT. 10 YEARS. This is an incredibly long period of time for a construction period in a heavy residential area with homes literally backing up to the construction site. Remember the “lighter, cheaper, faster” mantra that Buffalo so successfully employed at Canalside? This project is entirely too development-heavy, particularly on the Westwood site. It does not have to be this way. There are other land options available that would cause significantly less environmental impact for the items that do not belong in this RC-zoned property.

Additionally, per Section 4.3: “The Amherst Central Park improvements are estimated to generate up to 80,000 gallons/day of sanitary wastewater, primarily from recreational water features, i.e. splash pad spray and backwash water for swimming pool. Wastewater will be treated at the Town of Amherst Water Pollution Control Facility (WPCF), which has existing capacity to convey and treat these uses. In contrast, projected average usage for the Mixed Use Alternative in the GEIS, 245,000 gallons/day, was approximately three times greater than the Park average use, with peak hourly flow rates up to approximately 1,000,000 gallons/day. The projected sewer flow rates exceeded the sanitary system flow capacities and were a key basis for the denial of the Westwood Neighborhood (Mixed Use) application.” Given that the mixed use alternative was so massive and incompatible with the surrounding neighborhood, one-third of its proposed water usage remains a very high amount.

The plan also notes: “As part of the design plan for the Amherst Central Park, it is proposed that the Buffalo Niagara Heritage Village Museum would relocate its outdoor living displays to the Amherst Central Park. These displays may include livestock and poultry which could produce odors and noise. The Town will place these displays approximately 150 feet from the nearest occupied structures to the west of the Park and will maintain them such that

potential impacts due to odors and noise are anticipated to be small.” It should be obvious that agricultural displays should not be located behind residential homes. The museum currently has an appropriate location in a more agricultural setting, with plenty of nearby Town-owned land for its expansion.

(6) FUTURE DEVELOPMENT

Although the DEIS purports to preserve 115 acres of the mid- to northern section of the parcel as natural space, Section 6.2 reads: “The establishment of thresholds for the future environmental review of related improvements in the Amherst Central Park that are not set forth in Appendix A is an important component of this SGEIS. Examples of possible future related actions (aka improvements) may include development in the northern section of the Property in a manner that is not entirely consistent with the approved Conceptual Development Plan in Appendix A. This may occur given that the layout of the improvements as depicted on the Conceptual Development Plan is conceptual in nature. Instead, the layout as depicted on the Conceptual Development Plan is meant to depict the anticipated components of the Amherst Central Park and the maximum potential development that could occur without the need for additional environmental review(s) pursuant to SEQRA. The precise layout of improvements will be the subject of an ACP Application process for this Town-owned PUD. The future improvements will be reviewed in accordance with the process established in the PUD application.” The following “process” that is outlined significantly limits environmental review of the Town’s future actions. This makes one wonder about the Town’s true intentions for the northern section of the property. If the Town is pledging to keep 115 acres undeveloped, why is this pledge not cemented in the document, with no future “improvements” of any kind banned in this area?

This plan should NOT be approved by the Planning Board due to the numerous illegalities and deficiencies outlined herein.

Thank you in advance for considering my comments.

Jennifer Snyder-Haas
185 Fairways Blvd



TOWN OF AMHERST

BUILDING DEPARTMENT

ERIE COUNTY, NEW YORK

5583 MAIN STREET

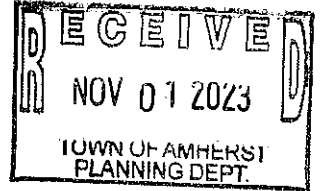
WILLIAMSVILLE, NEW YORK 14221

PHONE: (716) 631-7080

FAX: (716) 631-7192

Mark S. Berke, P.E.
Commissioner of Building

DATE: October 24, 2023
TO: Planning Department
FROM: Doug Gesel Supervising Code Enforcement Officer
RE: Conceptual Plan SP-2023-11 for 772 N Forest Rd, 385 & 391 Maple Rd



- Site Plan is: Subdivision is: ODA is: CSP is:
- Approved as Submitted
- Approved with the following conditions or changes:
- Denied for the following reasons:
- Not reviewable at this stage because the following information is not provided:
- Not applicable to this department at this time.

NOTE:

- Floodplain Development Permit required.
- Wetlands on property.
-

*This review was for site compliance only.

*Approval does not grant permission to start construction.


Douglas Gesel

Supervising Code Enforcement Officer
Town of Amherst Building Department

PUD



AMHERST FIRE CHIEFS' ASSOCIATION INC.

To: Dan Howard, Planning Director

Date: 10/30/23

From: Krista Halt, Liaison to Amherst Fire Safety Committee

RE: Site Plan Review: PUD APPLICATION REVIEW SP-2023-11 PROPOSED CONCEPTUAL DEVELOPMENT PLAN FOR A NEW COMMUNITY PARK

Address: 772 NORTH FOREST RD. 385 & 391 MAPLE RD.

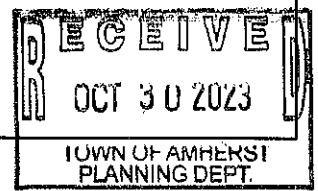
Petitioner: TOWN OF AMHERST

The above referenced Site Plan is Subdivision is Minor Modification is:

Approved as Submitted

Denied due to the following:

Not reviewable at this time due to the following:



- 1. Section 503 FCNYS 2020 – Fire Apparatus Access Road
 - A. Section 503 Firelanes (fire apparatus access roads) be provided in accordance with the FCNYS 2020
 - B. 503.1.1 – provide for the fire apparatus access road to within 150 feet of all portions of the building or within 300 feet if the building is sprinkled.
 - C. 503.1.2 – provide an additional fire apparatus access road
 - D. 503.2 – specifications – fire apparatus access roads shall be installed and arranged in accordance with section 503.2.1 through 503.2.7
 - 1. 503.2.1 – fire apparatus access road must be an unobstructed width of not less than 20 feet and a vertical clearance of 13 feet 6 inches.
 - 2. 503.2.2 – increase width of fire apparatus access road to ____ feet to be adequate for fire or rescue operations.
 - 3. 503.2.4 – the turning radius for fire apparatus access roads is 22 inside and 45 outside.
 - 4. 503.2.5 – dead end fire apparatus access roads in excess of 150 feet, shall be provided with an approved area for turning around fire apparatus.
 - 5. 503.3 – fire apparatus access roads must be marked as firelanes per the signage specification established by Appendix D FCNYS 2020
 - 6. Appendix D – Access Roads: Width, Distance from bldgs. Remoteness requiring 2 separate access roads.
 - 7. Appendix D 103.2 Grade: Fire apparatus access rds. Shall not exceed 10 percent in grade.
- 2. Section 506 FCNYS 2020 – Key Boxes – A fire department Knox key box is required for access to building keys.
- 3. Section 507 FCNYS 2020 – Fire Protection Water Supplies
 - A. Indicate all existing Fire Hydrants on plans.
 - B. All waterlines with numerous hydrants should be looped or on a grid system.
 - C. All fire hydrants must be within 500 feet of each other. (Subdivisions)
 - D. Section 507.5.1 – provide an additional Fire Hydrant within 400 feet of the most remote point of the building (as the fire hose would be laid out) or within 600 feet if the building is equipped with a Fire Sprinkler system.
 - E. [B] Section 912 - This project may be required to install a Fire Sprinkler system, if so, indicate the location of the fire department connection for the sprinkler system, which must be located on the street side of the building

COMMENTS:

Szatkowski, Jeffrey

From: Szatkowski, Jeffrey
Sent: Wednesday, October 18, 2023 4:29 PM
To: Szatkowski, Jeffrey
Subject: LA Review SP-2023-11_10182023

There are no comments on the submitted proposed conceptual development plan for a new community park.

Thanks,
Jeff

Jeffrey Szatkowski, Landscape Architect
Town of Amherst Planning Department
5583 Main St.
Williamsville, NY 14221
P: (716) 631-7051



TOWN OF AMHERST

BUILDING DEPARTMENT

ERIE COUNTY, NEW YORK

5583 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221

PHONE: (716) 631-7080

FAX: (716) 631-7192

Mark S. Berke, P.E., CFM
Commissioner of Building

Date: October 31, 2023

To: Daniel Ulatowski, AICP- Asst. Planning Director

From: Alan D. Herberger, Sr. Plumbing Inspector

Re: SP-2023-11; Proposed Conceptual Development Plan; New Community Park;
772 North Forest Rd., 385 & 391 Maple Rd. Town of Amherst, Petitioner

The Proposed PUD Application Review is Approved as Submitted. – Plumbing Dept.

cc: Engineering Dept.
Building Dept.



TOWN OF AMHERST

ERIE COUNTY, NEW YORK

5583 MAIN STREET
WILLIAMSVILLE, NEW YORK 14221
(716) 631-7030
FAX (716) 631-7101
www.amherst.ny.us

Martin A. Polowy
Town Attorney

Elizabeth A. Burakowski
Director of Special Projects

Nicole M. Burroughs
Senior Paralegal

Samuel A. Alba
Sr. Deputy Town Attorney

Nora B. Robshaw
Sr. Deputy Town Attorney

Brittanylee Penberthy
Town Prosecutor

TO: Scott Marshall, Planning Department

FROM: Nora B. Robshaw, Senior Deputy Town Attorney *NBR/rms*
Right-of-Way Review

DATE: October 25, 2023

RE: Proposed PUD Application Review
SP-2023-11; Proposed Conceptual Development Plan for a New
Community Park
772 North Forest Road, 385 & 391 Maple Road
Town of Amherst, Petitioner

This office has reviewed the materials submitted by your correspondence dated October 17, 2023, and has no comments.

We are returning copies of the materials for your file.

NBR:hs

c: Douglas Gesel, Senior Code Enforcement Officer, *(w/o attachment)*
Brian J. Armstrong, EIT, Director of Engineering Services, *(w/o attachment)*
Jeffrey Burroughs, PE, Town Engineer, *(w/o attachment)*
Mary-Diana Pouli, Executive Director of Youth & Recreation *(w/o attachment)*

TOWN OF AMHERST

TRAFFIC-SAFETY BOARD

ENGINEERING DEPARTMENT – 1100 NORTH FOREST ROAD, WILLIAMSVILLE, NEW YORK 14221
TRAFFIC SAFETY COORDINATOR - TELEPHONE 631-7154 - FAX 631-7222

MICHAEL SZUKALA
*Councilmember &
Liaison Officer*

November 2, 2023

ERIC FRAAS
Chairman

TO: Scott Marshall – Principal Planner
Mark S. Berke – Commissioner of Buildings

GREGORY DIONNE
Vice Chairman

FROM: Christopher P. Schregel – Traffic Safety Coordinator

CHRISTOPHER P. SCHREGEL
*Traffic Safety
Coordinator*

SUBJECT: PUD Application Review, **SP-2023-11**
Proposed Conceptual Development plan for a New
Community
TOA Job # 2023.16

ADDRESS: 772 North Forest Road, 385 & 391 Maple Road

PETITIONER: Town of Amherst

MEMBERS

DANIEL J. RIDER, P.E.
KENNETH A. SMITH
J. MICHNIEWICZ, P.E., P.T.O.E.
MARK STORCH
MAXWELL KAHN
KEVIN CANTWELL
KRISTIN GOSS
PATRICK WANAMAKER, P.E.

PUD APPLICATION REVIEW IS

APPROVED WITH CONDITIONS

DEPT. LIAISONS

THOMAS VOIGT
Planning

CAPT. CHARLES PERSONS
Police

WILLIAM PRENEVAU
Building

AL SPOTH
Highway

1. Reconsider altering the location and geometry of the N. Forest Road curb-cut as proposed. The proximity of the bends along N. Forest Road at this curb-cut location present challenges given the number trips expected, particularly coming from the north as there is not a proposed access from either Maple Road or Frankhauser Road. Reconsideration of the roundabout configuration is suggested.
2. Provide a pedestrian connection between the public sidewalk along the south side of Maple Road and the internal walking paths that loop near Maple Road.
3. Similar to comment #2, it is expected that park users will utilize the internal pathway system from the north end. Suggested that the Audubon Par 3 parking lot be utilized as a location for park users to park and access the paths within Amherst Central Park (ACP). As such, provide a pedestrian connection between the existing Par 3 parking lot and the internal walking paths within ACP within the golf course. Consider expanding parking at the Par 3 to accommodate this new "trail head".
4. Provide additional internal parking near key park features. Consider utilizing parallel parking along areas where park users may want to access by vehicle, e.g. playgrounds, outdoor exercise area, etc.
5. Traffic Safety Board agrees with the Draft SGIES that while the signal warrants are not met, that a traffic signal still be considered for the ACP driveway on Sheridan Drive at Fenwick to address the projected long delays and queues out of both the site driveway and Fenwick Road. Further providing for an improved pedestrian crossing to the residential subdivision across Sheridan Drive.



CPS/ch
Cc: Jeff Burroughs, Town Engineer
Mary-Diana Pouli, Exec. Director of Youth and Recreation

Szatkowski, Jeffrey

From: Ulatowski, Daniel
Sent: Thursday, November 16, 2023 1:10 PM
To: Wendy A. Marsh; Wagner, Barbara; Audino, Kate; Polowy, Martin; Burakowski, Elizabeth; Dafchik, Anne; Howard, Dan
Cc: Szatkowski, Jeffrey
Subject: FW: Amherst Central Park Concept Plan - Pedestrian and Bike Entrance at Frankhauser/Fairways

Importance: High

FYI,

See email below.

Dan U

From: Vaughan, William <wvaughan@chsbuffalo.org>
Sent: Thursday, November 16, 2023 1:00 PM
To: Marshall, Scott <SMarshall@amherst.ny.us>; Palumbo, Gary <gpalumbo@amherst.ny.us>; Voigt, Thomas J. <tvoigt@amherst.ny.us>; Ulatowski, Daniel <dulatowski@amherst.ny.us>
Cc: Toa Info <toainfo@amherst.ny.us>; Bucki, Debbie <dbucki@amherst.ny.us>; Berger, Jacqueline <jberger@amherst.ny.us>; Lavin, Shawn A. <slavin@amherst.ny.us>; Szukala, Michael <mszukala@amherst.ny.us>; Taggart, Martha <mtaggart@amherst.ny.us>; 'stephanie vaughan' <vaughan.stephanie81@yahoo.com>
Subject: Amherst Central Park Concept Plan - Pedestrian and Bike Entrance at Frankhauser/Fairways
Importance: High

CAUTION: This email originated from outside of the organization.
Please do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon,

My name is Bill Vaughan and I live at 11 Fairways Blvd. with my wife Stephanie and our two young children Sophie and Aidan. We have lived in Amherst since July of 2012 and our house is at the south end of Fairways, right at the Frankhauser/Fairways intersection.

I would like to state that I am supportive of the overall Westwood Concept as part of the Amherst Central Park but I have some concerns about the proposed ???Pedestrian and Bike Entrance??? to Frankhauser at the South West area of Westwood. A ???Pedestrian and Bike Entrance??? in that space does not make logical sense and also raises a number of traffic and safety concerns. I am writing to you today not only on behalf of my family but for many of our neighbors in the Frankhauser/Fairways neighborhood who have expressed similar concerns as well. Some of the biggest concerns being:

- Why is there a need for a Pedestrian and Bike Entrance? Why aren't the main entrances adequate?
 - o There are no other Pedestrian and Bike Entrances anywhere else on the Concept Plan so why put one there leading to/from Frankhauser?
 - o It is important to note that where the Pedestrian and Bike Entrance would be, there are no sidewalks on that East side of Frankhauser from Sheridan leading up to the proposed Pedestrian and Bike Entrance, and then through the Frankhauser/Fairways intersection. The sidewalk does not begin until you are

directly in front of my house at 11 Fairways ??? that is a long stretch where pedestrians would be forced to walk in the road to get to a sidewalk.

- This means that pedestrians leaving the park and utilizing the proposed Pedestrian and Bike Entrance would be immediately put into an unsafe situation at the Frankhauser/Fairways intersection as there is nowhere for them to safely walk. The same safety concerns for pedestrians would also be true for people entering the park at that proposed location.
 - On a personal note, because pedestrians leaving the park would want to avoid the unsafe intersection, they would utilize my yard (directly adjacent to the proposed Pedestrian and Bike Entrance) as a cut through to get to Fairways Blvd. As I mentioned, I have two young children and we play in our yard on a daily basis ??? having strangers cutting through my yard and being in close proximity to my children, I believe, is also problematic and presents additional safety issues.
- In June of 2020, the town reconfigured the intersection of Frankhauser and Fairways after recommendation from the Amherst Traffic and Safety Board due to traffic and safety issues and it being deemed an unsafe intersection - why would we include a design in the Concept Plan that would offset the work done to help mitigate the traffic/speeding/safety issues?
- If the intersection was deemed unsafe for vehicles, why would we want pedestrians and bicyclists to utilize that same intersection? Wouldn't it also be unsafe for them?
 - Even with the intersection redesign, it is still a difficult intersection with safety and speeding issues persisting. Vehicles continue to use Fairways/Frankhauser as a cut-through between Sheridan and Maple, speeding through the intersection causing unsafe traffic conditions ??? on a daily basis there are quite a few ???near miss??? car accidents, with vehicles speeding through the intersection/not stopping at the STOP sign on Fairways at Frankhauser.
 - Since the intersection was redesigned, we have also had multiple instances of vehicles speeding down Frankhauser, losing control of their vehicle, and driving right onto the new grassy area the town installed at the intersection, getting their vehicle stuck. This has happened most often at night and in inclement weather, but has also happened in ordinary driving conditions. Recently, the town removed the guide rail that paralleled the intersection (separating the road from my yard), so the next time this happens the vehicle that loses control and leaves the road will be in my yard. Again, with the additional traffic that will be seen from this, this puts my family at risk.
 - Adding the additional pedestrian and bike traffic, vehicle traffic, and cars parked on Frankhauser and Fairways, it will make an already unsafe intersection even more unsafe.

On behalf of my family and our neighbors, I respectfully ask you to reconsider and remove the Pedestrian and Bike Entrance at Frankhauser/Fairways from the Concept Plan. The questions raised here, and other safety concerns, should all be considered when looking at this possible Pedestrian and Bike Entrance at Frankhauser/Fairways. If the plan were to move forward as shown in the Concept Plan and a Pedestrian and Bike Entrance is placed where it is currently proposed, there will be far more burdens than benefits as a result of that Pedestrian and Bike Entrance, causing increased traffic and safety issues. Thank you for your time and I appreciate you considering this request. Have a great day.

Peace and all good things,

Bill Vaughan, MAT, BCC
Vice President, Mission Integration
Mercy Hospital of Buffalo
565 Abbott Road
Buffalo, New York 14220
Office: (716) 828-2190
Cell: (716) 868-1521
E-mail: wvaughan@chsbuffalo.org



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This message and all contents may be reviewed by authorized parties of the Catholic Health System other than those named in the message header.

A.2 Comment Summary



Appendix B Revised Wetland Mapping



Figure 6 - Wetland Delineation Map

Town of Amherst Erie County, New York

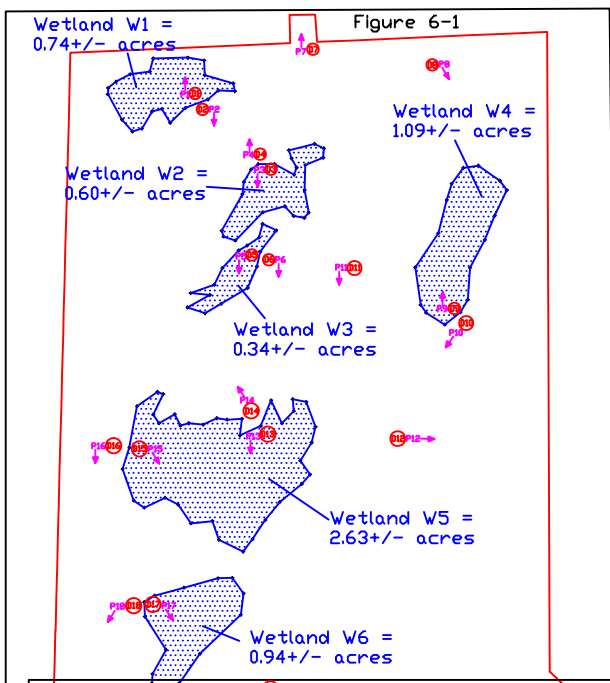


Figure 6-1

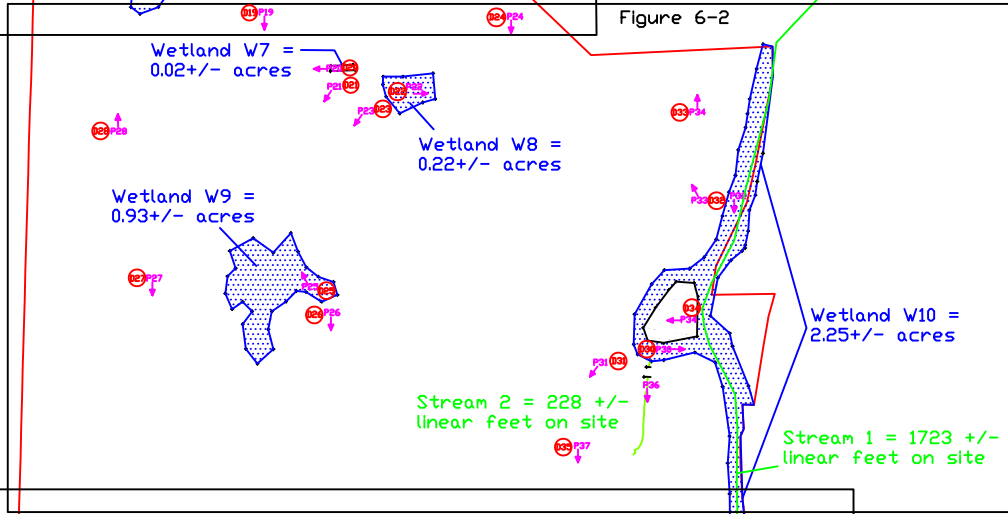


Figure 6-2

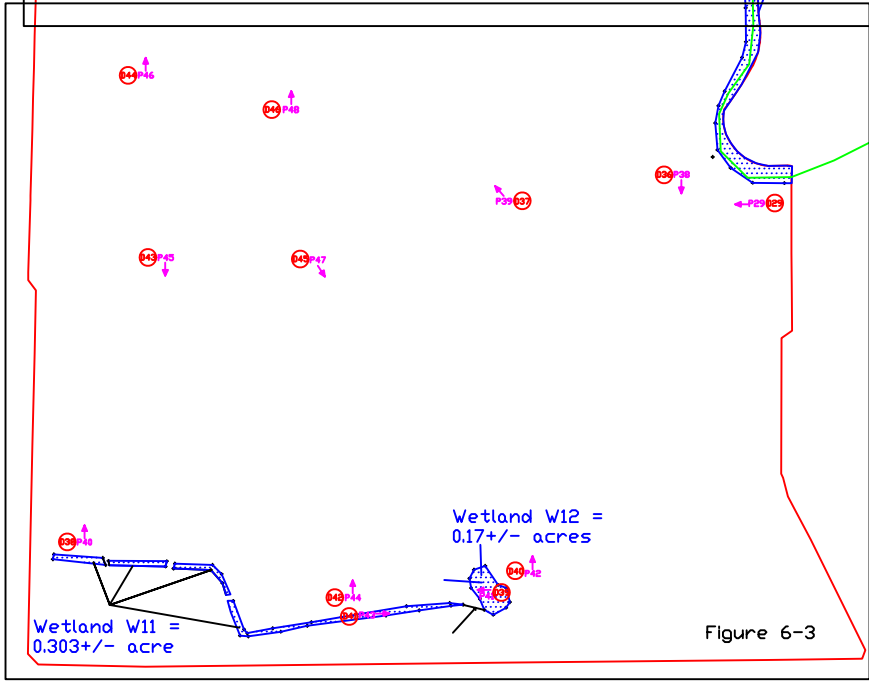
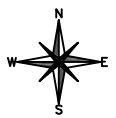


Figure 6-3



Amherst Central Park LEGEND

	Limits of Investigation
	Streams
	Wetland Boundary Flag
	Wetland Area
	Photo Location
	Data Point Location

Scale: 0 100' 200'

Map Date: June 7, 2023/ AMM/EDI
Revised: November 21, 2023 JMC/EDI

Base Map Provided By: GPSMap 62s

File Name: Delineation map.dwg

EDI Project Code: W1109d

W.C. STATON W.C.
2.63 +/- acres

Wetland W6 =
0.94 +/- acres

Wetland W7 =
0.02 +/- acres

Wetland W8 =
0.22 +/- acres

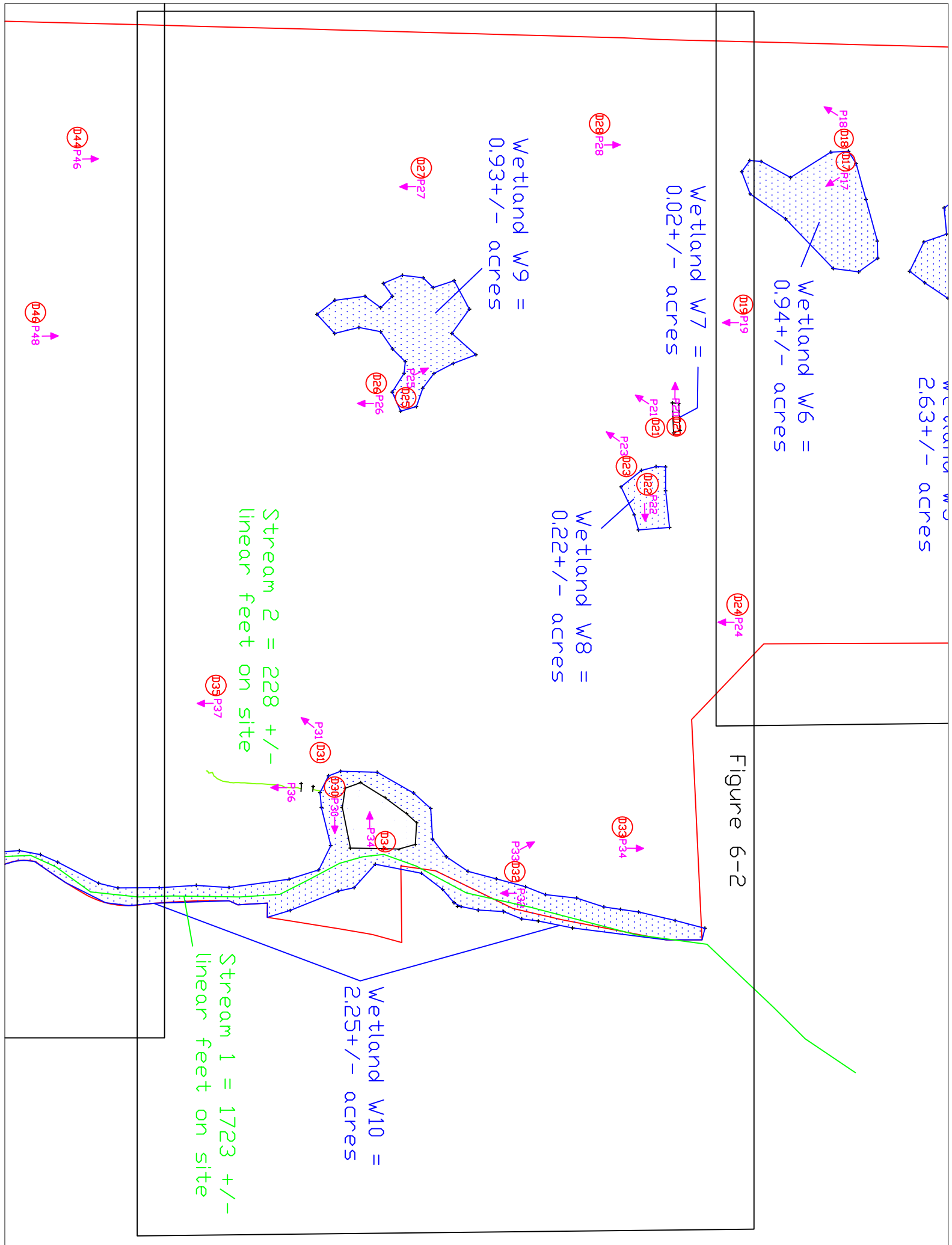
Wetland W9 =
0.93 +/- acres

Wetland W10 =
2.25 +/- acres

Stream 2 = 228 +/-
linear feet on site

Stream 1 = 1723 +/-
linear feet on site

Figure 6-2



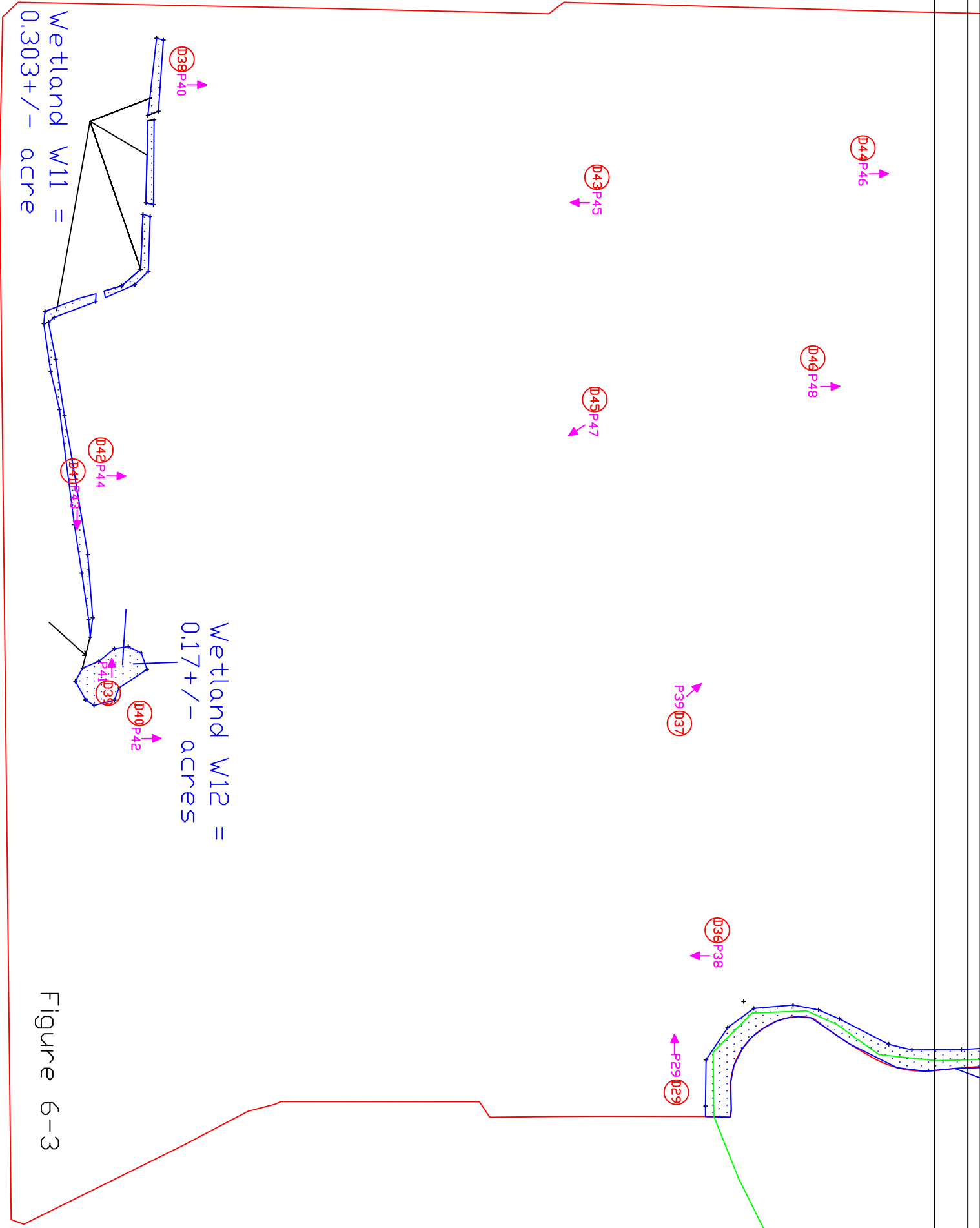


Figure 6-3

Appendix C Updated Traffic Impact Study





C&S Engineers, Inc.
141 Elm Street, Suite 100
Buffalo, New York 14203

Traffic Impact Study

Amherst Central Park
Town of Amherst, Erie County, New York

Prepared for:
Town of Amherst
Municipal Building
5583 Main Road
Williamsville, New York 14221

October 2023

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Appendices:

Appendix A – Figures

Appendix B – Collision Data

Appendix C – Traffic Data

Appendix D – Synchro Reports

Appendix E – Signal Warrant Analysis

Executive Summary

The existing location of the Westwood Country Club in the Town of Amherst has been proposed to be redeveloped into a 171-acre Town park. The proposed Amherst Central Park will have a variety of amenities for the community, some of which include trails, a community building, pavilions, playgrounds, theaters, an ice skating rink, a winter market, a museum, and more. The proposed site is in the Town of Amherst, Erie County, New York, between Sheridan Drive and Maple Road and Frankhauser Road and N. Forest Road. There are two proposed site driveways at the southern end on Sheridan Drive and N. Forest Road. This Traffic Impact Study is part of a larger Environmental Impact Study for the proposed park.

Through an existing conditions inventory, collision analysis, and level of service analysis, the study area intersections were evaluated for potential improvements and mitigation. The analysis considered existing and build conditions during the afternoon weekday peak and the midday Saturday peak. The selected peak hours were chosen for analysis due to the expected recreational use of the site. The site generated trips were calculated using the ITE Trip Generation Manual and assumptions made based on seating capacity and expected attendance to events. Proposed site generated traffic volumes were distributed using existing traffic patterns.

The existing LOS at the study intersections is acceptable for a congested roadway network with the worst level of service at a LOS D. The proposed park-related generated traffic minimally impacts the LOS at the study intersections. A traffic signal is not warranted at the proposed site driveway on Sheridan Drive; however, a signal should be considered due to the long delays and queue expected at the site driveway.

1.0 Introduction

Study Purpose

The Town of Amherst has requested a Traffic Impact Study for the proposed Amherst Central Park. This park is proposed to contain a variety of amenities for public use, some of which include pedestrian and bike trails, a community building, pavilions, playgrounds, theaters, an ice skating rink, a winter market, and more. This Traffic Impact Study is part of a larger Environmental Impact Study for the proposed park. The primary purposes of this study are to identify and assess traffic generated by the proposed park, compare existing conditions of the nearby roadways to the expected fully built conditions and recommend mitigation measures required due to the traffic generated by the park development.

Study Area

The proposed site location is in the Town of Amherst, Erie County, New York, at the old Westwood Country Club site. The northern and southern site limits are Sheridan Drive and Maple Road. The eastern limit of the proposed park is a combination of N. Forest Road, Ellicott Creek, and the existing Audubon Par 3 Golf Course. The western site limits are along Frankhauser Road and Fairways Boulevard homes. There are two proposed site driveways to access Amherst Central Park. The main entrance to the proposed park is planned to be off of Sheridan Drive, across from Fenwick Road. The other proposed site driveway is located on N. Forest Road at the existing Westwood Country Club entrance driveway. The study area includes intersections between Harlem Road and N. Forest Road along Sheridan Drive. See Figure 1 for the Study Area Map.

Study Roadways:

- 1) Sheridan Drive (NYS Route 324)
- 2) N. Forest Road

Study Intersections:

- 1) Sheridan Drive (NYS Route 324) at Harlem Road (NYS Route 240)
- 2) Sheridan Drive (NYS Route 324) at I-290 Ramps
- 3) Sheridan Drive (NYS Route 324) at Frankhauser Road
- 4) Sheridan Drive (NYS Route 324) at Fenwick Road
- 5) Sheridan Drive (NYS Route 324) at N. Forest Road



Figure 1: Study Area Map

Methodology

Intersections

The study intersections were analyzed using SYNCHRO 11¹, which is a computer program that implements the methods presented in the 6th Edition Highway Capacity Manual². SYNCHRO determines the **Level of Service (LOS)**, which is defined in terms of **Delay**.

Delay is a measure of driver discomfort, frustration, fuel consumption and lost travel time. **Level of Service** criteria are stated in terms of the control delay per vehicle for a 15-minute analysis period and range from "A" to "F". Level of Service A is representative of a movement that is free flowing with minimal delay, while LOS F generally represents long delays. LOS D is generally considered acceptable in urban environments.

The ranges of delay for each level of service, as contained in the 6th Edition Highway Capacity Manual, are shown in Table 1.

Table 1: Intersection Level of Service Criteria

Level of Service (LOS)	Unsignalized Intersections	Signalized Intersections	
	Delay (sec)	Delay (sec)	v/c ratio*
A	0-10	0-10	<1.0
B	> 10-15	> 10-20	<1.0
C	> 15-25	> 20-35	<1.0
D	> 25-35	> 35-55	<1.0
E	> 35-50	> 55-80	<1.0
F	over 50	over 80	≥1.0

* If the volume to capacity ratio is 1.0 or greater, the LOS is an F

2.0 Existing Conditions

Roadway Network

The study area is along Sheridan Drive (NYS Route 324), which is an east/west roadway mainly with 2 travel lanes in each direction and a shared left turning lane with dedicated left turn lanes at intersections. Harlem Road (NYS Route 240) forms a T-junction with Sheridan Drive at the western end of the study area and N. Forest Road intersects Sheridan Drive at the eastern end of the study area. Interstate 290 contains an exit and entrance ramp onto Sheridan Drive. Additionally, there are

¹ Synchro Studio 11, Traffic Signal Optimization and Simulation Modeling Software, Version 10, Trafficware Corporation, Albany, California, 2020.

² Highway Capacity Manual, Transportation Research Board, National Research Council, Washington D.C., 2016.

several minor intersections with Sheridan Drive such as: Sunrise Boulevard, Cranburne Lane, Frankhauser Road, and Fenwick Road. Apart from Frankhauser Road, these are all unsignalized intersections and primarily serve residential areas. Sheridan Drive primarily contains three travel lanes in each direction with a center turn lane from the western end of the study area to the area of the I-290 ramps. From the ramps, it runs with two travel lanes and a center turn lane to the eastern end of the study area. There are no existing bicycle accommodations along any road in the study area. Both Sheridan Drive and N. Forest Road have sidewalks along both sides of the street near the proposed site.

Table 2: Street Network Information

Street	Jurisdiction	Functional Classification	AADT	Speed Limit
Sheridan Drive (NYS Route 324)	NYSDOT	Urban Principal Arterial	36,681	45 mph
Harlem Road (NYS Route 240)	NYSDOT	Urban Minor Arterial	11,530	35 mph
Interstate 290 (WB entrance ramp)	NYSDOT	Urban Principal Arterial Interstate	8,301	-
Interstate 290 (WB exit ramp)	NYSDOT	Urban Principal Arterial Interstate	6,985	-
Sunrise Boulevard	Town of Amherst	Urban Local	-	30 mph
Cranburne Lane	Town of Amherst	Urban Local	-	30 mph
Frankhauser Road	Town of Amherst	Urban Local	-	30 mph
Fenwick Road	Town of Amherst	Urban Local	-	30 mph
North Forest Road	Erie County	Urban Principal Arterial & Urban Minor Arterial	9,583	35 mph

Capacity Analysis

Intersection Analysis

Turning movement counts (TMCs) were collected at the study area intersections through Tri-State Traffic Data. Data was collected on Thursday, September 21, 2023 from 3:00 PM to 6:00 PM and Saturday, September 23, 2023 from 11:00 AM to 2:00 PM. The study area weekday afternoon peak hour is 4:30 PM to 5:30 PM and the Saturday midday peak hour is 12:00 PM to 1:00 PM. Refer to **Appendix A, Figure 4** for existing turning movement volumes. **Table 3** below highlights the results of the level of service analysis for existing conditions.

Table 3: Intersection LOS Analysis - Existing Conditions

Approach		Weekday PM			Saturday Midday		
		LOS ^a (Delay) ^b	V/C ^c	Queue ^d	LOS (Delay)	V/C	Queue
Sheridan Drive (NYS Route 324) at Harlem Road (NYS Route 240)							
Eastbound	<i>Thru</i>	D (37.9)	0.54	515	C (26.6)	0.35	314
	<i>Right</i>	A (2.7)	0.29	51	A (2.1)	0.31	46
Westbound	<i>Left</i>	D (40.0)	0.32	76	C (32.8)	0.39	85
	<i>Thru</i>	A (3.8)	0.34	169	B (10.7)	0.25	267
Northbound	<i>Left</i>	E (69.1)	0.48	131	E (75.0)	0.54	129
	<i>Right</i>	A (7.7)	0.67	96	A (4.6)	0.46	46
<i>Intersection</i>		C (20.7)	-	-	B (19.7)	-	-
Sheridan Drive (NYS Route 324) at I-290 Ramps							
Eastbound	<i>Left</i>	E (63.1)	0.87	343	C (26.6)	0.49	213
	<i>Thru</i>	C (26.1)	0.46	525	B (15.2)	0.26	305
Westbound	<i>Thru/Right</i>	C (21.0)	0.91	637	B (10.5)	0.37	176
Northbound	<i>Left</i>	D (42.3)	0.25	173	D (52.6)	0.40	197
	<i>Left/Right</i>	C (29.1)	0.34	174	B (10.3)	0.35	74
	<i>Right</i>	C (28.5)	0.33	162	A (7.7)	0.33	58
<i>Intersection</i>		C (27.3)	-	-	B (15.5)	-	-
Sheridan Drive (NYS Route 324) at Frankhauser Road							
Eastbound	<i>Left</i>	A (1.6)	0.09	m3	A (1.0)	0.04	3
	<i>Thru</i>	A (6.6)	0.55	217	A (2.7)	0.36	101
Westbound	<i>Thru/Right</i>	A (2.2)	0.54	116	A (1.7)	0.34	66
Southbound	<i>Left</i>	F (85.3)	0.49	106	F (84.1)	0.42	89
	<i>Right</i>	C (25.5)	0.21	34	C (28.8)	0.17	29
<i>Intersection</i>		A (5.9)	-	-	A (4.0)	-	-
Sheridan Drive (NYS Route 324) at Fenwick Road							
Westbound	<i>Left</i>	c (15.7)	0.04	0.1	b (11.3)	0.03	0.1
Northbound	<i>Left/Right</i>	e (35.7)	0.23	0.9	c (21.0)	0.16	0.6
<i>Intersection</i>		n/a			n/a		

*lowercase letters signify the HCM 6th edition Stop Control methodology was used

a: level-of-service

b: delay is measured in seconds

c: volume to capacity ratio

d: 95th queue length, measured in feet (queue length of stop controlled intersections measured in number of vehicles)

Table 3 continued

Approach		Weekday PM			Saturday Midday		
		LOS ^a (Delay) ^b	V/C ^c	Queue ^d	LOS (Delay)	V/C	Queue
Sheridan Drive (NYS Route 324) at N. Forest Road							
Eastbound	<i>Left</i>	E (64.8)	0.87	#404	A (9.7)	0.40	115
	<i>Thru</i>	D (36.1)	0.75	727	B (19.6)	0.43	419
	<i>Right</i>	B (17.5)	0.35	208	A (5.4)	0.11	75
Westbound	<i>Left</i>	D (39.6)	0.69	168	B (13.0)	0.32	84
	<i>Thru/Right</i>	D (50.1)	0.86	755	C (22.4)	0.40	352
Northbound	<i>Left</i>	D (52.3)	0.65	209	D (51.9)	0.38	131
	<i>Thru</i>	E (73.7)	0.81	#485	E (74.9)	0.64	270
	<i>Right</i>	A (8.1)	0.35	64	A (7.8)	0.31	40
Southbound	<i>Left</i>	D (40.1)	0.24	61	D (48.2)	0.22	70
	<i>Thru</i>	E (68.8)	0.69	262	E (71.1)	0.51	147
	<i>Right</i>	C (26.9)	0.54	148	B (14.1)	0.53	75
<i>Intersection</i>		D (45.6)	-	-	C (27.0)	-	-

Based on the level of service analysis, the study intersections are operating at an acceptable LOS (LOS D or better). There are some intersection movements that are experiencing poor levels of service (LOS E or F), these movements are on the minor streets and at left turn movements with high opposing volumes. It is common for minor streets and left turns to have poor levels of service to benefit the level of service on the mainline in high traffic volume areas.

Pedestrian Conditions

Sidewalks exist along both sides of Sheridan Drive for the entire length that is contained within the study area. Sidewalks are non-continuous along N. Forest Road. There are signalized crosswalks at the intersections of Sheridan Drive and Harlem Road, Sheridan Drive and Interstate 290 ramps, Sheridan Drive and Frankhauser Road, and Sheridan Drive and N. Forest Road. Marked crosswalks exist along Sheridan Drive at the intersections of Sunrise Boulevard, Cranburne Lane, and Fenwick Road. See **Figure 3** in **Appendix A** for the Pedestrian, Bicycle and Transit Map.

Bicycle Conditions

There is no existing infrastructure for bicycling in the study area.

Transit Conditions

There is an existing operating bus line of the Niagara Frontier Transportation Authority (NFTA) present along Sheridan Drive, the 49 East Amherst line. There are 4 Bus stops in the study area. They are located at the intersections of Frankhauser Road and N. Forest Road.

Collision Analysis

A collision analysis was completed for the study area at signalized intersections along Sheridan Drive at Frankhauser Road and at N. Forest Road. There was a total of 79 collisions over a five-year period from January 2018 through December 2022 with 17 collisions at the Frankhauser Road intersection and 62 collisions at the N. Forest Road intersection. The most common type of collision was a rear end type, representing roughly half of all collisions. The listed cause for most of these collisions was following too closely. 39% of all collisions resulted in injuries. Detailed collision analyses are provided in **Appendix B. Table 4** contains a summary of the predominant collision types at each intersection.

Table 4: Collision Analysis

Type of Collision	Number	Percentage
Sheridan Drive at Frankhauser Road		
Rear End	12	70%
Overtaking	0	0%
Right Angle	2	12%
Left Turn	2	12%
Other	1 (fixed object)	6%
Sheridan Drive at Fenwick Road		
Rear End	3	33%
Right Angle	4	44%
Other	2 (fixed object)	22%
Sheridan Drive at North Forest Road		
Rear End	29	47%
Overtaking	4	6%
Right Angle	10	16%
Left Turn	13	21%
Sideswipe	3	5%
Other	3 (fixed object)	5%

3.0 No Build Condition

Historical traffic data was reviewed within the study area; there was an overall decrease in traffic volumes from 2011 to 2019. Based on the GBNRTC’s regional Travel Demand Model (TDM), projections of future trip production and attraction for the no build condition anticipates a status quo condition with a small reduction in traffic of 1% - 2% in the future. Any growth in the area is due to other proposed developments; no background growth rate is proposed to analyze the future no build condition.

4.0 Build Condition

Site Information

The site is proposed to contain a variety of amenities for public use, some of which include pedestrian and bike trails, a community building, pavilions, playgrounds, theaters, an ice skating rink, a winter market, a historic village, and more. The project site is bounded by Maple Road to the north, Sheridan Drive to the south and residential neighborhoods to the east and west. There are two proposed access points to the park, one at the existing Westwood Country Club driveway from N. Forest Road, and the other on Sheridan Drive at the intersection with Fenwick Road. **Appendix A, Figure 2** contains the Amherst Central Park Planned Unit Development Conceptual Plan . The construction of this site is estimated to be a phased buildout with a phase one completion within the next 5 years and a phase 2 completion in the next 10 years.

Trip Generation

The proposed Amherst Central Park will consist of:

- 171-acre Park
- 44,500 SF Community Building
- 3,300 SF Amphitheater
- 31,600 SF Music Theater
- 25,000 SF Ice Skating Rink/Ribbon
- 5,000 SF Winter Market
- 52,200 SF Buffalo Niagara Heritage Village and Museum (relocated from northern Amherst)

A combination of the ITE's Trip Generation Manual, seating capacity assumptions based on architectural standards, and historic attendance data were used to determine trips for Amherst Central Park. It is unlikely that all facilities will be peaking and running events that coincide with one another. To not overestimate the trip generation, but also use a conservative approach, the major generators of the park were used to estimate the trip generation. Assumptions for the trip generation are as follows:

- Not all facilities will be at capacity or running programs and events at the same time on the same day
- The facilities that are expected to be the major generators were used for the trip generation (community building and music theater)
- The community building is expected to have a Universal Pre-Kindergarten (UPK) program. This program is expected to peak slightly earlier in the day from the PM peak of the street network, along with the music theater. Some trips were accounted for during the PM peak, to account for other community activities in the center, and late pick up/teacher departure for the UPK program.

- It is assumed that the music theater will offer evening performances. Seat capacity for the music theater was estimated using architecture standards based on the square footage of the facility. Vehicle occupancy rate was assumed 2.3 attendees/vehicle based on ITE Standards.
- It is assumed that there will still be some background trips using other facilities in the park such as the playground, splashpad, trails, etc. These background trips are accounted for in the trip generation.
- It is assumed that the park will create the most trips during the PM Peak (4:30-5:30pm) and Saturday Midday Peak (12:00-1:00pm).

Trip generation for the PM Peak and Saturday Peak was calculated, and is outlined in **Table 5** below.

Table 5: Trip Generation

Park Facility	ITE Land Use Code	PM Peak Trips			Saturday Midday/Peak Trips		
		Entering	Exiting	Total	Entering	Exiting	Total
Park	411 Public Park	18	15	33	33	34	61
Community Building	495 Recreational Community Center	31	35	66	26	22	48
Theater	N/A	70	17	87	70	17	87
Ice Rink/Ribbon	465 Ice Skating Rink	18	15	33	35	31	66
Peak Hour Trips		137	82	219	165	97	262

Trip Distribution

Trip distribution was based on existing traffic patterns in the study area. The main entrance of the park is proposed to be off of Sheridan Drive, across from Fenwick Road. It was assumed the majority of the trips (70%) will be entering and exiting from the main entrance, and 30% will use the entrance on N. Forest Road.

Sheridan Drive has an approximate 50% split of traffic distributed between eastbound and westbound for both peak hours. Therefore, the overall study area distribution is 50% coming to and from the east, and 50% coming to and from the west. The more localized distribution is traffic distributed between the I-290 ramps, Harlem Road, and N. Forest Road. See **Appendix A, Figure 5** for the trip distribution in the study area.

Westwood Mix-Use Neighborhood TIS

The Westwood Mix-Use Neighborhood TIS was completed in 2017 by SRF Associates. The proposed site for this traffic study is the same site as Amherst Central Park. The proposed site development in the Westwood Mixed-Use Neighborhood included a variety of residential (single-family and multi-family) homes, office spaces, mixed-use commercial and residential buildings, a hotel, a senior living facility, a community center, and a public park. Trip generation completed for this study used ITE Trip Generation Manual, 9th Edition and the generation trips are shown in the following table.

The estimated trips generated by the proposed Amherst Central Park is less than the estimated trips generated by the previously proposed Westwood Mixed-Use Neighborhood. The impact to the nearby neighborhood and roadways by Amherst Central Park will be less than a proposed mixed-use development.

Table 6: Westwood Mixed-Use Neighborhood TIS Trip Generation

PARCEL	DESCRIPTION	SIZE	AM PEAK		PM PEAK	
			ENTER	EXIT	ENTER	EXIT
VII	Senior Housing	104 Units	7	14	14	12
VII	Assisted Living	200 Beds	18	10	19	25
I	Smaller Patio Homes	57 Units	6	13	12	12
IV	Multifamily Community Apartments	180 Units	18	74	76	41
II & III	Large Patio Homes (26) and Single Family Detached Housing (41)	67 Units	14	43	46	27
VI	Multi-family Building Apartments	89 Units	9	38	44	23
VI	Condominium Townhomes along Frankhauser Road	40 Units	4	21	19	9
VI	Hotel	130 Rooms	41	28	40	38
VI	Apartments	221 Units	22	90	90	49
VI	Commercial/Retail	166,000 SF	131	81	404	437
VI	Professional Office	264,800 SF	367	50	64	311
V	City Park	33 Acres of Land (6 Acres pond)	83	66	66	50
	Sub-total		720	528	894	1034
	Internal Trips		-113	-101	-206	-238
	Pass-by Trips		0	0	-102	-98
	Total New Trips		607	427	586	698

Capacity Analysis

Intersection Analysis

Refer to Appendix A Figure 7 for build turning movement volumes. Table 7 below highlights the results of the level of service analysis for build conditions compared to the existing conditions.

Table 7: Intersection LOS Analysis Existing versus Build Condition

Approach		Weekday PM						Saturday Midday					
		Existing			Build			Existing			Build		
		LOS ^a (Delay) ^b	V/C ^c	Queue ^d	LOS ^a (Delay) ^b	V/C ^c	Queue ^d	LOS (Delay)	V/C	Queue	LOS ^a (Delay) ^b	V/C ^c	Queue ^d
Sheridan Drive (NYS Route 324) at Harlem Road (NYS Route 240)													
Eastbound	<i>Thru</i>	D (37.9)	0.54	515	D (37.8)	0.55	532	C (26.6)	0.35	314	C (28.2)	0.38	342
	<i>Right</i>	A (2.7)	0.29	51	A (2.6)	0.29	50	A (2.1)	0.31	46	A (2.4)	0.31	50
Westbound	<i>Left</i>	D (40.0)	0.32	76	D (39.8)	0.33	m77	C (32.8)	0.39	85	C (30.7)	0.38	89
	<i>Thru</i>	A (3.8)	0.34	169	A (3.9)	0.34	169	B (10.7)	0.25	267	A (7.6)	0.26	214
Northbound	<i>Left</i>	E (69.1)	0.48	131	E (68.9)	0.48	131	E (75.0)	0.54	129	E (74.4)	0.54	129
	<i>Right</i>	A (7.7)	0.67	96	A (7.9)	0.68	100	A (4.6)	0.46	46	A (4.5)	0.48	46
<i>Intersection</i>		C (20.7)	-	-	C (20.7)	-	-	B (19.7)	-	-	B (19.0)	-	-
Sheridan Drive (NYS Route 324) at I-290 Ramps													
Eastbound	<i>Left</i>	E (63.1)	0.87	343	E (62.9)	0.87	343	C (26.6)	0.49	213	C (31.1)	0.54	210
	<i>Thru</i>	C (26.1)	0.46	525	C (26.6)	0.48	547	B (15.2)	0.26	305	B (20.0)	0.29	360
Westbound	<i>Thru/Right</i>	C (21.0)	0.91	637	C (21.8)	0.93	654	B (10.5)	0.37	176	B (12.2)	0.42	129
Northbound	<i>Left</i>	D (42.3)	0.25	173	D (42.3)	0.25	173	D (52.6)	0.40	197	D (47.0)	0.34	197
	<i>Left/Right</i>	C (29.1)	0.34	174	C (29.8)	0.35	182	B (10.3)	0.35	74	B (12.1)	0.33	93
	<i>Right</i>	C (28.5)	0.33	162	C (29.5)	0.34	172	A (7.7)	0.33	58	B (11.4)	0.32	83
<i>Intersection</i>		C (27.3)	-	-	C (27.8)	-	-	B (15.5)	-	-	B (18.0)	-	-
Sheridan Drive (NYS Route 324) at Frankhauser Road													
Eastbound	<i>Left</i>	A (1.6)	0.09	m3	A (1.7)	0.09	m2	A (1.0)	0.04	3	A (1.0)	0.04	3
	<i>Thru</i>	A (6.6)	0.55	217	A (7.4)	0.58	232	A (2.7)	0.36	101	A (3.0)	0.38	123
Westbound	<i>Thru/Right</i>	A (2.2)	0.54	116	A (2.0)	0.55	124	A (1.7)	0.34	66	A (1.7)	0.35	73
Southbound	<i>Left</i>	F (85.3)	0.49	106	F (85.3)	0.49	106	F (84.1)	0.42	89	F (84.1)	0.42	89
	<i>Right</i>	C (25.5)	0.21	34	C (25.5)	0.21	34	C (28.8)	0.17	29	C (28.8)	0.17	29
<i>Intersection</i>		A (5.9)	-	-	A (6.2)	-	-	A (4.0)	-	-	A (4.1)	-	-

Table 7 continued

Approach		Weekday PM						Saturday Midday					
		Existing			Build			Existing			Build		
		LOS ^a (Delay) ^b	V/C ^c	Queue ^d	LOS ^a (Delay) ^b	V/C ^c	Queue ^d	LOS (Delay)	V/C	Queue	LOS ^a (Delay) ^b	V/C ^c	Queue ^d
Sheridan Drive (NYS Route 324) at Fenwick Road and Site Driveway 1													
Eastbound	<i>Left</i>	n/a			c (16.7)	0.20	0.7	n/a			B (11.5)	0.14	0.5
Westbound	<i>Left</i>	c (15.7)	0.04	0.1	c (15.7)	0.04	0.1	b (11.3)	0.03	0.1	B (11.3)	0.03	0.1
Northbound	<i>Left/Right</i>	e (35.7)	0.23	0.9	f (1247.6)	2.53	5.2	c (21.0)	0.16	0.6	f (148.7)	0.70	3
Southbound	<i>Left/Right</i>	n/a			f (901.4)	2.30	7.5	n/a			f (86.2)	0.66	3.4
<i>Intersection</i>		n/a			n/a			n/a			n/a		
Sheridan Drive (NYS Route 324) at N. Forest Road													
Eastbound	<i>Left</i>	E (64.8)	0.87	#404	E (68.2)	0.89	#402	A (9.7)	0.40	115	A (9.8)	0.43	123
	<i>Thru</i>	D (36.1)	0.75	727	D (36.3)	0.77	733	B (19.6)	0.43	419	C (20.4)	0.45	454
	<i>Right</i>	B (17.5)	0.35	208	B (17.1)	0.36	201	A (5.4)	0.11	75	A (6.2)	0.12	83
Westbound	<i>Left</i>	D (39.6)	0.69	168	D (44.1)	0.71	177	B (13.0)	0.32	84	B (14.1)	0.34	88
	<i>Thru/Right</i>	D (50.1)	0.86	755	D (53.1)	0.89	#825	C (22.4)	0.40	352	C (24.3)	0.43	385
Northbound	<i>Left</i>	D (52.3)	0.65	209	D (52.9)	0.68	219	D (51.9)	0.38	131	D (50.5)	0.39	137
	<i>Thru</i>	E (73.7)	0.81	#485	E (75.3)	0.84	#539	E (74.9)	0.64	270	E (74.7)	0.67	288
	<i>Right</i>	A (8.1)	0.35	64	A (8.1)	0.35	65	A (7.8)	0.31	40	A (7.5)	0.30	40
Southbound	<i>Left</i>	D (40.1)	0.24	61	D (40.9)	0.28	69	D (48.2)	0.22	70	D (47.6)	0.26	80
	<i>Thru</i>	E (68.8)	0.69	262	E (67.8)	0.68	267	E (71.1)	0.51	147	E (69.1)	0.50	151
	<i>Right</i>	C (26.9)	0.54	148	C (26.4)	0.53	148	B (14.1)	0.53	75	B (15.6)	0.52	83
<i>Intersection</i>		D (45.6)	-	-	D (47.0)	-	-	C (27.0)	-	-	C (28.1)	-	-

*lowercase letters signify the HCM 6th edition Stop Control methodology was used

a: level-of-service

b: delay is measured in seconds

c: volume to capacity ratio

d: 95th queue length, measured in feet (queue length of stop controlled intersections measured in number of vehicles)

Based on the capacity analysis for the build condition, the proposed site has minor impacts on the level of service experienced at the study area intersections. Levels of service have remained the same at all the signalized intersections (LOS D or better). The intersection of Sheridan Drive and Fenwick Road is the location of a proposed site driveway. The addition of the site driveway and the added volume from the site have impacted the level of service for the movements at the intersection. The minor approaches at this intersection are operating at a LOS F for both the PM peak hour and the Saturday midday peak hour with long delays and queues.

5.0 Mitigation

Mitigation is not necessary for the existing signalized intersections in the study area; the proposed site has little impact on the levels of service at those intersections. Mitigation at the proposed site driveway on Sheridan Drive is recommended. A signal warrant analysis was conducted at the site driveway. Based on the analysis, the expected volumes at the intersection did not warrant a new traffic signal. It is recommended that a traffic signal still be considered at the Amherst Central Park driveway on Sheridan Drive due to the long delays and vehicle queues expected at the site driveway and at Fenwick Road located across from the driveway. Refer to **Appendix E** for the signal warrant analysis.

Providing multi-modal access to Amherst Central Park should also be considered given the residential nature of the area and proposed amenities at the park. Of particular concern is providing a safe crossing of Sheridan Drive from the neighborhood immediately south of the park. If the traffic signal is installed at the Amherst Central Park driveway on Sheridan Drive, pedestrian signals should be included across all four legs. If the signal is not installed, consideration should be given to a High Intensity Activated CrossWalk (HAWK) signal or Rectangular Rapid Flashing Beacon (RRFB) with a center refuge median.

Transit access can be improved to Amherst Central Park as well. Working with NFTA, a dedicated bus stop could be provided along Sheridan Drive at the (proposed) signalized intersection with the site driveway. If the traffic signal is not installed, a dedicated bus stop could be added within the Park.

6.0 Conclusion

The following are findings from this traffic impact study:

Existing:

- Intersections are operating at acceptable levels of service (LOS D or better) within the study area.
- The majority of collisions at intersections are rear ends.
- There are some multi-modal accommodations along Sheridan Drive in the study area. Bicycle accommodations are not present.

Build:

- The proposed Amherst Central Park on the 171-acre lot is expected to generate 219 new trips during the Weekday PM Peak, and 262 new trips during the Saturday Midday Peak.
- The trips generated by the proposed park are less than trip generated by the formerly proposed Westwood Mixed-Use Neighborhood development based on the TIS completed in 2017.
- The proposed park development is expected to have minimal impact on operations within the study area.
- The proposed site driveway on Sheridan Drive is expected to experience a poor level of service (LOS F).

Mitigation:

- Warrant was not met for a new traffic signal at the proposed driveway on Sheridan Drive.
- It is recommended that a traffic signal still be considered at the proposed site driveway due to long delays and queues on the minor approaches.
- Multi-modal and Transit access to Amherst Central Park should be improved.

Appendix A – Figures

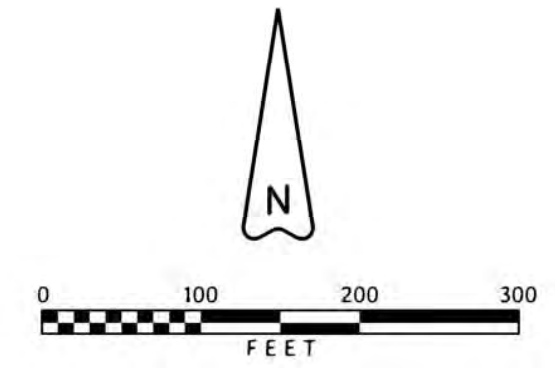
AMHERST

New York

CENTRAL PARK

Concept Plan

October 2, 2023



COMMISSIONED BY
THE TOWN OF AMHERST, N.Y.

Prepared By
DOVER, KOHL & PARTNERS

Modified By
The Town of Amherst

LEGEND

UNIQUE FEATURES

- 1) Community Building (Former Club House)
- 2) Music Fare Theater
- 3) The Winter Market
- 4) Ice Ribbon + Ice Rink
- 5) Splash Pad + Inclusive Playground
- 6) Amphitheater
- 7) Lake Front Pavilion
- 8) Outdoor Exercise Equipment (10 Stations)
- 9) Community Gardens (can be any size)
- 10) Greenhouse
- 11) Maintenance Area
- 12) Low Ropes Course or suspended bridges
- 13) Sheltered Bus Stop (at South Entrance)
- 14) Buffalo Niagara Heritage Village (Relocated)
- 15) Multi-use Pavilion

Multiple Features

- (PC) Playground (Conventional Equipment)
- (PN) Playground (Natural)
- (RS) Restrooms
- (RO) Roofed Open Air Shelters
- (OC) Outdoor Classrooms
- (PA) Public Art / Sculpture Sites
- (BT) Off-road Bike Trails, 4-foot wide, dirt
- (AR) Accentuated Rise (mounded hills)
- (MG) Minor Entrance Gates
- (BR) Bicycle Parking Racks (size to be determined)

Existing Deciduous

Existing Tree Canopy

Existing Water

Proposed Marsh / Water



Figure 2

Legend

- Sidewalk Both Sides
- One Side Sidewalk
- No Sidewalk
- Crosswalk
- Road with Bike Lanes
- Bus Stop




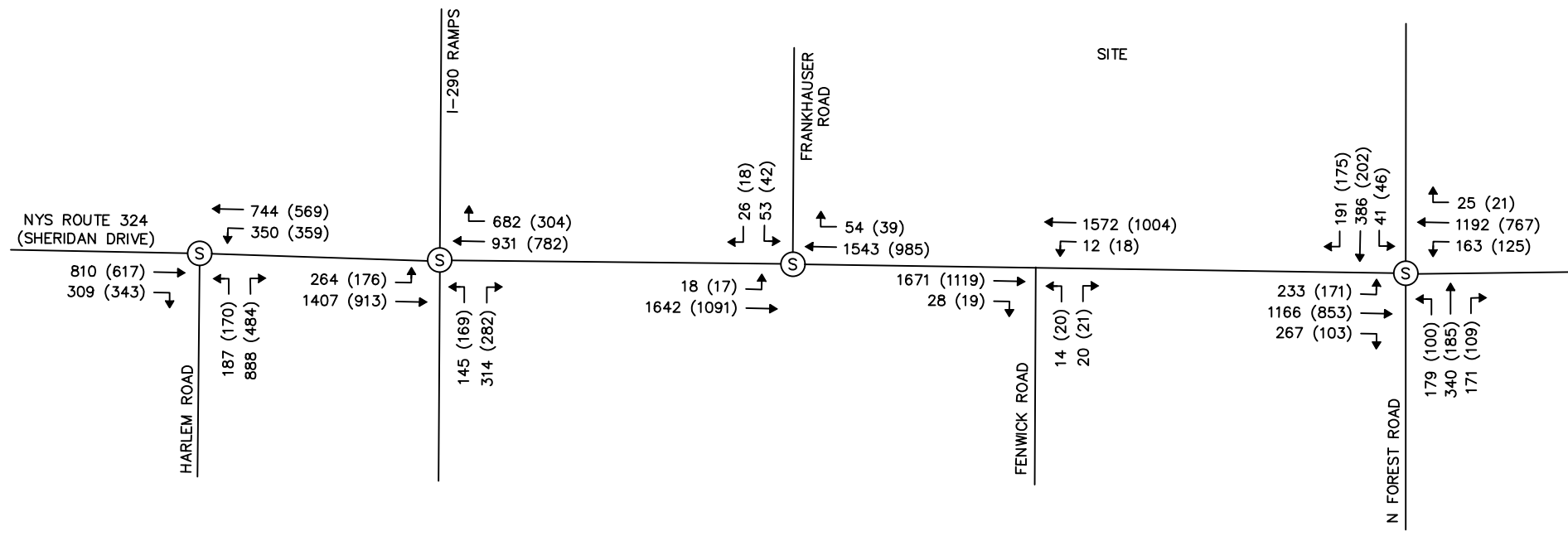
Not to Scale



Pedestrian, Bicycle, and Transit Map
Amherst Central Park Traffic Impact Study
Town of Amherst, Erie County, New York

Figure 3

KEY
 XX - WEEKDAY PM PEAK
 (4:30 - 5:30 PM)
 (XX) - SATURDAY MIDDAY PEAK
 (12:00 - 1:00 PM)

Sep 29, 2023 - 10:36am
 \\cscos.com\cstfile\Eng\Project\H22 - Town of Amherst\H22.007 - 2021 Professional Svcs Term\H22.007.002 - Amherst Central Park TIS\Planning-Study\Technical Information\Turning Movement Diagrams\TMD Existing.dwg

NOT TO SCALE



C&S Engineers, Inc.
 499 Col. Eileen Collins Blvd.
 Syracuse, New York 13212
 Phone: 315-455-2000
 Fax: 315-455-9667
 www.cscos.com

PROJECT NO:	H22007002
DATE:	SEPTEMBER 2023
DRAWN BY:	S. GALLAGHER
DESIGNED BY:	K. WESSEL
CHECKED BY:	K. WESSEL

NO ALTERATION PERMITTED
 HEREON EXCEPT AS PROVIDED
 UNDER SECTION 7209
 SUBDIVISION 2 OF THE NEW
 YORK EDUCATION LAW

EXISTING (2023)
 TURNING MOVEMENT DIAGRAM

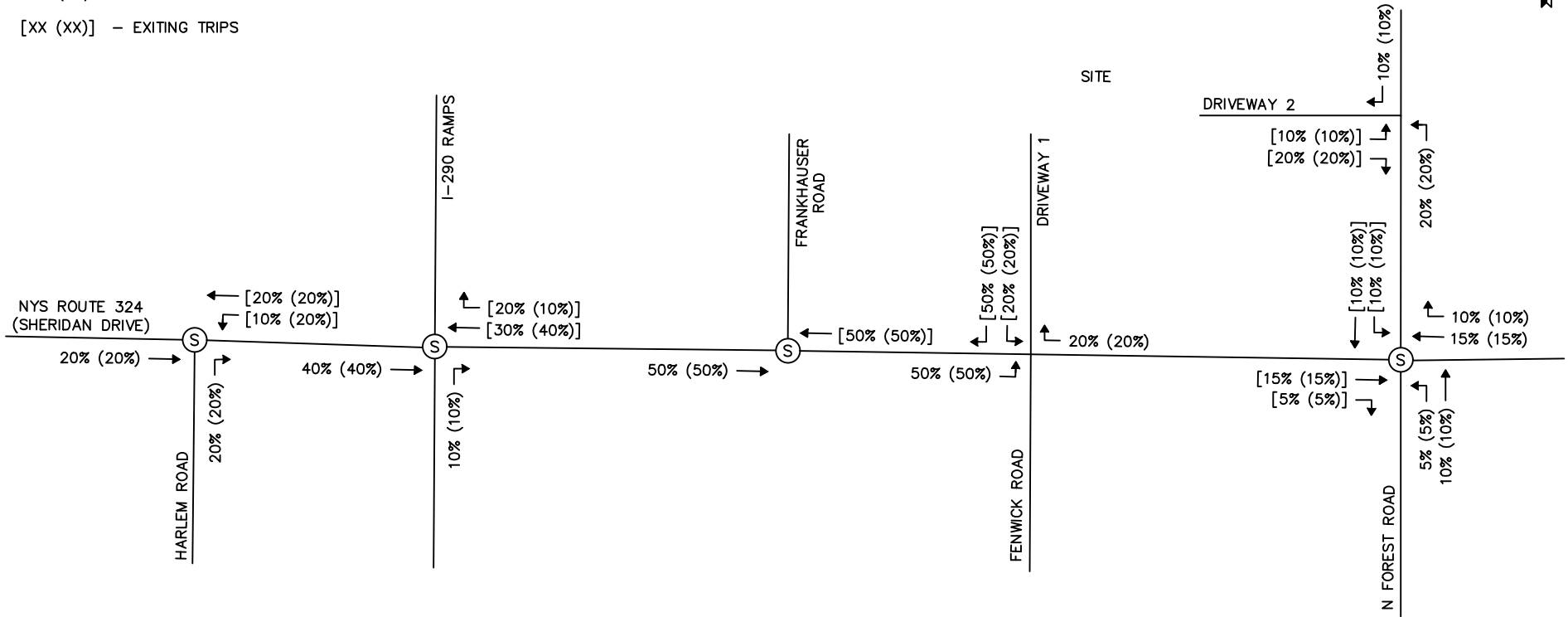
AMHERST CENTRAL PARK
 TRAFFIC IMPACT STUDY

TOWN OF AMHERST,
 ERIE COUNTY

Figure 4

KEY

- XX – WEEKDAY PM PEAK
(4:30 – 5:30 PM)
- (XX) – SATURDAY MIDDAY PEAK
(12:00 – 1:00 PM)
- XX (XX) – ENTERING TRIPS
- [XX (XX)] – EXITING TRIPS



Oct 06, 2023 - 12:19pm
 \\cscos.com\cstfile\Eng\Project\H22 - Town of Amherst\H22.007 - 2021 Professional Svcs Term\H22.007.002 - Amherst Central Park TIS\Planning-Study\Technical Information\Turning Movement Diagrams\Trip Distribution.dwg

NOT TO SCALE



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 www.cscos.com

PROJECT NO:	H22007002
DATE:	SEPTEMBER 2023
DRAWN BY:	S. GALLAGHER
DESIGNED BY:	K. WESSEL
CHECKED BY:	K. WESSEL

NO ALTERATION PERMITTED
 HEREON EXCEPT AS PROVIDED
 UNDER SECTION 7209
 SUBDIVISION 2 OF THE NEW
 YORK EDUCATION LAW

TRIP DISTRIBUTION
 TURNING MOVEMENT DIAGRAM

AMHERST CENTRAL PARK
 TRAFFIC IMPACT STUDY

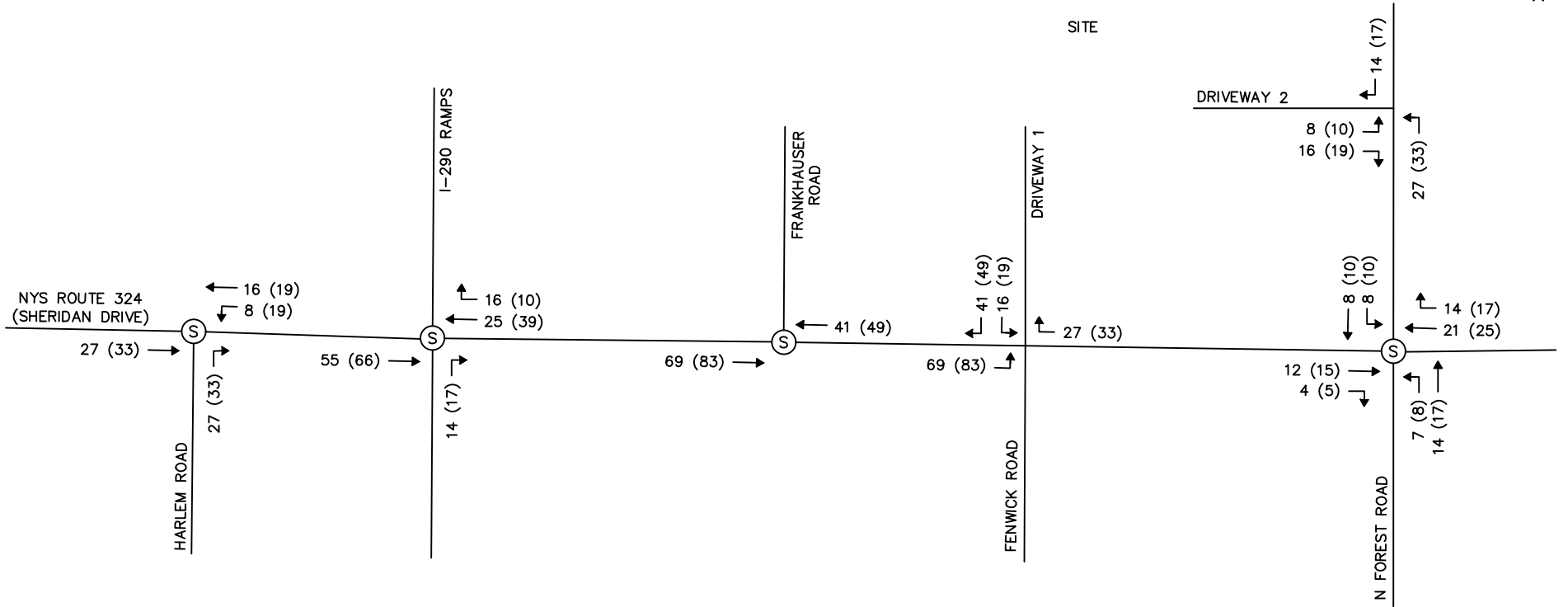
TOWN OF AMHERST,
 ERIE COUNTY

Figure 5

KEY

XX – WEEKDAY PM PEAK
(4:30 – 5:30 PM)

(XX) – SATURDAY MIDDAY PEAK
(12:00 – 1:00 PM)



Oct 11, 2023 - 11:24am

\\cscos.com\cstfile\Eng\Project\H22 - Town of Amherst\H22.007 - 2021 Professional Svcs Term\H22.007.002 - Amherst Central Park TIS\Planning-Study\Technical Information\Turning Movement Diagrams\Trip generation.dwg

NOT TO SCALE



C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

PROJECT NO: H22007002
DATE: SEPTEMBER 2023
DRAWN BY: S. GALLAGHER
DESIGNED BY: K. WESSEL
CHECKED BY: K. WESSEL

NO ALTERATION PERMITTED
HEREON EXCEPT AS PROVIDED
UNDER SECTION 7209
SUBDIVISION 2 OF THE NEW
YORK EDUCATION LAW

TRIP GENERATION
TURNING MOVEMENT DIAGRAM

AMHERST CENTRAL PARK
TRAFFIC IMPACT STUDY

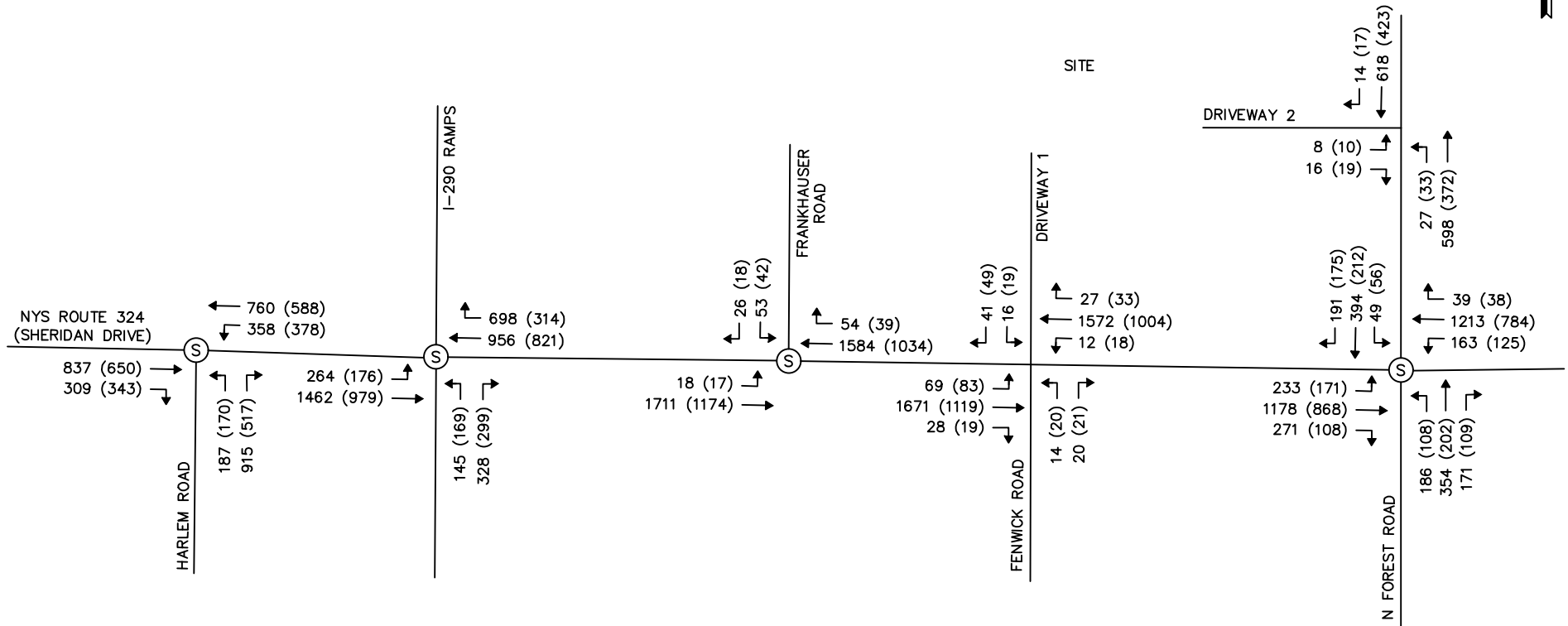
TOWN OF AMHERST,
ERIE COUNTY

Figure 6

KEY

XX – WEEKDAY PM PEAK
(4:30 – 5:30 PM)

(XX) – SATURDAY MIDDAY PEAK
(12:00 – 1:00 PM)



Oct 12, 2023 - 10:48am

\\cscos.com\cstfile\Eng\Project\H22 - Town of Amherst\H22.007 - 2021 Professional Svcs Term\H22.007.002 - Amherst Central Park TIS\Planning-Study\Technical Information\Turning Movement Diagrams\TMD Build.dwg

NOT TO SCALE



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PROJECT NO: H22007002
DATE: SEPTEMBER 2023
DRAWN BY: S. GALLAGHER
DESIGNED BY: K. WESSEL
CHECKED BY: K. WESSEL

NO ALTERATION PERMITTED
HEREON EXCEPT AS PROVIDED
UNDER SECTION 7209
SUBDIVISION 2 OF THE NEW
YORK EDUCATION LAW

**BUILD (2028)
TURNING MOVEMENT DIAGRAM**

AMHERST CENTRAL PARK
TRAFFIC IMPACT STUDY

TOWN OF AMHERST,
ERIE COUNTY

Figure 7

Appendix B – Collision Data



Crash Analysis

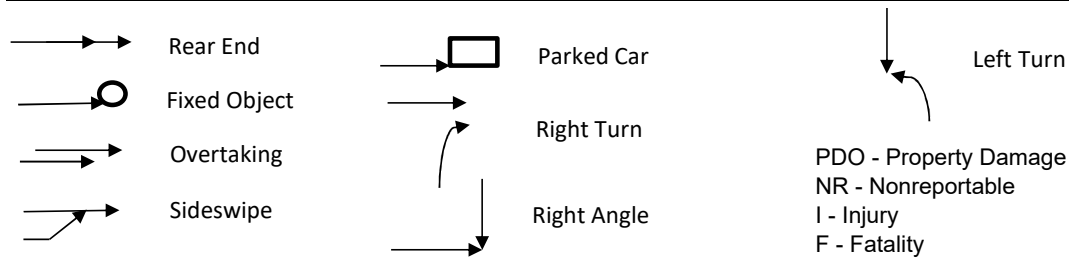
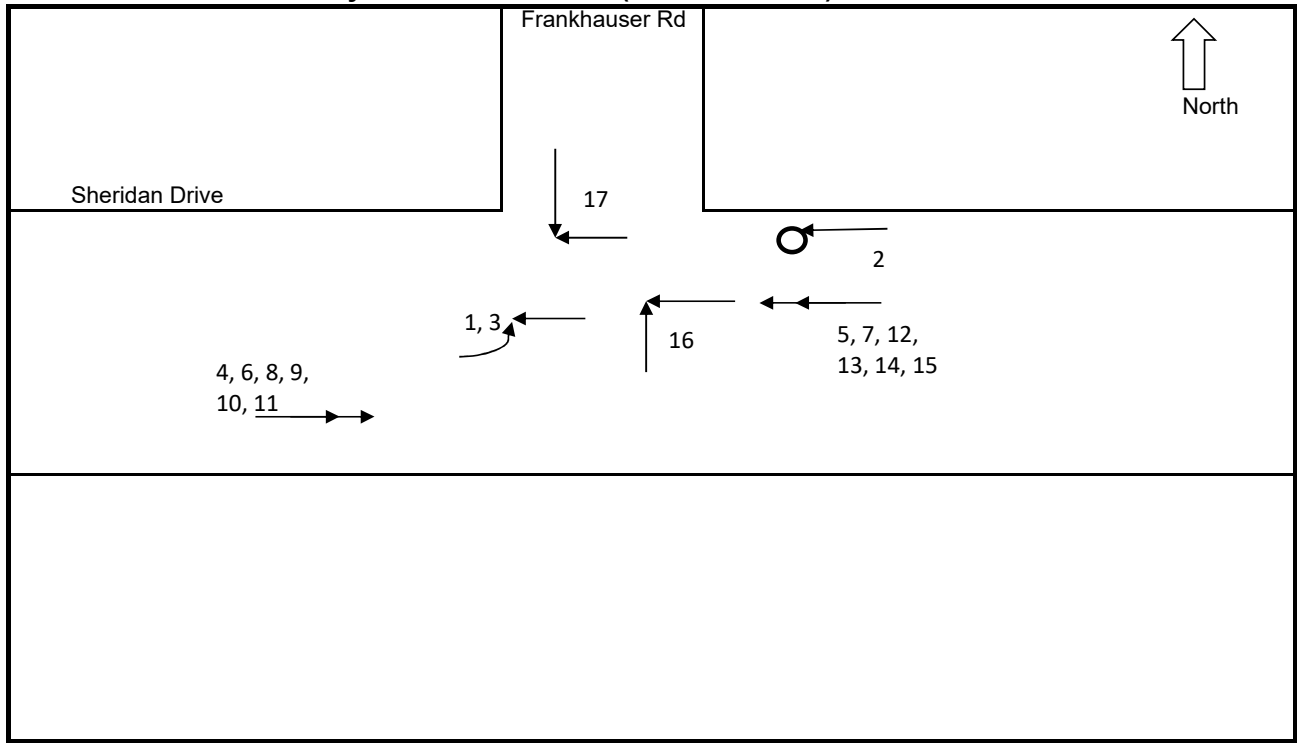
Prepared by **A. Turner**

Date **08/07/2023**

Checked by **K. Wessel**

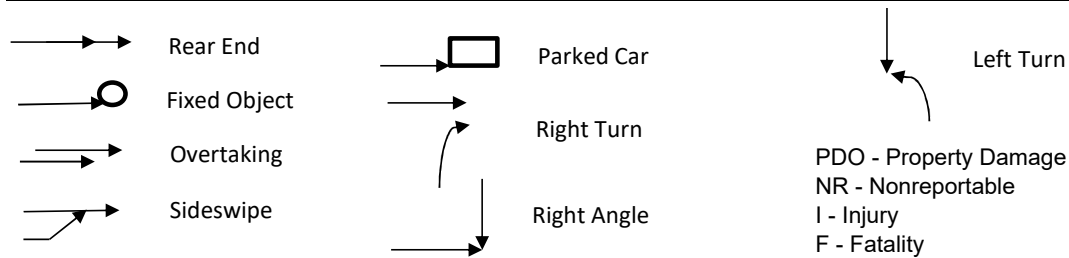
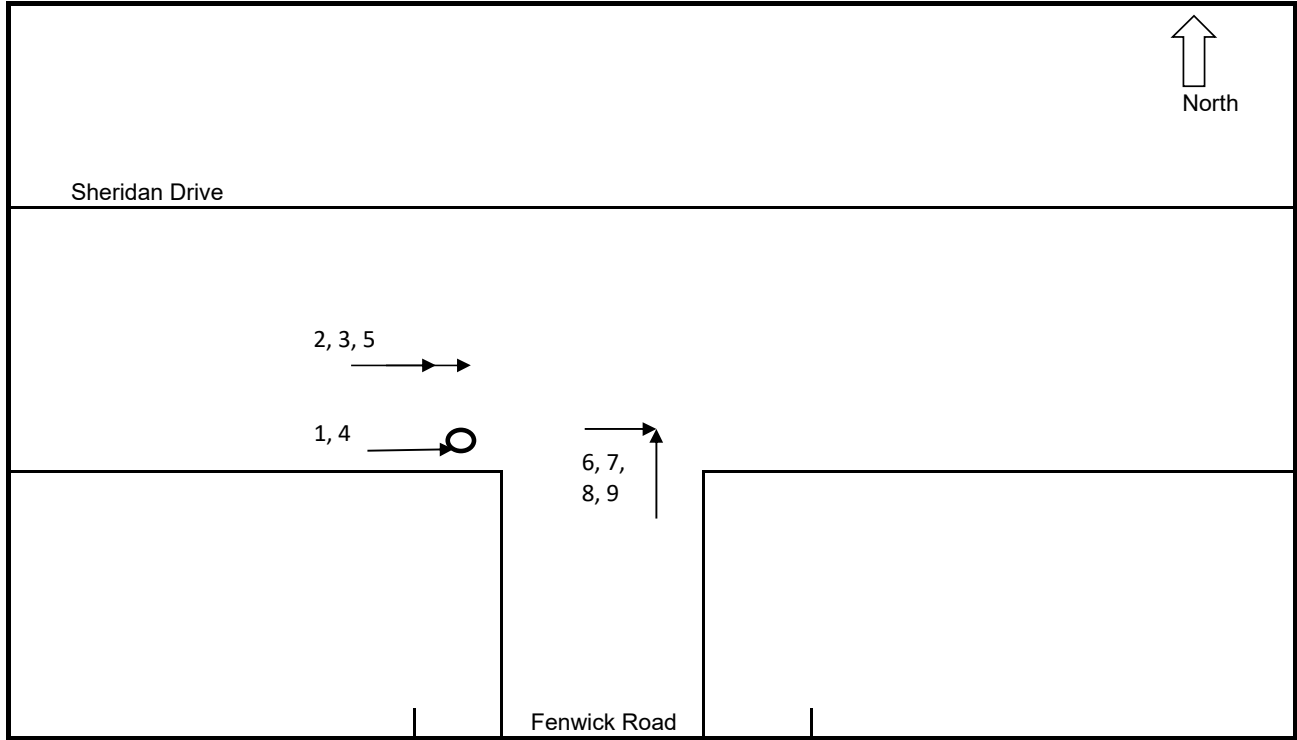
Date **08/07/2023**

Collision Analysis: Sheridan Drive (NYS Route 324) and Frankhauser Road



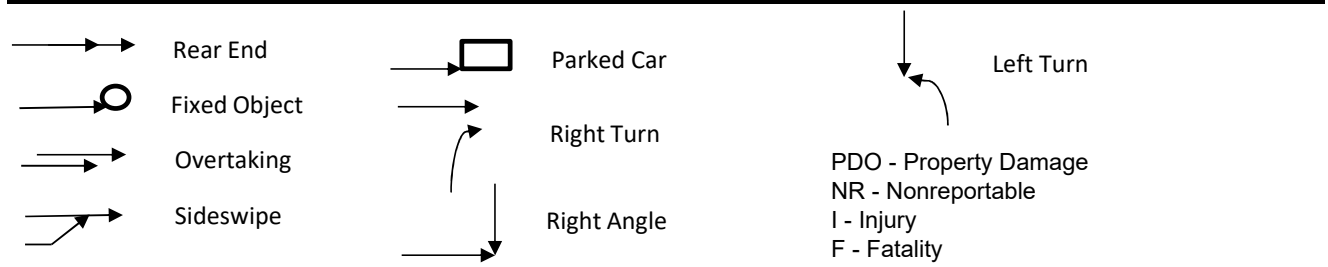
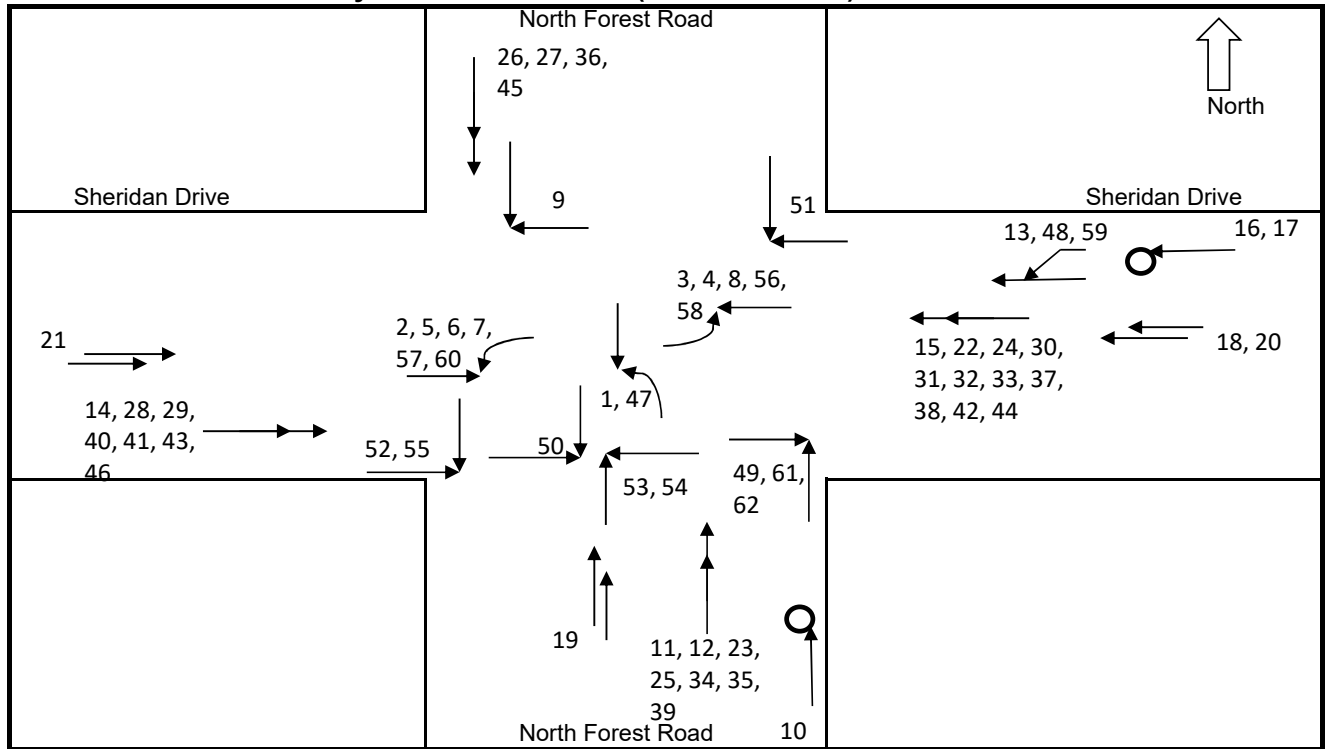
No.	Date	Time	Collision Type	Road Condition	Severity	Comment
1	3/29/2021	4:32 PM	Left Turn	Dry, Light	PDO	Traffic control devices disregarded
2	9/13/2020	11:05 AM	Fixed Object	Wet, Light	I	Driver inattention
3	9/17/2021	10:09 AM	Left Turn	Dry, Light	I	Traffic control devices disregarded
4	03/25/2022	11:51 AM	Rear End	Dry, Light	I	Following too closely
5	10/26/2021	3:32 PM	Rear End	Wet, Light	PDO	Cell phone (hand held), driver inattention
6	09/05/2019	11:47 AM	Rear End	Dry, Light	PDO	Following too closely
7	09/01/2019	1:01 PM	Rear End	Dry, Light	PDO	Unsafe speed
8	07/18/2019	5:32 PM	Rear End	Dry, Light	I	Following too closely
9	07/16/2019	5:28 PM	Rear End	Dry, Light	PDO	Following too closely, driver inattention
10	07/13/2019	8:57 AM	Rear End	Dry, Light	PDO	Unsafe lane change
11	03/22/2019	9:25 PM	Rear End	Wet, Dark	PDO	Following too closely
12	10/02/2018	12:02 PM	Rear End	Wet, Light	PDO	Following too closely
13	07/10/2018	8:37 PM	Rear End	Dry, Dark	I	Alcohol involvement, unsafe speed
14	04/05/2018	5:22 PM	Rear End	Wet, Light	PDO	Following too closely, unsafe speed
15	02/02/2018	12:35 PM	Rear End	Dry, Light	PDO	Unsafe speed, driver inattention
16	04/07/2022	2:36 PM	Right Angle	Dry, Light	PDO	Unsafe lane change, passing or lane usage
17	09/26/2020	5:35 PM	Right Angle	Dry, Light	I	Traffic control devices disregarded, driver

Collision Analysis: Sheridan Drive (NYS Route 324) and Fenwick Road



No.	Date	Time	Collision Type	Road Condition	Severity	Comment
1	01/13/2018	6:44 PM	Fixed Object	Wet, Dark	PDO	Unsafe speed
2	12/08/2022	7:47 AM	Rear End	Dry, Dark	I	Driver inattention, following too closely
3	08/14/2019	3:30 PM	Rear End	Dry, Light	I	Following too closely
4	03/01/2018	9:12 PM	Fixed Object	Wet, Dark	PDO	unsafe speed, pavement slippery
5	01/27/2020	8:18 AM	Rear End	Wet, Light	PDO	unsafe speed
6	12/20/2022	2:26 PM	Right Angle	Slush, Light	I	driver inattention, failure to yield right of way
7	01/27/2020	7:55 AM	Right Angle	Snow, Light	PDO	passing or lane usage improperly, failure to yield
8	03/27/2019	8:02 AM	Right Angle	Dry, Light	PDO	failure to yield right of way
9	02/04/2018	4:55 PM	Right Angle	Wet, Dark	I	failure to yield right of way

Collision Analysis: Sheridan Drive (NYS Route 324) and North Forest Road



PDO - Property Damage
 NR - Nonreportable
 I - Injury
 F - Fatality

No.	Date	Time	Collision Type	Road Condition	Severity	Comment
1	01/09/2020	7:29 AM	Left Turn	Wet, Light	PDO	Failure to yield right of way
2	11/28/2022	8:01 AM	Left Turn	Dry, Light	I	Failure to yield right of way, driver inattention, t
3	10/19/2022	12:10 PM	Left Turn	Wet, Light	I	Traffic control devices disregarded
4	07/07/2022	4:28 PM	Left Turn	Dry, Light	I	Traffic control devices disregarded
5	10/13/2021	3:46 PM	Left Turn	Dry, Light	I	Driver inattention, failure to yield right of way
6	12/11/2018	6:12 PM	Left Turn	Wet, Dark	I	Traffic control devices disregarded, failure to
7	10/15/2018	7:12 AM	Left Turn	Wet, Dark	PDO	Failure to yield right of way
8	5/18/2018	1:22 PM	Left Turn	Dry, Light	I	Failure to yield right of way
9	04/04/2021	9:40 PM	Right Angle	Dry, Dark	PDO	Traffic control devices disregarded
10	02/19/2022	5:30 AM	Fixed Object	Snow, Dark	PDO	N/A
11	09/08/2022	2:28 PM	Rear End	Dry, Light	I	Following too closely
12	05/21/2021	8:50 AM	Rear End	Dry, Light	PDO	N/A
13	12/21/2018	6:06 PM	Sideswipe	Wet, Dark	PDO	Unsafe lane change
14	03/23/2018	9:10 AM	Rear End	Dry, Light	PDO	Driver inattention, glare
15	01/15/2018	5:55 PM	Rear End	Wet, Dark	I	Following too closely
16	07/04/2022	10:49 PM	Fixed Object	Dry, Dark	I	Unsafe speed, driver inattention
17	04/08/2018	12:39 PM	Fixed Object	Dry, Light	PDO	Unsafe lane change, driver inattention



Crash Analysis

Prepared by **A. Turner**

Date **08/07/2023**

Checked by **K. Wessel**

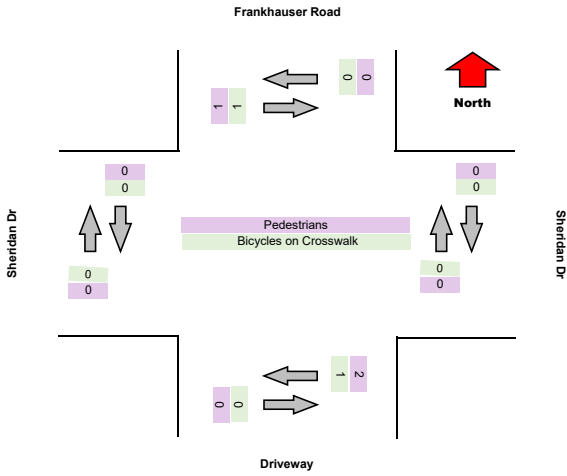
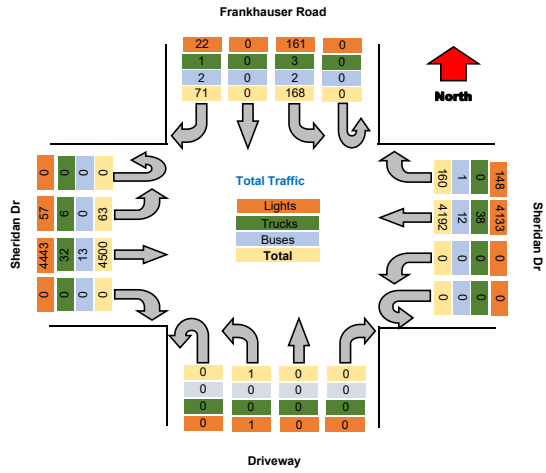
Date **08/07/2023**

No.	Date	Time	Collision Type	Road Condition	Severity	Comment
18	09/17/2022	8:00 AM	Overtaking	Dry, Light	PDO	Unsafe speed
19	03/17/2022	6:34 AM	Overtaking	Dry, Dark	PDO	Unsafe lane change
20	08/04/2019	12:15 PM	Overtaking	Dry, Light	PDO	Unsafe lane change
21	07/25/2019	11:54 AM	Overtaking	Dry, Light	PDO	Unsafe lane change
22	12/22/2022	11:00 AM	Rear End	Unknown	PDO	Unsafe lane change
23	09/13/2022	5:55 PM	Rear End	Dry, Light	PDO	Following too closely, driver inattention
24	6/13/2022	1:03 PM	Rear End	Dry, Light	PDO	Driver inattention
25	05/10/2022	1:45 PM	Rear End	Dry, Light	PDO	Alcohol involvement, unsafe speed
26	11/05/2021	1:15 PM	Rear End	Dry, Light	I	N/A
27	05/06/2021	2:45 PM	Rear End	Dry, Light	PDO	Following too closely, driver inattention
28	11/03/2020	5:25 PM	Rear End	Dry, Dark	I	Driver inattention, following too closely
29	06/10/2020	7:40 PM	Rear End	Dry, Light	I	Following too closely, driver inattention
30	04/23/2020	8:24 AM	Rear End	Dry, Light	I	Driver inattention
31	03/09/2020	1:42 PM	Rear End	Dry, Light	I	Following too closely
32	11/10/2019	11:28 AM	Rear End	Dry, Light	PDO	Driver inattention
33	10/01/2019	7:20 PM	Rear End	Wet, Dark	PDO	Unsafe speed
34	09/16/2019	8:17 AM	Rear End	Dry, Light	PDO	Following too closely
35	08/02/2019	1:29 PM	Rear End	Dry, Light	I	Unsafe speed
36	12/25/2018	3:27 PM	Rear End	Wet, Light	PDO	Unsafe speed
37	11/01/2018	5:15 PM	Rear End	Wet, Dark	I	N/A
38	11/10/2018	11:56 PM	Rear End	Dry, Dark	I	Unsafe speed, driver inattention
39	10/04/2018	2:58 PM	Rear End	Dry, Light	PDO	Following too closely
40	10/02/2018	7:56 AM	Rear End	Wet, Light	PDO	Driver inattention, unsafe speed
41	06/22/2018	1:10 PM	Rear End	Dry, Light	I	Unsafe speed
42	04/08/2018	12:34 PM	Rear End	Dry, Light	PDO	Following too closely
43	03/07/2018	11:41 AM	Rear End	Wet, Light	I	Driver inattention, cell phone (hands free)
44	03/02/2018	11:51 AM	Rear End	Wet, Light	I	Driver inattention, following too closely
45	01/18/2018	9:02 AM	Rear End	Slush, Light	PDO	Following too closely, driver inattention
46	01/10/2018	3:10 PM	Rear End	Wet, Light	PDO	Following too closely
47	04/16/2022	12:48 PM	Left Turn	Dry, Light	PDO	Failure to yield right of way
48	01/31/2022	2:30 PM	Sideswipe	Dry, Light	PDO	Failure to yield right of way
49	10/07/2021	12:35 PM	Right Angle	Dry, Light	PDO	Failure to yield right of way
50	08/15/2021	8:34 PM	Right Angle	Dry, Light	I	Failure to yield right of way, traffic control device
51	5/18/2021	4:49 PM	Right Angle	Dry, Light	PDO	Traffic control devices disregarded, failure to yield
52	04/21/2021	11:43 AM	Right Angle	Wet, Light	I	Traffic control devices disregarded
53	01/29/2021	3:35 PM	Right Angle	Dry, Light	PDO	Failure to yield right of way
54	11/15/2020	5:20 PM	Right Angle	Wet, Dark	I	Traffic control device improper/non-working
55	10/19/2020	7:18 PM	Right Angle	Wet, Dark	I	Failure to yield right of way, traffic control device
56	10/09/2020	5:20 PM	Left Turn	Dry, Light	PDO	Failure to yield right of way, unsafe speed
57	11/10/2019	11:39 AM	Left Turn	Dry, Light	PDO	Failure to yield right of way
58	10/01/2019	7:13 PM	Left Turn	Wet, Dark	I	Failure to yield right of way
59	08/26/2019	12:00 PM	Sideswipe	Dry, Light	PDO	Turning improper
60	12/15/2018	2:26 PM	Left Turn	Wet, Light	PDO	Failure to yield right of way
61	10/30/2018	2:00 PM	Right Angle	Dry, Light	PDO	Failure to yield right of way
62	04/01/2019	12:15 PM	Right Angle	Dry, Light	PDO	Failure to yield right of way

Appendix C – Traffic Data

Summary

Turning Movement Data Plot

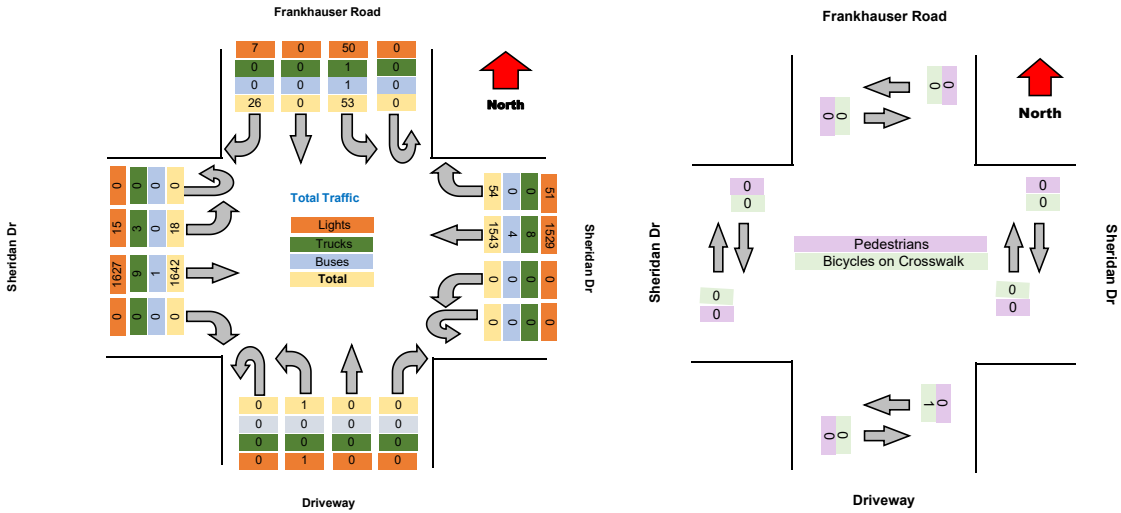


Summary

Turning Movement Peak Hour Data (PM)

4:30:00 PM

Leg	Frankhauser Road						Sheridan Dr						Driveway						Sheridan Dr						Total				
	Southbound						Westbound						Northbound						Eastbound										
Start Time	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW	
4:30:00 PM	9	0	18	0	27	0	0	15	355	0	0	370	0	0	0	0	0	0	0	0	0	0	426	6	0	432	0	0	829
4:45:00 PM	6	0	6	0	12	0	0	15	400	0	0	415	0	0	0	0	1	0	1	1	0	0	422	1	0	423	0	0	851
5:00:00 PM	5	0	20	0	25	0	0	10	368	0	0	378	0	0	0	0	0	0	0	0	0	0	370	3	0	373	0	0	776
5:15:00 PM	6	0	3	0	9	0	0	12	420	0	0	434	0	0	0	0	0	0	0	0	0	0	424	8	0	432	0	0	881
Grand Total	26	0	53	0	79	0	0	54	1563	0	0	1697	0	0	0	0	1	0	1	0	0	1642	18	0	1660	0	0	3337	
% Approach	32.2%	0.0%	67.1%	0.0%	0.0%	0.0%	0.0%	3.4%	96.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	98.9%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
% Total	0.8%	0.0%	1.6%	0.0%	2.4%	0.0%	0.0%	1.6%	46.2%	0.0%	0.0%	47.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	49.2%	0.5%	0.0%	49.7%	0.0%	0.0%	0.0%	
PHF	0.722	0.000	0.663	0.000	0.731	0.000	0.000	0.900	0.918	0.000	0.000	0.920	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.964	0.563	0.000	0.961	0.000	0.000	0.847
Lights	7	0	50	0	57	0	0	51	1529	0	0	1580	0	0	0	0	1	0	1	0	0	1627	15	0	1642	0	0	3280	
% Lights	26.9%	0.0%	84.3%	0.0%	72.2%	0.0%	0.0%	34.4%	99.1%	0.0%	0.0%	98.9%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%	92.1%	83.3%	0.0%	98.9%	0.0%	0.0%	88.3%	
Trucks	0	0	1	0	1	0	0	0	8	0	0	8	0	0	0	0	0	0	0	0	0	9	3	0	12	0	0	21	
% Trucks	0.0%	0.0%	1.9%	0.0%	1.3%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	16.7%	0.0%	0.7%	0.0%	0.0%	0.6%	
Buses	0	0	1	0	1	0	0	4	4	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	4	
% Buses	0.0%	0.0%	1.9%	0.0%	1.3%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	



Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & Frankhauser
Legs and Movements	All Processed Legs & Moves
Bin Size	15 minutes
Survey Date	2023-09-23, Saturday
Location	Sheridan Dr & Frankhauser
Latitude and Longitude	42.97821, -78.7765

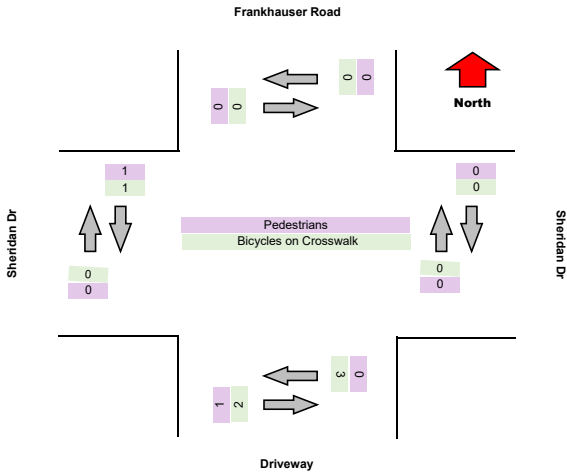
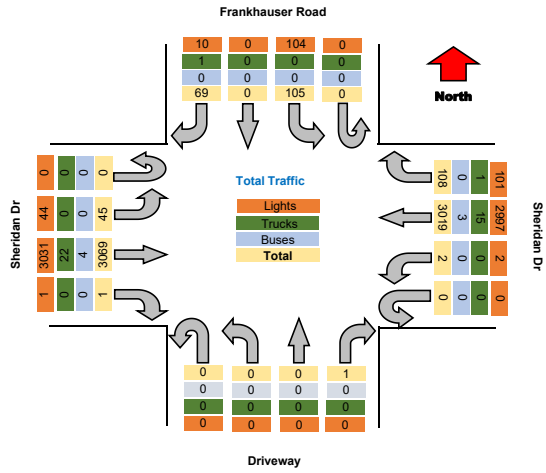
	Start	End	PHF
PM Peak	2023-09-23 12:45:00	2023-09-23 13:45:00	0.922

Turning Movement Data

Leg Direction	Frankhauser Road										Sheridan Dr										Driveway										Sheridan Dr										Total
	Southbound					Westbound					Northbound					Eastbound					Westbound					Eastbound															
Start Time	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total						
11:00:00 AM	7	0	10	0	17	0	0	0	0	0	11	233	0	0	244	0	0	0	0	0	0	0	0	0	0	0	0	225	3	0	228	0	0	459							
11:15:00 AM	5	0	11	0	16	0	0	0	0	0	12	267	0	0	279	0	0	0	0	0	0	0	0	0	0	0	0	245	4	0	249	0	1	544							
11:30:00 AM	9	0	6	0	15	0	0	0	0	0	11	243	1	0	255	0	0	0	0	0	0	0	0	0	0	0	0	257	5	0	262	0	0	532							
11:45:00 AM	8	0	7	0	15	0	0	0	0	0	10	239	0	0	249	0	0	1	0	0	0	1	0	0	0	0	0	250	4	0	254	0	0	519							
Hourly Total	29	0	34	0	63	0	0	0	0	0	44	982	1	0	1027	0	0	1	0	0	0	1	0	0	0	1	0	977	16	0	993	0	1	2094							
12:00:00 PM	4	0	6	0	10	0	0	0	0	0	10	236	1	0	247	0	0	0	0	0	0	0	1	1	0	0	0	274	3	0	277	0	0	534							
12:15:00 PM	2	0	9	0	11	0	0	0	0	0	10	240	0	0	250	0	0	0	0	0	0	0	0	0	0	0	0	252	2	0	254	0	0	503							
12:30:00 PM	6	0	11	0	17	0	0	0	0	0	11	243	0	0	254	0	0	0	0	0	0	0	0	0	0	0	0	249	6	0	255	0	0	508							
12:45:00 PM	6	0	16	0	22	0	0	0	0	0	8	258	0	0	266	0	0	0	0	0	0	0	0	0	0	0	1	276	6	0	283	0	1	571							
Hourly Total	18	0	42	0	60	0	0	0	0	0	39	966	1	0	1025	0	0	0	0	0	0	0	3	2	1	1	1091	17	0	1109	0	1	2194								
1:00:00 PM	6	0	8	0	14	0	0	0	0	0	10	281	0	0	291	0	0	0	0	0	0	0	0	0	0	0	0	239	6	0	245	0	0	500							
1:15:00 PM	4	0	6	0	10	0	0	0	0	0	5	235	0	0	240	0	0	0	0	0	0	0	0	0	0	0	0	240	1	0	241	0	0	491							
1:30:00 PM	7	0	8	0	15	0	0	0	0	0	7	290	0	0	297	0	0	0	0	0	0	0	0	0	0	0	0	283	5	0	288	0	0	600							
1:45:00 PM	5	0	7	0	12	0	0	0	0	0	3	260	0	0	265	0	0	0	0	0	0	0	0	0	0	0	0	239	0	0	239	0	0	500							
Hourly Total	22	0	29	0	51	0	0	0	0	0	25	1052	0	0	1077	0	0	0	0	0	0	0	0	0	0	0	0	3091	12	0	3103	0	0	2141							
Grand Total	99	0	109	0	174	0	0	0	0	0	109	3019	2	0	3129	0	0	1	0	0	0	1	3	2	1	1	3059	45	0	3104	0	2	6419								
% Approach	39.7%	0.0%	60.3%	0.0%	0.0%	3.5%	96.5%	0.1%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.5%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%								
% Total	1.1%	0.0%	1.6%	0.0%	2.7%	1.7%	47.0%	0.0%	0.0%	48.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.8%	0.7%	0.0%	48.6%	0.0%	0.0%	0.0%								
Lights	10	0	104	0	114	101	2997	2	0	3100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3031	44	0	3076	0	0	6290							
% Lights	14.9%	0.0%	99.0%	0.0%	65.9%	93.5%	99.3%	100.0%	0.0%	99.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	98.8%	97.8%	98.7%	0.0%	0.0%	98.0%								
Trucks	1	0	0	0	1	1	15	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0	0	22	0	0	39							
% Trucks	1.4%	0.0%	0.0%	0.0%	0.6%	0.9%	0.5%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.7%	0.0%	0.0%	0.6%								
Buses	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	7							
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%								
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%								
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	1	0							
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	66.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%							

Summary

Turning Movement Data Plot

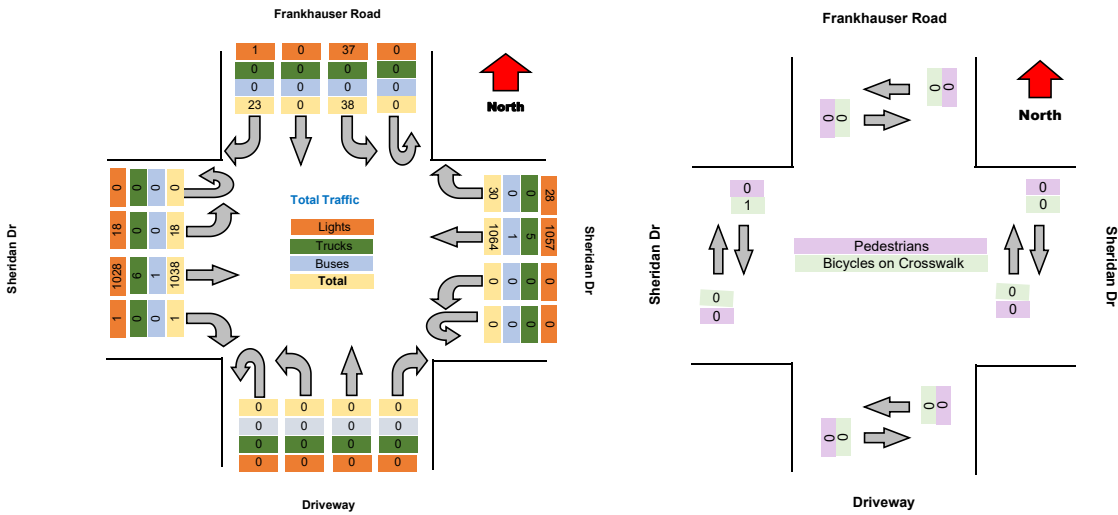


Summary

Turning Movement Peak Hour Data (PM)

12:45:00 PM

Leg	Frankhauser Road										Sheridan Dr										Driveway										Sheridan Dr										Total
	Southbound					Northbound					Westbound					Eastbound					Northbound					Eastbound															
Start Time	Right	Thru	Left	U-Turn	App Total	Peds CV	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CV	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CV	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CV	Peds CCW	Right	Thru	Left	U-Turn	App Total	Peds CV	Peds CCW						
12:45:00 PM	6	0	16	0	22	0	0	8	258	0	0	266	0	0	0	0	0	0	0	0	0	1	276	6	0	283	0	1	571												
1:00:00 PM	6	0	8	0	14	0	0	10	281	0	0	291	0	0	0	0	0	0	0	0	0	0	239	6	0	245	0	0	550												
1:15:00 PM	4	0	6	0	10	0	0	5	235	0	0	240	0	0	0	0	0	0	0	0	0	0	240	1	0	241	0	0	491												
1:30:00 PM	7	0	8	0	15	0	0	7	290	0	0	297	0	0	0	0	0	0	0	0	0	0	283	5	0	288	0	0	680												
Grand Total	23	0	38	0	61	0	0	30	1094	0	0	1094	0	0	0	0	0	0	0	0	0	1	1028	18	0	1047	0	1	2212												
% Approach	37.7%	0.0%	62.3%	0.0%	0.0%	0.0%	0.0%	2.7%	97.3%	0.0%	0.0%	0.0%	0.0%	0.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0%	0.0%	0.0%	0.1%	98.2%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%												
% Total	1.0%	0.0%	1.7%	0.0%	2.8%	0.0%	0.0%	1.4%	48.1%	0.0%	0.0%	49.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	46.9%	0.8%	0.0%	47.8%	0.0%	0.0%	0.0%												
PHF	0.821	0.000	0.594	0.000	0.683	0.000	0.000	0.750	0.917	0.000	0.000	0.921	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.917	0.750	0.000	0.918	0.000	0.000	0.922											
Lights	1	0	37	0	38	0	0	28	1057	0	0	1085	0	0	0	0	0	0	0	0	0	1	1028	18	0	1047	0	0	2170												
% Lights	4.3%	0.0%	67.4%	0.0%	62.3%	0.0%	0.0%	33.3%	99.3%	0.0%	0.0%	99.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	99.0%	100.0%	0.0%	99.1%	0.0%	0.0%	98.1%													
Trucks	0	0	0	0	0	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	6	0	0	6	0	0	11												
% Trucks	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%												
Buses	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2												
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%												
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0												
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%												
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1												
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%												



Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & Fenwick Rd
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Survey Date	2023-09-21, Thursday
Location	Sheridan Dr & Fenwick Rd
Latitude and Longitude	42.97813, -78.77413

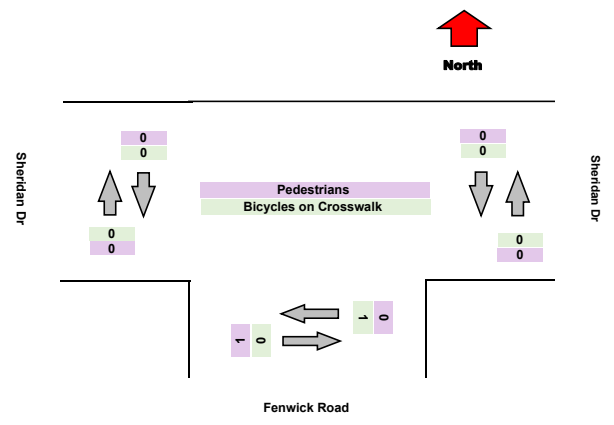
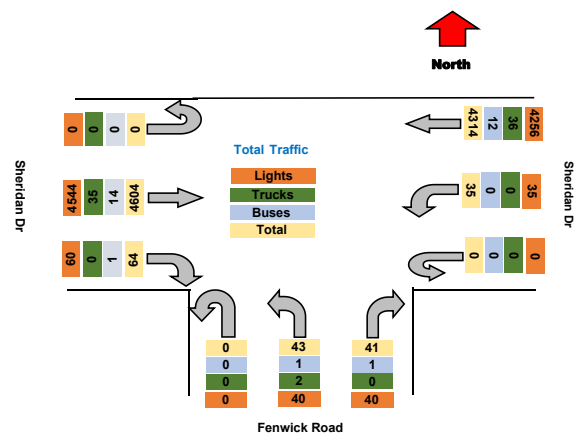
	Start	End	PHF
PM Peak	2023-09-21 16:30:00	2023-09-21 17:30:00	0.9576

Turning Movement Data

Leg Direction	Sheridan Dr Westbound						Fenwick Road Northbound						Sheridan Dr Eastbound						Total
	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	
3:00:00 PM	358	2	0	360	0	0	3	6	0	9	0	0	4	328	0	332	0	0	701
3:15:00 PM	340	4	0	344	0	0	4	5	0	9	0	0	4	389	0	393	0	0	746
3:30:00 PM	336	4	0	340	0	0	1	3	0	4	0	1	5	331	0	336	0	0	680
3:45:00 PM	336	3	0	339	0	0	2	3	0	5	0	0	1	376	0	377	0	0	721
Hourly Total	1370	13	0	1383	0	0	10	17	0	27	0	1	14	1424	0	1438	0	0	2848
4:00:00 PM	390	1	0	391	0	0	3	0	0	3	0	0	7	392	0	399	0	0	793
4:15:00 PM	325	3	0	328	0	0	4	4	0	8	0	0	4	398	0	402	0	0	738
4:30:00 PM	356	4	0	360	0	0	8	2	0	10	0	0	4	444	0	448	0	0	818
4:45:00 PM	413	4	0	417	0	0	3	3	0	6	1	0	6	419	0	425	0	0	848
Hourly Total	1484	12	0	1496	0	0	18	9	0	27	1	0	21	1653	0	1674	0	0	3197
5:00:00 PM	386	3	0	389	0	0	3	3	0	6	0	0	8	382	0	390	0	0	785
5:15:00 PM	417	1	0	418	0	0	6	6	0	12	0	0	10	426	0	436	0	0	866
5:30:00 PM	345	4	0	349	0	0	2	6	0	8	0	0	4	377	0	381	0	0	738
5:45:00 PM	312	2	0	314	0	0	2	2	0	4	0	0	7	342	0	349	0	0	667
Hourly Total	1460	10	0	1470	0	0	13	17	0	30	0	0	29	1527	0	1556	0	0	3056
Grand Total	4314	35	0	4349	0	0	41	43	0	84	1	1	64	4604	0	4668	0	0	9101
% Approach	99.2%	0.8%	0.0%	0.0%	0.0%	0.0%	48.8%	51.2%	0.0%	0.0%	0.0%	0.0%	1.4%	98.6%	0.0%	0.0%	0.0%	0.0%	0.0%
% Total	47.4%	0.4%	0.0%	47.8%	0.0%	0.0%	0.5%	0.5%	0.0%	0.9%	0.0%	0.0%	0.7%	50.6%	0.0%	51.3%	0.0%	0.0%	0.0%
Lights	4256	35	0	4291	0	0	40	40	0	80	0	0	60	4544	0	4604	0	0	8975
% Lights	98.7%	100.0%	0.0%	98.7%	0.0%	0.0%	97.6%	93.0%	0.0%	95.2%	0.0%	0.0%	93.8%	98.7%	0.0%	98.6%	0.0%	0.0%	98.6%
Trucks	36	0	0	36	0	0	0	2	0	2	0	0	0	35	0	35	0	0	73
% Trucks	0.8%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	4.7%	0.0%	2.4%	0.0%	0.0%	0.0%	0.8%	0.0%	0.7%	0.0%	0.0%	0.8%
Buses	12	0	0	12	0	0	1	1	0	2	0	0	1	14	0	15	0	0	29
% Buses	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	2.3%	0.0%	2.4%	0.0%	0.0%	1.6%	0.3%	0.0%	0.3%	0.0%	0.0%	0.3%
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Summary

Turning Movement Data Plot

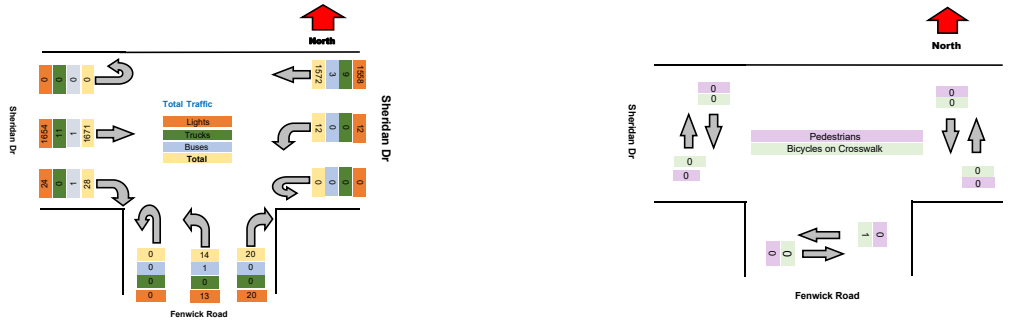


Summary

Turning Movement Peak Hour Data (PM)

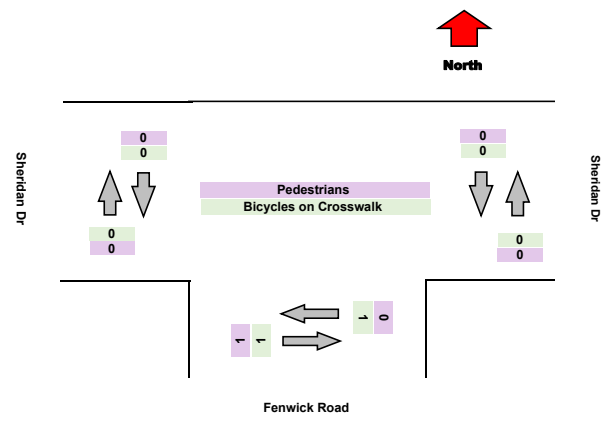
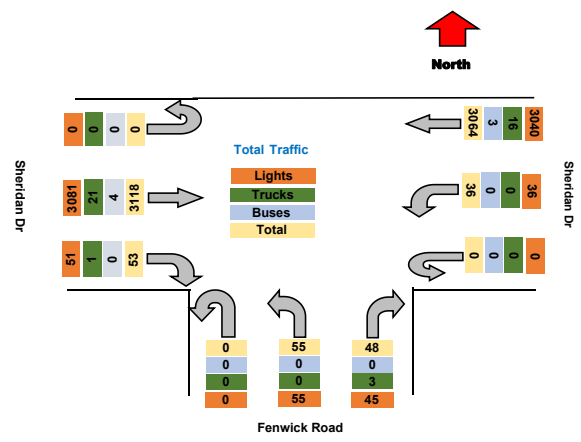
4:30:00 PM

Leg Direction	Sheridan Dr Westbound						Fenwick Road Northbound						Sheridan Dr Eastbound						Total
	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	
4:30:00 PM	356	4	0	360	0	0	8	2	0	10	0	0	4	444	0	448	0	0	818
4:45:00 PM	413	4	0	417	0	0	3	3	0	6	1	0	6	419	0	425	0	0	848
5:00:00 PM	386	3	0	389	0	0	3	3	0	6	0	0	8	382	0	390	0	0	785
5:15:00 PM	417	1	0	418	0	0	6	6	0	12	0	0	10	426	0	436	0	0	866
Grand Total	1572	12	0	1584	0	0	20	14	0	34	1	0	28	1671	0	1699	0	0	3317
% Approach	99.2%	0.8%	0.0%	0.0%	0.0%	0.0%	58.8%	41.2%	0.0%	0.0%	0.0%	0.0%	1.6%	98.4%	0.0%	0.0%	0.0%	0.0%	
% Total	47.4%	0.4%	0.0%	47.8%	0.0%	0.0%	0.6%	0.4%	0.0%	1.0%	0.0%	0.0%	0.8%	50.4%	0.0%	51.2%	0.0%	0.0%	
PHF	0.942	0.750	0.000	0.947	0.000	0.000	0.625	0.583	0.000	0.708	0.000	0.000	0.700	0.941	0.000	0.948	0.000	0.000	0.958
Lights	1558	12	0	1570	0	0	20	13	0	33	0	0	24	1654	0	1678	0	0	3281
% Lights	99.1%	100.0%	0.0%	99.1%	0.0%	0.0%	100.0%	92.9%	0.0%	97.1%	0.0%	0.0%	85.7%	99.0%	0.0%	98.8%	0.0%	0.0%	98.9%
Trucks	9	0	0	9	0	0	0	0	0	0	0	0	0	11	0	11	0	0	20
% Trucks	0.6%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.6%	0.0%	0.0%	0.6%
Buses	3	0	0	3	0	0	0	1	0	1	0	0	1	1	0	2	0	0	6
% Buses	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	7.1%	0.0%	2.9%	0.0%	0.0%	3.6%	0.1%	0.0%	0.1%	0.0%	0.0%	0.2%
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Summary

Turning Movement Data Plot

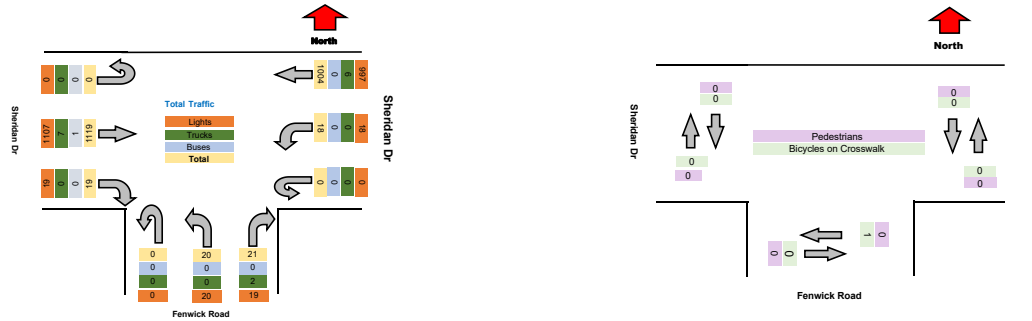


Summary

Turning Movement Peak Hour Data (PM)

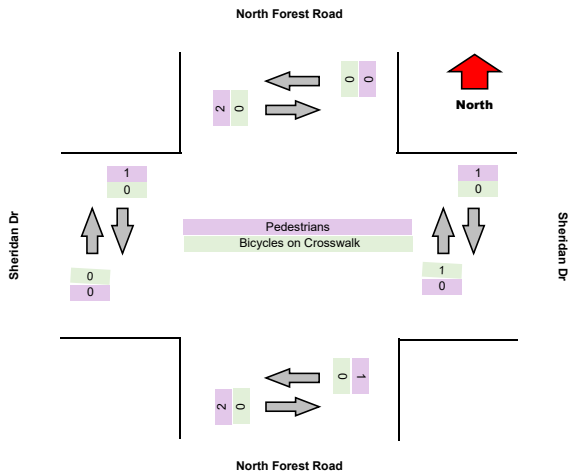
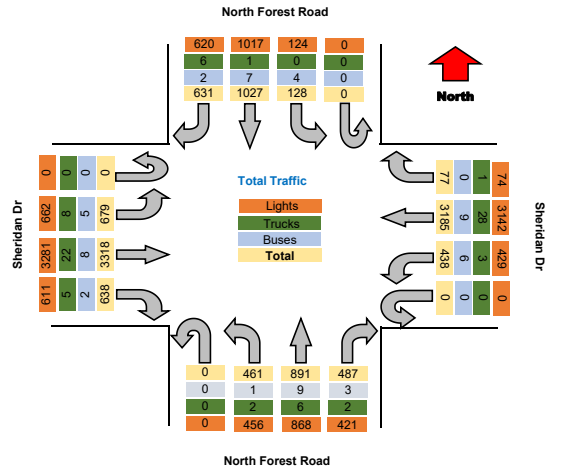
12:00:00 PM

Leg Direction	Sheridan Dr Westbound						Fenwick Road Northbound						Sheridan Dr Eastbound						Total
	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	
12:00:00 PM	254	4	0	258	0	0	5	4	0	9	0	1	8	273	0	281	0	0	548
12:15:00 PM	240	6	0	246	0	0	7	6	0	13	0	0	1	301	0	302	0	0	561
12:30:00 PM	242	6	0	248	0	0	6	6	0	12	1	0	5	251	0	256	0	0	516
12:45:00 PM	268	2	0	270	0	0	3	4	0	7	0	0	5	294	0	299	0	0	576
Grand Total	1004	18	0	1022	0	0	21	20	0	41	1	1	19	1119	0	1138	0	0	2201
% Approach	98.2%	1.8%	0.0%	0.0%	0.0%	0.0%	51.2%	48.8%	0.0%	0.0%	0.0%	0.0%	1.7%	98.3%	0.0%	0.0%	0.0%	0.0%	
% Total	45.6%	0.8%	0.0%	46.4%	0.0%	0.0%	1.0%	0.9%	0.0%	1.9%	0.0%	0.0%	0.9%	50.8%	0.0%	51.7%	0.0%	0.0%	
PHF	0.937	0.750	0.000	0.946	0.000	0.000	0.750	0.833	0.000	0.788	0.000	0.000	0.594	0.929	0.000	0.942	0.000	0.000	0.955
Lights	997	18	0	1015	0	0	19	20	0	39	0	0	19	1107	0	1126	0	0	2180
% Lights	99.3%	100.0%	0.0%	99.3%	0.0%	0.0%	90.5%	100.0%	0.0%	95.1%	0.0%	0.0%	100.0%	98.9%	0.0%	98.9%	0.0%	0.0%	99.0%
Trucks	6	0	0	6	0	0	2	0	0	2	0	0	0	7	0	7	0	0	15
% Trucks	0.6%	0.0%	0.0%	0.6%	0.0%	0.0%	9.5%	0.0%	0.0%	4.9%	0.0%	0.0%	0.0%	0.6%	0.0%	0.6%	0.0%	0.0%	0.7%
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Summary

Turning Movement Data Plot

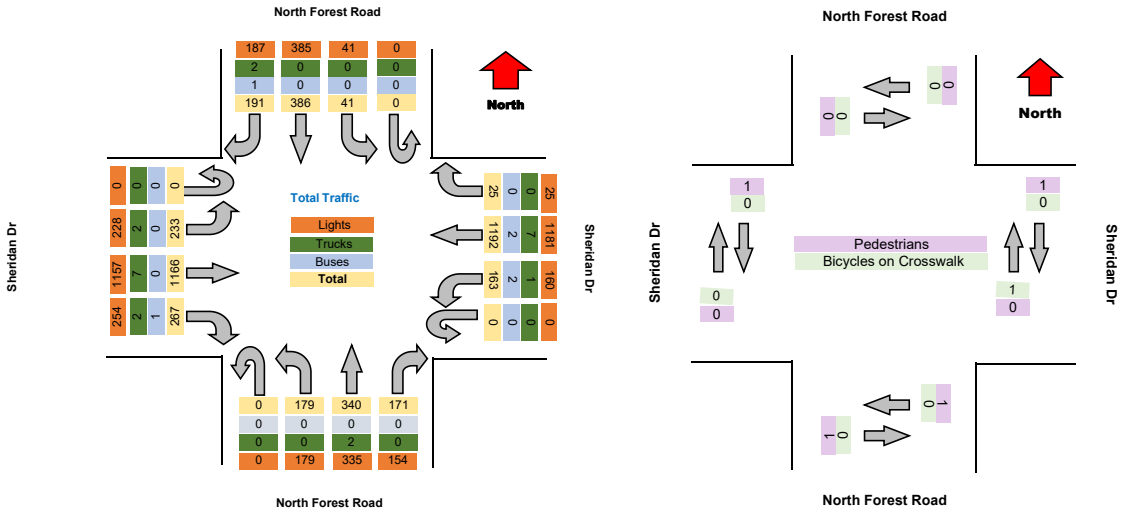


Summary

Turning Movement Peak Hour Data (PM)

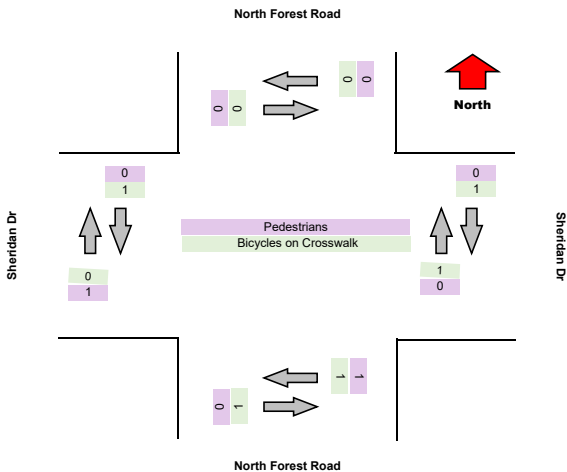
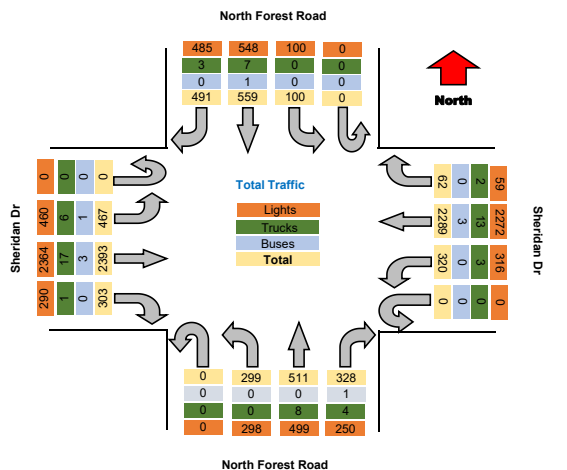
4:30:00 PM

Leg	North Forest Road					Sheridan Dr					North Forest Road					Sheridan Dr					Total								
	Southbound					Westbound					Northbound					Eastbound													
Start Time	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW								
4:30:00 PM	46	113	8	0	167	0	0	8	265	42	0	315	0	1	49	93	38	0	180	0	1	81	268	67	0	416	0	0	1078
4:45:00 PM	51	94	10	0	155	0	0	4	308	32	0	344	0	0	51	92	52	0	195	0	0	67	322	49	0	438	0	1	1132
5:00:00 PM	42	83	12	0	137	0	0	7	321	44	0	372	0	0	35	71	40	0	146	0	0	52	286	64	0	402	0	0	1057
5:15:00 PM	52	96	11	0	159	0	0	6	298	45	0	349	1	0	36	84	49	0	169	1	0	67	290	53	0	410	0	0	1057
Grand Total	191	386	41	0	618	0.00	0.00	25	1192	163	0	1380	0.00	0.00	171	340	179	0	690	0.00	0.00	267	1166	233	0	1666	0.00	1	4354
% Approach	30.9%	62.5%	6.6%	0.0%	0.0%	0.0%	0.0%	1.6%	86.4%	11.6%	0.0%	0.0%	0.0%	0.0%	24.6%	49.3%	25.9%	0.0%	0.0%	0.0%	0.0%	16.0%	70.0%	14.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Total	4.4%	8.9%	0.9%	0.0%	14.2%	0.0%	0.0%	0.6%	27.4%	3.7%	0.0%	31.7%	0.0%	0.0%	3.9%	7.8%	4.1%	0.0%	15.8%	0.0%	0.0%	6.1%	26.8%	5.4%	0.0%	38.3%	0.0%	0.0%	0.0%
PHF	0.918	0.854	0.854	0.000	0.928	0.000	0.000	0.781	0.628	0.908	0.000	0.927	0.000	0.000	0.838	0.914	0.861	0.000	0.885	0.000	0.000	0.624	0.905	0.869	0.000	0.951	0.000	0.000	0.982
Lights	187	385	41	0	613	0.00	0.00	25	1181	160	0	1366	0.00	0.00	154	335	179	0	668	0.00	0.00	254	1157	238	0	1639	0.00	0	4286
% Lights	97.9%	99.7%	100.0%	0.0%	99.2%	0.0%	0.0%	100.0%	99.1%	98.2%	0.0%	99.0%	0.0%	0.0%	90.1%	98.5%	100.0%	0.0%	96.8%	0.0%	0.0%	95.1%	92.2%	97.9%	0.0%	98.4%	0.0%	0.0%	98.4%
Trucks	2	0	0	0	2	0	0	0	7	1	0	8	0	0	0	2	0	0	2	0	0	2	7	2	0	11	0	0	23
% Trucks	1.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.6%	0.6%	0.0%	0.6%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.3%	0.0%	0.0%	0.7%	0.6%	0.0%	0.7%	0.0%	0.0%	0.0%	0.5%
Buses	1	0	0	0	1	0	0	2	2	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	4
% Buses	0.5%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	1.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Summary

Turning Movement Data Plot

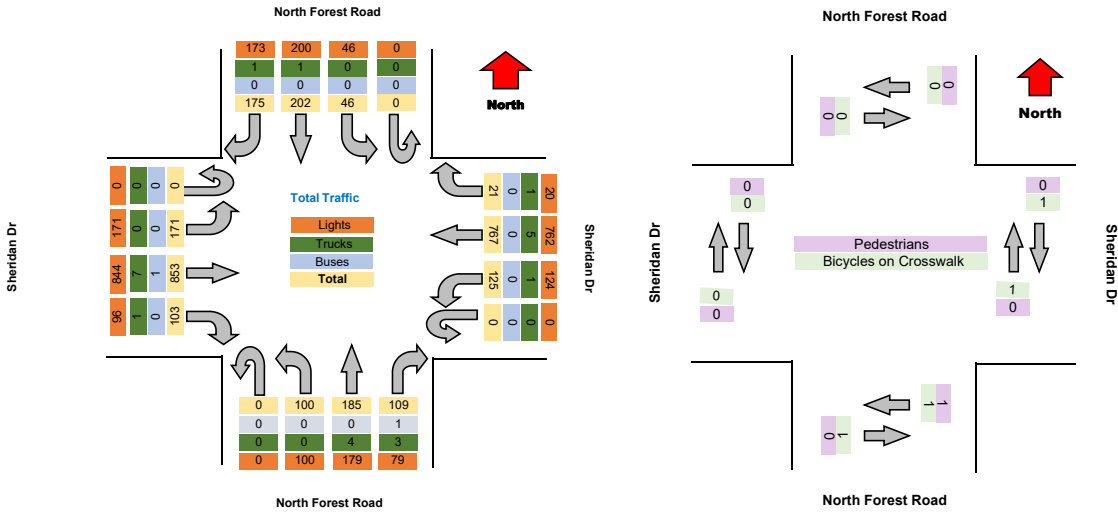


Summary

Turning Movement Peak Hour Data (PM)

12:00:00 PM

Leg	North Forest Road										Sheridan Dr										North Forest Road										Sheridan Dr										Total
	Southbound					Westbound					Northbound					Eastbound					Northbound					Eastbound															
Start Time	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW	Right	Thru	Left	U-Turn	App Total	Peaks CV	Peaks CCW													
12:00:00 PM	45	53	14	0	112	0	0	3	188	31	0	222	0	0	30	44	25	0	99	0	1	21	212	36	0	269	0	0	702												
12:15:00 PM	43	42	14	0	99	0	0	4	177	32	0	213	0	1	38	45	25	0	108	1	0	29	221	53	0	303	0	0	723												
12:30:00 PM	44	54	12	0	110	0	0	7	195	34	0	236	0	0	22	49	23	0	94	1	0	29	201	38	0	268	0	0	708												
12:45:00 PM	43	53	6	0	102	0	0	7	207	28	0	242	1	0	18	47	27	0	93	0	0	24	219	44	0	287	0	0	724												
Grand Total	175	202	46	0	423	0	0	21	767	126	0	913	1	1	109	185	109	0	394	2	1	103	853	171	0	1127	0	0	2837												
% Approach	41.4%	47.6%	10.9%	0.0%	0.0%	0.0%	0.0%	2.3%	84.0%	13.7%	0.0%	0.0%	0.0%	0.0%	27.7%	47.0%	25.4%	0.0%	0.0%	0.0%	0.0%	9.1%	75.7%	15.2%	0.0%	0.0%	0.0%	0.0%	0.0%												
% Total	6.1%	7.1%	1.6%	0.0%	14.8%	0.0%	0.0%	0.7%	26.8%	4.4%	0.0%	32.0%	0.0%	0.0%	3.8%	6.5%	3.5%	0.0%	13.8%	0.0%	0.0%	3.6%	29.9%	6.0%	0.0%	39.4%	0.0%	0.0%	0.0%												
PHF	0.972	0.935	0.821	0.000	0.944	0.000	0.000	0.750	0.928	0.919	0.000	0.943	0.000	0.000	0.717	0.944	0.928	0.000	0.912	0.000	0.000	0.888	0.965	0.807	0.000	0.930	0.000	0.000	0.887												
Lights	173	200	46	0	419	0	0	20	762	124	0	906	0	0	79	179	100	0	358	0	0	96	844	171	0	1111	0	0	2794												
% Lights	98.9%	99.0%	100.0%	0.0%	99.1%	0.0%	0.0%	95.2%	99.3%	99.2%	0.0%	99.2%	0.0%	0.0%	72.5%	96.8%	100.0%	0.0%	90.9%	0.0%	0.0%	83.2%	98.9%	100.0%	0.0%	98.6%	0.0%	0.0%	97.8%												
Trucks	1	1	0	0	2	0	0	1	5	1	0	7	0	0	3	4	0	0	7	0	0	1	7	0	0	8	0	0	24												
% Trucks	0.6%	0.5%	0.0%	0.0%	0.5%	0.0%	0.0%	4.8%	0.7%	0.8%	0.0%	0.8%	0.0%	0.0%	2.8%	2.2%	0.0%	0.0%	1.8%	0.0%	0.0%	1.0%	0.8%	0.0%	0.0%	0.7%	0.0%	0.0%	0.8%												
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	1	0	0	2												
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%												
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0												
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%												
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0												
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%												



Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & Harlem Rd
Legs and Movements	All Processed Legs & Movements
Bin Size	15 minutes
Survey Date	2023-09-21, Thursday
Location	Sheridan Dr & Harlem Rd
Latitude and Longitude	42.97858, -78.78386

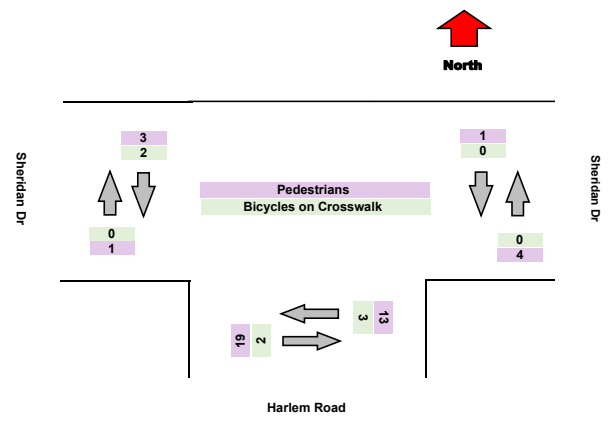
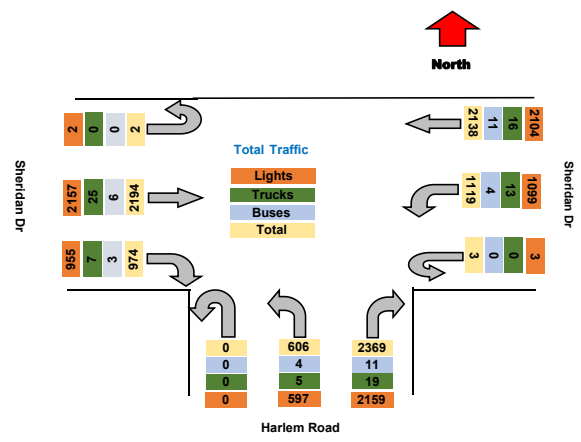
	Start	End	PHF
PM Peak	2023-09-21 16:30:00	2023-09-21 17:30:00	0.9815

Turning Movement Data

Leg Direction	Sheridan Dr Westbound						Harlem Road Northbound						Sheridan Dr Eastbound						Total
	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	
3:00:00 PM	188	106	0	294	0	0	170	59	0	229	1	0	101	165	0	266	0	0	789
3:15:00 PM	159	118	0	277	1	0	199	62	0	261	0	1	92	158	0	250	1	0	788
3:30:00 PM	169	77	1	247	0	0	164	58	0	222	0	1	102	177	0	279	0	0	748
3:45:00 PM	173	108	0	281	0	0	188	48	0	236	0	0	86	184	0	270	0	0	787
Hourly Total	689	409	1	1099	1	0	721	227	0	948	1	2	381	684	0	1065	1	0	3112
4:00:00 PM	182	95	1	278	0	1	200	54	0	254	0	0	76	184	0	260	0	1	792
4:15:00 PM	185	72	0	257	0	0	194	51	0	245	0	0	86	207	1	294	0	0	796
4:30:00 PM	182	79	1	262	0	0	248	43	0	291	0	16	76	209	0	285	0	2	838
4:45:00 PM	175	87	0	262	0	2	227	56	0	283	2	0	79	205	0	284	0	2	829
Hourly Total	724	333	2	1059	0	3	869	204	0	1073	2	16	317	805	1	1123	0	5	3255
5:00:00 PM	183	90	0	273	0	0	194	38	0	232	13	0	81	206	1	288	0	0	793
5:15:00 PM	204	94	0	298	0	0	219	50	0	269	0	3	73	190	0	263	0	0	830
5:30:00 PM	166	87	0	253	0	0	189	51	0	240	0	0	76	177	0	253	0	0	746
5:45:00 PM	172	106	0	278	0	1	177	36	0	213	0	0	46	132	0	178	0	0	669
Hourly Total	725	377	0	1102	0	1	779	175	0	954	13	3	276	705	1	982	0	0	3038
Grand Total	2138	1119	3	3260	1	4	2369	606	0	2975	16	21	974	2194	2	3170	1	5	9405
% Approach	65.6%	34.3%	0.1%	0.0%	0.0%	0.0%	79.6%	20.4%	0.0%	0.0%	0.0%	0.0%	30.7%	69.2%	0.1%	0.0%	0.0%	0.0%	0.0%
% Total	22.7%	11.9%	0.0%	34.7%	0.0%	0.0%	25.2%	6.4%	0.0%	31.6%	0.0%	0.0%	10.4%	23.3%	0.0%	33.7%	0.0%	0.0%	0.0%
Lights	2104	1099	3	3206	0	0	2159	597	0	2756	0	0	955	2157	2	3114	0	0	9076
% Lights	98.4%	98.2%	100.0%	98.3%	0.0%	0.0%	91.1%	98.5%	0.0%	92.6%	0.0%	0.0%	98.0%	98.3%	100.0%	98.2%	0.0%	0.0%	96.5%
Trucks	16	13	0	29	0	0	19	5	0	24	0	0	7	25	0	32	0	0	85
% Trucks	0.7%	1.2%	0.0%	0.9%	0.0%	0.0%	0.8%	0.8%	0.0%	0.8%	0.0%	0.0%	0.7%	1.1%	0.0%	1.0%	0.0%	0.0%	0.9%
Buses	11	4	0	15	0	0	11	4	0	15	0	0	3	6	0	9	0	0	39
% Buses	0.5%	0.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.7%	0.0%	0.5%	0.0%	0.0%	0.3%	0.3%	0.0%	0.3%	0.0%	0.0%	0.4%
Pedestrians	0	0	0	0	1	4	0	0	0	0	13	19	0	0	0	0	1	3	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	81.3%	90.5%	0.0%	0.0%	0.0%	0.0%	100.0%	60.0%	0.0%
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	2	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.8%	9.5%	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	0.0%

Summary

Turning Movement Data Plot

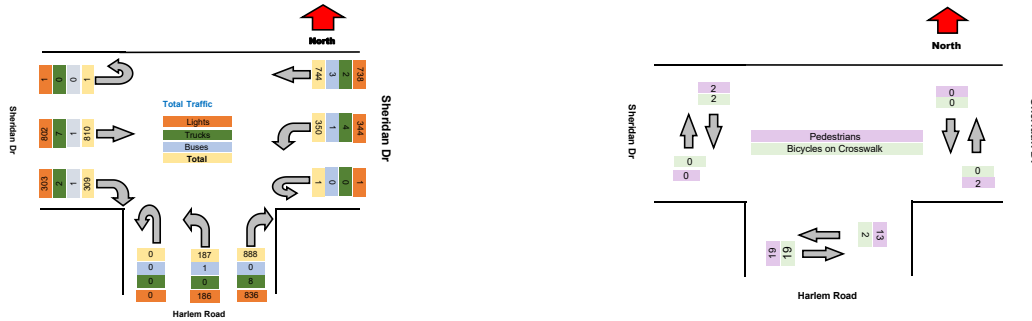


Summary

Turning Movement Peak Hour Data (PM)

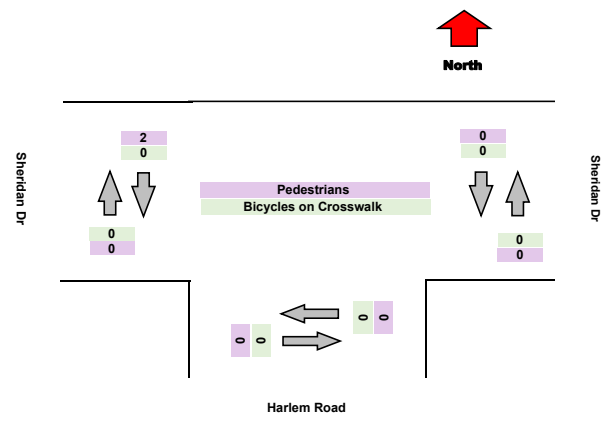
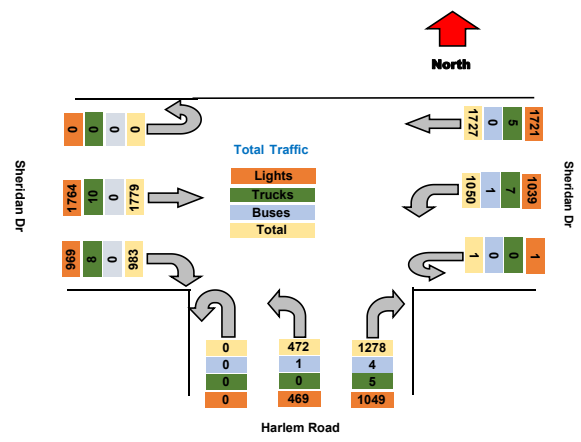
4:30:00 PM

Leg Direction	Sheridan Dr Westbound						Harlem Road Northbound						Sheridan Dr Eastbound						Total
	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	
4:30:00 PM	182	79	1	262	0	0	248	43	0	291	0	16	76	209	0	285	0	2	838
4:45:00 PM	175	87	0	262	0	2	227	56	0	283	2	0	79	205	0	284	0	2	829
5:00:00 PM	183	90	0	273	0	0	194	38	0	232	13	0	81	206	1	288	0	0	793
5:15:00 PM	204	94	0	298	0	0	219	50	0	269	0	3	73	190	0	263	0	0	830
Grand Total	744	350	1	1095	0	2	888	187	0	1075	15	19	309	810	1	1120	0	4	3290
% Approach	67.9%	32.0%	0.1%	0.0%	0.0%	0.0%	82.6%	17.4%	0.0%	0.0%	0.0%	0.0%	27.6%	72.3%	0.1%	0.0%	0.0%	0.0%	
% Total	22.6%	10.6%	0.0%	33.3%	0.0%	0.0%	27.0%	5.7%	0.0%	32.7%	0.0%	0.0%	9.4%	24.6%	0.0%	34.0%	0.0%	0.0%	
PHF	0.912	0.931	0.250	0.919	0.000	0.000	0.895	0.835	0.000	0.924	0.000	0.000	0.954	0.969	0.250	0.972	0.000	0.000	0.982
Lights	738	344	1	1083	0	0	836	186	0	1022	0	0	303	802	1	1106	0	0	3211
% Lights	99.2%	98.3%	100.0%	98.9%	0.0%	0.0%	94.1%	99.5%	0.0%	95.1%	0.0%	0.0%	98.1%	99.0%	100.0%	98.8%	0.0%	0.0%	97.6%
Trucks	3	1	0	4	0	0	8	0	0	8	0	0	2	7	0	9	0	0	23
% Trucks	0.3%	1.1%	0.0%	0.5%	0.0%	0.0%	0.9%	0.0%	0.0%	0.7%	0.0%	0.0%	0.6%	0.9%	0.0%	0.8%	0.0%	0.0%	0.7%
Buses	3	1	0	4	0	0	0	1	0	1	0	0	1	1	0	2	0	0	7
% Buses	0.4%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.5%	0.0%	0.1%	0.0%	0.0%	0.3%	0.1%	0.0%	0.2%	0.0%	0.0%	0.2%
Pedestrians	0	0	0	0	0	2	0	0	0	0	13	19	0	0	0	0	0	2	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	86.7%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%



Summary

Turning Movement Data Plot

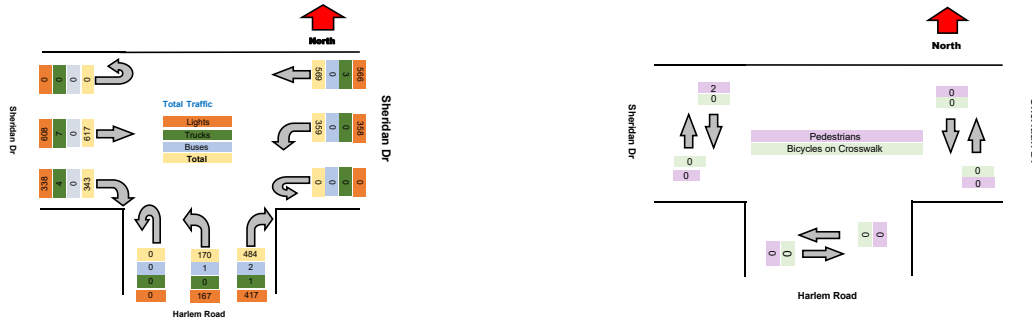


Summary

Turning Movement Peak Hour Data (PM)

12:00:00 PM

Leg Direction	Sheridan Dr Westbound						Harlem Road Northbound						Sheridan Dr Eastbound						Total
	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	
12:00:00 PM	141	94	0	235	0	0	126	32	0	158	0	0	99	163	0	262	0	0	655
12:15:00 PM	144	78	0	222	0	0	134	44	0	178	0	0	80	166	0	246	0	0	646
12:30:00 PM	157	94	0	251	0	0	111	45	0	156	0	0	79	135	0	214	0	0	621
12:45:00 PM	127	93	0	220	0	0	113	49	0	162	0	0	85	153	0	238	0	2	620
Grand Total	569	359	0	928	0	0	484	170	0	654	0	0	343	617	0	960	0	2	2542
% Approach	61.3%	38.7%	0.0%	0.0%	0.0%	0.0%	74.0%	26.0%	0.0%	0.0%	0.0%	0.0%	35.7%	64.3%	0.0%	0.0%	0.0%	0.0%	
% Total	22.4%	14.1%	0.0%	36.6%	0.0%	0.0%	19.0%	6.7%	0.0%	25.7%	0.0%	0.0%	13.5%	24.3%	0.0%	37.8%	0.0%	0.0%	
PHF	0.906	0.955	0.000	0.924	0.000	0.000	0.903	0.867	0.000	0.919	0.000	0.000	0.866	0.929	0.000	0.916	0.000	0.000	0.970
Lights	566	358	0	924	0	0	417	167	0	584	0	0	338	608	0	946	0	0	2454
% Lights	99.5%	99.7%	0.0%	99.6%	0.0%	0.0%	86.2%	98.2%	0.0%	89.3%	0.0%	0.0%	98.5%	98.5%	0.0%	98.5%	0.0%	0.0%	96.5%
Trucks	3	0	0	3	0	0	1	0	0	1	0	0	4	7	0	11	0	0	15
% Trucks	0.5%	0.0%	0.0%	0.3%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	1.2%	1.1%	0.0%	1.1%	0.0%	0.0%	0.6%
Buses	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	3
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.6%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Summary

Project	C&S
Project Code	11448
Site Name	Sheridan Dr & I 290 Ramps
Legs and Movements	All Processed Legs & Moves
Bin Size	15 minutes
Survey Date	2023-09-21, Thursday
Location	Sheridan Dr & I 290 Ramps
Latitude and Longitude	42.97846, -78.78165

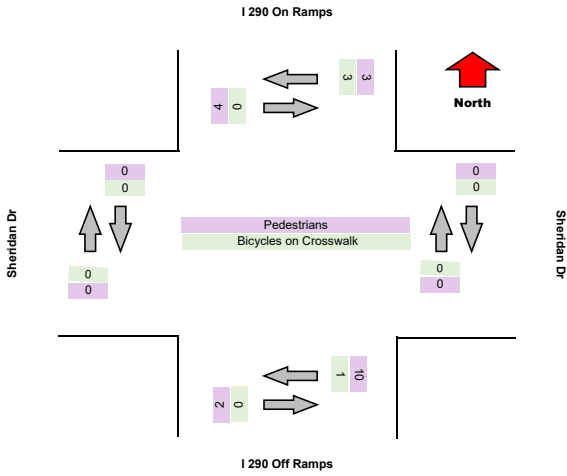
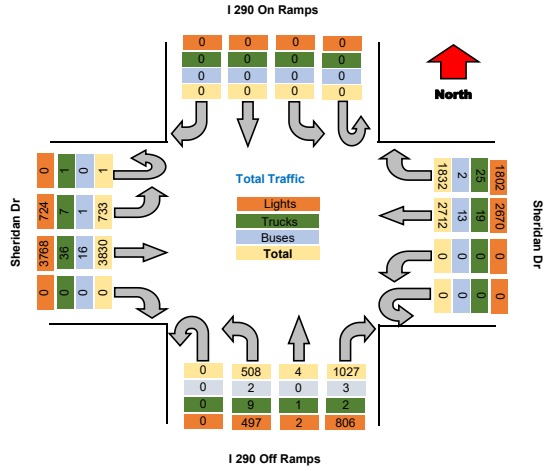
	Start	End	PHF
PM Peak	2023-09-21 16:15:00	2023-09-21 17:15:00	0.974

Turning Movement Data

Leg Direction	I 290 On Ramps										Sheridan Dr						I 290 Off Ramps						Sheridan Dr						Total
	Southbound					Westbound					Northbound			Eastbound			Northbound			Eastbound									
	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total	Right	Thru	Left	U-Turn	App Total				
Start Time																													
3:00:00 PM	0	0	0	0	0	1	1	145	240	0	0	385	0	0	86	0	50	0	136	0	0	0	283	57	0	340	0	0	861
3:15:00 PM	0	0	0	0	0	0	0	158	217	0	0	375	0	0	97	0	53	0	150	0	0	0	288	49	0	337	0	0	862
3:30:00 PM	0	0	0	0	0	1	1	142	209	0	0	351	0	0	81	0	47	0	128	0	0	0	297	69	0	366	0	0	845
3:45:00 PM	0	0	0	0	0	0	0	140	227	0	0	367	0	0	94	0	41	0	135	0	0	0	325	57	1	383	0	0	885
Hourly Total	0	0	0	0	0	2	2	585	893	0	0	1478	0	0	358	0	191	0	549	0	0	0	1193	232	1	1426	0	0	3453
4:00:00 PM	0	0	0	0	0	0	0	156	227	0	0	383	0	0	88	2	44	0	134	0	0	0	310	76	0	386	0	0	903
4:15:00 PM	0	0	0	0	0	0	0	146	225	0	0	371	0	0	91	0	39	0	130	0	0	0	352	59	0	421	0	0	922
4:30:00 PM	0	0	0	0	0	0	0	165	210	0	0	375	0	0	82	0	32	0	94	0	1	0	374	84	0	458	0	0	927
4:45:00 PM	0	0	0	0	0	0	0	166	257	0	0	423	0	0	76	0	40	0	116	3	0	0	353	47	0	400	0	0	939
Hourly Total	0	0	0	0	0	0	0	633	919	0	0	1852	0	0	317	2	155	0	474	3	1	0	1399	266	0	1665	0	0	3891
5:00:00 PM	0	0	0	0	0	0	0	197	227	0	0	424	0	0	87	0	33	0	120	8	0	0	348	71	0	419	0	0	963
5:15:00 PM	0	0	0	0	0	2	0	154	237	0	0	391	0	0	89	0	40	0	129	0	1	0	332	62	0	394	0	0	914
5:30:00 PM	0	0	0	0	0	0	0	160	242	0	0	402	0	0	85	0	38	0	123	0	0	0	305	49	0	354	0	0	879
5:45:00 PM	0	0	0	0	0	0	0	103	164	0	0	267	0	0	91	2	51	0	144	0	0	0	253	53	0	306	0	0	747
Hourly Total	0	0	0	0	0	2	1	614	900	0	0	1514	0	0	352	2	162	0	516	8	1	0	1238	235	0	1473	0	0	1563
Grand Total	0	0	0	0	0	4	3	1832	2712	0	0	4544	0	0	1027	4	508	0	1539	11	2	0	3830	733	1	4564	0	0	10647
% Approach	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	40.3%	59.7%	0.0%	0.0%	0.0%	0.0%	66.7%	0.3%	33.0%	0.0%	0.0%	0.0%	0.0%	0.0%	83.9%	16.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
% Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.2%	25.5%	0.0%	0.0%	42.7%	0.0%	0.0%	9.6%	0.0%	4.8%	0.0%	14.6%	0.0%	0.0%	0.0%	36.0%	6.9%	0.0%	42.9%	0.0%	0.0%	0.0%
Lights	0	0	0	0	0	0	0	1802	2670	0	0	4472	0	0	806	2	497	0	1305	0	0	0	3768	724	0	4492	0	0	10289
% Lights	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.4%	98.5%	0.0%	0.0%	98.4%	0.0%	0.0%	78.5%	50.0%	67.9%	0.0%	84.9%	0.0%	0.0%	0.0%	98.4%	98.8%	0.0%	98.4%	0.0%	0.0%	96.4%
Trucks	0	0	0	0	0	0	0	25	19	0	0	44	0	0	2	1	9	0	12	0	0	0	36	7	1	44	0	0	100
% Trucks	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%	0.7%	0.0%	0.0%	1.0%	0.0%	0.0%	0.2%	26.0%	1.8%	0.0%	0.8%	0.0%	0.0%	0.0%	0.9%	1.0%	100.0%	1.0%	0.0%	0.0%	0.9%
Buses	0	0	0	0	0	0	0	2	13	0	0	15	0	0	3	0	2	0	5	0	0	0	16	1	0	17	0	0	37
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%	0.4%	0.0%	0.0%	0.3%
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.9%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Bicycles on Crosswalk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Summary

Turning Movement Data Plot

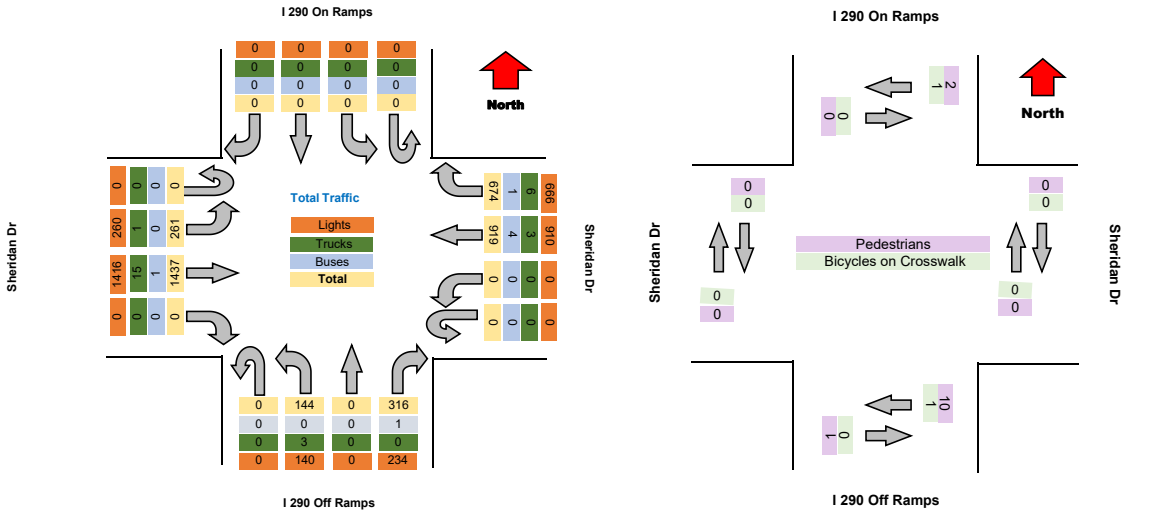


Summary

Turning Movement Peak Hour Data (PM)

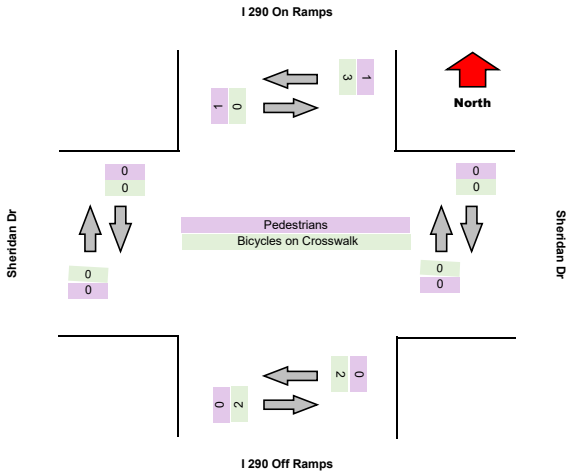
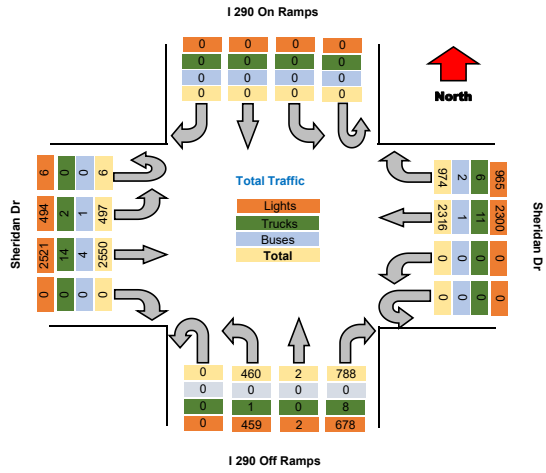
4:15:00 PM

Leg	I 290 On Ramps										Sheridan Dr					I 290 Off Ramps					Sheridan Dr					Total		
	Southbound					Westbound					Northbound					Eastbound												
Direction	Right	Thru	Left	U-Turn	App Total	Peak CV	Peak CCW	Right	Thru	Left	U-Turn	App Total	Peak CV	Peak CCW	Right	Thru	Left	U-Turn	App Total	Peak CV	Peak CCW	Right	Thru	Left	U-Turn	App Total	Peak CV	Peak CCW
4:15:00 PM	0	0	0	0	0	0	0	146	225	0	0	371	0	0	91	0	39	0	130	0	0	0	362	59	0	0	922	
4:30:00 PM	0	0	0	0	0	0	1	165	210	0	0	375	0	0	62	0	32	0	94	0	1	0	374	84	0	0	927	
4:45:00 PM	0	0	0	0	0	0	2	166	257	0	0	423	0	0	76	0	40	0	116	3	0	0	353	47	0	0	939	
5:00:00 PM	0	0	0	0	0	0	0	197	227	0	0	424	0	0	87	0	33	0	120	0	0	0	348	71	0	0	963	
Grand Total	0	0	0	0	0	0	3	674	910	0	0	1693	0	0	316	0	144	0	489	11	1	0	1437	261	0	0	3751	
% Approach	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0%	0.0%	0.0%	42.3%	57.7%	0.0%	0.0%	0.0%	0.0%	0.0%	68.7%	0.0%	31.3%	0.0%	0.0%	0.0%	0.0%	0.0%	84.6%	15.4%	0.0%	0.0%	0.0%	
% Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	18.0%	24.5%	0.0%	0.0%	42.5%	0.0%	0.0%	8.4%	0.0%	3.8%	0.0%	12.3%	0.0%	0.0%	0.0%	38.3%	7.0%	0.0%	45.3%	0.0%	0.0%
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.855	0.894	0.000	0.000	0.939	0.000	0.000	0.868	0.000	0.900	0.000	0.885	0.000	0.000	0.000	0.961	0.777	0.000	0.927	0.000	0.000
Lights	0	0	0	0	0	0	0	666	910	0	0	1676	0	0	234	0	140	0	374	0	0	0	1416	260	0	0	3626	
% Lights	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	58.8%	59.0%	0.0%	0.0%	98.9%	0.0%	0.0%	74.1%	0.0%	67.2%	0.0%	81.3%	0.0%	0.0%	0.0%	98.5%	59.6%	0.0%	98.7%	0.0%	0.0%
Trucks	0	0	0	0	0	0	0	6	3	0	0	9	0	0	0	0	3	0	3	0	0	0	15	1	0	16	0	0
% Trucks	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.3%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.7%	0.0%	0.0%	0.0%	1.0%	0.4%	0.0%	0.9%	0.0%	0.0%
Buses	0	0	0	0	0	0	0	1	4	0	0	5	0	0	1	0	1	0	2	0	0	0	1	0	0	1	0	0
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.7%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%
Pedestrians	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bicycles on Crosswalk	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Summary

Turning Movement Data Plot

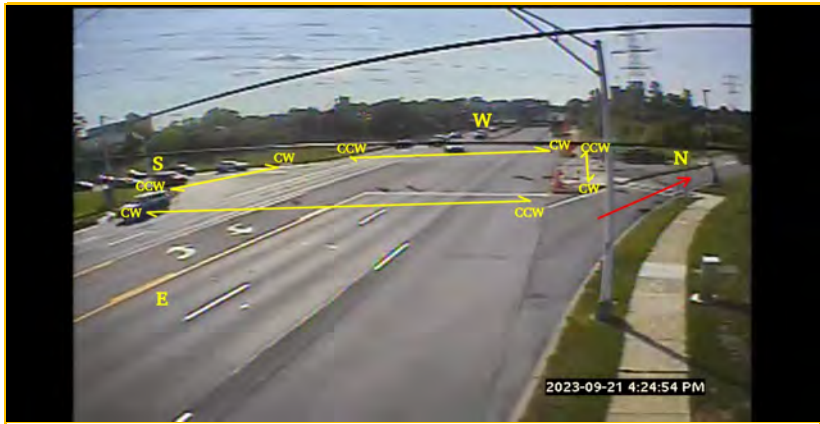
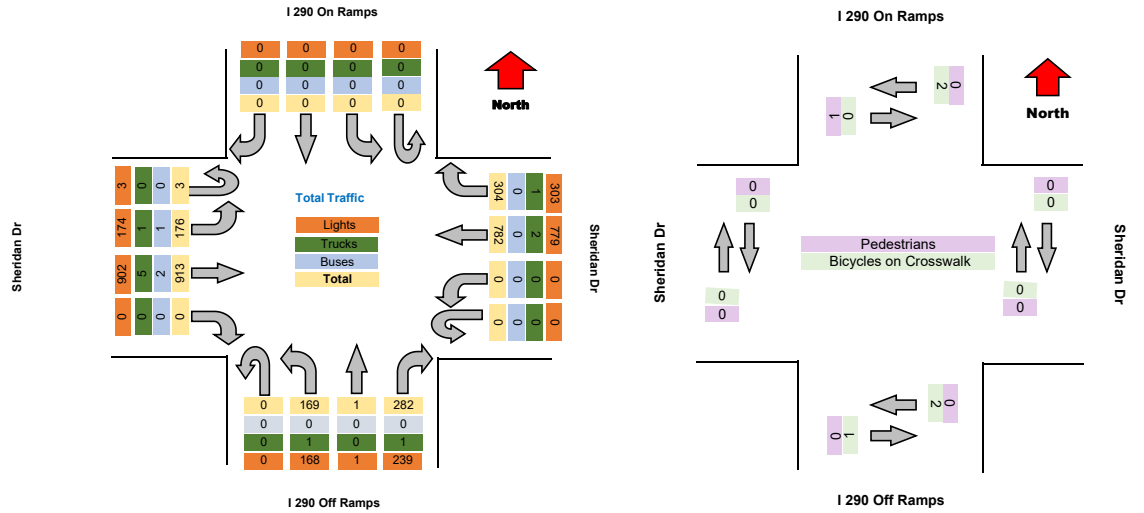


Summary

Turning Movement Peak Hour Data (PM)

12:00:00 PM

Leg	I 290 On Ramps				Sheridan Dr				I 290 Off Ramps				Sheridan Dr				Total												
	Southbound				Westbound				Northbound				Eastbound																
Start Time	Right	Thru	Left	U-Turn	App Total	Pass CV	Peak CV	Right	Thru	Left	U-Turn	App Total	Pass CV	Peak CV	Right	Thru	Left	U-Turn	App Total	Pass CV	Peak CV								
12:00:00 PM	0	0	0	0	0	0	0	64	188	0	0	250	0	0	74	1	45	0	120	0	0	0	220	68	1	289	0	0	689
12:15:00 PM	0	0	0	0	0	0	0	70	207	0	0	277	0	0	61	0	43	0	104	1	0	0	224	39	0	263	0	0	644
12:30:00 PM	0	0	0	0	0	1	0	80	193	0	0	273	0	0	70	0	44	0	114	1	1	0	228	42	2	272	0	0	689
12:45:00 PM	0	0	0	0	0	0	0	90	198	0	0	288	0	0	77	0	37	0	114	0	0	0	241	27	0	268	0	0	688
Grand Total	0	0	0	0	0	1	0	304	782	0	0	1082	0	0	282	1	169	0	452	2	1	0	913	176	3	1092	0	0	2839
% Approach	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0%	0.0%	0.0%	28.0%	72.0%	0.0%	0.0%	0.0%	0.0%	0.0%	62.4%	0.2%	37.4%	0.0%	0.0%	0.0%	0.0%	0.0%	83.6%	16.1%	0.3%	0.0%	0.0%	0.0%	
% Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	29.7%	0.0%	0.0%	41.3%	0.0%	0.0%	10.7%	0.0%	6.4%	0.0%	17.2%	0.0%	0.0%	0.0%	34.7%	6.7%	0.1%	41.5%	0.0%	0.0%	
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.844	0.844	0.000	0.000	0.848	0.000	0.000	0.916	0.250	0.939	0.000	0.842	0.000	0.000	0.000	0.947	0.647	0.375	0.845	0.000	0.000	0.884
Lights	0	0	0	0	0	0	0	303	779	0	0	1082	0	0	239	1	168	0	408	0	0	0	902	174	3	1079	0	0	2569
% Lights	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	99.7%	99.6%	0.0%	0.0%	99.6%	0.0%	0.0%	84.8%	100.0%	69.4%	0.0%	90.3%	0.0%	0.0%	0.0%	98.8%	98.9%	100.0%	98.8%	0.0%	0.0%	97.7%
Trucks	0	0	0	0	0	0	0	1	2	0	0	3	0	0	1	0	1	0	2	0	0	0	5	1	0	6	0	0	11
% Trucks	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.4%	0.0%	0.6%	0.0%	0.4%	0.0%	0.0%	0.0%	0.5%	0.6%	0.0%	0.6%	0.0%	0.0%	0.4%
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	3
% Buses	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.6%	0.0%	0.3%	0.0%	0.0%	0.1%
Pedestrians	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bicycles on Crosswalk	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	100.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

NB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/21/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	1	6	81	89	16	1	0	0	0	0	0	0	0	0	0	194
07:00	4	22	145	115	10	1	0	0	0	0	0	0	0	0	0	297
08:00	1	62	228	142	11	1	0	0	0	0	0	0	0	0	0	445
09:00	1	38	187	110	11	0	0	0	0	0	0	0	0	0	0	347
10:00	3	45	230	113	6	0	0	0	0	0	0	0	0	0	0	397
11:00	2	39	230	110	5	2	0	0	0	0	0	0	0	0	0	388
12 PM	30	39	191	123	6	1	0	0	0	0	0	0	0	0	0	390
13:00	4	68	239	104	4	0	0	0	0	0	0	0	0	0	0	419
14:00	21	133	259	88	5	0	0	0	0	0	0	0	0	0	0	506
15:00	8	108	265	111	7	0	0	0	0	0	0	0	0	0	0	499
16:00	78	128	261	96	2	0	0	0	0	0	0	0	0	0	0	565
17:00	5	59	324	146	14	1	0	0	0	0	0	0	0	0	0	549
18:00	0	50	202	93	14	2	0	0	0	0	0	0	0	0	0	361
19:00	0	18	170	115	16	0	0	0	0	0	0	0	0	0	0	319
20:00	4	22	106	84	12	1	0	0	0	0	0	0	0	0	0	229
21:00	0	12	62	83	6	1	0	0	0	0	0	0	0	0	0	164
22:00	0	6	39	43	9	1	0	0	0	0	0	0	0	0	0	98
23:00	1	1	17	17	6	0	0	0	0	0	0	0	0	0	0	42
Total	163	856	3236	1782	160	12	0	0	0	0	0	0	0	0	0	6209

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

NB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/22/23	0	2	13	14	5	0	0	0	0	0	0	0	0	0	0	34
01:00	0	1	2	4	0	1	0	0	0	0	0	0	0	0	0	8
02:00	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	9
03:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	1	2	4	2	0	0	0	0	0	0	0	0	0	0	9
05:00	0	4	18	26	5	0	0	0	0	0	0	0	0	0	0	53
06:00	4	13	77	71	15	0	0	0	0	0	0	0	0	0	0	180
07:00	8	20	121	109	13	3	0	0	0	0	0	0	0	0	0	274
08:00	3	66	193	157	12	0	0	0	0	0	0	0	0	0	0	431
09:00	7	41	210	112	13	0	0	0	0	0	0	0	0	0	0	383
10:00	2	34	164	108	11	0	1	0	0	0	0	0	0	0	0	320
11:00	4	47	184	103	13	0	0	0	0	0	0	0	0	0	0	351
12 PM	10	45	194	131	14	0	0	0	0	0	0	0	0	0	0	394
13:00	12	68	234	128	13	0	0	0	0	0	0	0	0	0	0	455
14:00	13	82	277	103	7	0	0	0	0	0	0	0	0	0	0	482
15:00	24	134	244	112	13	1	0	0	0	0	0	0	0	0	0	528
16:00	31	115	227	121	11	0	0	0	0	0	0	0	0	0	0	505
17:00	11	65	240	135	9	1	0	0	0	0	0	0	0	0	0	461
18:00	2	35	201	111	12	0	0	0	0	0	0	0	0	0	0	361
19:00	0	24	145	110	9	1	0	0	0	0	0	0	0	0	0	289
20:00	0	13	102	59	12	0	0	0	0	0	0	0	0	0	0	186
21:00	8	4	78	66	5	1	0	0	0	0	0	0	0	0	0	162
22:00	0	3	61	37	7	0	0	0	0	0	0	0	0	0	0	108
23:00	0	2	46	50	7	1	0	0	0	0	0	0	0	0	0	106
Total	139	819	3040	1876	208	9	1	0	0	0	0	0	0	0	0	6092

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

NB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/23/23	0	5	28	22	7	0	0	0	0	0	0	0	0	0	0	62
01:00	0	2	10	15	1	0	0	0	0	0	0	0	0	0	0	28
02:00	0	1	4	4	1	0	0	0	0	0	0	0	0	0	0	10
03:00	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	0	4	11	0	0	0	0	0	0	0	0	0	0	0	15
05:00	1	1	6	11	2	0	0	0	0	0	0	0	0	0	0	21
06:00	0	4	20	22	8	1	0	0	0	0	0	0	0	0	0	55
07:00	0	5	44	48	6	0	0	0	0	0	0	0	0	0	0	103
08:00	1	12	80	80	16	1	0	0	0	0	0	0	0	0	0	190
09:00	0	12	112	90	9	2	0	0	0	0	0	0	0	0	0	225
10:00	3	25	126	126	8	0	0	0	0	0	0	0	0	0	0	288
11:00	5	31	172	98	11	1	0	0	0	0	0	0	0	0	0	318
12 PM	3	39	191	134	12	1	0	0	0	0	0	0	0	0	0	380
13:00	1	23	161	126	17	0	0	0	0	0	0	0	0	0	0	328
14:00	3	58	179	108	14	0	0	0	0	0	0	0	0	0	0	362
15:00	4	20	159	148	10	2	0	0	0	0	0	0	0	0	0	343
16:00	2	15	165	128	11	0	0	0	0	0	0	0	0	0	0	321
17:00	1	18	126	121	18	0	0	0	0	0	0	0	0	0	0	284
18:00	0	21	137	97	12	1	1	0	0	0	0	0	0	0	0	269
19:00	1	21	119	66	5	1	0	0	0	0	0	0	0	0	0	213
20:00	0	9	84	57	6	2	0	0	0	0	0	0	0	0	0	158
21:00	0	14	78	66	7	1	0	0	0	0	0	0	0	0	0	166
22:00	1	5	53	52	9	1	0	0	0	0	0	0	0	0	0	121
23:00	0	5	27	33	4	0	1	0	0	0	0	0	0	0	0	70
Total	26	347	2088	1666	194	14	2	0	0	0	0	0	0	0	0	4337

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

NB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/24/23	0	3	22	13	4	0	1	0	0	0	0	0	0	0	0	43
01:00	0	1	7	10	6	1	0	0	0	0	0	0	0	0	0	25
02:00	0	0	4	5	2	0	0	0	0	0	0	0	0	0	0	11
03:00	0	0	7	5	1	0	0	0	0	0	0	0	0	0	0	13
04:00	0	3	6	5	1	0	0	0	0	0	0	0	0	0	0	15
05:00	0	1	3	10	0	0	0	0	0	0	0	0	0	0	0	14
06:00	1	1	15	18	4	0	0	0	0	0	0	0	0	0	0	39
07:00	0	2	25	30	7	0	0	0	0	0	0	0	0	0	0	64
08:00	0	4	45	64	11	2	0	0	0	0	0	0	0	0	0	126
09:00	4	21	120	122	14	0	0	0	0	0	0	0	0	0	0	281
10:00	1	5	102	110	14	1	0	0	0	0	0	0	0	0	0	233
11:00	5	25	133	108	8	1	0	0	0	0	0	0	0	0	0	280
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	11	66	489	500	72	5	1	0	0	0	0	0	0	0	0	1144
Grand Total	339	2088	8853	5824	634	40	4	0	0	0	0	0	0	0	0	17782

Stats

- 15th Percentile : 25 MPH
- 50th Percentile : 28 MPH
- 85th Percentile : 33 MPH
- 95th Percentile : 34 MPH
- Mean Speed(Average) : 29 MPH
- 10 MPH Pace Speed : 26-35 MPH
- Number in Pace : 14690
- Percent in Pace : 82.6%
- Number of Vehicles > 35 MPH : 678
- Percent of Vehicles > 35 MPH : 3.8%

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

SB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/21/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	4	11	55	144	21	0	0	0	0	0	0	0	0	0	0	235
07:00	33	46	278	234	22	0	0	0	0	0	0	0	0	0	0	613
08:00	50	53	196	238	23	0	0	0	0	0	0	0	0	0	0	560
09:00	1	23	248	171	17	0	0	0	0	0	0	0	0	0	0	460
10:00	7	30	194	154	10	0	0	0	0	0	0	0	0	0	0	395
11:00	3	20	230	174	8	0	0	0	0	0	0	0	0	0	0	435
12 PM	4	29	233	171	12	0	1	0	0	0	0	0	0	0	0	450
13:00	3	23	226	187	11	0	0	0	0	0	0	0	0	0	0	450
14:00	5	45	269	186	15	0	0	0	0	0	0	0	0	0	0	520
15:00	26	48	291	239	11	0	0	0	0	0	0	0	0	0	0	615
16:00	169	132	191	105	5	0	0	0	0	0	0	0	0	0	0	602
17:00	5	37	230	257	32	0	0	0	0	0	0	0	0	0	0	561
18:00	0	2	184	199	14	0	0	0	0	0	0	0	0	0	0	399
19:00	2	15	161	118	13	0	1	0	0	0	0	0	0	0	0	310
20:00	2	10	80	63	21	0	0	0	0	0	0	0	0	0	0	176
21:00	1	5	59	62	11	0	0	0	0	0	0	0	0	0	0	138
22:00	0	5	23	37	2	0	0	0	0	0	0	0	0	0	0	67
23:00	0	1	20	24	3	1	1	0	0	0	0	0	0	0	0	50
Total	315	535	3168	2763	251	1	3	0	0	0	0	0	0	0	0	7036

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

SB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/22/23	0	1	3	10	3	0	0	0	0	0	0	0	0	0	0	17
01:00	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	0	2	6	1	0	0	0	0	0	0	0	0	0	0	9
04:00	0	1	5	2	2	0	0	0	0	0	0	0	0	0	0	10
05:00	0	2	16	32	14	1	0	0	0	0	0	0	0	0	0	65
06:00	4	6	60	121	16	0	0	0	0	0	0	0	0	0	0	207
07:00	19	44	196	242	28	0	0	0	0	0	0	0	0	0	0	529
08:00	54	51	216	222	12	1	0	0	0	0	0	0	0	0	0	556
09:00	2	14	180	183	17	0	0	0	0	0	0	0	0	0	0	396
10:00	10	25	176	157	15	0	0	0	0	0	0	0	0	0	0	383
11:00	13	38	184	197	15	0	0	0	0	0	0	0	0	0	0	447
12 PM	2	21	206	180	12	1	0	0	0	0	0	0	0	0	0	422
13:00	2	30	253	205	8	0	0	0	0	0	0	0	0	0	0	498
14:00	9	43	284	174	9	0	0	0	0	0	0	0	0	0	0	519
15:00	57	62	294	187	12	0	0	0	0	0	0	0	0	0	0	612
16:00	96	105	209	156	15	0	0	0	0	0	0	0	0	0	0	581
17:00	5	20	277	207	16	0	0	0	0	0	0	0	0	0	0	525
18:00	0	5	127	180	30	0	0	0	0	0	0	0	0	0	0	342
19:00	0	11	142	136	12	0	0	0	0	0	0	0	0	0	0	301
20:00	1	13	89	75	8	1	0	0	0	0	0	0	0	0	0	187
21:00	3	8	62	59	8	0	0	0	0	0	0	0	0	0	0	140
22:00	0	7	32	46	13	1	0	0	0	0	0	0	0	0	0	99
23:00	0	2	21	30	4	1	0	0	0	0	0	0	0	0	0	58
Total	277	509	3037	2812	270	6	0	0	0	0	0	0	0	0	0	6911

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

SB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/23/23	0	1	9	20	2	0	0	0	0	0	0	0	0	0	0	32
01:00	0	2	3	10	1	0	0	0	0	0	0	0	0	0	0	16
02:00	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	5
03:00	0	1	2	3	3	0	0	0	0	0	0	0	0	0	0	9
04:00	0	0	1	5	3	1	0	0	0	0	0	0	0	0	0	10
05:00	0	0	7	10	3	0	0	0	0	0	0	0	0	0	0	20
06:00	0	1	25	34	9	1	0	0	0	0	0	0	0	0	0	70
07:00	0	2	50	78	16	1	0	0	0	0	0	0	0	0	0	147
08:00	1	5	53	145	27	3	0	0	0	0	0	0	0	0	0	234
09:00	2	4	110	163	26	0	0	0	0	0	0	0	0	0	0	305
10:00	5	15	131	210	18	2	0	0	0	0	0	0	0	0	0	381
11:00	1	14	177	154	19	1	0	0	0	0	0	0	0	0	0	366
12 PM	3	26	186	189	15	1	0	0	0	0	0	0	0	0	0	420
13:00	1	9	134	173	18	2	0	0	0	0	0	0	0	0	0	337
14:00	2	21	181	177	18	0	0	0	0	0	0	0	0	0	0	399
15:00	0	14	169	177	21	0	0	0	0	0	0	0	0	0	0	381
16:00	1	8	124	175	22	0	1	0	0	0	0	0	0	0	0	331
17:00	2	17	121	167	19	0	0	0	0	0	0	0	0	0	0	326
18:00	1	8	133	124	21	0	0	0	0	0	0	0	0	0	0	287
19:00	4	15	112	92	9	0	0	0	0	0	0	0	0	0	0	232
20:00	0	11	89	73	8	1	0	0	0	0	0	0	0	0	0	182
21:00	0	5	54	58	5	0	0	0	0	0	0	0	0	0	0	122
22:00	0	6	29	42	5	0	0	0	0	0	0	0	0	0	0	82
23:00	1	4	25	32	5	2	0	0	0	0	0	0	0	0	0	69
Total	24	189	1927	2313	294	15	1	0	0	0	0	0	0	0	0	4763

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: N Forest Dr
Segment: 305' N of Morgan Pkwy
Date: 09/21/2023

GPS: 42.980024, -78.769195

SB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/24/23	0	4	4	9	1	1	0	0	0	0	0	0	0	0	0	19
01:00	0	1	9	1	1	0	0	0	0	0	0	0	0	0	0	12
02:00	1	1	4	4	3	0	0	0	0	0	0	0	0	0	0	13
03:00	0	0	1	5	2	0	0	0	0	0	0	0	0	0	0	8
04:00	0	0	1	7	0	0	0	0	0	0	0	0	0	0	0	8
05:00	0	0	6	7	2	0	0	0	0	0	0	0	0	0	0	15
06:00	0	3	10	27	8	0	0	0	0	0	0	0	0	0	0	48
07:00	0	3	28	42	5	0	0	0	0	0	0	0	0	0	0	78
08:00	1	6	35	87	8	1	0	0	0	0	0	0	0	0	0	138
09:00	0	15	91	115	16	0	0	0	0	0	0	0	0	0	0	237
10:00	1	8	123	152	16	0	0	0	0	0	0	0	0	0	0	300
11:00	1	7	126	153	18	0	0	0	0	0	0	0	0	0	0	305
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	4	48	438	609	80	2	0	0	0	0	0	0	0	0	0	1181
Grand Total	620	1281	8570	8497	895	24	4	0	0	0	0	0	0	0	0	19891

Stats

- 15th Percentile : 25 MPH
- 50th Percentile : 29 MPH
- 85th Percentile : 33 MPH
- 95th Percentile : 34 MPH

- Mean Speed(Average) : 30 MPH
- 10 MPH Pace Speed : 26-35 MPH
- Number in Pace : 17092
- Percent in Pace : 85.9%
- Number of Vehicles > 35 MPH : 923
- Percent of Vehicles > 35 MPH : 4.6%

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: North Forest Rd
Segment: 305' N of Morgan Pkwy
Date: 09/20/2023

GPS: 42.980024, -78.769195

Start Time	18-Sep-23		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	*	*	*	*	*	*	34	17	62	32	43	19	46	23
01:00	*	*	*	*	*	*	*	*	8	4	28	16	25	12	20	11
02:00	*	*	*	*	*	*	*	*	9	4	10	5	11	13	10	7
03:00	*	*	*	*	*	*	*	*	3	9	7	9	13	8	8	9
04:00	*	*	*	*	*	*	*	*	9	10	15	10	15	8	13	9
05:00	*	*	*	*	*	*	*	*	53	65	21	20	14	15	29	33
06:00	*	*	*	*	*	*	194	235	180	207	55	70	39	48	117	140
07:00	*	*	*	*	*	*	297	613	274	529	103	147	64	78	184	342
08:00	*	*	*	*	*	*	445	560	431	556	190	234	126	138	298	372
09:00	*	*	*	*	*	*	347	460	383	396	225	305	281	237	309	350
10:00	*	*	*	*	*	*	397	395	320	383	288	381	233	300	310	365
11:00	*	*	*	*	*	*	388	435	351	447	318	366	280	305	334	388
12:00 PM	*	*	*	*	*	*	390	450	394	422	380	420	*	*	388	431
01:00	*	*	*	*	*	*	419	450	455	498	328	337	*	*	401	428
02:00	*	*	*	*	*	*	506	520	482	519	362	399	*	*	450	479
03:00	*	*	*	*	*	*	499	615	528	612	343	381	*	*	457	536
04:00	*	*	*	*	*	*	565	602	505	581	321	331	*	*	464	505
05:00	*	*	*	*	*	*	549	561	461	525	284	326	*	*	431	471
06:00	*	*	*	*	*	*	361	399	361	342	269	287	*	*	330	343
07:00	*	*	*	*	*	*	319	310	289	301	213	232	*	*	274	281
08:00	*	*	*	*	*	*	229	176	186	187	158	182	*	*	191	182
09:00	*	*	*	*	*	*	164	138	162	140	166	122	*	*	164	133
10:00	*	*	*	*	*	*	98	67	108	99	121	82	*	*	109	83
11:00	*	*	*	*	*	*	42	50	106	58	70	69	*	*	73	59
Lane	0	0	0	0	0	0	6209	7036	6092	6911	4337	4763	1144	1181	5410	5980
Day	0	0	0	0	0	0	13245	13245	13003	13003	9100	9100	2325	2325	11390	11390
AM Peak	-	-	-	-	-	-	08:00	07:00	08:00	08:00	11:00	10:00	09:00	11:00	11:00	11:00
Vol.	-	-	-	-	-	-	445	613	431	556	318	381	281	305	334	388
PM Peak	-	-	-	-	-	-	16:00	15:00	15:00	15:00	12:00	12:00	-	-	16:00	15:00
Vol.	-	-	-	-	-	-	565	615	528	612	380	420	-	-	464	536

Comb. Total 0 0 0 13245 13003 9100 2325 11390

ADT ADT 11,319 AADT 11,319

Location: Amherst, New York
 Road Name: Sheridan Dr
 Segment: 775' E of Fenwick, Rd
 Date: 09/21/2023

Tri-State Traffic Data Inc
 184 Baker Rd
 Coatesville PA 19320
"Serving Transportation Professionals Since 1995"

GPS: 42.978048, -78.771207

EB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/21/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	3	0	2	18	64	150	191	97	22	9	0	0	0	0	0	556
07:00	77	77	78	110	183	285	238	117	20	0	1	0	0	0	0	1186
08:00	74	78	87	129	261	345	223	78	3	3	0	0	0	0	0	1281
09:00	0	0	5	36	145	377	350	134	29	4	0	0	0	0	0	1080
10:00	0	3	10	49	213	404	288	86	15	3	0	0	0	0	0	1071
11:00	2	4	6	72	221	368	235	84	11	2	0	0	0	0	0	1005
12 PM	1	4	19	56	275	370	265	78	16	2	0	0	1	0	0	1087
13:00	1	6	31	80	189	377	274	91	14	1	0	0	0	0	0	1064
14:00	1	2	35	128	326	402	248	57	3	0	0	0	0	0	0	1202
15:00	19	25	43	155	322	398	255	118	13	1	0	0	0	0	0	1349
16:00	139	123	186	297	362	279	121	50	3	2	1	0	0	0	0	1563
17:00	106	75	144	195	292	341	208	79	11	2	0	0	0	0	0	1453
18:00	0	0	9	23	143	325	288	152	26	2	1	0	0	0	0	969
19:00	0	0	1	30	116	237	252	98	13	4	0	0	0	0	0	751
20:00	0	1	2	26	112	164	152	65	20	1	0	0	0	0	0	543
21:00	0	0	1	11	53	150	127	65	11	1	1	0	0	0	0	420
22:00	0	0	0	3	13	82	84	46	7	2	0	1	0	0	0	238
23:00	0	0	0	2	10	28	48	39	10	0	1	0	0	0	0	138
Total	423	398	659	1420	3300	5082	3847	1534	247	39	5	1	1	0	0	16956

Location: Amherst, New York
 Road Name: Sheridan Dr
 Segment: 775' E of Fenwick, Rd
 Date: 09/21/2023

Tri-State Traffic Data Inc
 184 Baker Rd
 Coatesville PA 19320
 "Serving Transportation Professionals Since 1995"

GPS: 42.978048, -78.771207

EB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/22/23	0	0	0	0	1	8	22	20	4	0	1	0	0	0	0	56
01:00	0	0	0	1	1	7	14	9	2	1	0	1	0	0	0	36
02:00	0	0	0	0	1	2	7	9	2	2	0	0	0	0	0	23
03:00	0	0	0	0	2	8	8	8	0	0	0	0	0	0	0	26
04:00	0	0	0	0	0	10	19	14	2	0	0	0	0	0	0	45
05:00	0	0	0	2	11	31	69	54	13	1	0	0	0	0	0	181
06:00	0	0	1	12	51	169	193	90	24	4	0	0	0	0	0	544
07:00	33	38	64	108	195	301	219	130	31	4	0	0	0	0	0	1123
08:00	13	13	38	78	207	381	321	139	18	3	0	0	0	0	0	1211
09:00	0	1	2	35	182	310	333	128	15	1	0	0	0	0	1	1008
10:00	0	0	3	23	163	305	282	130	19	5	0	0	0	0	0	930
11:00	0	1	5	35	173	358	294	95	14	2	1	0	0	0	0	978
12 PM	0	0	0	42	185	389	311	118	16	4	0	0	0	0	0	1065
13:00	0	0	5	73	234	397	276	93	11	1	0	0	0	0	0	1090
14:00	4	6	23	77	266	436	277	73	7	2	0	0	0	0	0	1171
15:00	20	50	77	158	367	437	205	81	9	0	0	0	0	0	0	1404
16:00	25	36	105	199	379	323	205	80	6	6	0	0	0	0	0	1364
17:00	0	14	27	100	287	392	269	95	20	3	0	0	0	0	0	1207
18:00	0	0	8	49	169	295	273	121	27	2	0	1	0	0	0	945
19:00	1	0	4	21	112	233	210	95	17	2	0	0	0	0	0	695
20:00	0	0	4	17	73	193	145	73	9	3	1	0	0	0	0	518
21:00	1	0	1	9	63	168	145	53	5	1	0	0	0	0	0	446
22:00	0	0	0	7	23	104	113	51	13	3	0	0	0	1	0	315
23:00	0	0	0	1	11	77	95	62	6	0	0	0	0	0	0	252
Total	97	159	367	1047	3156	5334	4305	1821	290	50	3	2	0	1	1	16633

Location: Amherst, New York
 Road Name: Sheridan Dr
 Segment: 775' E of Fenwick, Rd
 Date: 09/21/2023

Tri-State Traffic Data Inc
 184 Baker Rd
 Coatesville PA 19320
"Serving Transportation Professionals Since 1995"

GPS: 42.978048, -78.771207

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/23/23	0	0	0	2	13	25	48	29	7	2	0	0	0	0	0	126
01:00	0	0	1	0	4	11	16	18	2	0	0	0	1	0	0	53
02:00	0	0	0	0	2	7	18	1	0	0	0	0	0	0	0	28
03:00	0	0	0	0	3	7	10	7	0	0	0	0	0	0	0	27
04:00	0	0	0	0	0	10	14	10	4	0	0	0	0	0	0	38
05:00	0	0	0	1	7	16	29	24	5	3	0	0	0	0	0	85
06:00	0	0	0	3	15	52	78	50	13	2	0	0	0	0	0	213
07:00	0	0	0	7	17	98	121	75	20	3	1	1	0	0	0	343
08:00	0	0	0	21	86	193	182	132	24	2	0	0	0	0	0	640
09:00	0	0	0	12	79	252	249	109	21	3	1	0	0	0	0	726
10:00	0	0	2	37	163	300	289	93	16	1	0	0	0	0	0	901
11:00	0	0	1	22	153	377	273	127	14	1	0	0	0	0	0	968
12 PM	2	0	10	62	191	390	294	120	11	3	0	0	0	0	0	1083
13:00	0	0	2	29	166	352	308	115	15	4	0	1	0	0	0	992
14:00	0	0	11	47	202	392	268	110	14	0	0	0	0	0	0	1044
15:00	0	0	2	22	105	329	282	139	21	4	0	0	0	0	0	904
16:00	0	0	4	34	120	279	315	113	24	2	0	0	1	0	0	892
17:00	0	0	2	26	99	274	276	134	19	2	0	0	0	0	0	832
18:00	1	0	2	21	101	208	236	125	24	4	1	0	0	0	0	723
19:00	0	0	4	30	99	211	170	77	15	3	0	0	0	0	0	609
20:00	0	0	2	12	60	215	138	62	23	0	1	0	0	0	0	513
21:00	0	0	0	7	35	141	117	59	3	1	0	0	0	0	0	363
22:00	0	0	2	4	25	110	105	55	6	1	0	0	0	0	0	308
23:00	0	0	0	0	28	44	89	57	9	0	0	0	0	0	0	227
Total	3	0	45	399	1773	4293	3925	1841	310	41	4	2	2	0	0	12638

Location: Amherst, New York
 Road Name: Sheridan Dr
 Segment: 775' E of Fenwick, Rd
 Date: 09/21/2023

Tri-State Traffic Data Inc
 184 Baker Rd
 Coatesville PA 19320
 "Serving Transportation Professionals Since 1995"

GPS: 42.978048, -78.771207

EB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/24/23	0	0	0	0	10	26	41	25	9	1	0	0	0	0	0	112
01:00	0	0	0	0	7	16	26	16	2	0	0	0	0	0	0	67
02:00	0	0	0	0	1	4	13	17	2	1	0	0	0	0	0	38
03:00	0	0	0	0	0	9	14	5	0	1	0	1	0	0	0	30
04:00	0	0	0	0	1	7	12	9	1	1	0	0	0	0	0	31
05:00	0	0	0	0	4	16	25	31	6	0	1	0	0	0	0	83
06:00	0	0	0	1	8	27	47	37	6	3	1	0	0	0	0	130
07:00	0	0	0	1	12	61	87	39	9	4	1	0	0	0	0	214
08:00	0	0	0	4	20	101	155	61	14	6	0	0	0	0	0	361
09:00	2	0	0	4	59	206	218	101	17	6	1	1	0	0	0	615
10:00	0	0	0	10	103	223	196	106	21	2	0	0	0	0	0	661
11:00	0	0	4	8	79	235	266	146	19	4	0	0	0	0	0	761
12 PM	0	0	12	65	210	340	289	160	19	1	0	0	1	0	0	1097
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	2	0	16	93	514	1271	1389	753	125	30	4	2	1	0	0	4200
Grand Total	525	557	1087	2959	8743	15980	13466	5949	972	160	16	7	4	1	1	50427

Stats

- 15th Percentile : 36 MPH
- 50th Percentile : 43 MPH
- 85th Percentile : 49 MPH
- 95th Percentile : 53 MPH
- Mean Speed(Average) : 44 MPH
- 10 MPH Pace Speed : 41-50 MPH
- Number in Pace : 29461
- Percent in Pace : 58.4%
- Number of Vehicles > 45 MPH : 20576
- Percent of Vehicles > 45 MPH : 40.8%

Location: Amherst, NY
 Road Name: Sheridan Dr
 Segment: 775' E of Fenwick Rd
 Date: 09/21/2023

Tri-State Traffic Data Inc
 184 Baker Rd
 Coatesville PA 19320
 "Serving Transportation Professionals Since 1995"

GPS: 42.978048, -78.771207

Start Time	Mon 18-Sep-23	Tue 19-Sep-23	Wed 20-Sep-23	Thu 21-Sep-23	Fri 22-Sep-23	Average Day	Sat 23-Sep-23	Sun 24-Sep-23	Week Average					
12:00 AM	*	*	*	*	56	56	126	112	98					
01:00	*	*	*	*	36	36	53	67	52					
02:00	*	*	*	*	23	23	28	38	30					
03:00	*	*	*	*	26	26	27	30	28					
04:00	*	*	*	*	45	45	38	31	38					
05:00	*	*	*	*	181	181	85	83	116					
06:00	*	*	*	555	541	548	213	130	360					
07:00	*	*	*	1186	1121	1154	343	214	716					
08:00	*	*	*	1279	1211	1245	640	361	873					
09:00	*	*	*	1078	1006	1042	724	615	856					
10:00	*	*	*	1070	929	1000	900	661	890					
11:00	*	*	*	1005	975	990	968	758	926					
12:00 PM	*	*	*	1086	1065	1076	1081	1097	1082					
01:00	*	*	*	1062	1088	1075	991	*	1047					
02:00	*	*	*	1201	1169	1185	1043	*	1138					
03:00	*	*	*	1347	1404	1376	902	*	1218					
04:00	*	*	*	1562	1364	1463	892	*	1273					
05:00	*	*	*	1452	1206	1329	831	*	1163					
06:00	*	*	*	969	945	957	723	*	879					
07:00	*	*	*	750	695	722	609	*	685					
08:00	*	*	*	542	518	530	513	*	524					
09:00	*	*	*	420	446	433	363	*	410					
10:00	*	*	*	238	315	276	308	*	287					
11:00	*	*	*	138	252	195	227	*	206					
Day Total	0	0	0	16940	16617	16963	12628	4197	14895					
% Avg. WkDay	0.0%	0.0%	0.0%	99.9%	98.0%									
% Avg. Week	0.0%	0.0%	0.0%	113.7%	111.6%	113.9%	84.8%	28.2%						
AM Peak	-	-	-	08:00	08:00	-	08:00	-	11:00	11:00	-	11:00	-	-
Vol.	-	-	-	1279	1211	-	1245	-	968	758	-	926	-	-
PM Peak	-	-	-	16:00	15:00	-	16:00	-	12:00	12:00	-	16:00	-	-
Vol.	-	-	-	1562	1404	-	1463	-	1081	1097	-	1273	-	-
Grand Total	0	0	0	16940	16617	16963	12628	4197	14895					

ADT

ADT 14,794

AADT 14,794

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/21/2023

GPS: 42.978249, -78.77159

WB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/21/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	0	1	0	1	23	133	208	128	23	4	0	1	0	0	0	522
07:00	0	0	0	9	88	371	427	190	28	8	4	1	0	0	0	1126
08:00	0	0	2	17	118	456	327	110	13	4	2	0	0	0	0	1049
09:00	0	0	0	10	84	384	384	113	20	2	1	0	0	0	0	998
10:00	0	0	0	4	133	356	320	98	24	2	1	0	0	0	0	938
11:00	1	0	3	27	141	387	317	100	16	3	0	0	0	0	0	995
12 PM	0	0	0	5	115	465	355	108	16	3	0	0	0	0	0	1067
13:00	1	0	0	20	125	446	326	101	13	1	0	0	0	0	0	1033
14:00	0	0	1	16	178	495	346	128	14	4	0	0	0	0	0	1182
15:00	0	2	6	18	168	500	390	151	19	5	3	0	0	0	0	1262
16:00	0	0	0	7	159	533	478	160	27	6	3	1	0	0	0	1374
17:00	0	0	10	25	115	484	504	200	24	4	0	1	0	0	0	1367
18:00	0	0	0	4	70	315	386	178	36	8	1	0	0	0	0	998
19:00	0	0	0	5	75	309	285	95	15	1	0	0	0	0	0	785
20:00	0	0	0	0	32	195	237	103	16	2	0	0	0	0	0	585
21:00	0	0	0	3	33	134	171	83	13	3	0	0	0	0	0	440
22:00	0	0	1	1	11	53	97	68	11	5	0	0	0	0	0	247
23:00	0	0	0	1	7	37	61	33	7	2	0	0	0	0	0	148
Total	2	3	23	173	1675	6053	5619	2147	335	67	15	4	0	0	0	16116

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/21/2023

GPS: 42.978249, -78.77159

WB

Start Time	0 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 250	Total
09/22/23	0	0	0	1	4	7	32	16	5	0	0	0	0	0	0	65
01:00	0	0	0	1	0	7	14	7	3	0	0	0	0	0	0	32
02:00	0	0	0	0	1	3	6	3	0	0	0	0	0	0	0	13
03:00	0	0	0	0	0	3	8	7	1	1	2	0	0	0	0	22
04:00	0	0	0	1	2	7	18	8	6	0	0	0	0	0	0	42
05:00	0	0	1	1	9	24	77	52	13	2	1	0	0	0	0	180
06:00	0	0	0	1	23	109	200	138	27	5	0	1	0	0	0	504
07:00	1	0	0	4	56	319	439	190	41	5	3	0	0	0	0	1058
08:00	0	0	1	23	85	356	385	166	29	0	0	0	0	0	0	1045
09:00	0	0	1	0	89	327	369	149	26	3	1	0	0	0	0	965
10:00	0	0	3	22	118	346	287	141	18	5	0	0	0	0	0	940
11:00	0	1	1	20	128	350	329	146	12	5	0	0	0	0	0	992
12 PM	0	0	0	8	119	428	354	127	22	1	0	0	0	0	0	1059
13:00	0	0	0	3	104	391	364	147	23	2	0	0	0	0	0	1034
14:00	0	0	0	12	164	464	417	138	19	6	0	0	0	0	0	1220
15:00	0	0	1	22	110	436	397	157	26	7	1	0	0	0	0	1157
16:00	0	0	0	16	142	485	456	164	42	7	0	0	0	0	0	1312
17:00	0	0	3	28	137	449	423	162	29	6	1	0	0	0	0	1238
18:00	0	0	0	16	86	291	387	177	30	3	1	0	0	0	0	991
19:00	0	0	0	7	95	240	285	92	14	6	1	1	0	0	0	741
20:00	0	0	0	17	90	181	176	61	10	2	2	0	0	0	0	539
21:00	1	0	2	13	71	181	141	45	4	0	0	0	0	0	0	458
22:00	0	0	0	4	12	85	111	92	24	5	0	0	0	0	0	333
23:00	0	0	0	1	8	56	80	44	15	0	0	0	0	0	0	204
Total	2	1	13	221	1653	5545	5755	2429	439	71	13	2	0	0	0	16144

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/21/2023

GPS: 42.978249, -78.77159

WB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/23/23	0	0	0	0	5	21	48	24	4	1	0	0	0	0	0	103
01:00	0	0	0	1	1	16	21	24	4	0	0	0	0	0	0	67
02:00	0	0	0	0	1	1	8	8	0	0	0	0	1	0	0	19
03:00	0	0	0	0	1	3	12	4	0	1	0	1	0	0	0	22
04:00	0	0	0	0	2	5	11	5	1	2	0	0	0	0	0	26
05:00	0	0	0	1	5	19	19	14	4	0	0	0	0	0	0	62
06:00	0	0	0	0	9	44	50	49	10	3	0	0	0	0	0	165
07:00	0	0	0	1	14	63	153	88	25	5	1	0	0	0	0	350
08:00	0	0	0	2	18	130	213	142	37	5	6	0	0	0	0	553
09:00	0	0	0	2	70	262	273	115	16	3	0	0	0	0	1	742
10:00	0	0	0	4	52	321	374	143	20	1	0	0	0	0	0	915
11:00	0	1	0	2	79	351	355	134	23	1	0	0	0	0	0	946
12 PM	0	0	1	3	84	348	372	134	13	4	1	0	0	0	0	960
13:00	0	0	0	0	60	344	394	170	27	2	1	0	0	0	1	999
14:00	0	0	0	3	73	326	378	165	31	3	1	0	0	0	0	980
15:00	1	0	0	5	56	318	359	173	32	5	0	0	0	0	1	950
16:00	0	0	0	5	41	284	371	143	27	3	1	0	0	0	0	875
17:00	0	0	0	0	53	279	355	158	31	2	2	0	0	0	0	880
18:00	0	0	0	0	37	246	302	134	30	7	1	2	0	0	0	759
19:00	0	0	0	7	53	206	228	124	14	2	0	0	0	0	0	634
20:00	0	0	0	2	48	150	202	92	15	2	2	0	0	0	0	513
21:00	0	0	0	4	33	128	176	64	6	1	0	0	0	0	0	412
22:00	0	0	0	2	10	86	106	62	17	1	1	0	0	0	0	285
23:00	0	1	0	2	13	53	85	51	12	2	0	0	0	0	0	219
Total	1	2	1	46	818	4004	4865	2220	399	56	17	3	1	0	3	12436

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/21/2023

GPS: 42.978249, -78.77159

WB

Start Time	0	21	26	31	36	41	46	51	56	61	66	71	76	81	86	Total
	20	25	30	35	40	45	50	55	60	65	70	75	80	85	250	
09/24/23	0	0	0	0	4	18	42	42	6	2	0	2	0	0	0	116
01:00	0	0	0	1	1	7	19	15	3	0	0	0	0	0	0	46
02:00	0	1	0	1	0	9	13	6	2	0	0	0	0	0	0	32
03:00	0	0	0	0	0	4	5	6	1	0	0	0	0	0	0	16
04:00	0	0	0	0	0	2	9	1	3	0	1	0	0	1	0	17
05:00	0	0	0	1	0	7	14	9	2	1	0	0	0	0	0	34
06:00	0	0	0	1	5	22	49	30	15	0	0	0	1	0	0	123
07:00	0	0	0	0	12	34	60	58	9	4	0	0	0	0	0	177
08:00	0	0	0	1	13	56	172	92	13	4	1	1	1	0	0	354
09:00	0	0	0	2	24	153	230	121	20	3	0	0	0	1	0	554
10:00	0	0	0	2	26	213	236	147	32	7	0	0	0	0	0	663
11:00	0	0	0	1	35	230	283	168	27	5	0	1	0	0	0	750
12 PM	20	23	17	37	72	268	264	141	12	3	0	1	0	0	0	858
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	20	24	17	47	192	1023	1396	836	145	29	2	5	2	2	0	3740
Grand Total	25	30	54	487	4338	16625	17635	7632	1318	223	47	14	3	2	3	48436

Stats

- 15th Percentile : 40 MPH
- 50th Percentile : 45 MPH
- 85th Percentile : 51 MPH
- 95th Percentile : 54 MPH

- Mean Speed(Average) : 46 MPH
- 10 MPH Pace Speed : 41-50 MPH
- Number in Pace : 34261
- Percent in Pace : 70.7%
- Number of Vehicles > 45 MPH : 26877
- Percent of Vehicles > 45 MPH : 55.5%

Tri-State Traffic Data Inc

184 Baker Rd
Coatesville PA 19320

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road Name: Sheridan Dr
Segment: 670' E of Fenwick Rd
Date: 09/20/2023

GPS: 42.978249, -78.77159

Start Time	Mon 18-Sep-23	Tue 19-Sep-23	Wed 20-Sep-23	Thu 21-Sep-23	Fri 22-Sep-23	Average Day	Sat 23-Sep-23	Sun 24-Sep-23	Week Average					
12:00 AM	*	*	*	*	65	65	103	116	95					
01:00	*	*	*	*	32	32	67	46	48					
02:00	*	*	*	*	13	13	19	32	21					
03:00	*	*	*	*	22	22	22	16	20					
04:00	*	*	*	*	42	42	26	17	28					
05:00	*	*	*	*	180	180	62	34	92					
06:00	*	*	*	520	504	512	165	123	328					
07:00	*	*	*	1125	1057	1091	350	177	677					
08:00	*	*	*	1049	1043	1046	553	354	750					
09:00	*	*	*	998	963	980	741	554	814					
10:00	*	*	*	937	939	938	914	663	863					
11:00	*	*	*	994	991	992	946	750	920					
12:00 PM	*	*	*	1067	1059	1063	958	857	985					
01:00	*	*	*	1033	1034	1034	998	*	1022					
02:00	*	*	*	1182	1218	1200	980	*	1127					
03:00	*	*	*	1259	1156	1208	949	*	1121					
04:00	*	*	*	1373	1310	1342	875	*	1186					
05:00	*	*	*	1367	1237	1302	879	*	1161					
06:00	*	*	*	997	990	994	758	*	915					
07:00	*	*	*	784	741	762	634	*	720					
08:00	*	*	*	585	539	562	513	*	546					
09:00	*	*	*	440	458	449	412	*	437					
10:00	*	*	*	247	333	290	285	*	288					
11:00	*	*	*	148	204	176	219	*	190					
Day Total	0	0	0	16105	16130	16295	12428	3739	14354					
% Avg. WkDay	0.0%	0.0%	0.0%	98.8%	99.0%									
% Avg. Week	0.0%	0.0%	0.0%	112.2%	112.4%	113.5%	86.6%	26.0%						
AM Peak	-	-	-	07:00	07:00	-	07:00	-	11:00	11:00	-	11:00	-	-
Vol.	-	-	-	1125	1057	-	1091	-	946	750	-	920	-	-
PM Peak	-	-	-	16:00	16:00	-	16:00	-	13:00	12:00	-	16:00	-	-
Vol.	-	-	-	1373	1310	-	1342	-	998	857	-	1186	-	-
Grand Total	0	0	0	16105	16130	16295	12428	3739	14354					

ADT

ADT 14,226

AADT 14,226

Sheridan Drive - Harlem Road to N Forest Road

Year	Combined Volume	% Growth
2011	39724	
2019	36681	-0.99%

Niagara Falls Boulevard from Rt 290 to Maple Road

2011	2019
39724	36681
-0.99%	

Appendix D – Synchro Reports

Existing PM
1: Harlem Road & Sheridan Drive



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Lane Configurations	↑↑	↑	↔	↑↑	↔	↔		
Traffic Volume (vph)	810	309	350	744	187	888		
Future Volume (vph)	810	309	350	744	187	888		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	230		0	0		
Storage Lanes		1	1		2	2		
Taper Length (ft)			25		25			
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.88		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	3539	1583	3433	3539	3433	2787		
Flt Permitted			0.950		0.950			
Satd. Flow (perm)	3539	1583	3433	3539	3433	2787		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		315				817		
Link Speed (mph)	45			45	35			
Link Distance (ft)	570			576	995			
Travel Time (s)	8.6			8.7	19.4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98		
Adj. Flow (vph)	827	315	357	759	191	906		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	827	315	357	759	191	906		
Turn Type	NA	pt+ov	Prot	NA	Prot	custom		
Protected Phases	2	2 3	1 4	2 1	3	3 4	1	4
Permitted Phases								
Detector Phase	2	2 3	1 4	2 1	3	3 4		
Switch Phase								
Minimum Initial (s)	5.0				5.0		5.0	5.0
Minimum Split (s)	24.7				24.9		24.7	22.5
Total Split (s)	49.0				35.0		37.0	39.0
Total Split (%)	30.6%				21.9%		23%	24%
Maximum Green (s)	42.3				28.1		30.3	34.7
Yellow Time (s)	4.0				3.6		4.0	3.2
All-Red Time (s)	2.7				3.3		2.7	1.1
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	6.7				6.9			
Lead/Lag	Lag				Lead		Lead	Lag
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0				3.0		3.0	3.0
Recall Mode	C-Max				Min		None	None
Walk Time (s)	7.0				7.0		7.0	7.0
Flash Dont Walk (s)	11.0				11.0		11.0	11.0
Pedestrian Calls (#/hr)	0				0		0	0
Act Effct Green (s)	69.7	95.3	51.3	102.4	18.6	44.0		
Actuated g/C Ratio	0.44	0.60	0.32	0.64	0.12	0.28		
v/c Ratio	0.54	0.29	0.32	0.34	0.48	0.67		
Control Delay	37.9	2.7	40.0	3.4	69.1	7.5		
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.2		
Total Delay	37.9	2.7	40.0	3.8	69.1	7.7		

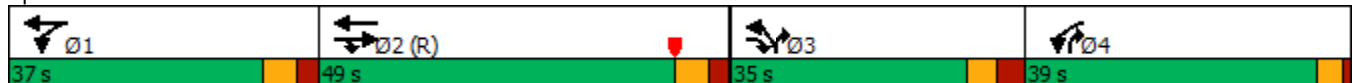


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
LOS	D	A	D	A	E	A		
Approach Delay	28.2			15.4	18.4			
Approach LOS	C			B	B			
90th %ile Green (s)	44.7				28.1		37.6	25.0
90th %ile Term Code	Coord				Max		Gap	Gap
70th %ile Green (s)	63.1				20.1		29.1	23.1
70th %ile Term Code	Coord				Gap		Gap	Gap
50th %ile Green (s)	71.5				17.1		25.0	21.8
50th %ile Term Code	Coord				Gap		Gap	Gap
30th %ile Green (s)	79.1				15.5		21.3	19.5
30th %ile Term Code	Coord				Gap		Gap	Gap
10th %ile Green (s)	90.3				12.3		16.7	16.1
10th %ile Term Code	Coord				Gap		Gap	Gap
Queue Length 50th (ft)	325	0	106	30	98	40		
Queue Length 95th (ft)	515	51	76	169	131	96		
Internal Link Dist (ft)	490			496	915			
Turn Bay Length (ft)			230					
Base Capacity (vph)	1542	1145	1226	2233	602	1526		
Starvation Cap Reductn	0	0	0	947	0	0		
Spillback Cap Reductn	0	0	0	0	0	125		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.54	0.28	0.29	0.59	0.32	0.65		

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 157 (98%), Referenced to phase 2:EBWB, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 20.7
 Intersection Capacity Utilization 64.8%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service C

Splits and Phases: 1: Harlem Road & Sheridan Drive



Existing PM
2: I-290 Ramps & Sheridan Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑			↑↑↑		↘	↔	↘			
Traffic Volume (vph)	264	1407	0	0	931	682	145	0	314	0	0	0
Future Volume (vph)	264	1407	0	0	931	682	145	0	314	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Frt					0.937			0.863	0.850			
Flt Protected	0.950						0.950	0.996				
Satd. Flow (prot)	1770	5085	0	0	4765	0	1681	1457	1504	0	0	0
Flt Permitted	0.053						0.950	0.996				
Satd. Flow (perm)	99	5085	0	0	4765	0	1681	1457	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)					136			59	59			
Link Speed (mph)		45			45			30				30
Link Distance (ft)		576			428			842				263
Travel Time (s)		8.7			6.5			19.1				6.0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	272	1451	0	0	960	703	149	0	324	0	0	0
Shared Lane Traffic (%)							10%		48%			
Lane Group Flow (vph)	272	1451	0	0	1663	0	134	171	168	0	0	0
Turn Type	pm+pt	NA			NA		Prot	NA	Prot			
Protected Phases	1	6			2		7	3	3			
Permitted Phases	6											
Detector Phase	1	6			2		7	3	3			
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Minimum Split (s)	10.8	23.8			23.8		9.5	22.5	22.5			
Total Split (s)	36.0	105.0			69.0		55.0	55.0	55.0			
Total Split (%)	22.5%	65.6%			43.1%		34.4%	34.4%	34.4%			
Maximum Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
Yellow Time (s)	4.3	4.3			4.3		3.5	3.5	3.5			
All-Red Time (s)	1.5	1.5			1.5		1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			
Total Lost Time (s)	5.8	5.8			5.8		4.5	4.5	4.5			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Recall Mode	None	C-Max			C-Max		None	None	None			
Walk Time (s)		7.0			7.0			7.0	7.0			
Flash Dont Walk (s)		11.0			11.0			11.0	11.0			
Pedestrian Calls (#/hr)		0			0			0	0			
Act Effct Green (s)	99.2	99.2			69.3		50.5	50.5	50.5			
Actuated g/C Ratio	0.62	0.62			0.43		0.32	0.32	0.32			
v/c Ratio	0.87	0.46			0.91dr		0.25	0.34	0.33			
Control Delay	63.1	25.1			21.0		42.3	29.1	28.5			
Queue Delay	0.0	1.0			0.0		0.0	0.0	0.0			
Total Delay	63.1	26.1			21.0		42.3	29.1	28.5			

Existing PM
2: I-290 Ramps & Sheridan Drive

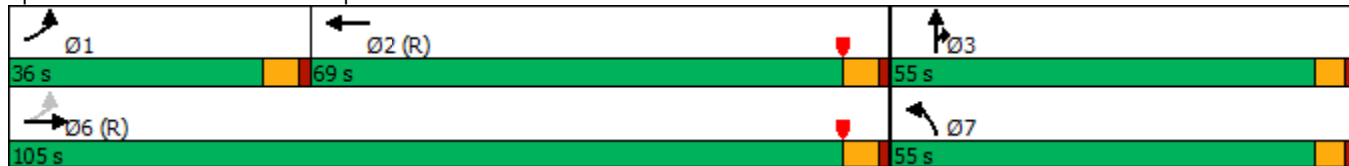


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C			C		D	C	C			
Approach Delay		32.0			21.0			32.7				
Approach LOS		C			C			C				
90th %ile Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
90th %ile Term Code	Max	Coord			Coord		Hold	Max	Max			
70th %ile Green (s)	28.8	99.2			64.6		50.5	50.5	50.5			
70th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
50th %ile Green (s)	25.0	99.2			68.4		50.5	50.5	50.5			
50th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
30th %ile Green (s)	21.1	99.2			72.3		50.5	50.5	50.5			
30th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
10th %ile Green (s)	15.5	99.2			77.9		50.5	50.5	50.5			
10th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
Queue Length 50th (ft)	240	345			560		110	96	90			
Queue Length 95th (ft)	343	525			637		173	174	162			
Internal Link Dist (ft)		496			348			762			183	
Turn Bay Length (ft)	150											
Base Capacity (vph)	376	3152			2140		530	500	515			
Starvation Cap Reductn	0	1337			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.72	0.80			0.78		0.25	0.34	0.33			

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 108 (68%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 27.3
 Intersection LOS: C
 Intersection Capacity Utilization 68.5%
 ICU Level of Service C
 Analysis Period (min) 15
 dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 2: I-290 Ramps & Sheridan Drive



Existing PM
3: Sheridan Drive & Frankhauser Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↷↷	↷↶		↶	↷
Traffic Volume (vph)	18	1642	1543	54	53	26
Future Volume (vph)	18	1642	1543	54	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	60
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.995			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3522	0	1770	1583
Flt Permitted	0.129				0.950	
Satd. Flow (perm)	240	3539	3522	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			4			27
Link Speed (mph)		45	45		30	
Link Distance (ft)		958	640		988	
Travel Time (s)		14.5	9.7		22.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	19	1728	1624	57	56	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	1728	1681	0	56	27
Turn Type	Perm	NA	NA		Prot	Prot
Protected Phases		1	1		3	3
Permitted Phases	1					
Detector Phase	1	1	1		3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	23.9	23.9	23.9		23.7	23.7
Total Split (s)	110.0	110.0	110.0		50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%		31.3%	31.3%
Maximum Green (s)	104.1	104.1	104.1		44.3	44.3
Yellow Time (s)	4.3	4.3	4.3		3.2	3.2
All-Red Time (s)	1.6	1.6	1.6		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.9	5.9	5.9		5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	141.5	141.5	141.5		10.5	10.5
Actuated g/C Ratio	0.88	0.88	0.88		0.07	0.07
v/c Ratio	0.09	0.55	0.54		0.49	0.21
Control Delay	1.6	6.6	2.2		85.3	25.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	1.6	6.6	2.2		85.3	25.5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	A	A	A		F	C
Approach Delay		6.6	2.2		65.8	
Approach LOS		A	A		E	
90th %ile Green (s)	133.8	133.8	133.8		14.6	14.6
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	136.2	136.2	136.2		12.2	12.2
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	137.9	137.9	137.9		10.5	10.5
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	139.7	139.7	139.7		8.7	8.7
30th %ile Term Code	Coord	Coord	Coord		Gap	Gap
10th %ile Green (s)	154.1	154.1	154.1		0.0	0.0
10th %ile Term Code	Coord	Coord	Coord		Skip	Skip
Queue Length 50th (ft)	1	178	66		58	0
Queue Length 95th (ft)	m3	217	116		106	34
Internal Link Dist (ft)		878	560		908	
Turn Bay Length (ft)	150					60
Base Capacity (vph)	212	3130	3115		490	457
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.09	0.55	0.54		0.11	0.06

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 87 (54%), Referenced to phase 1:EBWB, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.55
 Intersection Signal Delay: 5.9
 Intersection LOS: A
 Intersection Capacity Utilization 59.2%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Sheridan Drive & Frankhauser Road



Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	1671	28	12	1572	14	20
Future Vol, veh/h	1671	28	12	1572	14	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1741	29	13	1638	15	21

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1770	0	2601
Stage 1	-	-	-	-	1756
Stage 2	-	-	-	-	845
Critical Hdwy	-	-	4.14	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	-	-	2.22	-	3.52
Pot Cap-1 Maneuver	-	-	348	-	20
Stage 1	-	-	-	-	124
Stage 2	-	-	-	-	382
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	348	-	19
Mov Cap-2 Maneuver	-	-	-	-	91
Stage 1	-	-	-	-	124
Stage 2	-	-	-	-	368

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	35.7
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	152	-	-	348	-
HCM Lane V/C Ratio	0.233	-	-	0.036	-
HCM Control Delay (s)	35.7	-	-	15.7	-
HCM Lane LOS	E	-	-	C	-
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Existing PM
5: North Forest Road & Sheridan Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	1166	267	163	1192	25	179	340	171	41	386	191
Future Volume (vph)	233	1166	267	163	1192	25	179	340	171	41	386	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		170	175		0	190		440	350		70
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			200		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850		0.997				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3529	0	1770	1863	1583	1770	3539	1583
Flt Permitted	0.056			0.105			0.261			0.294		
Satd. Flow (perm)	104	3539	1583	196	3529	0	486	1863	1583	548	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			132		2				178			128
Link Speed (mph)		45		45			40			35		
Link Distance (ft)		1664		992			903			941		
Travel Time (s)		25.2		15.0			15.4			18.3		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	243	1215	278	170	1242	26	186	354	178	43	402	199
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	1215	278	170	1268	0	186	354	178	43	402	199
Turn Type	pm+pt	NA	Prot	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	6	5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	6.0	28.0	28.0	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0
Minimum Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (%)	15.6%	44.4%	44.4%	15.6%	44.4%		15.6%	27.5%	27.5%	12.5%	24.4%	24.4%
Maximum Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	36.4	36.4	12.4	31.4	31.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8		3.6	3.6	3.6	3.6	3.6	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	7.1	7.1	7.1		7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		7.0	7.0				7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0				11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0				0	0		0	0	
Act Effct Green (s)	91.7	73.0	73.0	81.5	66.8		50.3	37.4	37.4	34.6	26.4	26.4
Actuated g/C Ratio	0.57	0.46	0.46	0.51	0.42		0.31	0.23	0.23	0.22	0.16	0.16
v/c Ratio	0.87	0.75	0.35	0.69	0.86		0.65	0.81	0.35	0.24	0.69	0.54
Control Delay	64.8	36.1	17.5	39.6	50.1		52.3	73.7	8.1	40.1	68.8	26.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.8	36.1	17.5	39.6	50.1		52.3	73.7	8.1	40.1	68.8	26.9

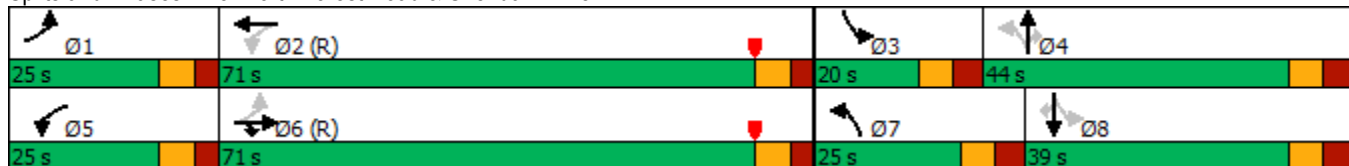


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D	B	D	D		D	E	A	D	E	C
Approach Delay		37.1			48.8			51.9			53.9	
Approach LOS		D			D			D			D	
90th %ile Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	38.3	38.3	10.5	31.4	31.4
90th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Max	Max	Gap	Hold	Hold
70th %ile Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	39.8	39.8	9.0	31.4	31.4
70th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Max	Max	Gap	Hold	Hold
50th %ile Green (s)	21.6	69.3	69.3	16.2	63.9		17.4	37.0	37.0	8.1	27.7	27.7
50th %ile Term Code	Max	Coord	Coord	Gap	Coord		Max	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	25.1	77.6	77.6	13.3	65.8		16.0	32.5	32.5	7.2	23.7	23.7
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	22.5	90.3	90.3	8.5	76.3		13.8	39.4	39.4	0.0	18.0	18.0
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)	218	621	130	83	651		146	355	0	31	209	65
Queue Length 95th (ft)	#404	727	208	168	755		209	#485	64	61	262	148
Internal Link Dist (ft)		1584			912			823			861	
Turn Bay Length (ft)	350		170	175			190		440	350		70
Base Capacity (vph)	278	1614	793	279	1473		292	444	513	227	694	413
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.75	0.35	0.61	0.86		0.64	0.80	0.35	0.19	0.58	0.48

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 30 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
 Natural Cycle: 160
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 45.6
 Intersection LOS: D
 Intersection Capacity Utilization 94.0%
 ICU Level of Service F
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 5: North Forest Road & Sheridan Drive



Existing SAT Midday
1: Harlem Road & Sheridan Drive



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Lane Configurations	↑↑	↑	↔	↑↑	↔	↔		
Traffic Volume (vph)	617	343	359	569	170	484		
Future Volume (vph)	617	343	359	569	170	484		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	230		0	0		
Storage Lanes		1	1		2	2		
Taper Length (ft)			25		25			
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.88		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	3574	1599	3467	3574	3467	2814		
Flt Permitted			0.950		0.950			
Satd. Flow (perm)	3574	1599	3467	3574	3467	2814		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		354				499		
Link Speed (mph)	45			45	35			
Link Distance (ft)	570			576	995			
Travel Time (s)	8.6			8.7	19.4			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%		
Adj. Flow (vph)	636	354	370	587	175	499		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	636	354	370	587	175	499		
Turn Type	NA	pt+ov	Prot	NA	Prot	custom		
Protected Phases	2	2 3	1 4	2 1	3	3 4	1	4
Permitted Phases								
Detector Phase	2	2 3	1 4	2 1	3	3 4		
Switch Phase								
Minimum Initial (s)	5.0				5.0		5.0	5.0
Minimum Split (s)	24.7				24.9		24.7	22.5
Total Split (s)	49.0				35.0		37.0	39.0
Total Split (%)	30.6%				21.9%		23%	24%
Maximum Green (s)	42.3				28.1		30.3	34.7
Yellow Time (s)	4.0				3.6		4.0	3.2
All-Red Time (s)	2.7				3.3		2.7	1.1
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	6.7				6.9			
Lead/Lag	Lag				Lead		Lead	Lag
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0				3.0		3.0	3.0
Recall Mode	C-Max				Min		None	None
Walk Time (s)	7.0				7.0		7.0	7.0
Flash Dont Walk (s)	11.0				11.0		11.0	11.0
Pedestrian Calls (#/hr)	0				0		0	0
Act Effct Green (s)	80.5	102.3	44.3	106.3	14.9	40.1		
Actuated g/C Ratio	0.50	0.64	0.28	0.66	0.09	0.25		
v/c Ratio	0.35	0.31	0.39	0.25	0.54	0.46		
Control Delay	26.6	2.1	32.8	10.7	75.0	4.6		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		

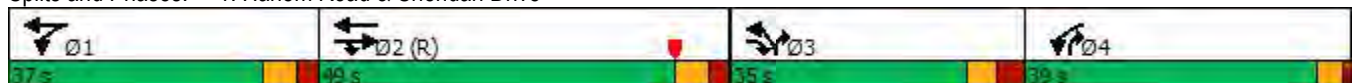


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Total Delay	26.6	2.1	32.8	10.7	75.0	4.6		
LOS	C	A	C	B	E	A		
Approach Delay	17.9			19.2	22.9			
Approach LOS	B			B	C			
90th %ile Green (s)	63.3				19.8		26.8	25.5
90th %ile Term Code	Coord				Gap		Gap	Gap
70th %ile Green (s)	74.6				16.8		21.2	22.8
70th %ile Term Code	Coord				Gap		Gap	Gap
50th %ile Green (s)	79.9				15.3		19.1	21.1
50th %ile Term Code	Coord				Gap		Gap	Gap
30th %ile Green (s)	87.2				12.9		16.1	19.2
30th %ile Term Code	Coord				Gap		Gap	Gap
10th %ile Green (s)	97.5				9.8		12.5	15.6
10th %ile Term Code	Coord				Gap		Gap	Gap
Queue Length 50th (ft)	209	0	86	196	91	0		
Queue Length 95th (ft)	314	46	85	267	129	46		
Internal Link Dist (ft)	490			496	915			
Turn Bay Length (ft)			230					
Base Capacity (vph)	1797	1252	1201	2361	608	1279		
Starvation Cap Reductn	0	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.35	0.28	0.31	0.25	0.29	0.39		

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 157 (98%), Referenced to phase 2:EBWB, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.54
 Intersection Signal Delay: 19.7
 Intersection LOS: B
 Intersection Capacity Utilization 49.1%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 1: Harlem Road & Sheridan Drive



Existing SAT Midday
2: I-290 Ramps & Sheridan Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑			↑↑↑		↘	↔	↘			
Traffic Volume (vph)	176	913	0	0	782	304	169	0	282	0	0	0
Future Volume (vph)	176	913	0	0	782	304	169	0	282	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Frt					0.958			0.867	0.850			
Flt Protected	0.950						0.950	0.994				
Satd. Flow (prot)	1787	5136	0	0	4920	0	1698	1475	1519	0	0	0
Flt Permitted	0.201						0.950	0.994				
Satd. Flow (perm)	378	5136	0	0	4920	0	1698	1475	1519	0	0	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)					73			135	151			
Link Speed (mph)		45			45			35				30
Link Distance (ft)		576			428			842				263
Travel Time (s)		8.7			6.5			16.4				6.0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	180	932	0	0	798	310	172	0	288	0	0	0
Shared Lane Traffic (%)							10%		47%			
Lane Group Flow (vph)	180	932	0	0	1108	0	155	152	153	0	0	0
Turn Type	pm+pt	NA			NA		Prot	NA	Prot			
Protected Phases	1	6			2		7	3	3			
Permitted Phases	6											
Detector Phase	1	6			2		7	3	3			
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Minimum Split (s)	10.8	23.8			23.8		9.5	22.5	22.5			
Total Split (s)	36.0	105.0			69.0		55.0	55.0	55.0			
Total Split (%)	22.5%	65.6%			43.1%		34.4%	34.4%	34.4%			
Maximum Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
Yellow Time (s)	4.3	4.3			4.3		3.5	3.5	3.5			
All-Red Time (s)	1.5	1.5			1.5		1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			
Total Lost Time (s)	5.8	5.8			5.8		4.5	4.5	4.5			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Recall Mode	None	C-Max			C-Max		None	None	None			
Walk Time (s)		7.0			7.0			7.0	7.0			
Flash Dont Walk (s)		11.0			11.0			11.0	11.0			
Pedestrian Calls (#/hr)		0			0			0	0			
Act Effct Green (s)	113.4	113.4			96.3		36.3	36.3	36.3			
Actuated g/C Ratio	0.71	0.71			0.60		0.23	0.23	0.23			
v/c Ratio	0.49	0.26			0.37		0.40	0.35	0.33			
Control Delay	26.6	15.2			10.5		52.6	10.3	7.7			
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0			

Existing SAT Midday
2: I-290 Ramps & Sheridan Drive

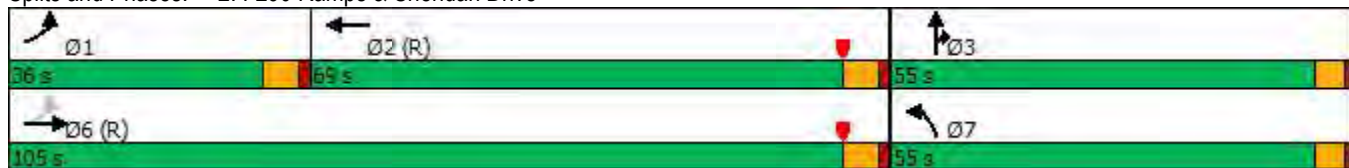


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	26.6	15.2			10.5		52.6	10.3	7.7			
LOS	C	B			B		D	B	A			
Approach Delay		17.0			10.5			23.7				
Approach LOS		B			B			C				
90th %ile Green (s)	15.9	99.2			77.5		50.5	50.5	50.5			
90th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
70th %ile Green (s)	13.7	99.2			79.7		50.5	50.5	50.5			
70th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
50th %ile Green (s)	12.3	99.2			81.1		50.5	50.5	50.5			
50th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
30th %ile Green (s)	7.9	132.6			118.9		17.1	17.1	17.1			
30th %ile Term Code	Gap	Coord			Coord		Gap	Hold	Hold			
10th %ile Green (s)	6.8	136.9			124.3		12.8	12.8	12.8			
10th %ile Term Code	Gap	Coord			Coord		Gap	Hold	Hold			
Queue Length 50th (ft)	101	145			272		129	13	1			
Queue Length 95th (ft)	213	305			176		197	74	58			
Internal Link Dist (ft)		496			348			762			183	
Turn Bay Length (ft)	150											
Base Capacity (vph)	534	3640			2990		535	438	582			
Starvation Cap Reductn	0	0			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.34	0.26			0.37		0.29	0.35	0.26			

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 108 (68%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.49
 Intersection Signal Delay: 15.5
 Intersection LOS: B
 Intersection Capacity Utilization 52.6%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: I-290 Ramps & Sheridan Drive



Existing SAT Midday
3: Sheridan Drive & Frankhauser Road



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	1091	985	39	42	18
Future Volume (vph)	17	1091	985	39	42	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	60
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3574	3553	0	1787	1599
Flt Permitted	0.262				0.950	
Satd. Flow (perm)	493	3574	3553	0	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			5			19
Link Speed (mph)		45	45		30	
Link Distance (ft)		958	640		988	
Travel Time (s)		14.5	9.7		22.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	18	1136	1026	41	44	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	1136	1067	0	44	19
Turn Type	Perm	NA	NA		Prot	Prot
Protected Phases		1	1		3	3
Permitted Phases	1					
Detector Phase	1	1	1		3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	23.9	23.9	23.9		23.7	23.7
Total Split (s)	110.0	110.0	110.0		50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%		31.3%	31.3%
Maximum Green (s)	104.1	104.1	104.1		44.3	44.3
Yellow Time (s)	4.3	4.3	4.3		3.2	3.2
All-Red Time (s)	1.6	1.6	1.6		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.9	5.9	5.9		5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	142.5	142.5	142.5		9.3	9.3
Actuated g/C Ratio	0.89	0.89	0.89		0.06	0.06
v/c Ratio	0.04	0.36	0.34		0.42	0.17
Control Delay	1.0	2.7	1.7		84.1	28.8
Queue Delay	0.0	0.0	0.0		0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Delay	1.0	2.7	1.7		84.1	28.8
LOS	A	A	A		F	C
Approach Delay		2.6	1.7		67.4	
Approach LOS		A	A		E	
90th %ile Green (s)	135.5	135.5	135.5		12.9	12.9
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	137.5	137.5	137.5		10.9	10.9
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	139.1	139.1	139.1		9.3	9.3
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	140.6	140.6	140.6		7.8	7.8
30th %ile Term Code	Coord	Coord	Coord		Gap	Gap
10th %ile Green (s)	154.1	154.1	154.1		0.0	0.0
10th %ile Term Code	Coord	Coord	Coord		Skip	Skip
Queue Length 50th (ft)	1	52	51		45	0
Queue Length 95th (ft)	3	101	66		89	29
Internal Link Dist (ft)		878	560		908	
Turn Bay Length (ft)	150					60
Base Capacity (vph)	439	3184	3165		494	456
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.04	0.36	0.34		0.09	0.04

Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	160
Offset:	87 (54%), Referenced to phase 1:EBWB, Start of Yellow
Natural Cycle:	50
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.42
Intersection Signal Delay:	4.0
Intersection LOS:	A
Intersection Capacity Utilization:	44.0%
ICU Level of Service:	A
Analysis Period (min):	15

Splits and Phases: 3: Sheridan Drive & Frankhauser Road



Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↖	↑↑	↘	
Traffic Vol, veh/h	1119	19	18	1004	20	21
Future Vol, veh/h	1119	19	18	1004	20	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	150	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1166	20	19	1046	21	22

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1186	0	1737
Stage 1	-	-	-	-	1176
Stage 2	-	-	-	-	561
Critical Hdwy	-	-	4.12	-	6.82
Critical Hdwy Stg 1	-	-	-	-	5.82
Critical Hdwy Stg 2	-	-	-	-	5.82
Follow-up Hdwy	-	-	2.21	-	3.51
Pot Cap-1 Maneuver	-	-	590	-	79
Stage 1	-	-	-	-	257
Stage 2	-	-	-	-	538
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	590	-	76
Mov Cap-2 Maneuver	-	-	-	-	187
Stage 1	-	-	-	-	257
Stage 2	-	-	-	-	521

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	21
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	267	-	-	590	-
HCM Lane V/C Ratio	0.16	-	-	0.032	-
HCM Control Delay (s)	21	-	-	11.3	-
HCM Lane LOS	C	-	-	B	-
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Existing SAT Midday
5: North Forest Road & Sheridan Drive

Amherst Central Park
10/12/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	171	853	103	125	767	21	100	185	109	46	202	175
Future Volume (vph)	171	853	103	125	767	21	100	185	109	46	202	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		170	175		0	190		440	350		70
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			200		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850		0.996				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3574	1599	1787	3560	0	1787	1881	1599	1787	3574	1599
Flt Permitted	0.285			0.271			0.457			0.548		
Satd. Flow (perm)	536	3574	1599	510	3560	0	860	1881	1599	1031	3574	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			132		2				128			176
Link Speed (mph)		45		45			30			30		
Link Distance (ft)		1664		992			903			941		
Travel Time (s)		25.2		15.0			20.5			21.4		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	173	862	104	126	775	21	101	187	110	46	204	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	173	862	104	126	796	0	101	187	110	46	204	177
Turn Type	pm+pt	NA	Prot	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	6	5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	6.0	28.0	28.0	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0
Minimum Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (%)	15.6%	44.4%	44.4%	15.6%	44.4%		15.6%	27.5%	27.5%	12.5%	24.4%	24.4%
Maximum Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	36.4	36.4	12.4	31.4	31.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8		3.6	3.6	3.6	3.6	3.6	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	7.1	7.1	7.1		7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		7.0	7.0				7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0				11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0				0	0		0	0	
Act Effct Green (s)	101.6	90.2	90.2	98.2	88.5		35.7	24.7	24.7	26.6	17.9	17.9
Actuated g/C Ratio	0.64	0.56	0.56	0.61	0.55		0.22	0.15	0.15	0.17	0.11	0.11
v/c Ratio	0.40	0.43	0.11	0.32	0.40		0.38	0.64	0.31	0.22	0.51	0.53
Control Delay	9.7	19.6	5.4	13.0	22.4		51.9	74.9	7.8	48.2	71.1	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0

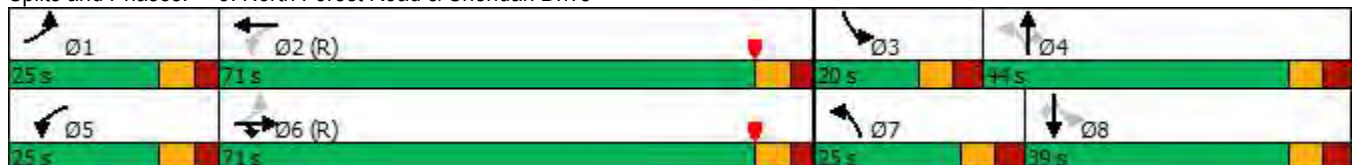


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	9.7	19.6	5.4	13.0	22.4		51.9	74.9	7.8	48.2	71.1	14.1
LOS	A	B	A	B	C		D	E	A	D	E	B
Approach Delay		16.8			21.2			50.5			45.0	
Approach LOS		B			C			D			D	
90th %ile Green (s)	15.6	78.1	78.1	13.0	75.5		16.7	28.2	28.2	11.3	22.8	22.8
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
70th %ile Green (s)	12.8	85.8	85.8	10.8	83.8		14.4	24.1	24.1	9.9	19.6	19.6
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	11.0	91.3	91.3	9.4	89.7		12.8	21.2	21.2	8.7	17.1	17.1
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	9.6	96.2	96.2	8.3	94.9		11.1	18.6	18.6	7.5	15.0	15.0
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Gap	Min	Min
10th %ile Green (s)	8.0	99.8	99.8	7.0	98.8		8.8	31.4	31.4	0.0	15.0	15.0
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Skip	Min	Min
Queue Length 50th (ft)	35	231	16	44	240		87	192	0	38	108	1
Queue Length 95th (ft)	115	419	75	84	352		131	270	40	70	147	75
Internal Link Dist (ft)		1584			912			823			861	
Turn Bay Length (ft)	350		170	175			190		440	350		70
Base Capacity (vph)	497	2015	959	479	1970		304	427	462	253	701	455
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.43	0.11	0.26	0.40		0.33	0.44	0.24	0.18	0.29	0.39

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 30 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
 Natural Cycle: 160
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.64
 Intersection Signal Delay: 27.0
 Intersection LOS: C
 Intersection Capacity Utilization 73.9%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 5: North Forest Road & Sheridan Drive



Build PM
1: Harlem Road & Sheridan Drive



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Lane Configurations	↑↑	↑	↔	↑↑	↔	↔		
Traffic Volume (vph)	837	309	358	760	187	915		
Future Volume (vph)	837	309	358	760	187	915		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	230		0	0		
Storage Lanes		1	1		2	2		
Taper Length (ft)			25		25			
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.88		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	3539	1583	3433	3539	3433	2787		
Flt Permitted			0.950		0.950			
Satd. Flow (perm)	3539	1583	3433	3539	3433	2787		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		315				839		
Link Speed (mph)	45			45	35			
Link Distance (ft)	570			576	995			
Travel Time (s)	8.6			8.7	19.4			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98		
Adj. Flow (vph)	854	315	365	776	191	934		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	854	315	365	776	191	934		
Turn Type	NA	pt+ov	Prot	NA	Prot	custom		
Protected Phases	2	2 3	1 4	2 1	3	3 4	1	4
Permitted Phases								
Detector Phase	2	2 3	1 4	2 1	3	3 4		
Switch Phase								
Minimum Initial (s)	5.0				5.0		5.0	5.0
Minimum Split (s)	24.7				24.9		24.7	22.5
Total Split (s)	49.0				35.0		37.0	39.0
Total Split (%)	30.6%				21.9%		23%	24%
Maximum Green (s)	42.3				28.1		31.9	34.7
Yellow Time (s)	4.0				3.6		4.0	3.2
All-Red Time (s)	2.7				3.3		1.1	1.1
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	6.7				6.9			
Lead/Lag	Lag				Lead		Lead	Lag
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0				3.0		3.0	3.0
Recall Mode	C-Max				Min		None	None
Walk Time (s)	7.0				7.0		7.0	7.0
Flash Dont Walk (s)	11.0				11.0		11.0	11.0
Pedestrian Calls (#/hr)	0				0		0	0
Act Effct Green (s)	70.4	96.1	52.1	102.0	18.7	44.4		
Actuated g/C Ratio	0.44	0.60	0.33	0.64	0.12	0.28		
v/c Ratio	0.55	0.29	0.33	0.34	0.48	0.68		
Control Delay	37.8	2.6	39.8	3.4	68.9	7.7		
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.2		
Total Delay	37.8	2.6	39.8	3.9	68.9	7.9		

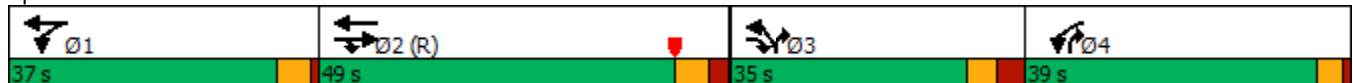


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
LOS	D	A	D	A	E	A		
Approach Delay	28.3			15.4	18.3			
Approach LOS	C			B	B			
90th %ile Green (s)	45.6				28.1		38.3	25.0
90th %ile Term Code	Coord				Max		Gap	Gap
70th %ile Green (s)	62.9				20.7		29.9	23.5
70th %ile Term Code	Coord				Gap		Gap	Gap
50th %ile Green (s)	72.3				17.1		25.5	22.1
50th %ile Term Code	Coord				Gap		Gap	Gap
30th %ile Green (s)	80.1				15.5		21.7	19.7
30th %ile Term Code	Coord				Gap		Gap	Gap
10th %ile Green (s)	91.2				12.3		17.1	16.4
10th %ile Term Code	Coord				Gap		Gap	Gap
Queue Length 50th (ft)	335	0	108	33	98	43		
Queue Length 95th (ft)	532	50	m77	169	131	100		
Internal Link Dist (ft)	490			496	915			
Turn Bay Length (ft)			230					
Base Capacity (vph)	1557	1150	1261	2234	602	1541		
Starvation Cap Reductn	0	0	0	946	0	0		
Spillback Cap Reductn	0	0	0	0	0	141		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.55	0.27	0.29	0.60	0.32	0.67		

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 157 (98%), Referenced to phase 2:EBWB, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 20.7
 Intersection LOS: C
 Intersection Capacity Utilization 66.5%
 ICU Level of Service C
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Harlem Road & Sheridan Drive



Build PM
2: I-290 Ramps



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑			↑↑↑		↗	↕	↗			
Traffic Volume (vph)	264	1462	0	0	956	698	145	0	328	0	0	0
Future Volume (vph)	264	1462	0	0	956	698	145	0	328	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Frt					0.937			0.863	0.850			
Flt Protected	0.950						0.950	0.996				
Satd. Flow (prot)	1770	5085	0	0	4765	0	1681	1457	1504	0	0	0
Flt Permitted	0.053						0.950	0.996				
Satd. Flow (perm)	99	5085	0	0	4765	0	1681	1457	1504	0	0	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)					136			59	59			
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		576			428			842			263	
Travel Time (s)		8.7			6.5			19.1			6.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	272	1507	0	0	986	720	149	0	338	0	0	0
Shared Lane Traffic (%)							10%		48%			
Lane Group Flow (vph)	272	1507	0	0	1706	0	134	177	176	0	0	0
Turn Type	pm+pt	NA			NA		Prot	NA	Prot			
Protected Phases	1	6			2		7	3	3			
Permitted Phases	6											
Detector Phase	1	6			2		7	3	3			
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Minimum Split (s)	10.8	23.8			23.8		9.5	22.5	22.5			
Total Split (s)	36.0	105.0			69.0		55.0	55.0	55.0			
Total Split (%)	22.5%	65.6%			43.1%		34.4%	34.4%	34.4%			
Maximum Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
Yellow Time (s)	4.3	4.3			4.3		3.5	3.5	3.5			
All-Red Time (s)	1.5	1.5			1.5		1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			
Total Lost Time (s)	5.8	5.8			5.8		4.5	4.5	4.5			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Recall Mode	None	C-Max			C-Max		None	None	None			
Walk Time (s)		7.0			7.0			7.0	7.0			
Flash Dont Walk (s)		11.0			11.0			11.0	11.0			
Pedestrian Calls (#/hr)		0			0			0	0			
Act Effct Green (s)	99.2	99.2			69.3		50.5	50.5	50.5			
Actuated g/C Ratio	0.62	0.62			0.43		0.32	0.32	0.32			
v/c Ratio	0.87	0.48			0.93dr		0.25	0.35	0.34			
Control Delay	62.9	25.4			21.8		42.3	29.8	29.5			
Queue Delay	0.0	1.2			0.0		0.0	0.0	0.0			
Total Delay	62.9	26.6			21.8		42.3	29.8	29.5			

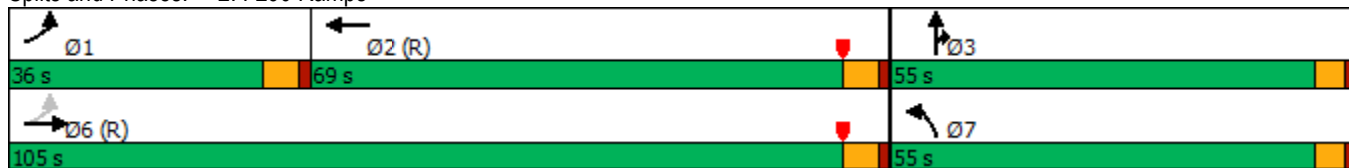


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	C			C		D	C	C			
Approach Delay		32.2			21.8			33.1				
Approach LOS		C			C			C				
90th %ile Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
90th %ile Term Code	Max	Coord			Coord		Hold	Max	Max			
70th %ile Green (s)	28.8	99.2			64.6		50.5	50.5	50.5			
70th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
50th %ile Green (s)	25.0	99.2			68.4		50.5	50.5	50.5			
50th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
30th %ile Green (s)	21.1	99.2			72.3		50.5	50.5	50.5			
30th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
10th %ile Green (s)	15.5	99.2			77.9		50.5	50.5	50.5			
10th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
Queue Length 50th (ft)	240	357			580		110	103	96			
Queue Length 95th (ft)	343	547			654		173	182	172			
Internal Link Dist (ft)		496			348			762			183	
Turn Bay Length (ft)	150											
Base Capacity (vph)	376	3152			2140		530	500	515			
Starvation Cap Reductn	0	1316			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.72	0.82			0.80		0.25	0.35	0.34			

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 108 (68%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 27.8
 Intersection LOS: C
 Intersection Capacity Utilization 69.5%
 ICU Level of Service C
 Analysis Period (min) 15
 dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 2: I-290 Ramps





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	18	1711	1584	54	53	26
Future Volume (vph)	18	1711	1584	54	53	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	60
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.995			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	3539	3522	0	1770	1583
Flt Permitted	0.123				0.950	
Satd. Flow (perm)	229	3539	3522	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			4			27
Link Speed (mph)		45	45		30	
Link Distance (ft)		958	640		988	
Travel Time (s)		14.5	9.7		22.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	19	1801	1667	57	56	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	1801	1724	0	56	27
Turn Type	Perm	NA	NA		Prot	Prot
Protected Phases		1	1		3	3
Permitted Phases	1					
Detector Phase	1	1	1		3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	23.9	23.9	23.9		23.7	23.7
Total Split (s)	110.0	110.0	110.0		50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%		31.3%	31.3%
Maximum Green (s)	104.1	104.1	104.1		44.3	44.3
Yellow Time (s)	4.3	4.3	4.3		3.2	3.2
All-Red Time (s)	1.6	1.6	1.6		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.9	5.9	5.9		5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	141.5	141.5	141.5		10.5	10.5
Actuated g/C Ratio	0.88	0.88	0.88		0.07	0.07
v/c Ratio	0.09	0.58	0.55		0.49	0.21
Control Delay	1.7	7.4	2.0		85.3	25.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	1.7	7.4	2.0		85.3	25.5



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
LOS	A	A	A		F	C
Approach Delay		7.4	2.0		65.8	
Approach LOS		A	A		E	
90th %ile Green (s)	133.8	133.8	133.8		14.6	14.6
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	136.2	136.2	136.2		12.2	12.2
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	137.9	137.9	137.9		10.5	10.5
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	139.7	139.7	139.7		8.7	8.7
30th %ile Term Code	Coord	Coord	Coord		Gap	Gap
10th %ile Green (s)	154.1	154.1	154.1		0.0	0.0
10th %ile Term Code	Coord	Coord	Coord		Skip	Skip
Queue Length 50th (ft)	1	189	68		58	0
Queue Length 95th (ft)	m2	232	124		106	34
Internal Link Dist (ft)		878	560		908	
Turn Bay Length (ft)	150					60
Base Capacity (vph)	202	3130	3115		490	457
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.09	0.58	0.55		0.11	0.06

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 87 (54%), Referenced to phase 1:EBWB, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.58
 Intersection Signal Delay: 6.2
 Intersection LOS: A
 Intersection Capacity Utilization 61.1%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Sheridan Drive & Frankhauser Road



Intersection												
Int Delay, s/veh	28											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	69	1671	28	12	1572	27	14	0	20	16	0	41
Future Vol, veh/h	69	1671	28	12	1572	27	14	0	20	16	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	96	96	92	96	92	96	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	75	1741	29	13	1638	29	15	0	21	17	0	45

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1667	0	0	1770	0	0	2751	3599	885	2700	3599	834
Stage 1	-	-	-	-	-	-	1906	1906	-	1679	1679	-
Stage 2	-	-	-	-	-	-	845	1693	-	1021	1920	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	382	-	-	348	-	-	~9	5	288	~10	5	311
Stage 1	-	-	-	-	-	-	71	115	-	99	150	-
Stage 2	-	-	-	-	-	-	324	147	-	253	113	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	382	-	-	348	-	-	~6	4	288	~8	4	311
Mov Cap-2 Maneuver	-	-	-	-	-	-	~6	4	-	~8	4	-
Stage 1	-	-	-	-	-	-	57	92	-	80	144	-
Stage 2	-	-	-	-	-	-	267	142	-	189	91	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.7	0.1	\$ 1247.6	\$ 901.4
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	14	382	-	-	348	-	-	27
HCM Lane V/C Ratio	2.53	0.196	-	-	0.036	-	-	2.295
HCM Control Delay (s)	\$ 1247.6	16.7	-	-	15.7	-	-	\$ 901.4
HCM Lane LOS	F	C	-	-	C	-	-	F
HCM 95th %tile Q(veh)	5.2	0.7	-	-	0.1	-	-	7.5

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Build PM
5: North Forest Road & Sheridan Drive



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	233	1178	271	163	1213	39	186	354	171	49	394	191
Future Volume (vph)	233	1178	271	163	1213	39	186	354	171	49	394	191
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		170	175		0	190		440	350		70
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			200		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850		0.995				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3522	0	1770	1863	1583	1770	3539	1583
Flt Permitted	0.057			0.096			0.259			0.265		
Satd. Flow (perm)	106	3539	1583	179	3522	0	482	1863	1583	494	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			132		2				178			128
Link Speed (mph)		45		45			40			35		
Link Distance (ft)		1664		992			903			690		
Travel Time (s)		25.2		15.0			15.4			13.4		
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	243	1227	282	170	1264	41	194	369	178	51	410	199
Shared Lane Traffic (%)												
Lane Group Flow (vph)	243	1227	282	170	1305	0	194	369	178	51	410	199
Turn Type	pm+pt	NA	Prot	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	6	5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	6.0	28.0	28.0	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0
Minimum Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (%)	15.6%	44.4%	44.4%	15.6%	44.4%		15.6%	27.5%	27.5%	12.5%	24.4%	24.4%
Maximum Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	36.4	36.4	12.4	31.4	31.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8		3.6	3.6	3.6	3.6	3.6	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	7.1	7.1	7.1		7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		7.0	7.0				7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0				11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0				0	0		0	0	
Act Effct Green (s)	90.2	71.9	71.9	81.1	66.2		51.1	37.9	37.9	35.9	27.3	27.3
Actuated g/C Ratio	0.56	0.45	0.45	0.51	0.41		0.32	0.24	0.24	0.22	0.17	0.17
v/c Ratio	0.89	0.77	0.36	0.71	0.89		0.68	0.84	0.35	0.28	0.68	0.53
Control Delay	68.2	36.3	17.1	44.1	53.1		52.9	75.3	8.1	40.9	67.8	26.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.2	36.3	17.1	44.1	53.1		52.9	75.3	8.1	40.9	67.8	26.4

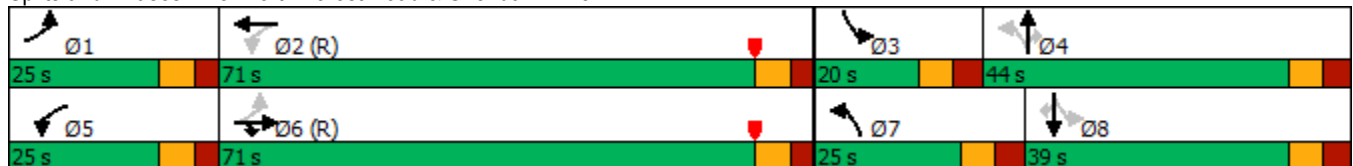


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	E	D	B	D	D		D	E	A	D	E	C
Approach Delay		37.6			52.1			53.3			53.3	
Approach LOS		D			D			D			D	
90th %ile Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	37.5	37.5	11.3	31.4	31.4
90th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Max	Max	Gap	Hold	Hold
70th %ile Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	39.1	39.1	9.7	31.4	31.4
70th %ile Term Code	Max	Coord	Coord	Max	Coord		Max	Max	Max	Gap	Hold	Hold
50th %ile Green (s)	19.4	66.9	66.9	16.4	63.9		17.4	38.8	38.8	8.5	29.9	29.9
50th %ile Term Code	Max	Coord	Coord	Gap	Coord		Max	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	24.9	75.2	75.2	13.6	63.9		16.4	34.2	34.2	7.6	25.4	25.4
30th %ile Term Code	Max	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	22.5	89.5	89.5	8.6	75.6		14.2	40.1	40.1	0.0	18.3	18.3
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Skip	Gap	Gap
Queue Length 50th (ft)	219	641	131	91	681		150	368	0	36	210	64
Queue Length 95th (ft)	#402	733	201	177	#825		219	#539	65	69	267	148
Internal Link Dist (ft)		1584			912			823			610	
Turn Bay Length (ft)	350		170	175			190		440	350		70
Base Capacity (vph)	273	1589	783	272	1459		293	446	515	221	694	413
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.89	0.77	0.36	0.63	0.89		0.66	0.83	0.35	0.23	0.59	0.48

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 30 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
 Natural Cycle: 160
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.89
 Intersection Signal Delay: 47.0
 Intersection LOS: D
 Intersection Capacity Utilization 95.8%
 ICU Level of Service F
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 5: North Forest Road & Sheridan Drive





Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Lane Configurations	↑↑	↑	↖↗	↑↑	↖↗	↖↗		
Traffic Volume (vph)	650	343	378	588	170	517		
Future Volume (vph)	650	343	378	588	170	517		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	230		0	0		
Storage Lanes		1	1		2	2		
Taper Length (ft)			25		25			
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.88		
Frt		0.850				0.850		
Flt Protected			0.950		0.950			
Satd. Flow (prot)	3574	1599	3467	3574	3467	2814		
Flt Permitted			0.950		0.950			
Satd. Flow (perm)	3574	1599	3467	3574	3467	2814		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		349				533		
Link Speed (mph)	45			45	30			
Link Distance (ft)	570			576	995			
Travel Time (s)	8.6			8.7	22.6			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%		
Adj. Flow (vph)	670	354	390	606	175	533		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	670	354	390	606	175	533		
Turn Type	NA	pt+ov	Prot	NA	Prot	custom		
Protected Phases	2	2 3	1 4	2 1	3	3 4	1	4
Permitted Phases								
Detector Phase	2	2 3	1 4	2 1	3	3 4		
Switch Phase								
Minimum Initial (s)	5.0				5.0		5.0	5.0
Minimum Split (s)	24.7				24.9		24.7	22.5
Total Split (s)	49.0				35.0		37.0	39.0
Total Split (%)	30.6%				21.9%		23%	24%
Maximum Green (s)	42.3				28.1		31.9	34.7
Yellow Time (s)	4.0				3.6		4.0	3.2
All-Red Time (s)	2.7				3.3		1.1	1.1
Lost Time Adjust (s)	0.0				0.0			
Total Lost Time (s)	6.7				6.9			
Lead/Lag	Lag				Lead		Lead	Lag
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0				3.0		3.0	3.0
Recall Mode	C-Max				Min		None	None
Walk Time (s)	7.0				7.0		7.0	7.0
Flash Dont Walk (s)	11.0				11.0		11.0	11.0
Pedestrian Calls (#/hr)	0				0		0	0
Act Effct Green (s)	80.2	102.2	46.0	105.3	15.1	41.1		
Actuated g/C Ratio	0.50	0.64	0.29	0.66	0.09	0.26		
v/c Ratio	0.37	0.31	0.39	0.26	0.54	0.48		
Control Delay	27.2	2.2	31.0	9.0	74.7	4.5		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		

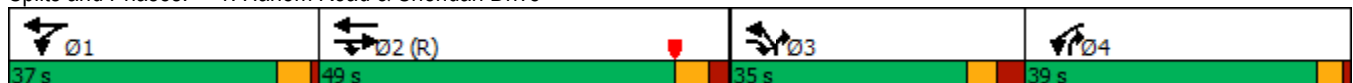


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø1	Ø4
Total Delay	27.2	2.2	31.0	9.0	74.7	4.5		
LOS	C	A	C	A	E	A		
Approach Delay	18.6			17.6	21.8			
Approach LOS	B			B	C			
90th %ile Green (s)	63.4				19.8		27.6	26.2
90th %ile Term Code	Coord				Gap		Gap	Gap
70th %ile Green (s)	72.9				16.8		23.0	24.3
70th %ile Term Code	Coord				Gap		Gap	Gap
50th %ile Green (s)	80.1				15.3		19.7	21.9
50th %ile Term Code	Coord				Gap		Gap	Gap
30th %ile Green (s)	87.6				12.9		16.6	19.9
30th %ile Term Code	Coord				Gap		Gap	Gap
10th %ile Green (s)	97.1				10.7		13.0	16.2
10th %ile Term Code	Coord				Gap		Gap	Gap
Queue Length 50th (ft)	222	2	89	205	91	0		
Queue Length 95th (ft)	333	48	87	254	129	46		
Internal Link Dist (ft)	490			496	915			
Turn Bay Length (ft)			230					
Base Capacity (vph)	1791	1249	1254	2341	608	1304		
Starvation Cap Reductn	0	0	0	0	0	0		
Spillback Cap Reductn	0	0	0	0	0	0		
Storage Cap Reductn	0	0	0	0	0	0		
Reduced v/c Ratio	0.37	0.28	0.31	0.26	0.29	0.41		

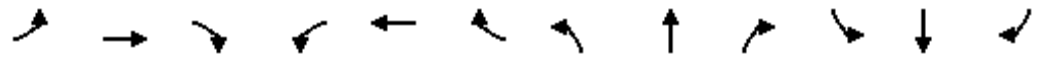
Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 157 (98%), Referenced to phase 2:EBWB, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.54
 Intersection Signal Delay: 19.1
 Intersection LOS: B
 Intersection Capacity Utilization 49.2%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 1: Harlem Road & Sheridan Drive



Build SAT Midday
2: I-290 Ramps



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑			↑↑↑		↘	↔	↘			
Traffic Volume (vph)	176	979	0	0	821	314	169	0	299	0	0	0
Future Volume (vph)	176	979	0	0	821	314	169	0	299	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	150		0	0		0	0		0
Storage Lanes	1		0	0		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	0.95	0.91	0.95	1.00	1.00	1.00
Frt					0.959			0.866	0.850			
Flt Protected	0.950						0.950	0.995				
Satd. Flow (prot)	1787	5136	0	0	4925	0	1698	1475	1519	0	0	0
Flt Permitted	0.179						0.950	0.995				
Satd. Flow (perm)	337	5136	0	0	4925	0	1698	1475	1519	0	0	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)					71			130	130			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			428			842			263	
Travel Time (s)		13.1			9.7			19.1			6.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	180	999	0	0	838	320	172	0	305	0	0	0
Shared Lane Traffic (%)							10%		48%			
Lane Group Flow (vph)	180	999	0	0	1158	0	155	163	159	0	0	0
Turn Type	pm+pt	NA			NA		Prot	NA	Prot			
Protected Phases	1	6			2		7	3	3			
Permitted Phases	6											
Detector Phase	1	6			2		7	3	3			
Switch Phase												
Minimum Initial (s)	5.0	5.0			5.0		5.0	5.0	5.0			
Minimum Split (s)	10.8	23.8			23.8		9.5	22.5	22.5			
Total Split (s)	36.0	105.0			69.0		55.0	55.0	55.0			
Total Split (%)	22.5%	65.6%			43.1%		34.4%	34.4%	34.4%			
Maximum Green (s)	30.2	99.2			63.2		50.5	50.5	50.5			
Yellow Time (s)	4.3	4.3			4.3		3.5	3.5	3.5			
All-Red Time (s)	1.5	1.5			1.5		1.0	1.0	1.0			
Lost Time Adjust (s)	0.0	0.0			0.0		0.0	0.0	0.0			
Total Lost Time (s)	5.8	5.8			5.8		4.5	4.5	4.5			
Lead/Lag	Lead				Lag							
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Recall Mode	None	C-Max			C-Max		None	None	None			
Walk Time (s)		7.0			7.0			7.0	7.0			
Flash Dont Walk (s)		11.0			11.0			11.0	11.0			
Pedestrian Calls (#/hr)		0			0			0	0			
Act Effct Green (s)	106.7	106.7			88.9		43.0	43.0	43.0			
Actuated g/C Ratio	0.67	0.67			0.56		0.27	0.27	0.27			
v/c Ratio	0.54	0.29			0.42		0.34	0.33	0.32			
Control Delay	31.1	20.0			12.2		47.0	12.1	11.4			
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0			

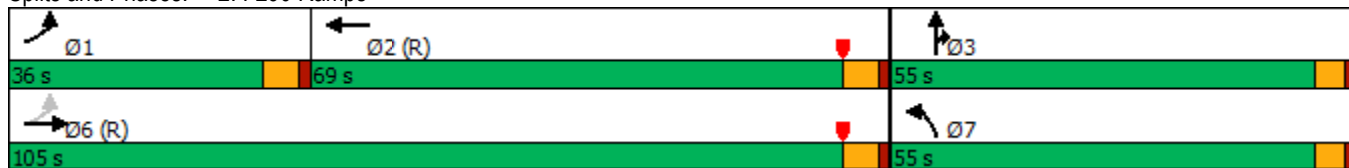


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	31.1	20.0			12.2		47.0	12.1	11.4			
LOS	C	B			B		D	B	B			
Approach Delay		21.7			12.2			23.2				
Approach LOS		C			B			C				
90th %ile Green (s)	16.7	99.2			76.7		50.5	50.5	50.5			
90th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
70th %ile Green (s)	13.7	99.2			79.7		50.5	50.5	50.5			
70th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
50th %ile Green (s)	12.3	99.2			81.1		50.5	50.5	50.5			
50th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
30th %ile Green (s)	10.9	99.2			82.5		50.5	50.5	50.5			
30th %ile Term Code	Gap	Coord			Coord		Hold	Max	Max			
10th %ile Green (s)	6.8	136.9			124.3		12.8	12.8	12.8			
10th %ile Term Code	Gap	Coord			Coord		Gap	Hold	Hold			
Queue Length 50th (ft)	115	166			281		129	26	22			
Queue Length 95th (ft)	210	360			129		197	93	83			
Internal Link Dist (ft)		496			348			762				183
Turn Bay Length (ft)	150											
Base Capacity (vph)	498	3426			2766		535	491	568			
Starvation Cap Reductn	0	0			0		0	0	0			
Spillback Cap Reductn	0	0			0		0	0	0			
Storage Cap Reductn	0	0			0		0	0	0			
Reduced v/c Ratio	0.36	0.29			0.42		0.29	0.33	0.28			

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 108 (68%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.54
 Intersection Signal Delay: 18.0
 Intersection LOS: B
 Intersection Capacity Utilization 53.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 2: I-290 Ramps





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	17	1174	1034	39	42	18
Future Volume (vph)	17	1174	1034	39	42	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	60
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	0.95	0.95	0.95	1.00	1.00
Frt			0.994			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1787	3574	3553	0	1787	1599
Flt Permitted	0.248				0.950	
Satd. Flow (perm)	467	3574	3553	0	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			5			19
Link Speed (mph)		45	45		30	
Link Distance (ft)		958	640		988	
Travel Time (s)		14.5	9.7		22.5	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	18	1223	1077	41	44	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	1223	1118	0	44	19
Turn Type	Perm	NA	NA		Prot	Prot
Protected Phases		1	1		3	3
Permitted Phases	1					
Detector Phase	1	1	1		3	3
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0		5.0	5.0
Minimum Split (s)	23.9	23.9	23.9		23.7	23.7
Total Split (s)	110.0	110.0	110.0		50.0	50.0
Total Split (%)	68.8%	68.8%	68.8%		31.3%	31.3%
Maximum Green (s)	104.1	104.1	104.1		44.3	44.3
Yellow Time (s)	4.3	4.3	4.3		3.2	3.2
All-Red Time (s)	1.6	1.6	1.6		2.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	5.9	5.9	5.9		5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	C-Max	C-Max	C-Max		None	None
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	142.5	142.5	142.5		9.3	9.3
Actuated g/C Ratio	0.89	0.89	0.89		0.06	0.06
v/c Ratio	0.04	0.38	0.35		0.42	0.17
Control Delay	1.0	3.0	1.7		84.1	28.8
Queue Delay	0.0	0.0	0.0		0.0	0.0



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Total Delay	1.0	3.0	1.7		84.1	28.8
LOS	A	A	A		F	C
Approach Delay		3.0	1.7		67.4	
Approach LOS		A	A		E	
90th %ile Green (s)	135.5	135.5	135.5		12.9	12.9
90th %ile Term Code	Coord	Coord	Coord		Gap	Gap
70th %ile Green (s)	137.5	137.5	137.5		10.9	10.9
70th %ile Term Code	Coord	Coord	Coord		Gap	Gap
50th %ile Green (s)	139.1	139.1	139.1		9.3	9.3
50th %ile Term Code	Coord	Coord	Coord		Gap	Gap
30th %ile Green (s)	140.6	140.6	140.6		7.8	7.8
30th %ile Term Code	Coord	Coord	Coord		Gap	Gap
10th %ile Green (s)	154.1	154.1	154.1		0.0	0.0
10th %ile Term Code	Coord	Coord	Coord		Skip	Skip
Queue Length 50th (ft)	1	67	61		45	0
Queue Length 95th (ft)	3	123	73		89	29
Internal Link Dist (ft)		878	560		908	
Turn Bay Length (ft)	150					60
Base Capacity (vph)	416	3184	3165		494	456
Starvation Cap Reductn	0	0	0		0	0
Spillback Cap Reductn	0	0	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.04	0.38	0.35		0.09	0.04

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 87 (54%), Referenced to phase 1:EBWB, Start of Yellow
 Natural Cycle: 55
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.42
 Intersection Signal Delay: 4.1
 Intersection LOS: A
 Intersection Capacity Utilization 46.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 3: Sheridan Drive & Frankhauser Road

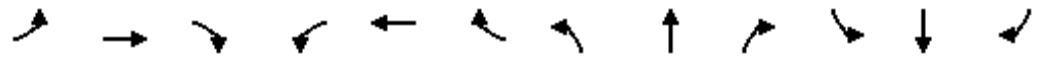


Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕			↕			↕	
Traffic Vol, veh/h	83	1119	19	18	1004	33	20	0	21	19	0	49
Future Vol, veh/h	83	1119	19	18	1004	33	20	0	21	19	0	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	125	-	-	150	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	96	96	96	96	92	96	92	96	92	92	92
Heavy Vehicles, %	2	1	1	1	1	2	1	2	1	2	2	2
Mvmt Flow	90	1166	20	19	1046	36	21	0	22	21	0	53

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1082	0	0	1186	0	0	1917	2476	593	1865	2468	541
Stage 1	-	-	-	-	-	-	1356	1356	-	1102	1102	-
Stage 2	-	-	-	-	-	-	561	1120	-	763	1366	-
Critical Hdwy	4.14	-	-	4.12	-	-	7.52	6.54	6.92	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.21	-	-	3.51	4.02	3.31	3.52	4.02	3.32
Pot Cap-1 Maneuver	640	-	-	590	-	-	41	29	451	45	30	485
Stage 1	-	-	-	-	-	-	159	216	-	226	286	-
Stage 2	-	-	-	-	-	-	482	280	-	363	213	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	640	-	-	590	-	-	32	24	451	37	25	485
Mov Cap-2 Maneuver	-	-	-	-	-	-	32	24	-	37	25	-
Stage 1	-	-	-	-	-	-	137	186	-	194	277	-
Stage 2	-	-	-	-	-	-	415	271	-	297	183	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.2			148.7			86.2		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	61	640	-	-	590	-	-	111
HCM Lane V/C Ratio	0.7	0.141	-	-	0.032	-	-	0.666
HCM Control Delay (s)	148.7	11.5	-	-	11.3	-	-	86.2
HCM Lane LOS	F	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	3	0.5	-	-	0.1	-	-	3.4



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↑	↗	↘	↑↑	↗
Traffic Volume (vph)	171	868	108	125	784	38	108	202	109	56	212	175
Future Volume (vph)	171	868	108	125	784	38	108	202	109	56	212	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	350		170	175		0	190		440	350		70
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			200		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850		0.993				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3574	1599	1787	3549	0	1787	1881	1599	1787	3574	1599
Flt Permitted	0.266			0.261			0.457			0.496		
Satd. Flow (perm)	500	3574	1599	491	3549	0	860	1881	1599	933	3574	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			132		4				128			167
Link Speed (mph)		45		45			30			30		
Link Distance (ft)		1664		992			903			690		
Travel Time (s)		25.2		15.0			20.5			15.7		
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	173	877	109	126	792	38	109	204	110	57	214	177
Shared Lane Traffic (%)												
Lane Group Flow (vph)	173	877	109	126	830	0	109	204	110	57	214	177
Turn Type	pm+pt	NA	Prot	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6	6	5	2		7	4		3	8	
Permitted Phases	6			2			4		4	8		8
Detector Phase	1	6	6	5	2		7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	6.0	28.0	28.0	6.0	6.0		6.0	6.0	6.0	6.0	15.0	15.0
Minimum Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (s)	25.0	71.0	71.0	25.0	71.0		25.0	44.0	44.0	20.0	39.0	39.0
Total Split (%)	15.6%	44.4%	44.4%	15.6%	44.4%		15.6%	27.5%	27.5%	12.5%	24.4%	24.4%
Maximum Green (s)	17.9	63.9	63.9	17.9	63.9		17.4	36.4	36.4	12.4	31.4	31.4
Yellow Time (s)	4.3	4.3	4.3	4.3	4.3		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8		3.6	3.6	3.6	3.6	3.6	3.6
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.1	7.1	7.1	7.1	7.1		7.6	7.6	7.6	7.6	7.6	7.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	C-Max	C-Max	None	C-Max		None	None	None	None	None	None
Walk Time (s)		7.0	7.0				7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		11.0	11.0				11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0	0				0	0		0	0	
Act Effct Green (s)	99.8	88.1	88.1	96.2	86.4		37.4	26.0	26.0	28.8	19.4	19.4
Actuated g/C Ratio	0.62	0.55	0.55	0.60	0.54		0.23	0.16	0.16	0.18	0.12	0.12
v/c Ratio	0.43	0.45	0.12	0.34	0.43		0.39	0.67	0.30	0.26	0.50	0.52
Control Delay	9.8	20.4	6.2	14.1	24.3		50.5	74.7	7.5	47.6	69.1	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0

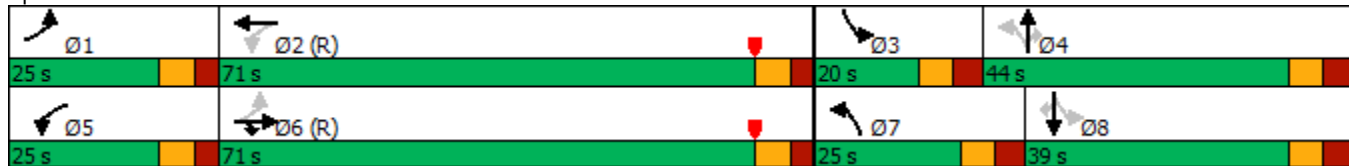


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	9.8	20.4	6.2	14.1	24.3		50.5	74.7	7.5	47.6	69.1	15.6
LOS	A	C	A	B	C		D	E	A	D	E	B
Approach Delay		17.5			22.9			51.0			45.2	
Approach LOS		B			C			D			D	
90th %ile Green (s)	16.1	75.0	75.0	13.3	72.2		17.2	30.0	30.0	12.3	25.1	25.1
90th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
70th %ile Green (s)	13.1	83.2	83.2	11.0	81.1		14.9	25.7	25.7	10.7	21.5	21.5
70th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	11.3	88.8	88.8	9.6	87.1		13.3	22.7	22.7	9.5	18.9	18.9
50th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	9.7	94.4	94.4	8.4	93.1		11.5	19.6	19.6	8.2	16.3	16.3
30th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	8.0	99.3	99.3	7.0	98.3		9.3	31.9	31.9	0.0	15.0	15.0
10th %ile Term Code	Gap	Coord	Coord	Gap	Coord		Gap	Hold	Hold	Skip	Min	Min
Queue Length 50th (ft)	44	247	18	46	263		92	209	0	47	112	9
Queue Length 95th (ft)	123	454	83	88	385		137	288	40	80	151	83
Internal Link Dist (ft)		1584			912			823			610	
Turn Bay Length (ft)	350		170	175			190		440	350		70
Base Capacity (vph)	470	1968	940	462	1917		313	427	462	251	701	448
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.45	0.12	0.27	0.43		0.35	0.48	0.24	0.23	0.31	0.40

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 30 (19%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
 Natural Cycle: 160
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 28.1
 Intersection LOS: C
 Intersection Capacity Utilization 75.3%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 5: North Forest Road & Sheridan Drive



Appendix E – Signal Warrant Analysis



Sheridan Drive at Fenwick Road Signal Warrant Analysis

Reference: FHWA Manual on Uniform Traffic Control Devices 2009 Edition, Chapter 4C Warrants
 NYS Supplement MUTCD, 2009 Edition, Chapter 4C Warrants

Background Data:

Artery: **Sheridan Drive (NYS Route 324)**

Side Road: **Fenwick road**

Saturday

Peak

Hour

8th Highest Hour

Traffic Volumes:

Artery (Total of Both Approaches, incl aux lns):

2276

1366

Side Road (Highest of either approach, 1 dir only, incl aux lns):

68

41

* If 8th highest hour is not known, use 0.6 x peak hour

Number of Approach Lanes excluding Auxiliary Lanes

Artery: **2**

Side Road: **1**

Warrant 1 - Eight-Hour Vehicular Volume

85th percentile speed exceed 40 mph?

Yes

OR

Is intersection within built up area of an isolated community having population less than 10,000?

No

If answer is yes to either question, then 70% or 56% of condition can be applicable

No

Condition A - Min Vehicular Volume

Number of lanes		VPH on Major				VPH on Higher Volume			
Each Approach		Total Both Approaches				Minor Approach			
Major	Minor	Incl Aux Lanes				Incl Aux Lanes			
		100%	80%	70%	56%	100%	80%	70%	56%
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B - Interruption of Continuous Traffic

Number of lanes		VPH on Major				VPH on Higher Volume			
Each Approach		Total Both Approaches				Minor Approach			
Major	Minor	Incl Aux Lanes				Incl Aux Lanes			
		100%	80%	70%	56%	100%	80%	70%	56%
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

Major # Lanes

2

VPH on Artery

1366

Minor # Lanes

1

VPH on Side Road

41

Warrant Satisfied:

No

If 100% of A or B is met, then yes (same 8 hours for major/minor)

If 80% of A and B is met, then yes (same major/minor 8 hours, but not same for A&B)

If speed is > 40MPH and 70% of A or B is met, then yes

If speed is > 40MPH and 56% of A and B is met, then yes

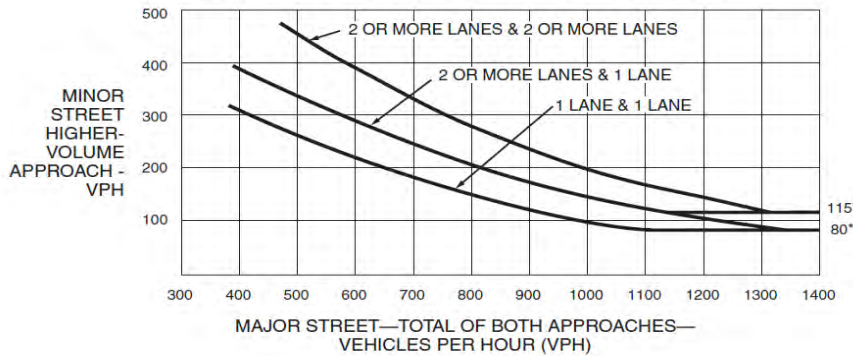


Warrant 2 - Four Hour Volumes

Four Highest Hourly Volumes (any four hrs, same for side rd and artery, not necessarily consecutive)

Major	1914	Minor	68
(Both Approaches)	2039	(1 direction)	
	1989		57
	2023		

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



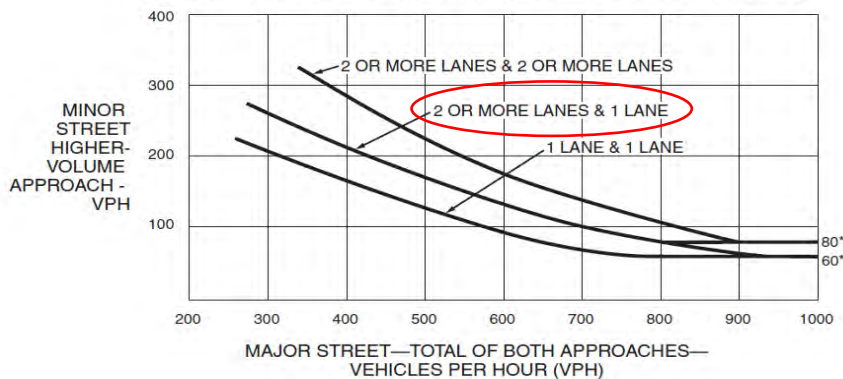
*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

If 4 volumes when plotted fall above curve shown for given approach lane configuration, warrant is satisfied

Does the 85th percentile speed exceed 40 mph? Yes
 OR
 Is intersection within built up area of an isolated community having population less than 10,000? No

If Yes to either, then the following graph should be used:

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

If 4 volumes when plotted fall above curve shown for given approach lane configuration, warrant is satisfied

Warrant Satisfied: No



Warrant 3 - Peak Hour

(used in unusual cases that attract or discharge a lot of vehicles in a short amount of time)

Criteria A or B need to be met for warrant to be met

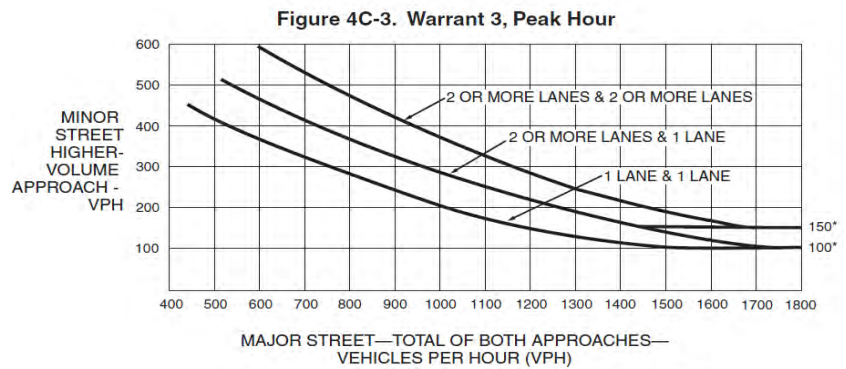
Criteria A: need all three (3) conditions to be met

- 1) stopped time delay for minor (1 dir) equals or exceeds 4 veh/hrs (1 appr) or 5 veh/hr (2 appr) and Yes
 - 2) volume on the same minor appr equals or exceeds 100 veh/hr (1 lane) or 150 veh/hr (2 lanes) and No
 - 3) total entering volume equals or exceeds 650 veh/hr (3 appr) or 800 veh/hr (4 + appr) Yes
- Criteria A met? **No**

Criteria B

Peak Hour Volume (any 4 consecutive 15 minute intervals)

Major **2276** Minor **68**
(Both Approaches) (1 direction)

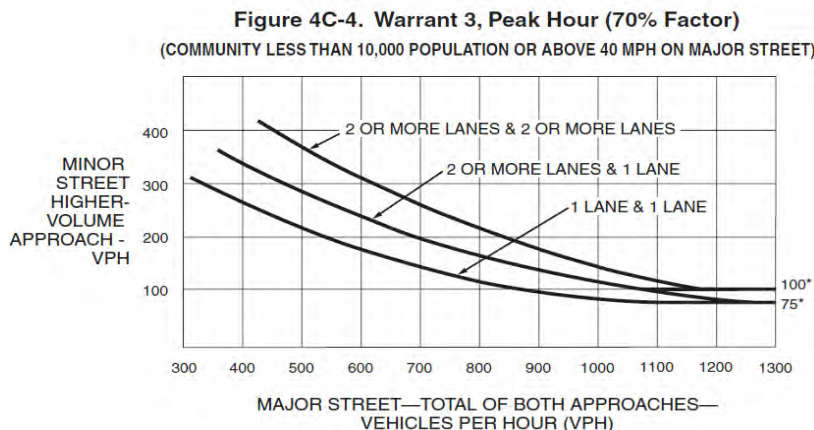


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

If Peak Hour volume when plotted falls above curve shown for given approach lane configuration, Criteria B is satisfied

- Does the 85th percentile speed exceed 40 mph? Yes
- OR
- Is intersection within built up area of an isolated community having population less than 10,000? No

If Yes to either, then the following graph should be used:



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

If Peak Hour volume when plotted falls above curve shown for given approach lane configuration, criteria B is satisfied

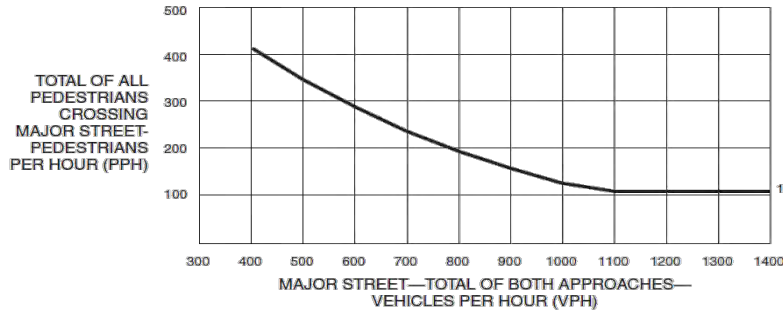
Criteria B met? **No**

Warrant Satisfied: **No**



Warrant 4 - Minimum Pedestrian Volume

Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume



*Note: 107 pph applies as the lower threshold volume.

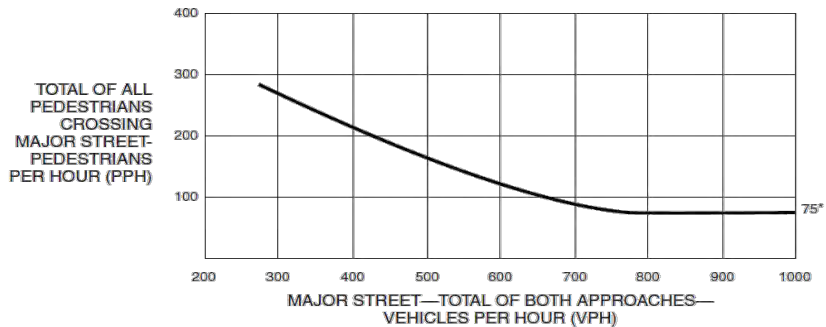
Use Figure 4C-5 for any 4 hours of an average day

Four-hour Volumes
(any 4 hours of an average day)

Major **2276** Peds **0**
(Both Approaches) (Crossing Major)

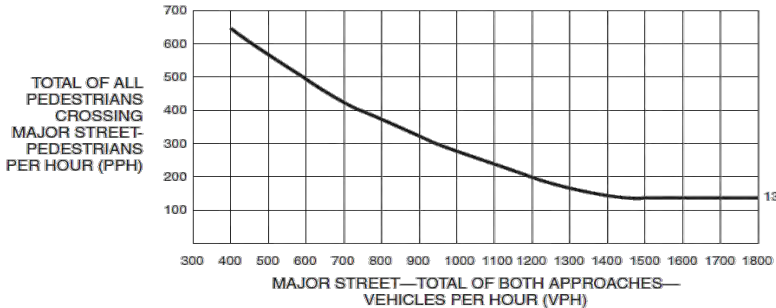
Use Figure 4C-6 for 4-hour volumes if the speed limit or 85th percentile speed on the major exceeds 35 MPH, or if the intersection lies in a built-up area of an isolated community of less than 10,000

Figure 4C-6. Warrant 4, Pedestrian Four-Hour Volume (70% Factor)



*Note: 75 pph applies as the lower threshold volume.

Figure 4C-7. Warrant 4, Pedestrian Peak Hour



*Note: 133 pph applies as the lower threshold volume.

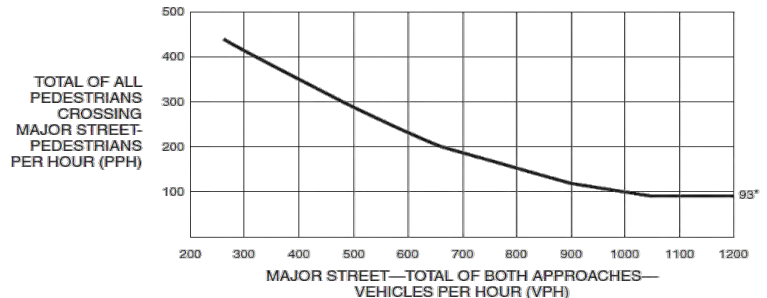
Use Figure 4C-7 for one hour (any 4 consecutive 15 min periods)

Peak Hour Volume
(any 4 consecutive 15 min intervals)

Major **2276** Peds **0**
(Both Approaches) (Crossing Major)

Use Figure 4C-8 for 4-hour volumes if the speed limit or 85th percentile speed on the major exceeds 35 MPH, or if the intersection lies in a built-up area of an isolated community of less than 10,000

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)



*Note: 93 pph applies as the lower threshold volume.

This warrant shall not be applied at locations where the distance to the nearest signal along major is less than 90m (300ft)

* The ped criterion may be reduced as much as 50% if the average crossing speed of a ped is less than 3.5 ft/s

Warrant Satisfied: **No**



Warrant 5 - School Crossing

Are the # of adequate gaps in each hour less than the # of minutes in each hour? N/A

AND

Are there a minimum of 20 students during the highest crossing hour? N/A

This warrant shall not be applied at locations where the distance to the nearest signal along the

major is less than 90m (300ft)

Warrant Satisfied: **No**

This warrant does not apply because it is for school children, and there are no schools near this intersection.

Warrant 6 - Coordinated Signal System

Are the adjacent traffic control signals so far apart that they do not provide a necessary degree of vehicular platooning (1-way street or traffic mainly in 1 direction)? No

OR

On a 2-way street will proposed and adjacent signals provide a progressive operation? No

* This warrant should not be applied where the spacing of signals would be less than 300m (1000ft).

Warrant Satisfied: **No**



Warrant 7 - Crash Experience

Have adequate trial of less restrictive remedies with satisfactory observance and enforcement failed to reduce the number of accidents? **No**

AND

Have there been 5 or more reported accidents susceptible to correction by a traffic signal within a 12 month period? **Yes**

AND

Are vehicle and ped volumes at least 80% of the requirements specified in Warrants 1 (Cond A or B) or 4? (56% criteria can be used if applicable) **No**

The answer to all above questions must be "yes" to satisfy this warrant

Warrant Satisfied: **No**

Warrant 8 - Roadway Network (for intersection of 2 majors)

1) Total Existing Weekday Peak Hour Volume Entering Intersection **3502**
Is this volume > 1000 VPH? **No**

AND

Do the ETC+5 yrs volumes satisfy warrants 1, 2 or 3? **No**

OR

2) 5th highest Weekend volume entering intersection
Is this volume > 1000 VPH? **No**

Both answers to 1) **or** the answer to 2) must be "yes" to satisfy this warrant

Warrant Satisfied: **No**



Warrant 9 - Intersection Near a Grade Crossing

This warrant does not apply because there are no grade crossings at this intersection

Criteria A and B need to be met for warrant to be met

Criteria A:

A grade crossing exists on an approach controlled by a stop or yield sign and the center of the track nearest to the intersection is within 140 ft of the stop line or yield line on the approach

Criteria A met? **No**

Criteria B

Highest traffic volume hour with rail traffic (if rail schedule isn't known, use peak hour volumes)
 Major **2276** Minor **68**
 (Both Approaches) (1 direction)

Figure 4C-9. Warrant 9, Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)

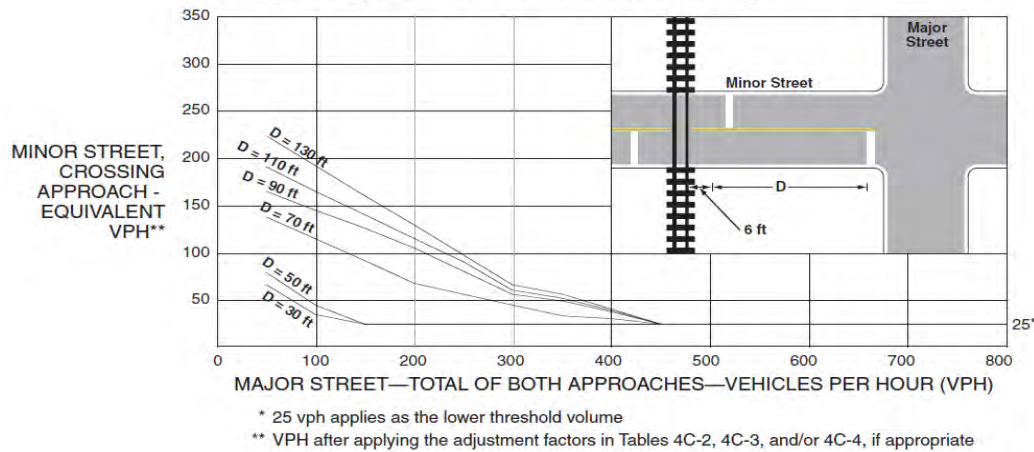
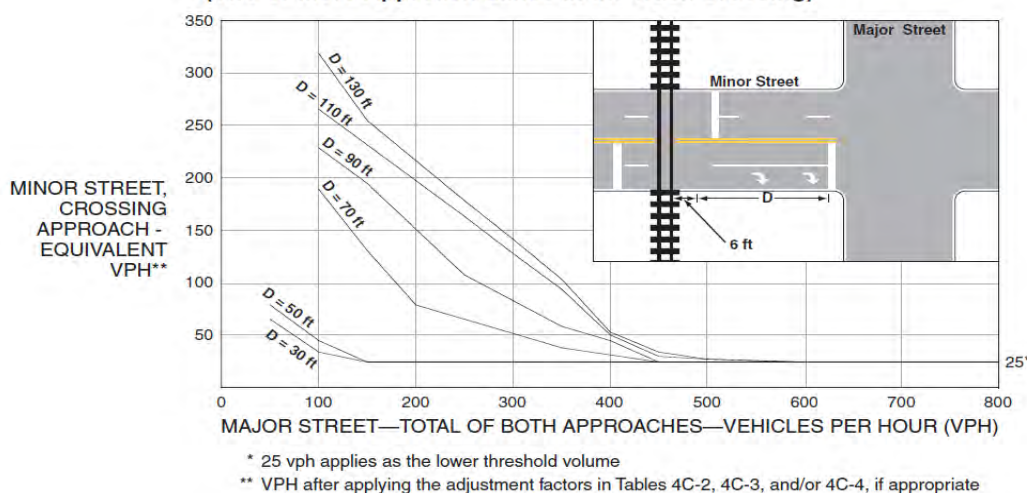


Figure 4C-10. Warrant 9, Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)



See MUTCD text for adjustment based on frequency of rail traffic, high-occupancy buses and tractor-trailer percentages

Criteria B met? **No**
 Warrant Satisfied: **No**