

10-0969-020A
August 31, 2023

Mr. Joseph P. Ouellette
Executive Director
Office of State Traffic Administration
Department of Transportation
2800 Berlin Turnpike
P. O. Box 317546
Newington, CT 06131-7546

Re: **Major Traffic Generator Administrative Decision Request/Checklist
ASML – Materials Intake Contamination Control (MICC) & Cafeteria Expansion
77 Danbury Road (U.S. Route 7)**

Dear Mr. Ouellette:

Enclosed for your review is the "Major Traffic Generator (MTG), Administrative Decision (AD) Request/Checklist" and supporting materials for the proposed Materials Intake Contamination Control (MICC) Facility & Cafeteria Expansion located on the ASML campus in Wilton, CT.

The ASML campus is certified by OSTA under the Certificate 347 series, AD 513 (OSTA No. 161-1606-01) and AD 519 (OSTA No. 161-1802-01). OSTA AD 513 was approved on April 13, 2018, for parking expansion on the ASML campus. Subsequently, OSTA AD 519 was approved on June 5, 2018, to add one level to the parking garage approved under AD 513 and construct two buildings additions, which allowed for 378,576 square feet of manufacturing and associated administration and office uses with 1,222 parking spaces.

Given the duration of time that has transpired since the last OSTA approval in 2018, Tighe & Bond obtained information representing the existing building sizes and parking spaces within the certified boundary. Based on record information and approved development by the Town of Wilton, the existing ASML campus contains 368,263 square feet of building area and 1,156 parking spaces, 10,313 square feet and 66 parking spaces less than the approved development under OSTA AD 519. The loss of 66 parking spaces is due to the new parking garage driveway internally on the site located in the northeast corner of the ASML campus. An OSTA AD Application Package for the new driveway was submitted to OSTA and received a response from OSTA stating that action was not required (See email attached). Access to the ASML campus from the roadway network is and will continue to be via the existing driveway on Danbury Road at the signalized intersection across from Grumman Hill Road.

The proposed work on the ASML campus under this application includes the construction of a multi-story approximately 167,036 square foot expansion to the southwest corner of the existing 77 Danbury Road Building. To accommodate the expansion of manufacturing operations within the expansion and existing building, ASML has begun and will continue to transition existing employees from the 77 Danbury Road Site to other facilities. As a result of the relocation, the MICC expansion is not expected to result in a significant increase in site traffic. Additionally, to support the new existing campus and MICC facility, a cafeteria expansion is under construction in the southwest corner of the existing building adding 20,379 square feet. The cafeteria will expand existing operations and is not expected to result in an increase in site traffic. Following construction, the 77 Danbury site will contain 555,678 square feet of manufacturing and associated office and administrative space.



The construction of the MICC & Cafeteria expansion will reconfigure existing surface parking lots and the southern portion of the campus, resulting in a loss of 255 parking spaces. Following construction, site parking will be located in surface lots to the northeast and northwest of the building and the existing parking garage to the north with a total of 901 parking spaces.

Based upon the MICC Facility & Cafeteria Expansion being within the existing ASML Campus OSTA certified area, OSTA has regulatory authority over the ASML MICC Facility & Cafeteria Expansion project. Considering that the proposed MICC Facility & Cafeteria Expansion is not expected to significantly increase site generated traffic or result in a change of land use, the project falls within the provisions for an Administrative Decision as detailed in the attached documentation and checklist.

Site Plan & Site Location Plan (OSTA AD Checklist Item I & II)

The OSTA Overall Site Plan (OSP-1) and Site Location Plan (Figure 1) prepared in accordance with the checklist standards are enclosed.

Traffic Information (Checklist Item III)

The proposed new MICC Facility and Cafeteria expansion is not expected to significantly increase site traffic or change existing land use. In anticipation of the expansion of manufacturing operations on the 77 Danbury Road Site, ASML has begun and continues to transition existing employees from 77 Danbury Road to other facilities. It is expected by the end of 2023, up to 600 employees are expected to be relocated to other facilities with more expected as the MICC expansion progresses. Despite the expected offset of site-generated traffic, traffic analyses were conducted at the intersection of Danbury Road at ASML driveway and Grumman Hill Road as described and detailed in the attached Traffic Information supplement to this letter.

Complete Streets Checklist (Checklist Item IV)

The proposed MICC facility & cafeteria expansion is not expected to result in a significant increase in pedestrian or bicycle activity. As mentioned in the traffic information, existing employees working at the 77 Danbury Road site will be relocated to other facilities to offset the new employees working within the expansion. Therefore, similar pedestrian and bicycle activity is expected. Pedestrian access to the ASML campus is currently provided via sidewalks along Danbury Road (US Route 7) and sidewalks existing on the ASML campus. Parking for bicycles is provided on campus.

Drainage Information (OSTA AD Checklist Item V)

As detailed in the OSTA AD Drainage Checklist, the proposed development is not expected to significantly impact state drainage facilities and, therefore, additional drainage information is not required. It is important to note that drainage signoff has been received from the District Drainage Engineer. Drainage signoff from the Town Engineer has been requested and will be provided upon receipt.

Planning and/or Zoning Approval (Checklist Item VI)

The Site Plan application was submitted to the Town of Wilton Planning and Zoning Department on August 31, 2023, and approval is expected by the end of October. A copy of the approval will be provided upon receipt.

Local Traffic Authority Concurrence (Checklist Item VII)

The Town of Wilton Local Traffic Authority (LTA) contact, Mr. Thomas Conlan, Chief of Police, has been copied on this submission. Written concurrence by the Town of Wilton LTA will be requested and provided upon receipt.

Should you have any questions or require any additional information, please contact us.

Sincerely,

TIGHE & BOND, INC.



Craig D. Yannes, PE, PTOE, RSP1
Project Manager



John W. Block, PE, LS
Senior Vice President

Copy: Mr. Thomas Conlan, Town of Wilton Local Traffic Authority Contact & Chief of Police

Enclosures: ASML Driveway Revision No Action Email (Dated 09/14/2022)
Application Checklist
OSTA Overall Site Plan (OSP-1, Dated 08/31/2023)
Site Location Plan (Figure 1)
Traffic Information
Site Development Plans (Dated 08/15/2023)
Signoff from District Drainage Engineer

J:\VA\0969 ASML\020_Campus Master Plan\Reports\OSTA AD\2023_08_31 - ASML MICC OSTA AD Request.docx

Craig D. Yannes

From: Flannery, Eamon P. <Eamon.Flannery@ct.gov>
Sent: Wednesday, September 14, 2022 12:33 PM
To: Craig D. Yannes
Cc: Pothering, Ryan J
Subject: OSTA MTG (#1) #161-2209-01 New MTG Application ASML - Site Circulation Revisions received! - Wilton
Attachments: AD 519.pdf; AD 519 Plan.pdf

[Caution - External Sender]

Good afternoon Craig, hope all is well.

Our office is in receipt of your Administrative Decision (AD) application for the subject site. This site was previously approved under AD 519, which I have attached for your reference.

The recently submitted site plan indicates that the site will be revised to provide an internal accessway to the rear of the site, resulting in a net parking reduction.

Considering the site is still within the building and parking parameters approved under AD 519, there are no land use changes or expansions, and the internal site revisions will not impact the traffic distribution on the State highway, the proposed site changes do not require OSTA regulation at this time.

You may use this email for your records. If you need something more formal, please let me know. Thank you

Eamon

Eamon Flannery, P.E. | Transportation Engineer 3
Connecticut Department of Transportation
The Office of the State Traffic Administration
(860) 594 – 3022
[*Eamon.Flannery@ct.gov*](mailto:Eamon.Flannery@ct.gov)



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546
Phone: (860) 594-3020

June 5, 2018

Scott F. Hesketh, P.E.
F. A. Hesketh & Associates, Inc.
6 Creamery Brook
East Granby, CT 06026

OSTA #161-1802-01

Dear Mr .Hesketh:

Subject: Town of Wilton
Previously Issued: Certificate 347 Series; Administrative Decision 513
Current Proposal: Add One Level to Parking Garage and Construct Two Building Additions
Street Address: 77 Danbury Road
Current Owner: ASML US, Inc.
Administrative Decision No. 519

A review of your March 1, 2018 request for an Administrative Decision regarding the subject expansion not previously considered under the Certificate 347series and Administrative Decision (AD) 513, including the latest follow-up information received on May 15, 2018, has been completed.

It was determined that the proposed building expansions of 29,278 and 44,731 square feet of manufacturing space, the demolition of 10,349 square feet of existing manufacturing space, and the addition of one level(142 parking spaces) to the parking garage considered under AD 513, will not substantially affect state highway traffic operations in the area. Chief John P. Lynch , the Local Traffic Authority representative for the Town of Wilton, concurred with these findings on April 10, 2018. Consequently, on June 5, 2018 an Administrative Decision was rendered that formal action by the Office of the State Traffic Administration (OSTA) under Section 14-311 of the General Statutes of Connecticut regarding the proposed redevelopment is not required. The decision was based, in part, on the enclosed plan prepared by F.A. Hesketh and Associates entitled "OSTA Master Plan prepared for ASML us, Inc.; 77 Danbury Road; Wilton, Connecticut"," Sheet Number 1 of 1, dated February 19, 2018 and last revised May 28, 2018.

The Administrative Decision shall not be effective unless:

1. A copy of this letter has been filed on the municipal land records, in accordance with the enclosed procedures, **and this office has received a copy of the recorded letter, and**
2. The 29,728 square foot expansion as represented on the referenced plan receives local planning and zoning approval within two (2) years of the date of this letter, **and this office receives written confirmation from the Town regarding such approval.**

Upon satisfaction of item 1 above, this office would have no objection to the issuance of any building or foundation permits associated with additional garage level or the 44,731 square foot building expansion. Upon satisfaction of both items 1 and 2 this office would have no objection to the issuance of building or foundation permits for the additional 29,278 square foot building expansion. The Department's District 3 Maintenance Office at 140 Pond Lily Avenue, New Haven, CT 06515 (Attn: Mr. Daniel A. DiReinzo, (203) 389-3002) must be contacted prior to the start of construction to determine if an encroachment permit will be needed for any incidental work within the State right-of-way.

Subsequent to the expansion, the allowable overall development within the OSTA certifiable area will consist of 378,576 square feet of manufacturing space with 1222 parking spaces. Any future expansion or proposed land use changes shall only be allowed subject to review by this office and, if necessary, formal OSTA action.

Sincerely,

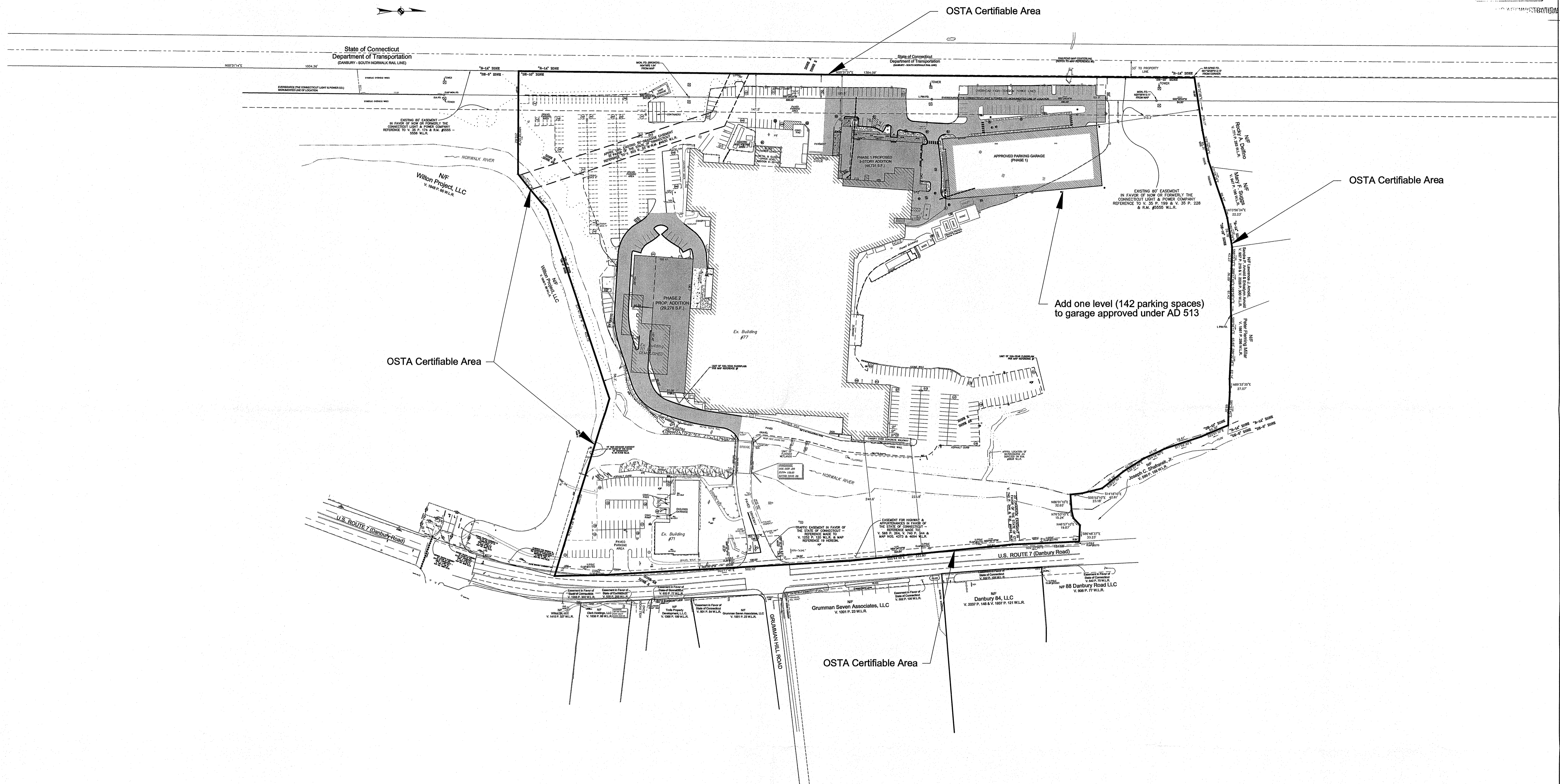


David A. Sawicki
Executive Director
Office of the State Traffic Administration

Enclosures

Copy to: John P. Lynch – john.lynch@wiltonct.org -plan attached
Robert Root – robert.root@wiltonct.org-plan attached
Ervin Ozolins- Ervins.Ozolins@asml.com plan attached
Scott F. Hesketh, P.E. – shesketh@fahesketh.com – original to be mailed

PLAN APPROVED
JUN 0 5 2018



PLAN APPROVED
JUN 0 5 2018
STATE TRAFFIC ADMINISTRATION

LAND USE TABLE			
LAND USE	DEVELOPMENT ALLOWED UNDER CERT. 347-C & AD 513	EXISTING DEVELOPMENT	DEVELOPMENT ALLOWED UNDER PROPOSED A.D.
MANUFACTURING	314,916 S.F.	314,916 S.F.	+74,069 S.F.
			-10,349 S.F.
PARKING	1,080 SPACES	1,080 SPACES	+142 SPACES
			378,576 S.F.

Revisions:

No.	Date	Description
1	5-07-18	OSTA Comments 5-07-18
2	5-28-18	OSTA Comments 5-28-18

OSTA MASTER PLAN
PREPARED FOR
ASML US, INC.
77 DANBURY ROAD
WILTON, CONNECTICUT
Date: 02/19/18 Drawn by: CAD Job no: 17166
Checked by: SFH Sheet no: 1 OF 1
Scale: 1" = 100'

**OSTA
MP-1**

FAH
F. A. Hesketh & Associates, Inc.
6 Creamery Brook, East Granby, CT 06026
Phone (860) 653-8000 Fax (860) 844-8600
www.fahsketh.com · mail@fahsketh.com
Civil & Traffic Engineers · Surveyors · Planners · Landscape Architects



STATE OF CONNECTICUT
 OFFICE OF THE STATE TRAFFIC ADMINISTRATION
 DEPARTMENT OF TRANSPORTATION
 2800 BERLIN TURNPIKE, P.O. BOX 317546
 NEWINGTON, CT 06131-7546
 Email: DOT.OSTA@ct.gov



**MAJOR TRAFFIC GENERATOR
 ADMINISTRATIVE DECISION REQUEST/CHECKLIST**

(To be used where no State highway or State railroad right-of-way mitigation/safety measures are proposed)

Date: 8/31/2023

(PLEASE FILL OUT COMPLETELY)

DEVELOPMENT INFORMATION

Name of Facility: ASML - MICC & Cafeteria Expansion

Location (complete street address; if none, provide map/block/lot information): 77 Danbury Road (U.S. Route 7)

Town and Zip Code: Wilton 06897

Proposed Gross Floor Area (GSF) and Land Use of Expansion: +187,415 SF

Proposed GSF and Land Use of Land Use Change (i.e. xx retail to xx office, etc.): N/A

Total Gross Floor Area Categorized By Land Use: 555,678 SF of Manufacturing Office Uses

Existing Parking Spaces 1156 Parking Spaces Added by Expansion/Land Use Change: -255

Total Parking Spaces: 901 Number Designated Handicapped: 27

LAND OWNER INFORMATION

Corporate Name*: ASML US, LLC

Contact for Written Correspondence: Patrick van den Bogaard

Address: 77 Danbury Road

Town, State & Zip Code: Wilton, CT 06897

Phone: 203-451-1839

Land Owner's E-Mail: patrick.van.den.bogaard@asml.com

CONSULTANT INFORMATION

Firm: Tighe & Bond

Name: Craig D. Yannes, PE, PTOE, RSP1

Address: 1000 Bridgeport Avenue, 3rd Floor

Town, State and Zip Code: Shelton, CT 06484

Phone: 203-712-1114

E-Mail: CDYannes@tighebond.com

* As noted in the municipal land records. If there is more than one land owner, a separate form shall be provided for each.

ADMINISTRATIVE DECISION SUBMISSION GUIDELINES

- All of the information listed below shall be submitted for the review of new major traffic generators that do not substantially affect the State highway system or a railroad crossing within the State railroad right-of-way (i.e. mitigation or safety measures regarding State highways or a railroad crossing within the State railroad right-of-way are not necessary to accommodate traffic generated by the new major traffic generator).
- The information is also required for the review of proposed expansions or land use changes to existing major traffic generators that predate the Office of the State Traffic Administration (OSTA) certification process and those that were previously certified that do not substantially affect the state highway system.
- The OSTA considers all lots created from the subdivision of a single larger lot as being used for a single development purpose and thus the subdivision will be subject to OSTA regulation under 14-311c if the sum of the full build development on all the lots will equal or exceed the OSTA MTG square footage or parking triggers. If P&Z approval is not granted for a full build development, then the municipal planner must be consulted to determine what a reasonable full build out is for the vacant lots. In lieu of P&Z approval for the vacant lots, the municipal planner will need to confirm that what is submitted to OSTA represents a reasonable full build. The traffic impact study must be based on this full build for the subdivision.

If improvements or changes to the State highway system or a railroad crossing within the State railroad right-of-way are being proposed to mitigate the impact of the traffic associated with a new major traffic generator or a proposed expansion or land use change to an existing major traffic generator then the development will be considered to have a substantial impact on the state highway system. **DO NOT USE THIS CHECKLIST.** Formal OSTA action will be required and a major traffic generator certificate application and the information on its associated checklist must be submitted.

An electronic copy of the information checked-off below plus any additional information deemed appropriate to the development shall be submitted to the [“DOT OSTA Major Traffic Generator Submission”](#) SharePoint page. All required information shall be electronically submitted in PDF format, and if applicable, any traffic/drainage related files should be provided in the original analysis data format. Electronic submissions should follow OSTA filing naming conventions provided at the end of the document. An additional set of submittals should be forwarded by the developer to the Local Traffic Authority of each involved municipality.

Consultant engineers may request access to the SharePoint page by e-mailing DOT.OSTA@ct.gov.

The request will not be considered complete, and the review of the proposed development will not begin until all applicable information is received.



I. Site Plan

An overall site plan showing the entire OSTA certifiable area, including the Administrative Decision (AD) review area uniquely identified as such, shall be provided, sized to fit on a single 2' x 3' plan sheet, that identifies:

- All buildings (including gross floor area and land use for each);
- Parking spaces;
- Property lines;
- Internal connections to abutting properties;
- Names of all property owners (including the abutting property owners);
- The complete street address(es) for all properties within the certifiable area. If street address information is not available, show map / block / lot information. An aerial photograph may be used; and,
- Intersection Sight Distances (ISD) that will be provided and maintained for any existing and proposed drives onto a State highway that were not part of a previous OSTA certificate or AD. The ISD shall be shown directly on the drives out to its full extent.

The entire OSTA certifiable area shall include all parcels whose traffic must use the review development's access drive(s) and shall be distinguishable by a distinct peripheral property line with the call out "OSTA Certifiable Area". Refer to the [OSTA website](#) to view sample overall site plans.



If any State highway driveway ISD encroaches on property not owned by the AD developer, provide written confirmation from the adjacent property owner that they are willing to grant the easement. The AD will contain a stipulation that no building or foundation permit shall be granted until the sightline easement has been granted.



II. Site Location Plan - show State highways, municipal roads, transit networks (include train stations, bus stops), and any bicycle or pedestrian facilities/routes in the vicinity of the site.



III. Traffic Information – Contact the CTDOT Trip Analysis Unit at Gary.Sojka@ct.gov with any questions regarding trip generation or distribution. The amount of information required will be based on the expected number of new trips associated with the development / expansion / land use change.



If 50 or fewer new trips, submit only information noted in Item D-1 below.



If more than 50 but less than 100 new trips, submit all information noted under Item C below as well as the information noted in Item D-1 and D-2 for all site driveways.



If approximately 100 or more new trips, or 50 or more new trips to an individual intersection left turn movement, then submit all information noted under Items A through G below for site access driveways and any other intersections where approximately 100 or more new trips are being added, or 50 or more new trips to an individual intersection left turn movement.

A. Existing Traffic Volumes

- 1. Flow diagrams showing the appropriate existing peak hour traffic volumes for the proposed development, inclusive of all site drives. Diagrams must indicate date of submission and date of existing traffic count.
- 2. Identify the hours of the day, day of week and how the peak hours were determined in relation to the proposed development.
 - The weekday morning / afternoon and weekend midday peak hours are the most typical time periods analyzed. Depending on the type of proposed development, all or some combination of these hours will be required. In some cases, the peak hour of the generator may be needed (e.g. movie theater – evenings, school – dismissal peak).
 - Approach volumes must be totaled and checked for accuracy before submission. Traffic volumes between intersections shall be balanced or an explanation for the break in traffic flow provided.
 - Areas experiencing a significant recreational peak (i.e. theaters, sporting events, concerts, etc.) shall be counted during the peak season. When this is not possible, traffic volumes may be seasonally adjusted to reflect the heaviest peak hour volume.

B. Background Traffic

- 1. Identify other developments, including those previously approved by the OSTA, or pending, but not yet operational and include their volume in the background traffic.
- 2. Identify any annual growth or seasonal adjustment factors used and justify their selection.
- 3. Provide flow diagrams showing the appropriate background peak hour traffic volumes for the proposed development as determined in the existing condition. Diagrams must indicate date of submission and date of background traffic. Background traffic flow diagrams must be consistent with existing traffic diagrams.
 - Approach volumes must be totaled and checked for accuracy before submission. Traffic volumes between intersections shall be balanced or an explanation for the break in traffic flow provided.
 - If there are overlapping intersections with a recently approved MTG, the combined traffic figures from the prior MTG shall be used as base traffic for the new project.

C. Trip Distribution

1. Provide flow diagrams showing the percent distribution of generated traffic, by direction, for each major road leading to the area and at all access points. Diagrams must include date of submission. Flow diagrams shall be consistent with the peak hours analyzed in the existing and background traffic conditions.
2. Provide a description of the methodology used to develop the trip distribution. Any differences in the approach and departure distribution shall be explained.

D. Site Generated Traffic / Combined Traffic Volumes

1. Submit a narrative regarding logic used for the trip generation.
2. Provide flow diagrams for the applicable peak hour(s) for the generated traffic volumes.
3. Provide flow diagrams for the applicable peak hour(s) for the combined traffic volumes (the sum of the background and generated traffic volumes). Diagrams must include date of submission and date of combined traffic.
- In most cases, trip generation data derived from the latest ITE Trip Generation Report will be acceptable. Approved CTDOT studies are currently utilized to derive trip generation data for super food stores and Dunkin' Donut's locations. Other studies will be taken into consideration but will be subject to approval.
 - Out parcels contained within retail developments shall utilize the most specific land use code available via ITE or other acceptable study data. For restaurants, indicate whether it is a fast-food or sit-down service and if a drive-up window is proposed.
 - Trip generation shall reflect a successful day, not abnormally high-peak periods such as holiday weekends.
 - For retail developments, Friday afternoon and Saturday midday peak are required study periods. For apartments, condominiums, hotels and motels, the number of 1-, 2- and 3-bedroom units, and the square foot area of each type of unit shall be noted. For hotels and motels, list the number of rooms.

E. Capacity Analysis, including all Synchro (Trafficware) files, input data, supportive computation sheets and/or charts shall be submitted. The format for the submitted analysis shall be in accordance with Transportation Research Board's Highway Capacity Manual (HCM 2016 or later). Inquiries about the format of the analysis may be directed to the Division of Traffic Engineering at DOT.TrafficEngineering@ct.gov. Analysis should be provided for intersections, interchanges, or expressways for the following time periods and traffic conditions:

1. Background Traffic and Combined Traffic – Analyze same peak hours as shown in the traffic flow diagrams.
2. Morning and afternoon peak hour of the generator, if different than the morning and afternoon peak hour of the adjacent highway.

F. Storage / Queue Analysis - The submission of a storage and / or queue analysis supporting the background and combined traffic capacity analysis provided under Sections III-E.1 and III-E.2 is usually necessary under the following conditions:

- 1. When exclusive turning lanes exist, there is potential through lane blockage of turn lane or visa verse.
- 2. When there is a potential for vehicular backups affecting operation of nearby intersections, major drives and / or nearby rail crossings.
- 3. When there is limited stopping sight distance on a signalized approach.
- 4. Off-ramp approaches to signalized intersections.
- 5. Other conditions may be identified during the review by the engineer which would require a storage / queue analysis.

G. Provide [UConn Crash Data Repository](#) and/or local police department information on the latest available three years of crash experience. A narrative for all existing site drives and off-site impacted locations on State highways, identifying any potential crash patterns, is required. A table of data or collision diagram may be used to show the crash history.

IV. Complete Streets Checklist (review of Pedestrian & Non-Motorized Road User Facilities)

- The following items shall be submitted for review:
- a. The anticipated pedestrian and/or bicycle travel generation to/from the proposed development.
 - b. A description of all pedestrian and bicycle accommodation features proposed. If no features are proposed, an explanation as to what features were considered and why they are not being pursued shall be provided.
 - c. Information on existing sidewalks and paths in the area and information on any sidewalk requirements.

For all public and private developments: Does the financing include State/Federal funding?
 Yes No

If “Yes”, then the [Connecticut Department of Transportation Bicycle and Pedestrian Travel Needs Assessment Form \(BPTNA\)](#) shall be completed and submitted.

V. Drainage Requirements

For developments not previously certified, that do not have frontage on a state highway or state railroad, no drainage information will be required. For those that do have frontage on a state highway, the amount of information required will be based on an assessment of the drainage impact to the state highway system associated with the development / expansion / land use change. See attached form “*OSTA Administrative Decision Request – Drainage*” to determine if this project will qualify for an exemption or if further drainage information as shown below will be required.

A. Drainage Report - A well-documented Drainage Report will facilitate the drainage review process. Failure to provide the Drainage Report will delay the review and approval process until the document is received. Inquiries regarding submissions may be directed to the Division of Bridges - Hydraulics and Drainage, at Michael.Hogan@ct.gov.

1. Locate the MTG site on an 8.5" x 11" excerpt of a USGS topographic quadrangle map (Scale 1:24,000). Indicate the quadrangle name and number on this plan.

2. Locate the MTG site on the relevant portion of the FEMA Flood Insurance Rate Map (FIRM) and Floodway Map. Indicate the panel number, scale and effective date of the map(s).

3. A detailed narrative specifically relating the proposed drainage design to existing State drainage facilities, (roadways, railroads, etc.), describing any potential impacts consequent to the proposed construction is required. The narrative must contain a definitive conclusion on whether there is any drainage impact to State facilities. The narrative should also include a discussion of existing and proposed drainage patterns.

It is desirable to maintain the existing drainage patterns. Diversions of storm runoff to State drainage facilities are generally not acceptable unless appropriate drainage rights are obtained from all affected downstream owners.

4. Contour plans depicting tributary drainage areas both within and, where applicable, beyond the MTG boundaries are required.

In some cases, the entire MTG site may drain away from the State transportation facility. In this instance, the report narrative identified in Item No. 3 above should so indicate. This will negate the requirement for drainage design computations; however, contour plans are still needed to verify the drainage patterns.

5. Submit drainage layout and details of existing and proposed storm sewer as well as hydraulic structure designs and their relationships to any adjacent State drainage facilities.

All proposed outlets connecting or discharging to State maintained facilities must be clearly indicated. Furthermore, existing State maintained drainage facilities that are located adjacent to development property and / or are potentially affected by the proposed construction must be shown on the plans. Copies of "as-built" plans showing the location of these State systems are acceptable providing that the appropriate pipe sizes, type of pipe, invert elevations, drainage structure types and top of frame elevations are shown, where required.

- 6. Existing and proposed drainage rights and easements of the MTG site and contiguous State properties must be identified on the plans and described in the drainage report narrative. If there are no existing drainage rights or easements recorded for the MTG or contiguous State property, the drainage report narrative must indicate same.
- 7. For development sites that:
 - connect or discharge to existing State drainage facilities – a., b., and c. below are required.
 - receive discharge from existing State drainage facilities – a. and b. below are required.
 - propose pavement widening on State roadways – a., b. and c. below are required.
 - a. Supporting computations and electronic data files for gutter flow, storm sewer, hydraulic grade line (water surface profile) and outlet protection, as appropriate for the development.
 - b. **An analysis, including computations and electronic data files for gutter flow, storm sewer, hydraulic grade line (water surface profile) and outlet protection, as appropriate for the State facilities, shall be performed to its terminus or to a distinct hydraulic control to verify its adequacy. This analysis must consider the relative times-to-peak of the site and State maintained drainage systems and is required even if a reduction in peak flows from the site itself is anticipated.**
 - c. A visual inspection of the existing State drainage facilities (pipes and structures) shall be performed to verify its condition and documented. The condition of existing ditches and outlets of the State drainage systems shall also be field inspected to verify their stability, need for cleaning, and to ensure no erosion or sediment problems exist.
- 8. Design plans and computations (including electronic data files) for any proposed storm water detention (above or below grade), retention or infiltration facilities. These plans must indicate sizes, dimensions, elevations and construction materials for the facility and its proposed outlet. At a minimum, design requirements must meet the standards set forth in the Department's Drainage Manual.
 - Emergency overflows shall not be directed towards State infrastructures.
 - Where failure of these facilities could impact adjoining State systems or structures, an Inspection / Maintenance plan must be prepared by the developer. This plan, together with any formal agreements or related documents, are normally filed in the municipal land records.
- 9. Indicate the location and type of any features included in the proposed drainage design to treat storm runoff and thereby enhance storm water quality. Treatment shall be accomplished prior to discharging to State drainage systems.
- 10. For sites which contain regulated floodplain or floodway areas as defined by the relevant Flood Insurance Study documents, within their boundaries, the applicant must depict the limits of same on the development site plan(s). Additionally, any proposed encroachments within these regulated areas must be evaluated, at least in a qualitative sense, for potential impacts

upon upstream or downstream State facilities. Ultimately, a detailed hydraulic evaluation of floodplain or floodway encroachments may be required.

VI. Planning and / or Zoning Approval

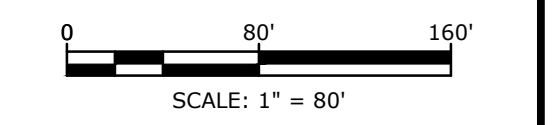
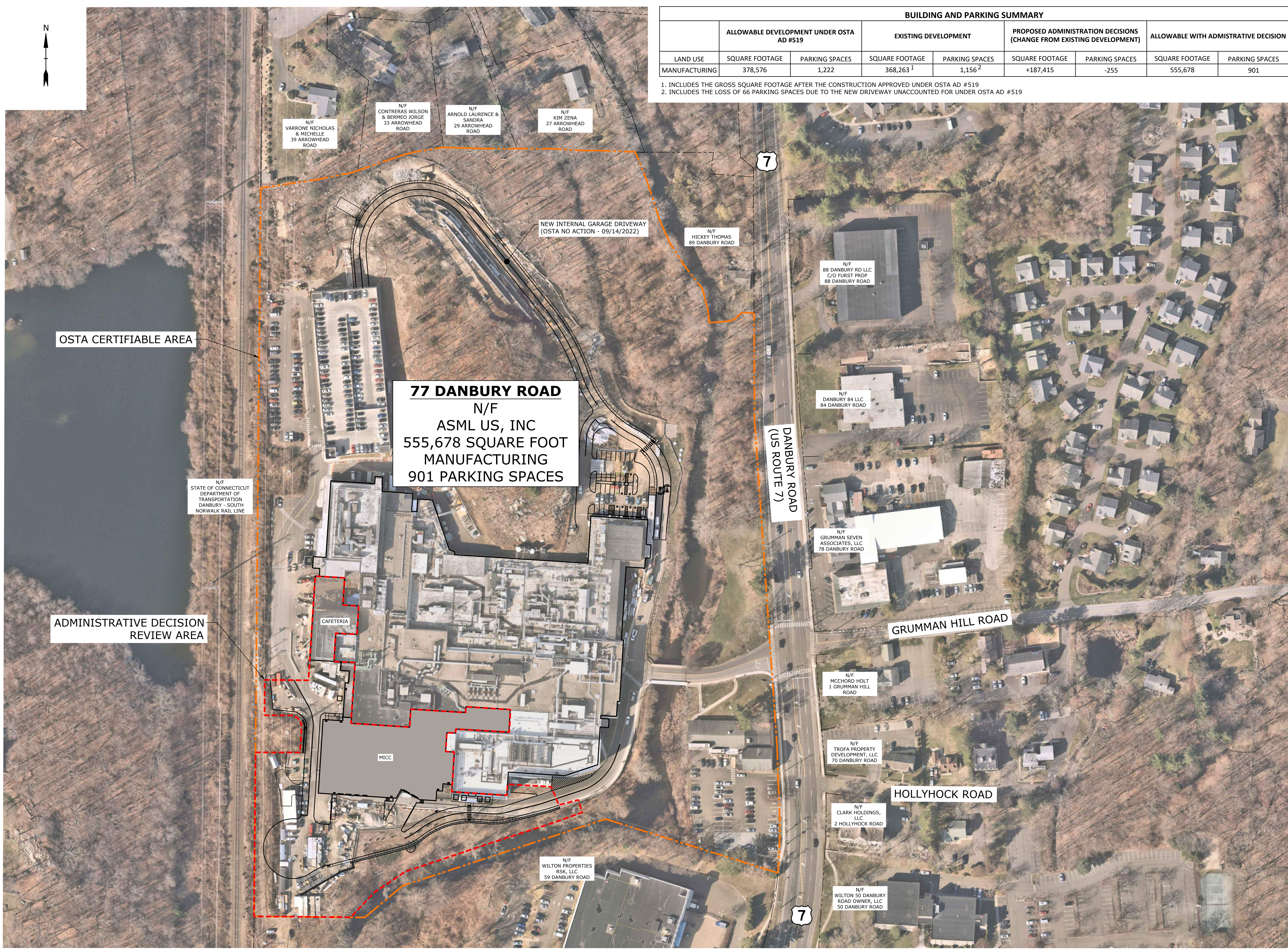
- Provide a copy of local Planning and/or Zoning approval and date received, or documentation that it is not required. **If the Planning and/or Zoning approval does not specify the size of the development, land use and parking which has been approved, or does not reference a site plan with the same information, then written confirmation (e-mail will suffice) from the Planning and/or Zoning Office will also be required, specifically indicating what has been approved.**
- If approval is required, the municipality must be in receipt of an appropriate application prior to the submission of the AD request to the OSTA. If the approval has not been granted, a statement indicating the anticipated schedule for obtaining Planning and/or Zoning approval must be supplied. Upon approval, a copy thereof must be submitted (e-mail will suffice).

VII. Local Traffic Authority Concurrence

- Written confirmation from the Local Traffic Authority indicating concurrence with the assessment of no substantial impact to the state highway system contingent on the Department's agreement with said assessment must be provided (e-mail will suffice).

BUILDING AND PARKING SUMMARY								
LAND USE	ALLOWABLE DEVELOPMENT UNDER OSTA AD #519		EXISTING DEVELOPMENT		PROPOSED ADMINISTRATION DECISIONS (CHANGE FROM EXISTING DEVELOPMENT)		ALLOWABLE WITH ADMINISTRATIVE DECISION	
	SQUARE FOOTAGE	PARKING SPACES	SQUARE FOOTAGE	PARKING SPACES	SQUARE FOOTAGE	PARKING SPACES	SQUARE FOOTAGE	PARKING SPACES
MANUFACTURING	378,576	1,222	368,263 ¹	1,156 ²	+187,415	-255	555,678	901

1. INCLUDES THE GROSS SQUARE FOOTAGE AFTER THE CONSTRUCTION APPROVED UNDER OSTA AD #519
 2. INCLUDES THE LOSS OF 66 PARKING SPACES DUE TO THE NEW DRIVEWAY UNACCOUNTED FOR UNDER OSTA AD #519



MICC & CAFETERIA EXPANSION

ASML US, INC

Wilton, CT

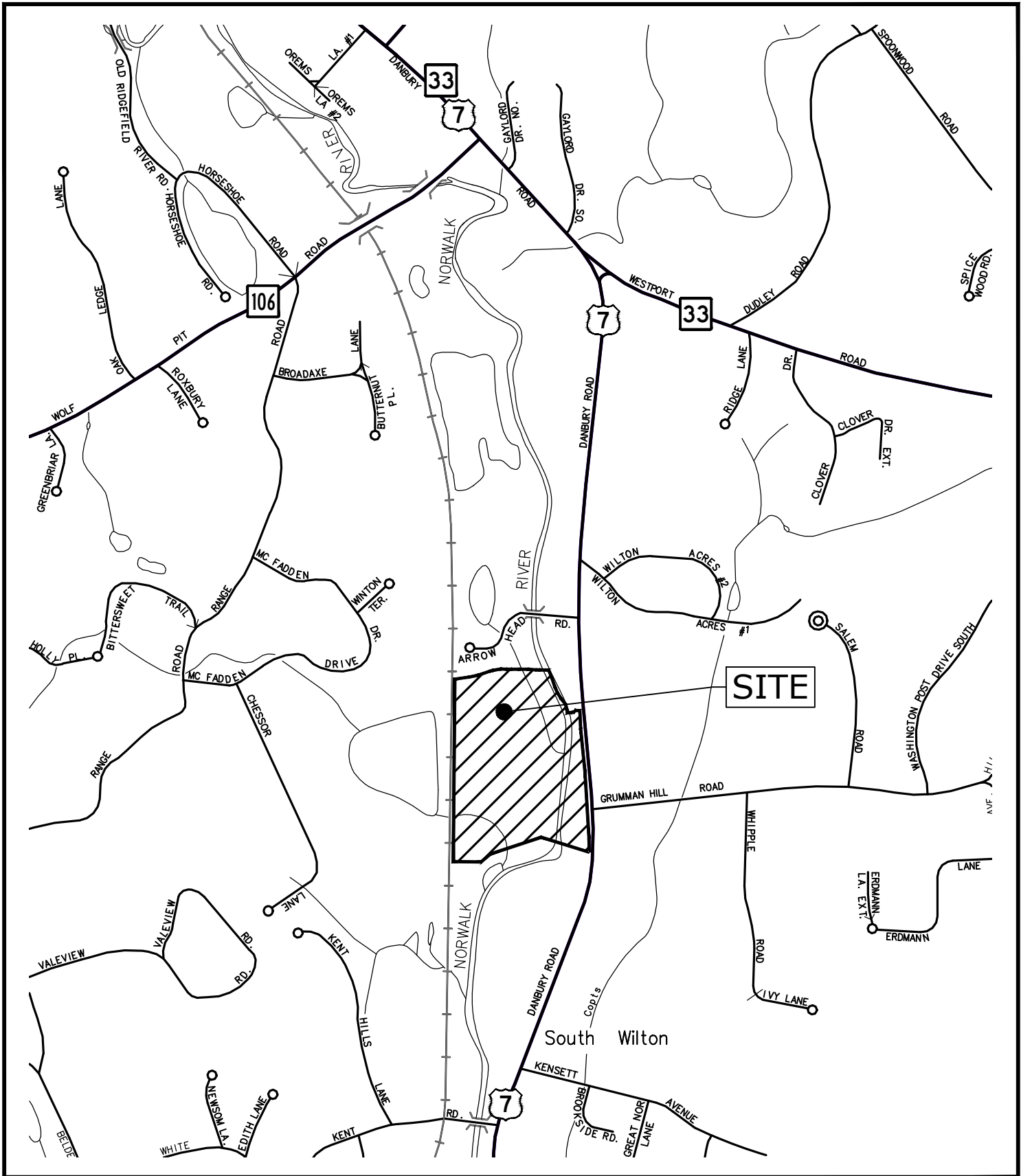
MARK	DATE	DESCRIPTION

OSTA
 OVERALL SITE PLAN

SCALE: 1" = 80'

OSP-1

Aug 25, 2023-11:22am Plotted By: DFitzgerald
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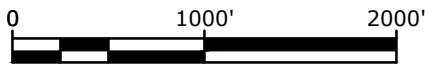
ASML - MICC EXPANSION
WILTON, CT

SITE LOCATION MAP



1" = 1000'

FIGURE 1



SCALE: 1" = 1000'



Traffic Information (Checklist Item III)

Study Area Intersection & Roadways

The 77 Danbury Road property houses ASML's main Wilton campus. The property is bordered by Danbury Road (U.S. Route 7) to the east, the Metro North Danbury Branch Line railroad to the west, the Norwalk River to the south, and residential properties to the north. The property is accessed via a driveway on Danbury Road located near the south end of the site opposite Grumman Hill Road. A Site Location Map depicting the property and the surrounding area is provided in Figure 1.

The signalized intersection of Danbury Road (U.S. Route 7) at 77 Danbury Road and Grumman Hill Road comprises the study area. The Danbury Road northbound and southbound approaches each provide a shared through right, a through lane, and left turn lane. The 77 Danbury Road approach contains a shared-through left and right turn lane while the Grumman Hill Road approach has one lane for all movements. The signal has protected-permitted left turns for Danbury Road, a single phase for the 77 Danbury Road and Grumman Hill Road approaches, and an exclusive pedestrian phase allows for pedestrian movements across all legs of the intersection. Further details about Danbury Road and Grumman Hill Road are provided in the following paragraphs.

Danbury Road (U.S. Route 7) runs north-south and is classified as a Principal Arterial by the Connecticut Department of Transportation (CTDOT) and the Wilton Plan of Conservation and Development (POCD). Danbury Road serves as the main corridor within Wilton and connects Interstate 95 in Norwalk to the south with Interstate 84 in Danbury to the north, where it continues north beyond the Connecticut State Line. The roadway has a four-lane cross-section with additional left-turn lanes at the 77 Danbury Road Site Driveway and Grumman Hill Road intersection. In the vicinity of the site, lane widths range from 10 to 12 feet and shoulder widths range from 3 to 5 feet. Sidewalk is provided along both sides of the roadway south of the 77 Danbury Road Site Driveway and Grumman Hill Road intersection and on the east side to the north of the intersection. The posted speed limit on Danbury Road is 40 miles per hour within the study area.

Grumman Hill Road, located directly across from the site driveway, is a local road as classified by CTDOT and the Wilton POCD. It runs from the Danbury Road (U.S. Route 7) intersection with the site driveway to the east to Middlebrook Farm Road to the west, which connects to Ridgefield Road (State Route 33). The roadway provides access to the area's schools, the school bus depot, the Wilton Parks & Recreation Department, and private residences. It typically has a two-lane cross section with 11 to 12-foot travel lanes with no shoulders. A speed limit of 25 miles per hour is set on School Road.

Collision History

Vehicle collision history was collected from the Connecticut Crash Data Repository at the study area intersection of Danbury Road with the Site Driveway and School Road between January 1, 2017 and June 2023. These five plus years of data were reviewed to assess pre-pandemic conditions through the most recent available data. Table 1 provides a summary of the collision types and severity.

As shown in Table 1, there were 57 motor vehicle collisions reported within the period analyzed. The most frequent type of collision was rear-end, which accounted for 26 crashes (45.6%). Angle was the second most common at 21 collisions (36.8%). The remaining ten

crashes were same-direction sideswipes. Throughout the period analyzed, there were no fatalities or collisions reporting serious injuries. All collisions resulted in minor injuries or property damage only. There were no collisions reported with bicyclists or pedestrians.

A significant and/or abnormal pattern of collisions was not identified from the analysis. The proposed project and site-generated traffic are not anticipated to negatively impact existing collision patterns or roadway safety at the study intersection.

Traffic Volumes

The study analyses focus on the weekday morning (7:00 AM to 9:00 AM) and weekday afternoon peak periods when commuter and/or site-generated traffic volumes are typically at their highest levels. Existing traffic volumes were collected via a 24-hour manual intersection turning movement counts (TMCs) conducted at the study area intersection. The data showed that the weekday morning and afternoon peak hours occurred from 7:30am to 8:30am and 4:45pm to 5:45pm, respectively. In addition, there was an early afternoon peak from 2:15pm to 3:15pm that coincides with ASML's manufacturing shift change. The 2023 Existing Traffic Volumes for the weekday morning, weekday afternoon shift change, and weekday afternoon peaks are presented in Figures 2 through 4, respectively. Raw TMC data is included for reference.

Site-Generated Traffic

The MICC expansion is not expected to result in a significant increase in site traffic. The MICC project aims to expand manufacturing operations within the expansion and the existing building that will require existing services to be reduced and/or relocated. In anticipation of these revisions, ASML has begun and will continue to transition existing employees from 77 Danbury Road to other facilities. By year end, up to 600 employees are expected to be relocated to other facilities with more expected as the MICC expansion progresses.

Despite the expected offset of site-generated traffic, analyses with increased traffic volumes were undertaken to understand the ability of the Danbury Road at ASML Driveway and Grumman Hill Road intersection to accommodate additional traffic. To account for general traffic growth in the area, the 2023 Existing Traffic Volumes were projected to the 2025 project completion year using a 0.75% annual growth rate. Utilizing these 2025 projected volumes as a baseline, iterative analyses were then performed to determine the site traffic increase that the study area intersection could accommodate while maintaining acceptable operations. Based on the analyses summarized in the following section, it was determined that the intersection can accommodate approximately 60 percent more site traffic than 2023 Existing Conditions. The 60 percent increase equates to approximately 168 weekday morning, 221 weekday afternoon shift change, and 128 weekday afternoon additional peak hour trips. The 2025 Future Traffic Volumes, which include the existing volumes plus the annual traffic growth and 60 percent site traffic increase, are presented in Figures 5 through 7 for the weekday morning, afternoon shift change, and afternoon peaks, respectively.

For comparative purposes, site-generated traffic estimates for the MICC expansion were calculated based upon the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021. Based on ITE data, the 167,036 square foot manufacturing space expansion is expected to generate approximately 111 weekday morning, 136 weekday afternoon shift change, and 124 weekday afternoon peak hour trips, all of which are lower than the estimated 60% increase. The site-generated traffic summary is outlined in tabular format in Table 2.

Traffic Analyses

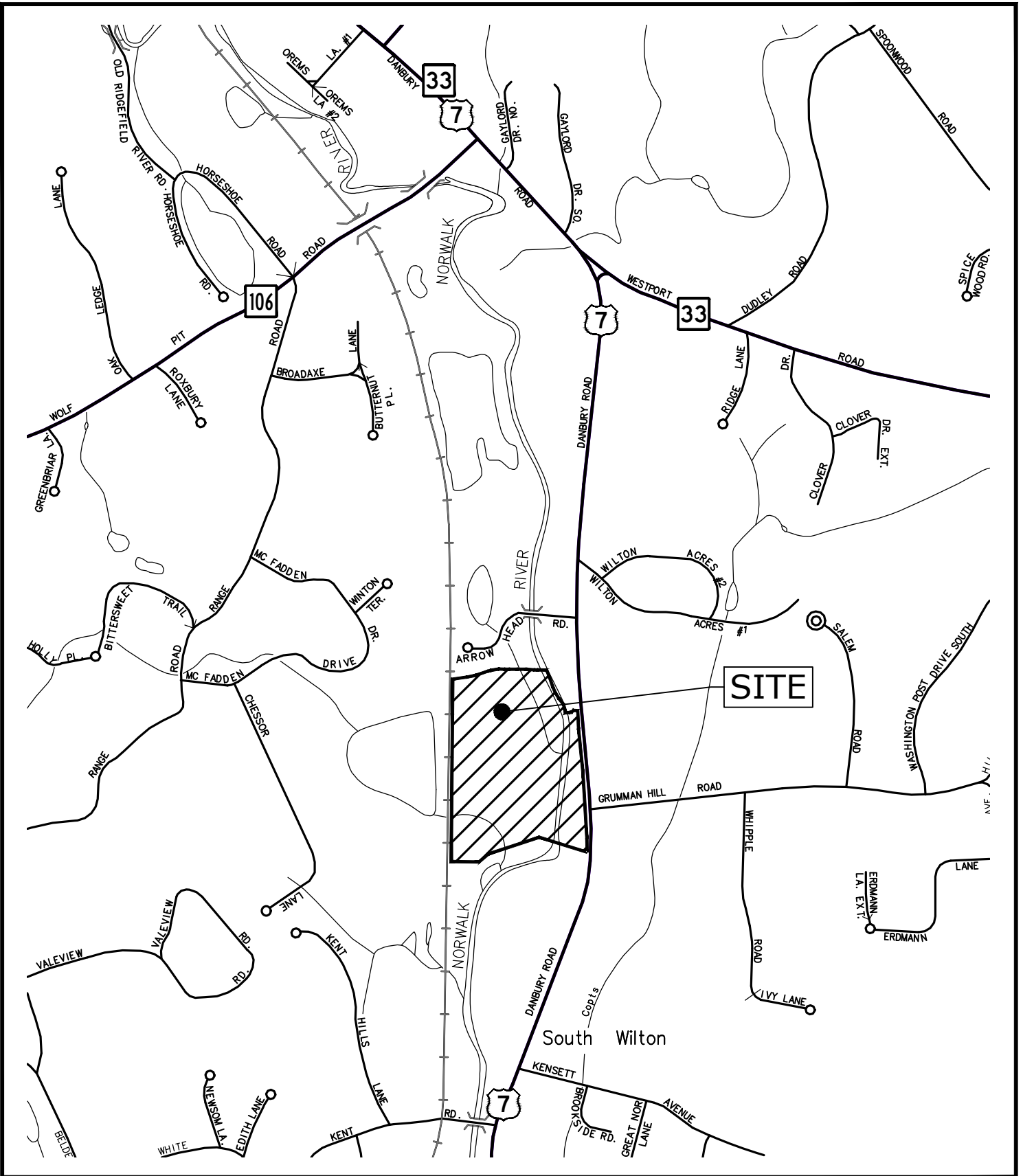
Traffic capacity and queue analyses were performed at the study intersection for the 2023 Existing and 2025 Future conditions during the weekday morning, afternoon shift change and afternoon commuter peak hours using Trafficware Synchro Studio 11 – Traffic Analysis Software. The software conducts the analyses based on the methodology provided in the *Highway Capacity Manual, 6th Edition*. Tables 3 and 4 summarize the capacity and queue analyses results, respectively. Capacity analyses worksheets with full inputs, settings, and results are also attached for reference.

As described in the previous section, an iterative analysis was performed to determine the increased traffic that the Danbury Road at ASML Driveway and Grumman Hill Road. As shown in Table 3, the intersection operates acceptably with overall LOS C or better and movements operating at LOS D or better during all three peak hours. Queues remain within available storage with increases largely less than two vehicles (50 feet), except for the northbound left movement during the morning peak hour which extends past available storage due to the proximity of the opposing southbound left turn lane to Hollyhock Road. The adjacent northbound through lane has sufficient space to store the additional left turning vehicles.

Enclosures: Site Location Map (Figure 1)
Traffic Volumes (Figures 2 through 7)
Collision History (Table 1)
Site-Generated Traffic Summary (Table 2)
Capacity Analysis Summary Tables (Tables 3 and 4)
Capacity Analyses Worksheets
Traffic Count Data (Collected 11/29/2022)

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Jul 05, 2023-10:05am Plotted By: KHuang
Tighe & Bond, Inc. J:\A\A0969 ASML\020 Campus Master Plan\Drawings\AutoCAD\Figures\Site Location Map.dwg



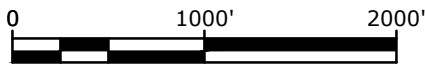
ASML - MICC & CAFETERIA EXPANSION
77 DANBURY ROAD, CT

SITE LOCATION MAP



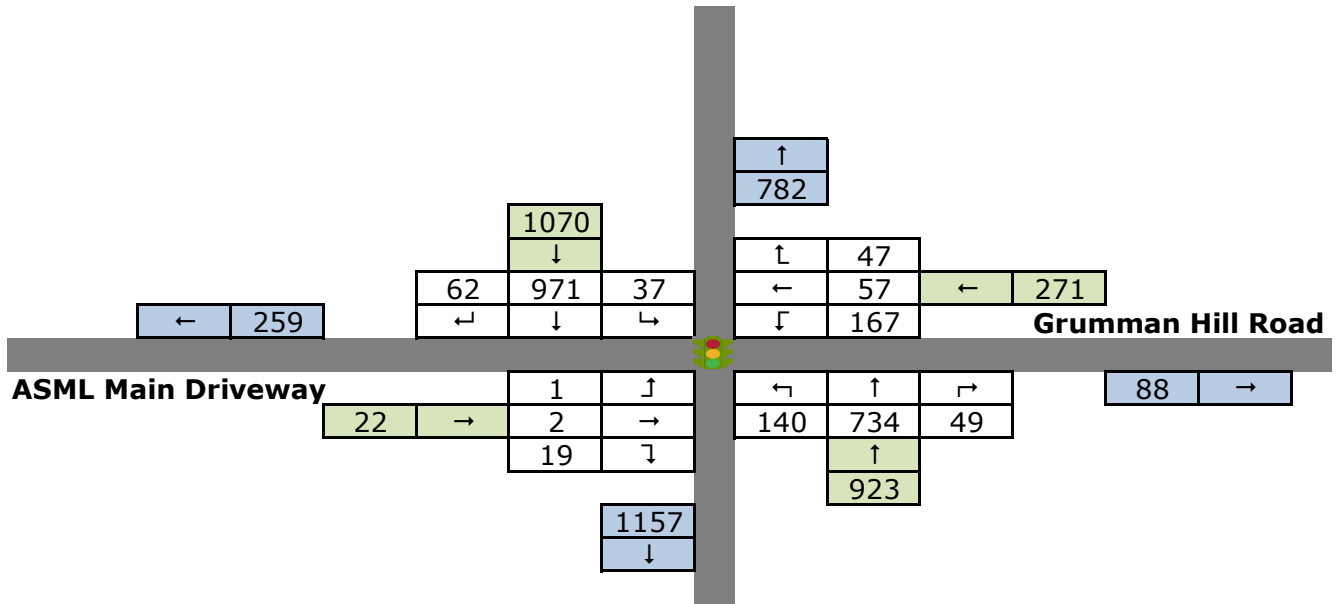
1" = 1000'

FIGURE 1



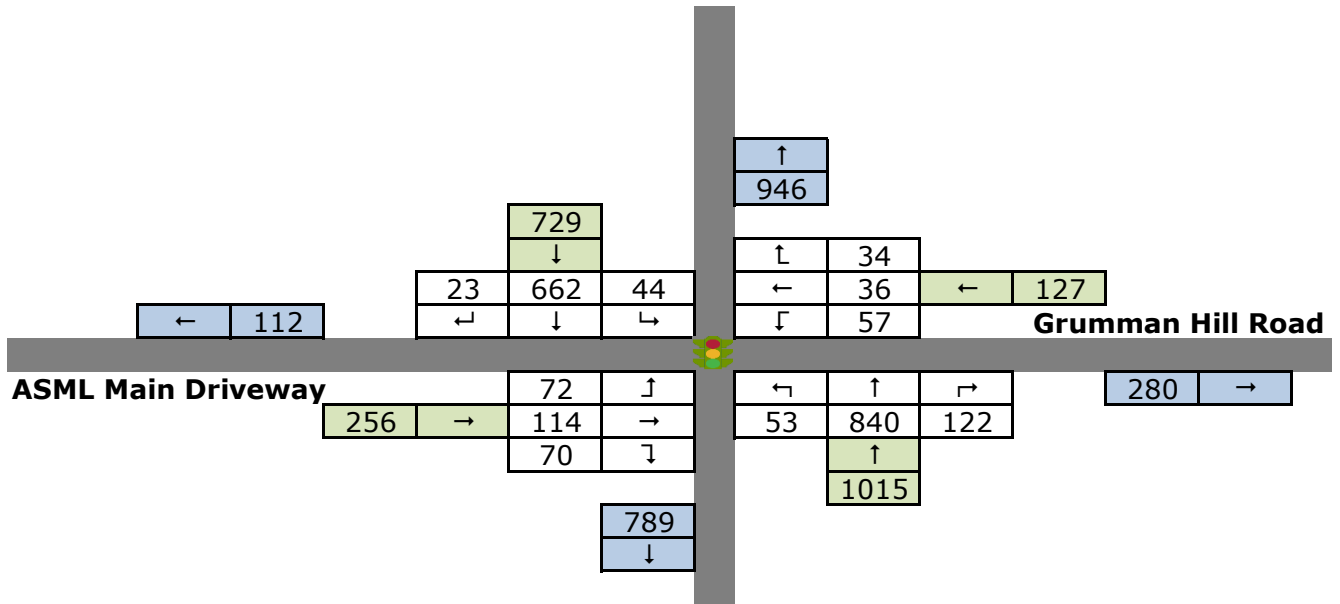
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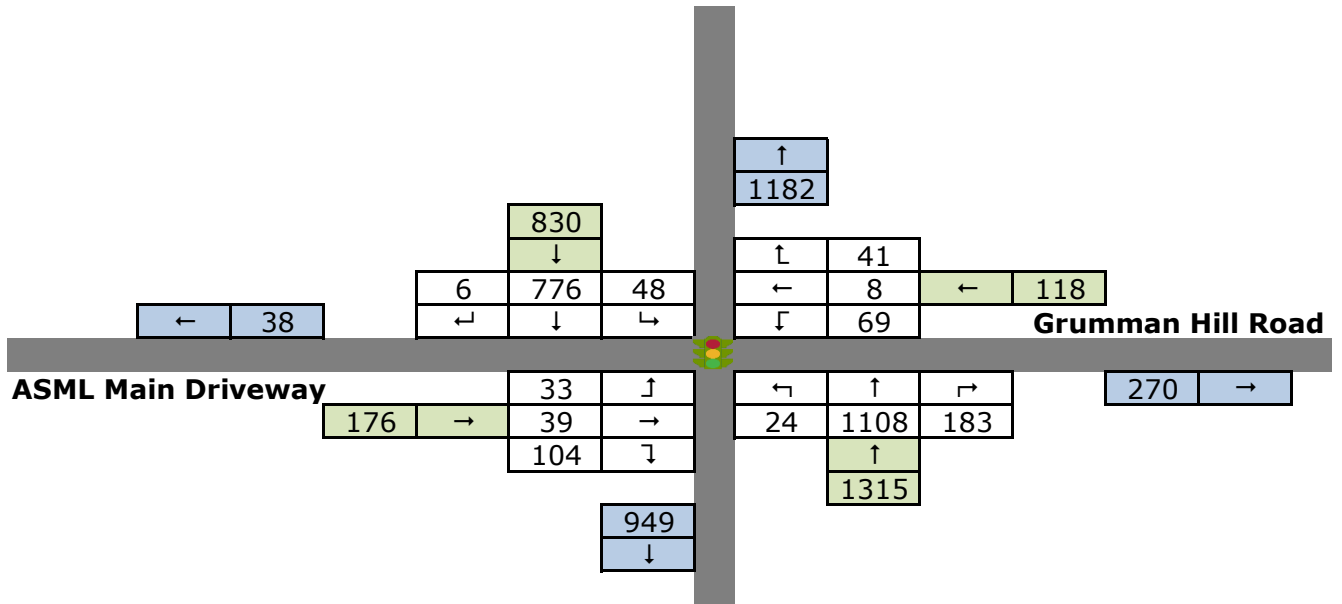
**2022 Existing Conditions
Weekday Morning Peak Hour
ASML MICC Expansion**

Figure 2



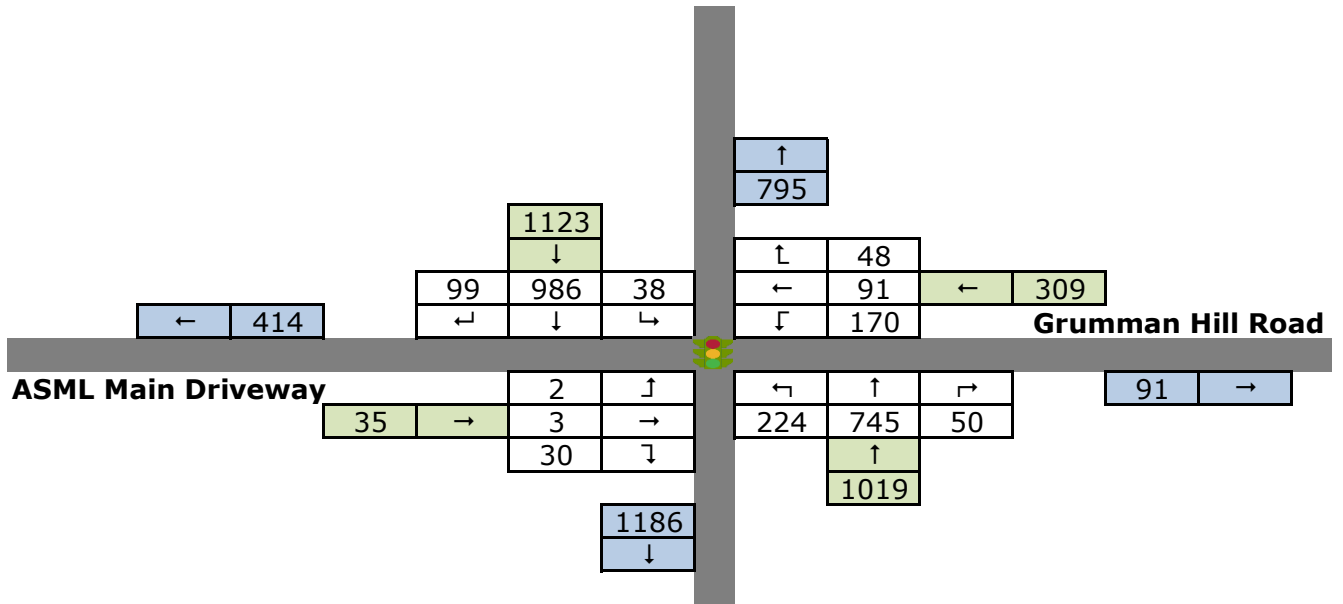
**2022 Existing Conditions
Weekday Afternoon Shift Change Peak Hour
ASML MICC Expansion**

Figure 3



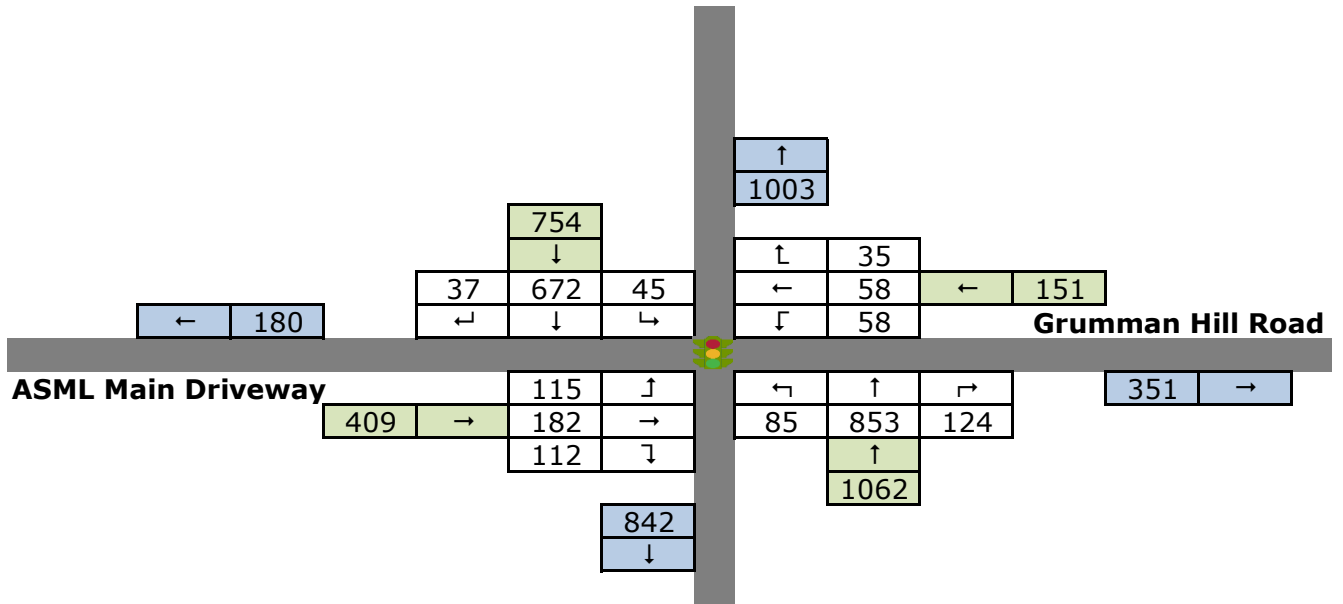
**2022 Existing Conditions
Weekday Afternoon Peak Hour
ASML MICC Expansion**

Figure 4



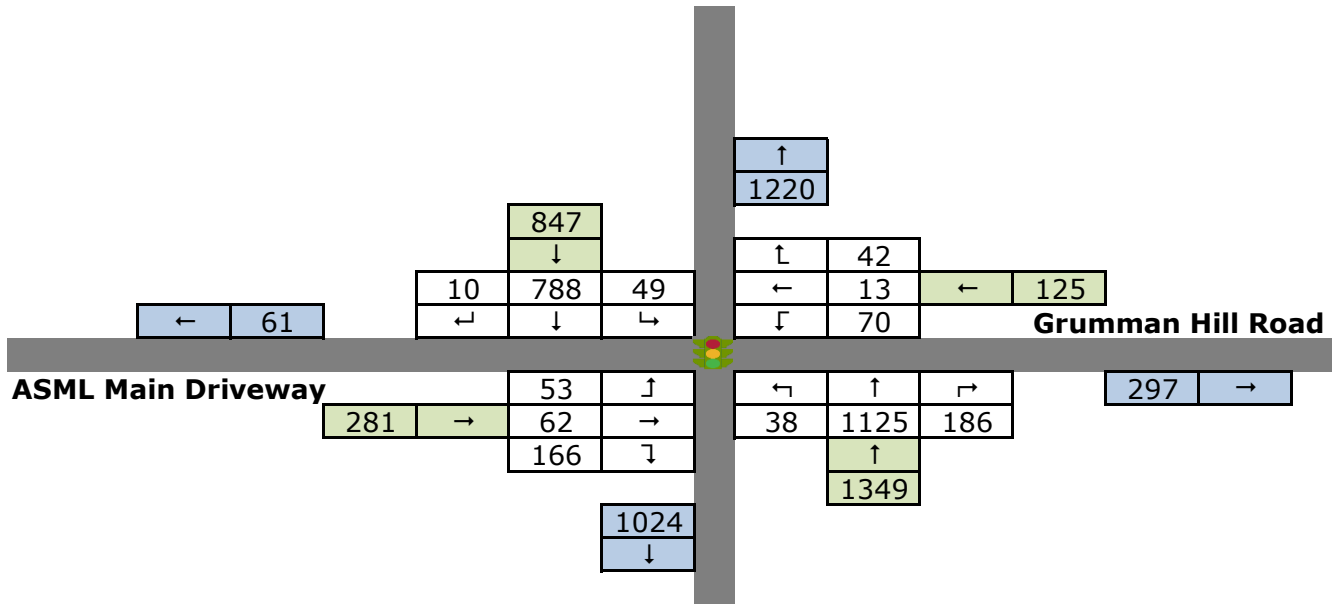
**2025 Future Conditions
Weekday Morning Peak Hour
ASML MICC Expansion**

Figure 5



2025 Future Conditions
Weekday Afternoon Shift Change Peak Hour
ASML MICC Expansion

Figure 6



**2025 Future Conditions
Weekday Afternoon Peak Hour
ASML MICC Expansion**

Figure 7

TABLE 1
Intersection Collision History Summary

Intersection: **US Route 7 (Danbury Road)** at **ASML Driveway/Grumman Hill Road**

COLLISION TYPE

	2017	2018	2019	2020	2021	2022	2023	Total	Percent
Rear-End	3	8	2	5	2	4	2	26	45.6%
Angle	5	4	3	4	1	2	2	21	36.8%
Sideswipe, Same Direction	1	4	2	3	0	0	0	10	17.5%
TOTAL	9	16	7	12	3	6	4	57	100%

CONTRIBUTING FACTOR

	2017	2018	2019	2020	2021	2022	2023	Total	Percent
None	8	13	7	8	3	5	3	47	82.5%
Backup Due to Regular Congestion	0	3	0	2	0	0	1	6	10.5%
Work Zone (construction / maintenance / utility)	0	0	0	2	0	0	0	2	3.5%
Road Surface Condition (wet, icy, snow, slush, etc.)	1	0	0	0	0	0	0	1	1.8%
TOTAL	9	16	7	12	3	6	4	57	100%

COLLISION EVENT

	2017	2018	2019	2020	2021	2022	2023	Total	Percent
Motor Vehicle	9	16	7	12	3	6	4	57	100.0%
Pedestrian / Cyclist	0	0	0	0	0	0	0	0	0.0%
TOTAL	9	16	7	12	3	6	4	57	100%

SEVERITY

	2017	2018	2019	2020	2021	2022	2023	Total	Percent
Minor Injury / Property Damage Only (PDO)	9	16	7	12	3	6	4	57	100.0%
TOTAL	9	16	7	12	3	6	4	57	100%

DAY & TIME

	2017	2018	2019	2020	2021	2022	2023	Total	Percent
Weekday 6-9 A.M.	2	2	2	1	1	1	1	10	17.5%
Weekday 3-6 P.M.	2	6	1	4	0	1	1	15	26.3%
Weekday Off-Peak	5	6	1	7	1	3	0	23	40.4%
Saturday 11 A.M. - 2 P.M.	0	0	0	0	0	1	2	3	5.3%
Weekend Off-Peak	0	2	3	0	1	0	0	6	10.5%
TOTAL	9	16	7	12	3	6	4	57	100%

WEATHER

	2017	2018	2019	2020	2021	2022	2023	Total	Percent
Clear	8	12	7	9	2	5	2	45	78.9%
Rain	1	4	0	3	1	1	1	11	19.3%
Snow	0	0	0	0	0	0	1	1	1.8%
TOTAL	9	16	7	12	3	6	4	57	100%

ROAD SURFACE CONDITION

	2017	2018	2019	2020	2021	2022	2023	Total	Percent
Dry	8	9	7	8	2	4	2	40	70.2%
Wet	1	7	0	4	1	2	2	17	29.8%
TOTAL	9	16	7	12	3	6	4	57	100%

LIGHT CONDITIONS

	2017	2018	2019	2020	2021	2022	2023	Total	Percent
Light	6	14	7	8	2	3	3	43	75.4%
Dark	3	2	0	4	1	3	1	14	24.6%
TOTAL	9	16	7	12	3	6	4	57	100%

TABLE 2
 Site-Generated Traffic Summary

60% Increase from Existing Site-Generated Traffic [Used for Analyses]			
Peak Hour Period	Enter	Exit	Total
Weekday Morning	155	13	168
Weekday PM Shift Change	68	153	221
Weekday Afternoon	23	105	128

ITE Trip Generation Manual Estimate [For Comparison Purposes]			
Peak Hour Period	Enter	Exit	Total
Weekday Morning	85	26	111
Weekday PM Shift Change	57	79	136
Weekday Afternoon	38	86	124

Sources: Existing Site-Generated Traffic from Traffic Counts, 11/29/2022

Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021
 Land Use - 140 [Manufacturing]

TABLE 1
Intersection Operation Summary - Capacity

Lane Use	Weekday Morning Peak Hour						Weekday Shift Change Peak Hour						Weekday Afternoon Peak Hour						
	2022 Existing			2025 Future			2022 Existing			2025 Future			2022 Existing			2025 Future			
	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	
Traffic Signal - US Route 7 (Danbury Road) at Grumman Hill Road/ASML Main Driveway																			
Overall	C	23.7	0.84	C	30.3	0.87	B	19.7	0.82	C	26.3	0.88	B	12.7	0.67	B	15.3	0.77	
ASML Main Driveway	EBLT	C	22.3	0.01	C	22.2	0.02	D	49.9	0.82	D	48.8	0.88	D	43.2	0.47	D	52.4	0.69
	EBR	A	0.4	0.08	A	2.1	0.11	B	10.7	0.28	B	14.5	0.32	B	11.0	0.44	B	10.2	0.54
Grumman Hill Road	WB	D	49.0	0.84	D	50.9	0.87	C	33.2	0.56	C	27.0	0.46	D	43.9	0.67	D	54.1	0.77
	NBL	B	17.2	0.55	D	42.7	0.80	A	7.8	0.16	B	13.3	0.36	A	3.6	0.06	A	4.4	0.11
US Route 7 (Danbury Road)	NBTR	B	13.5	0.43	B	14.5	0.45	B	15.0	0.55	C	23.0	0.71	B	10.9	0.63	B	12.1	0.66
	SBL	B	10.8	0.10	B	12.0	0.11	A	7.8	0.16	B	10.9	0.23	A	5.1	0.20	A	5.9	0.21
	SBTR	C	25.5	0.63	C	34.2	0.79	B	14.5	0.44	C	21.9	0.60	A	8.0	0.36	A	9.5	0.39

Legend

LOS - Level of Service

Delay - average delay per vehicle in seconds






















V/C - volume to capacity ratio

TABLE 2

Intersection Operation Summary - Queues (In Feet)

	Lane Use	Available Storage	Weekday Morning Peak Hour				Weekday Shift Change Peak Hour				Weekday Afternoon Peak Hour			
			2022 Existing		2025 Future		2022 Existing		2025 Future		2022 Existing		2025 Future	
			50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th
Traffic Signal - US Route 7 (Danbury Road) at Grumman Hill Road/ASML Main Driveway														
ASML Main Driveway	EBLT	245	2	7	3	9	159	152	261	292	50	77	81	113
	EBR	50	0	0	0	0	12	22	38	51	0	31	0	34
Grumman Hill Road	WB	450	178	213	203	252	65	113	73	142	68	102	75	111
	NBL	115	28	79	74	264	11	25	23	35	3	10	5	16
US Route 7 (Danbury Road)	NBTR	545	141	224	154	223	199	272	248	270	224	372	246	394
	SBL	225	10	19	11	18	10	22	13	21	6	16	6	18
	SBTR	>1000	284	346	317	356	146	188	187	190	82	154	132	161

103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2022 Existing Conditions Weekday AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	2	19	167	57	47	140	734	49	37	971	62
Future Volume (vph)	1	2	19	167	57	47	140	734	49	37	971	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	12	10	11	12	10	11	12
Storage Length (ft)	0		50	0		0	110		0	230		400
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.977			0.991			0.991	
Flt Protected		0.980			0.970		0.950			0.950		
Satd. Flow (prot)	0	1808	1392	0	1958	0	1452	3299	0	1668	3323	0
Flt Permitted		0.908			0.809		0.170			0.326		
Satd. Flow (perm)	0	1675	1392	0	1633	0	260	3299	0	572	3323	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		12			10			10	
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		262			353			314			1440	
Travel Time (s)		7.1			9.6			5.4			24.5	
Peak Hour Factor	0.62	0.62	0.62	0.79	0.79	0.79	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	1%	16%	1%	0%	3%	16%	5%	2%	1%	4%	5%
Adj. Flow (vph)	2	3	31	211	72	59	146	765	51	39	1011	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	5	31	0	342	0	146	816	0	39	1076	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	4	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	9.0	9.0	9.0	9.0	9.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	13.6	13.6	13.6	13.6	13.6		9.0	21.1		9.0	21.1	
Total Split (s)	33.0	33.0	33.0	33.0	33.0		10.0	47.0		10.0	47.0	
Total Split (%)	36.7%	36.7%	36.7%	36.7%	36.7%		11.1%	52.2%		11.1%	52.2%	
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2		3.0	4.3		3.0	4.3	
All-Red Time (s)	1.4	1.4	1.4	1.4	1.4		1.0	1.8		1.0	1.8	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.6	4.6		4.6		4.0	6.1		4.0	6.1	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Act Effct Green (s)		22.0	22.0		22.0		58.5	51.7		53.4	46.0	
Actuated g/C Ratio		0.24	0.24		0.24		0.65	0.57		0.59	0.51	
v/c Ratio		0.01	0.08		0.84		0.55	0.43		0.10	0.63	
Control Delay		22.3	0.4		49.0		17.2	13.5		10.8	25.5	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		22.3	0.4		49.0		17.2	13.5		10.8	25.5	
LOS		C	A		D		B	B		B	C	
Approach Delay		3.4			49.0			14.0			25.0	
Approach LOS		A			D			B			C	

103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2022 Existing Conditions Weekday AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		2	0		178		28	141		10	284	
Queue Length 95th (ft)		7	0		213		#79	224		m19	m346	
Internal Link Dist (ft)		182			273			234			1360	
Turn Bay Length (ft)			50				110			230		
Base Capacity (vph)		528	498		523		267	1898		417	1712	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.01	0.06		0.65		0.55	0.43		0.09	0.63	






















Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	10 (11%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle:	55
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.84
Intersection Signal Delay:	23.7
Intersection LOS:	C
Intersection Capacity Utilization:	70.6%
ICU Level of Service:	C
Analysis Period (min):	15
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road



103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2022 Existing Conditions Weekday Shift Change

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	114	70	57	36	34	53	840	122	44	662	23
Future Volume (vph)	72	114	70	57	36	34	53	840	122	44	662	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	12	10	11	12	10	11	12
Storage Length (ft)	0		50	0		0	110		0	230		400
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.964			0.981			0.995	
Flt Protected		0.981			0.978		0.950			0.950		
Satd. Flow (prot)	0	1811	1392	0	1946	0	1452	3272	0	1668	3338	0
Flt Permitted		0.796			0.521		0.295			0.224		
Satd. Flow (perm)	0	1469	1392	0	1037	0	451	3272	0	393	3338	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		19			27			6	
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		262			353			314			1440	
Travel Time (s)		7.1			9.6			5.4			24.5	
Peak Hour Factor	0.61	0.61	0.61	0.82	0.82	0.82	0.95	0.95	0.95	0.86	0.86	0.86
Heavy Vehicles (%)	6%	1%	16%	1%	0%	3%	16%	5%	2%	1%	4%	5%
Adj. Flow (vph)	118	187	115	70	44	41	56	884	128	51	770	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	305	115	0	155	0	56	1012	0	51	797	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	4	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	9.0	9.0	9.0	9.0	9.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	13.6	13.6	13.6	13.6	13.6		9.0	21.1		9.0	21.1	
Total Split (s)	26.0	26.0	26.0	26.0	26.0		10.0	54.0		10.0	54.0	
Total Split (%)	28.9%	28.9%	28.9%	28.9%	28.9%		11.1%	60.0%		11.1%	60.0%	
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2		3.0	4.3		3.0	4.3	
All-Red Time (s)	1.4	1.4	1.4	1.4	1.4		1.0	1.8		1.0	1.8	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.6	4.6		4.6		4.0	6.1		4.0	6.1	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Act Effct Green (s)		22.8	22.8		22.8		56.3	50.7		55.2	48.8	
Actuated g/C Ratio		0.25	0.25		0.25		0.63	0.56		0.61	0.54	
v/c Ratio		0.82	0.28		0.56		0.16	0.55		0.16	0.44	
Control Delay		49.9	10.7		33.2		7.8	15.0		7.8	14.5	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		49.9	10.7		33.2		7.8	15.0		7.8	14.5	
LOS		D	B		C		A	B		A	B	
Approach Delay		39.2			33.2			14.6			14.1	
Approach LOS		D			C			B			B	

103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2022 Existing Conditions Weekday Shift Change

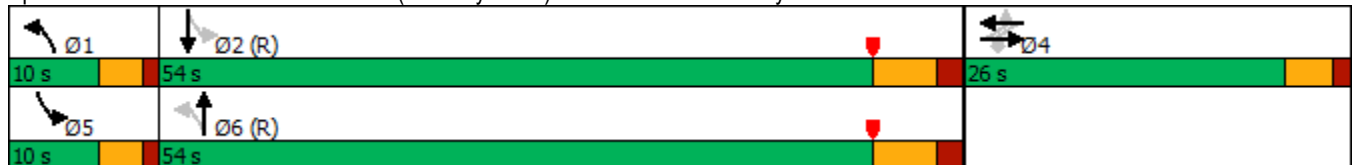


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		159	12		65		11	199		10	146	
Queue Length 95th (ft)		152	22		113		25	272		22	188	
Internal Link Dist (ft)		182			273			234			1360	
Turn Bay Length (ft)			50				110			230		
Base Capacity (vph)		389	432		289		349	1936		328	1899	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.78	0.27		0.54		0.16	0.52		0.16	0.42	






















Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	30 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle:	60
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.82
Intersection Signal Delay:	19.7
Intersection LOS:	B
Intersection Capacity Utilization	57.3%
ICU Level of Service	B
Analysis Period (min)	15

Splits and Phases: 103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road



103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2022 Existing Conditions Weekday PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	39	104	69	8	41	24	1108	183	48	776	6
Future Volume (vph)	33	39	104	69	8	41	24	1108	183	48	776	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	12	10	11	12	10	11	12
Storage Length (ft)	0		50	0		0	110		0	230		400
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.953			0.979			0.999	
Flt Protected		0.978			0.972		0.950			0.950		
Satd. Flow (prot)	0	1799	1392	0	1905	0	1452	3267	0	1668	3352	0
Flt Permitted		0.787			0.768		0.319			0.138		
Satd. Flow (perm)	0	1448	1392	0	1505	0	488	3267	0	242	3352	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			133		28			31				1
Link Speed (mph)		25			25			40				40
Link Distance (ft)		262			353			314				1440
Travel Time (s)		7.1			9.6			5.4				24.5
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles (%)	6%	1%	16%	1%	0%	3%	16%	5%	2%	1%	4%	5%
Adj. Flow (vph)	42	50	133	88	10	53	26	1218	201	52	843	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	92	133	0	151	0	26	1419	0	52	850	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	4	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	9.0	9.0	9.0	9.0	9.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	13.6	13.6	13.6	13.6	13.6		9.0	21.1		9.0	21.1	
Total Split (s)	26.0	26.0	26.0	26.0	26.0		10.0	54.0		10.0	54.0	
Total Split (%)	28.9%	28.9%	28.9%	28.9%	28.9%		11.1%	60.0%		11.1%	60.0%	
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2		3.0	4.3		3.0	4.3	
All-Red Time (s)	1.4	1.4	1.4	1.4	1.4		1.0	1.8		1.0	1.8	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.6	4.6		4.6		4.0	6.1		4.0	6.1	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Act Effct Green (s)		12.1	12.1		12.1		66.7	61.6		67.8	63.5	
Actuated g/C Ratio		0.13	0.13		0.13		0.74	0.68		0.75	0.71	
v/c Ratio		0.47	0.44		0.67		0.06	0.63		0.20	0.36	
Control Delay		43.2	11.0		43.9		3.6	10.9		5.1	8.0	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		43.2	11.0		43.9		3.6	10.9		5.1	8.0	
LOS		D	B		D		A	B		A	A	
Approach Delay		24.1			43.9			10.7			7.8	
Approach LOS		C			D			B			A	

103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2022 Existing Conditions Weekday PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		50	0		68		3	224		6	82	
Queue Length 95th (ft)		77	31		102		10	372		m16	m154	
Internal Link Dist (ft)		182			273			234			1360	
Turn Bay Length (ft)			50				110			230		
Base Capacity (vph)		344	432		379		428	2244		277	2365	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.27	0.31		0.40		0.06	0.63		0.19	0.36	






















Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 30 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 12.7
 Intersection LOS: B
 Intersection Capacity Utilization 62.2%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road



103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2025 Future Conditions Weekday AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	3	30	170	91	48	224	745	50	38	986	99
Future Volume (vph)	2	3	30	170	91	48	224	745	50	38	986	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	12	10	11	12	10	11	12
Storage Length (ft)	0		50	0		0	110		0	230		400
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.979			0.991			0.986	
Flt Protected		0.982			0.973		0.950			0.950		
Satd. Flow (prot)	0	1814	1392	0	1971	0	1452	3300	0	1668	3306	0
Flt Permitted		0.909			0.825		0.115			0.340		
Satd. Flow (perm)	0	1679	1392	0	1671	0	176	3300	0	597	3306	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		11			10				16
Link Speed (mph)		25			25			40				40
Link Distance (ft)		262			353			314				1440
Travel Time (s)		7.1			9.6			5.4				24.5
Peak Hour Factor	0.62	0.62	0.62	0.79	0.79	0.79	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	1%	16%	1%	0%	3%	16%	5%	2%	1%	4%	5%
Adj. Flow (vph)	3	5	48	215	115	61	233	776	52	40	1027	103
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	8	48	0	391	0	233	828	0	40	1130	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	4	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	9.0	9.0	9.0	9.0	9.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	13.6	13.6	13.6	13.6	13.6		9.0	21.1		9.0	21.1	
Total Split (s)	32.0	32.0	32.0	32.0	32.0		10.0	48.0		10.0	48.0	
Total Split (%)	35.6%	35.6%	35.6%	35.6%	35.6%		11.1%	53.3%		11.1%	53.3%	
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2		3.0	4.3		3.0	4.3	
All-Red Time (s)	1.4	1.4	1.4	1.4	1.4		1.0	1.8		1.0	1.8	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.6	4.6		4.6		4.0	6.1		4.0	6.1	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Act Effct Green (s)		23.7	23.7		23.7		56.2	49.9		46.1	38.7	
Actuated g/C Ratio		0.26	0.26		0.26		0.62	0.55		0.51	0.43	
v/c Ratio		0.02	0.11		0.87		0.80	0.45		0.11	0.79	
Control Delay		22.2	2.1		50.9		42.7	14.5		12.0	34.2	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		22.2	2.1		50.9		42.7	14.5		12.0	34.2	
LOS		C	A		D		D	B		B	C	
Approach Delay		5.0			50.9		20.7				33.4	
Approach LOS		A			D		C				C	

103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2025 Future Conditions Weekday AM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3	0		203		74	154		11	317	
Queue Length 95th (ft)		9	0		252		#264	223		m18	m356	
Internal Link Dist (ft)		182			273			234			1360	
Turn Bay Length (ft)			50				110			230		
Base Capacity (vph)		514	485		519		292	1834		381	1547	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.02	0.10		0.75		0.80	0.45		0.10	0.73	






















Intersection Summary

Area Type:	Other
Cycle Length:	90
Actuated Cycle Length:	90
Offset:	10 (11%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle:	70
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.87
Intersection Signal Delay:	30.3
Intersection LOS:	C
Intersection Capacity Utilization:	78.9%
ICU Level of Service:	D
Analysis Period (min):	15
#	95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
m	Volume for 95th percentile queue is metered by upstream signal.

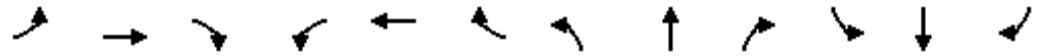
Splits and Phases: 103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road



103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2025 Future Conditions Weekday Shift Change

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	182	112	58	58	35	85	853	124	45	672	37
Future Volume (vph)	115	182	112	58	58	35	85	853	124	45	672	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	12	10	11	12	10	11	12
Storage Length (ft)	0		50	0		0	110		0	230		400
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.969			0.981			0.992	
Flt Protected		0.981			0.981		0.950			0.950		
Satd. Flow (prot)	0	1811	1392	0	1965	0	1452	3272	0	1668	3327	0
Flt Permitted		0.788			0.515		0.229			0.163		
Satd. Flow (perm)	0	1454	1392	0	1032	0	350	3272	0	286	3327	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86		15			29			10	
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		262			353			314			1440	
Travel Time (s)		7.1			9.6			5.4			24.5	
Peak Hour Factor	0.61	0.61	0.61	0.82	0.82	0.82	0.95	0.95	0.95	0.86	0.86	0.86
Heavy Vehicles (%)	6%	1%	16%	1%	0%	3%	16%	5%	2%	1%	4%	5%
Adj. Flow (vph)	189	298	184	71	71	43	89	898	131	52	781	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	487	184	0	185	0	89	1029	0	52	824	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	4	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	9.0	9.0	9.0	9.0	9.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	13.6	13.6	13.6	13.6	13.6		9.0	21.1		9.0	21.1	
Total Split (s)	24.0	24.0	24.0	24.0	24.0		10.0	56.0		10.0	56.0	
Total Split (%)	26.7%	26.7%	26.7%	26.7%	26.7%		11.1%	62.2%		11.1%	62.2%	
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2		3.0	4.3		3.0	4.3	
All-Red Time (s)	1.4	1.4	1.4	1.4	1.4		1.0	1.8		1.0	1.8	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.6	4.6		4.6		4.0	6.1		4.0	6.1	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Act Effct Green (s)		34.3	34.3		34.3		44.9	39.2		43.6	37.0	
Actuated g/C Ratio		0.38	0.38		0.38		0.50	0.44		0.48	0.41	
v/c Ratio		0.88	0.32		0.46		0.36	0.71		0.23	0.60	
Control Delay		48.8	14.5		27.0		13.3	23.0		10.9	21.9	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		48.8	14.5		27.0		13.3	23.0		10.9	21.9	
LOS		D	B		C		B	C		B	C	
Approach Delay		39.4			27.0			22.2			21.3	
Approach LOS		D			C			C			C	

103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2025 Future Conditions Weekday Shift Change



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		261	38		73		23	248		13	187	
Queue Length 95th (ft)		#292	51		142		35	270		21	190	
Internal Link Dist (ft)		182			273			234			1360	
Turn Bay Length (ft)			50				110			230		
Base Capacity (vph)		553	582		402		248	1827		231	1849	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.88	0.32		0.46		0.36	0.56		0.23	0.45	






















Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 30 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 26.3
 Intersection LOS: C
 Intersection Capacity Utilization 72.1%
 ICU Level of Service C
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road



103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2025 Future Conditions Weekday PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	62	166	70	13	42	38	1125	186	49	788	10
Future Volume (vph)	53	62	166	70	13	42	38	1125	186	49	788	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	12	10	11	12	10	11	12
Storage Length (ft)	0		50	0		0	110		0	230		400
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.955			0.979			0.998	
Flt Protected		0.977			0.973		0.950			0.950		
Satd. Flow (prot)	0	1797	1392	0	1912	0	1452	3267	0	1668	3348	0
Flt Permitted		0.764			0.626		0.301			0.132		
Satd. Flow (perm)	0	1405	1392	0	1230	0	460	3267	0	232	3348	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			213		26			34				2
Link Speed (mph)		25			25			40				40
Link Distance (ft)		262			353			314				1440
Travel Time (s)		7.1			9.6			5.4				24.5
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles (%)	6%	1%	16%	1%	0%	3%	16%	5%	2%	1%	4%	5%
Adj. Flow (vph)	68	79	213	90	17	54	42	1236	204	53	857	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	147	213	0	161	0	42	1440	0	53	868	0
Turn Type	Perm	NA	Perm	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4		4	4			6			2		
Detector Phase	4	4	4	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	9.0	9.0	9.0	9.0	9.0		5.0	15.0		5.0	15.0	
Minimum Split (s)	13.6	13.6	13.6	13.6	13.6		9.0	21.1		9.0	21.1	
Total Split (s)	24.0	24.0	24.0	24.0	24.0		9.0	57.0		9.0	57.0	
Total Split (%)	26.7%	26.7%	26.7%	26.7%	26.7%		10.0%	63.3%		10.0%	63.3%	
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2		3.0	4.3		3.0	4.3	
All-Red Time (s)	1.4	1.4	1.4	1.4	1.4		1.0	1.8		1.0	1.8	
Lost Time Adjust (s)		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.6	4.6		4.6		4.0	6.1		4.0	6.1	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Act Effct Green (s)		13.6	13.6		13.6		65.4	60.2		65.4	60.2	
Actuated g/C Ratio		0.15	0.15		0.15		0.73	0.67		0.73	0.67	
v/c Ratio		0.69	0.54		0.77		0.11	0.66		0.21	0.39	
Control Delay		52.4	10.2		54.1		4.4	12.1		5.9	9.5	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay		52.4	10.2		54.1		4.4	12.1		5.9	9.5	
LOS		D	B		D		A	B		A	A	
Approach Delay		27.4			54.1			11.8			9.3	
Approach LOS		C			D			B			A	

103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road
 2025 Future Conditions Weekday PM Peak



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		81	0		75		5	246		6	132	
Queue Length 95th (ft)		113	34		111		16	394		m18	m161	
Internal Link Dist (ft)		182			273			234			1360	
Turn Bay Length (ft)			50				110			230		
Base Capacity (vph)		302	467		285		389	2197		249	2240	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.49	0.46		0.56		0.11	0.66		0.21	0.39	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 30 (33%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
 Natural Cycle: 60
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.77
 Intersection Signal Delay: 15.3
 Intersection LOS: B
 Intersection Capacity Utilization 63.4%
 ICU Level of Service B
 Analysis Period (min) 15
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 103: U.S. Route 7 (Danbury Road) & ASML Main Driveway/Grumman Hill Road



Connecticut Counts LLC
Kensington, Connecticut 06037
(860) 828-1693

Route 7 at Gunman Hill Road/ASML Dr
Wilton, Connecticut

File Name : 23810
Site Code : 23810
Start Date : 11/29/2022
Page No : 1

Groups Printed- Lights - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

Start Time	Route 7 From North					Gunman Hill Road From East					Route 7 From South					ASML Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
12:00 AM	0	8	0	0	8	0	0	2	0	2	0	13	0	0	13	2	3	1	0	6	29
12:15 AM	0	8	0	0	8	0	0	1	0	1	1	24	4	0	29	0	2	0	0	2	40
12:30 AM	0	3	1	0	4	0	0	0	0	0	3	13	1	0	17	2	0	0	0	2	23
12:45 AM	0	8	1	0	9	1	0	1	0	2	2	8	0	0	10	2	1	0	0	3	24
Total	0	27	2	0	29	1	0	4	0	5	6	58	5	0	69	6	6	1	0	13	116
01:00 AM	0	10	1	0	11	0	0	0	0	0	0	8	1	0	9	0	0	0	0	0	20
01:15 AM	1	8	0	0	9	0	0	0	0	0	1	6	0	0	7	4	0	1	0	5	21
01:30 AM	0	5	0	0	5	0	0	1	0	1	0	7	1	0	8	0	0	0	0	0	14
01:45 AM	0	5	0	0	5	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	8
Total	1	28	1	0	30	0	0	1	0	1	1	22	4	0	27	4	0	1	0	5	63
02:00 AM	0	1	0	0	1	0	0	0	0	0	0	12	3	0	15	3	0	0	0	3	19
02:15 AM	0	9	0	0	9	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	16
02:30 AM	1	4	0	0	5	0	0	0	0	0	0	7	0	0	7	0	1	0	0	1	13
02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	14	0	0	15	0	0	0	0	0	0	25	4	0	29	3	1	0	0	4	48
03:00 AM	0	2	0	0	2	0	1	0	0	1	0	4	0	0	4	0	0	0	0	0	7
03:15 AM	0	2	1	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	6
03:30 AM	0	8	0	0	8	0	0	1	0	1	0	7	1	0	8	0	0	0	0	0	17
03:45 AM	0	7	0	0	7	0	1	1	0	2	0	5	0	0	5	1	0	1	0	2	16
Total	0	19	1	0	20	0	2	2	0	4	0	19	1	0	20	1	0	1	0	2	46
04:00 AM	1	10	0	0	11	0	2	0	0	2	0	7	2	0	9	1	0	0	0	1	23
04:15 AM	6	11	0	0	17	0	0	2	0	2	0	5	2	0	7	0	0	0	0	0	26
04:30 AM	6	27	0	0	33	1	1	0	0	2	1	9	0	0	10	0	0	0	0	0	45
04:45 AM	10	26	0	0	36	1	5	1	0	7	0	14	6	0	20	2	1	0	0	3	66
Total	23	74	0	0	97	2	8	3	0	13	1	35	10	0	46	3	1	0	0	4	160
05:00 AM	8	46	0	0	54	1	2	1	0	4	0	21	3	0	24	0	0	1	0	1	83
05:15 AM	20	63	0	0	83	3	19	4	0	26	0	27	15	0	42	2	2	0	0	4	155
05:30 AM	29	97	2	0	128	1	25	13	0	39	1	35	22	0	58	1	1	0	0	2	227
05:45 AM	39	93	0	0	132	0	26	27	0	53	2	36	37	0	75	9	6	0	0	15	275
Total	96	299	2	0	397	5	72	45	0	122	3	119	77	0	199	12	9	1	0	22	740
06:00 AM	15	119	1	0	135	0	17	16	0	33	2	63	10	0	75	9	5	6	0	20	263
06:15 AM	9	171	0	0	180	1	13	11	0	25	4	99	19	0	122	7	5	9	0	21	348
06:30 AM	11	236	1	0	248	2	17	9	0	28	1	110	13	0	124	10	21	14	0	45	445
06:45 AM	10	226	3	0	239	3	9	17	0	29	2	129	16	0	147	3	4	1	0	8	423
Total	45	752	5	0	802	6	56	53	0	115	9	401	58	0	468	29	35	30	0	94	1479
07:00 AM	16	230	3	0	249	5	5	21	0	31	3	128	15	1	147	2	3	1	0	6	433
07:15 AM	10	240	3	1	254	7	7	22	0	36	8	147	27	0	182	4	1	2	1	8	480
07:30 AM	25	234	1	0	260	8	17	32	1	58	5	202	30	0	237	7	2	1	0	10	565
07:45 AM	17	236	6	0	259	16	16	54	0	86	11	191	39	1	242	2	0	0	0	2	589
Total	68	940	13	1	1022	36	45	129	1	211	27	668	111	2	808	15	6	4	1	26	2067
08:00 AM	9	253	10	1	273	12	16	39	0	67	11	168	44	2	225	5	0	0	1	6	571
08:15 AM	11	248	20	1	280	11	8	42	0	61	22	173	27	3	225	5	0	0	2	7	573
08:30 AM	6	197	11	1	215	20	8	31	1	60	16	175	31	3	225	7	1	1	2	11	511
08:45 AM	10	209	13	0	232	21	12	46	1	80	14	200	24	7	245	19	0	2	0	21	578
Total	36	907	54	3	1000	64	44	158	2	268	63	716	126	15	920	36	1	3	5	45	2233

Connecticut Counts LLC
Kensington, Connecticut 06037
(860) 828-1693

File Name : 23810
 Site Code : 23810
 Start Date : 11/29/2022
 Page No : 2

Groups Printed- Lights - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

Start Time	Route 7 From North					Gunman Hill Road From East					Route 7 From South					ASML Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
09:00 AM	2	220	8	0	230	11	5	49	1	66	10	168	17	5	200	24	1	1	0	26	26
09:15 AM	2	203	6	2	213	8	1	31	1	41	10	147	7	11	175	13	0	2	0	15	15
09:30 AM	4	240	3	0	247	9	1	26	0	36	9	169	8	4	190	11	0	1	0	12	12
09:45 AM	2	173	5	0	180	7	2	15	0	24	12	152	12	2	178	12	1	0	0	13	13
Total	10	836	22	2	870	35	9	121	2	167	41	636	44	22	743	60	2	4	0	66	1846
10:00 AM	1	180	6	0	187	8	1	9	1	19	4	139	9	2	154	8	0	0	0	8	8
10:15 AM	1	179	7	0	187	8	3	20	1	32	12	148	4	1	165	6	1	3	0	10	10
10:30 AM	3	169	4	0	176	8	1	11	0	20	8	136	8	0	152	6	0	3	0	9	9
10:45 AM	0	155	3	0	158	3	1	18	1	23	10	143	7	4	164	7	0	5	0	12	12
Total	5	683	20	0	708	27	6	58	3	94	34	566	28	7	635	27	1	11	0	39	1476
11:00 AM	3	154	7	0	164	4	2	6	0	12	16	172	3	2	193	3	5	2	0	10	10
11:15 AM	3	164	2	0	169	6	2	11	0	19	15	167	7	2	191	6	2	4	0	12	12
11:30 AM	2	173	6	0	181	4	2	10	0	16	12	158	7	3	180	15	1	2	0	18	18
11:45 AM	3	176	7	1	187	4	2	16	1	23	21	156	8	7	192	15	2	2	1	20	20
Total	11	667	22	1	701	18	8	43	1	70	64	653	25	14	756	39	10	10	1	60	1587
12:00 PM	0	166	9	0	175	12	4	16	0	32	19	170	7	2	198	16	2	1	0	19	19
12:15 PM	0	185	3	0	188	18	0	17	4	39	13	148	12	8	181	5	1	2	0	8	8
12:30 PM	3	171	9	0	183	10	5	7	0	22	17	196	8	10	231	3	0	2	0	5	5
12:45 PM	0	186	8	0	194	6	3	11	1	21	19	215	15	3	252	16	1	0	0	17	17
Total	3	708	29	0	740	46	12	51	5	114	68	729	42	23	862	40	4	5	0	49	1765
01:00 PM	1	173	7	0	181	4	2	14	1	21	15	204	6	4	229	7	2	1	0	10	10
01:15 PM	4	177	11	0	192	8	5	15	1	29	16	165	15	7	203	15	2	3	1	21	21
01:30 PM	1	167	6	0	174	6	5	18	0	29	23	204	14	5	246	7	4	4	0	15	15
01:45 PM	5	198	12	0	215	5	4	17	0	26	11	199	13	6	229	20	7	5	0	32	32
Total	11	715	36	0	762	23	16	64	2	105	65	772	48	22	907	49	15	13	1	78	1852
02:00 PM	2	168	6	0	176	6	6	18	0	30	20	192	10	1	223	8	14	6	0	28	28
02:15 PM	2	169	8	0	179	6	7	10	2	25	24	219	14	3	260	11	15	11	0	37	37
02:30 PM	9	169	2	0	180	5	12	12	0	29	28	202	20	0	250	31	48	24	0	103	103
02:45 PM	11	160	14	0	185	4	14	17	0	35	31	208	10	2	251	19	27	23	1	70	70
Total	24	666	30	0	720	21	39	57	2	119	103	821	54	6	984	69	104	64	1	238	2061
03:00 PM	1	164	20	1	186	19	3	18	0	40	39	211	9	0	259	9	24	14	2	49	49
03:15 PM	2	202	20	0	224	25	0	21	1	47	35	232	5	0	272	12	14	7	0	33	33
03:30 PM	3	188	16	0	207	13	0	17	0	30	29	234	8	2	273	9	17	12	0	38	38
03:45 PM	0	176	8	0	184	5	1	13	0	19	38	205	3	2	248	9	10	6	0	25	25
Total	6	730	64	1	801	62	4	69	1	136	141	882	25	4	1052	39	65	39	2	145	2134
04:00 PM	0	191	9	0	200	13	0	15	0	28	30	234	1	2	267	16	9	6	1	32	32
04:15 PM	1	173	13	1	188	13	1	12	1	27	44	270	3	8	325	18	9	8	1	36	36
04:30 PM	0	192	14	1	207	15	1	13	1	30	45	252	1	8	306	25	11	17	0	53	53
04:45 PM	0	181	5	1	187	17	0	20	2	39	51	296	9	6	362	26	17	12	2	57	57
Total	1	737	41	3	782	58	2	60	4	124	170	1052	14	24	1260	85	46	43	4	178	2344
05:00 PM	1	210	15	0	226	10	2	16	0	28	45	234	3	12	294	31	9	8	0	48	48
05:15 PM	3	177	15	0	195	6	4	15	0	25	55	305	5	2	367	25	10	4	0	39	39
05:30 PM	2	208	13	0	223	8	2	18	1	29	32	273	7	0	312	22	3	9	0	34	34
05:45 PM	1	199	15	0	215	8	4	11	0	23	44	288	12	6	350	21	5	8	0	34	34
Total	7	794	58	0	859	32	12	60	1	105	176	1100	27	20	1323	99	27	29	0	155	2442
06:00 PM	1	186	8	0	195	9	2	8	0	19	34	219	7	2	262	25	14	9	0	48	48
06:15 PM	2	169	10	0	181	9	0	13	0	22	33	184	7	6	230	13	4	10	0	27	27
06:30 PM	0	98	6	0	104	1	0	8	0	9	28	184	8	2	222	7	1	1	0	9	9

Connecticut Counts LLC

Kensington, Connecticut 06037

(860) 828-1693

File Name : 23810
 Site Code : 23810
 Start Date : 11/29/2022
 Page No : 3

Groups Printed- Lights - Buses - Unit Trucks - Articulated Trucks - Bicycles on Road - Bicycles on Crosswalk - Pedestrians

Start Time	Route 7 From North					Gunman Hill Road From East					Route 7 From South					ASML Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
06:45 PM	1	102	4	0	107	5	1	7	0	13	25	194	3	1	223	6	2	4	0	12	355
Total	4	555	28	0	587	24	3	36	0	63	120	781	25	11	937	51	21	24	0	96	1683
07:00 PM	0	110	8	0	118	3	0	3	1	7	14	187	4	1	206	3	2	0	0	5	336
07:15 PM	1	103	3	0	107	3	0	19	1	23	13	157	5	1	176	3	0	3	0	6	312
07:30 PM	0	113	3	0	116	2	0	5	0	7	13	130	4	1	148	4	3	4	0	11	282
07:45 PM	1	89	0	0	90	4	2	8	0	14	14	136	1	1	152	19	0	8	0	27	283
Total	2	415	14	0	431	12	2	35	2	51	54	610	14	4	682	29	5	15	0	49	1213
08:00 PM	0	101	5	0	106	2	0	7	0	9	19	130	1	0	150	8	0	1	0	9	274
08:15 PM	1	91	6	0	98	3	1	5	0	9	14	128	3	1	146	3	1	1	0	5	258
08:30 PM	0	80	0	0	80	1	1	1	0	3	11	89	1	0	101	0	1	2	0	3	187
08:45 PM	3	83	10	0	96	3	0	5	0	8	11	104	4	0	119	2	0	0	0	2	225
Total	4	355	21	0	380	9	2	18	0	29	55	451	9	1	516	13	2	4	0	19	944
09:00 PM	2	76	3	0	81	1	1	2	0	4	9	92	1	1	103	2	0	0	0	2	190
09:15 PM	9	52	1	0	62	1	6	1	0	8	5	94	2	0	101	2	1	0	0	3	174
09:30 PM	10	56	4	0	70	2	5	0	0	7	6	70	3	0	79	5	0	1	0	6	162
09:45 PM	8	47	3	0	58	2	7	5	0	14	10	73	8	0	91	5	1	1	0	7	170
Total	29	231	11	0	271	6	19	8	0	33	30	329	14	1	374	14	2	2	0	18	696
10:00 PM	2	48	1	0	51	2	1	2	0	5	5	58	4	0	67	7	1	3	0	11	134
10:15 PM	0	37	0	0	37	1	0	0	0	1	8	52	2	0	62	4	9	5	0	18	118
10:30 PM	1	33	1	0	35	0	1	2	0	3	6	57	1	1	65	9	3	6	0	18	121
10:45 PM	0	17	0	0	17	1	0	3	0	4	5	48	1	0	54	7	1	0	0	8	83
Total	3	135	2	0	140	4	2	7	0	13	24	215	8	1	248	27	14	14	0	55	456
11:00 PM	0	30	0	0	30	0	0	0	0	0	0	39	0	0	39	2	3	1	0	6	75
11:15 PM	0	17	0	0	17	2	0	1	0	3	8	31	1	0	40	8	7	2	0	17	77
11:30 PM	0	13	0	0	13	0	1	1	0	2	1	24	0	0	25	17	13	9	0	39	79
11:45 PM	0	16	0	0	16	0	0	0	0	0	2	23	1	0	26	5	5	2	0	12	54
Total	0	76	0	0	76	2	1	2	0	5	11	117	2	0	130	32	28	14	0	74	285
Grand Total	390	11363	476	11	12240	493	364	1084	26	1967	1266	11777	775	177	13995	782	405	332	15	1534	29736
Approch %	3.2	92.8	3.9	0.1		25.1	18.5	55.1	1.3		9	84.2	5.5	1.3		51	26.4	21.6	1		
Total %	1.3	38.2	1.6	0	41.2	1.7	1.2	3.6	0.1	6.6	4.3	39.6	2.6	0.6	47.1	2.6	1.4	1.1	0.1	5.2	
Lights	371	10880			11721			1069			1246	11229			13136						28146
% Lights	95.1	95.7	98.7	0	95.8	97.2	99.7	98.6	7.7	97.3	98.4	95.3	84.4	4	93.9	84.5	99.5	94	0	89.7	94.7
Buses	0	72	2	0	74	7	0	0	0	7	1	65	89	0	155	89	0	0	0	89	325
% Buses	0	0.6	0.4	0	0.6	1.4	0	0	0	0.4	0.1	0.6	11.5	0	1.1	11.4	0	0	0	5.8	1.1
Single-Unit Trucks																					
% Single-Unit Trucks	3.1	2.6	0.6	0	2.5	1.4	0.3	1.2	0	1.1	1.4	2.7	2.7	0	2.5	3.1	0.5	3	0	2.3	2.4
Articulated Trucks	7	119	1	0	127	0	0	2	0	2	1	167	11	0	179	7	0	10	0	17	325
% Articulated Trucks	1.8	1	0.2	0	1	0	0	0.2	0	0.1	0.1	1.4	1.4	0	1.3	0.9	0	3	0	1.1	1.1
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
% Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0
Bicycles on Crosswalk	0	0	0	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	3
% Bicycles on Crosswalk	0	0	0	9.1	0	0	0	0	3.8	0.1	0	0	0	0.6	0	0	0	0	0	0	0
Pedestrians	0	0	0	10	10	0	0	0	23	23	0	0	0	169	169	0	0	0	15	15	217
% Pedestrians	0	0	0	90.9	0.1	0	0	0	88.5	1.2	0	0	0	95.5	1.2	0	0	0	100	1	0.7

Connecticut Counts LLC

Kensington, Connecticut 06037
(860) 828-1693

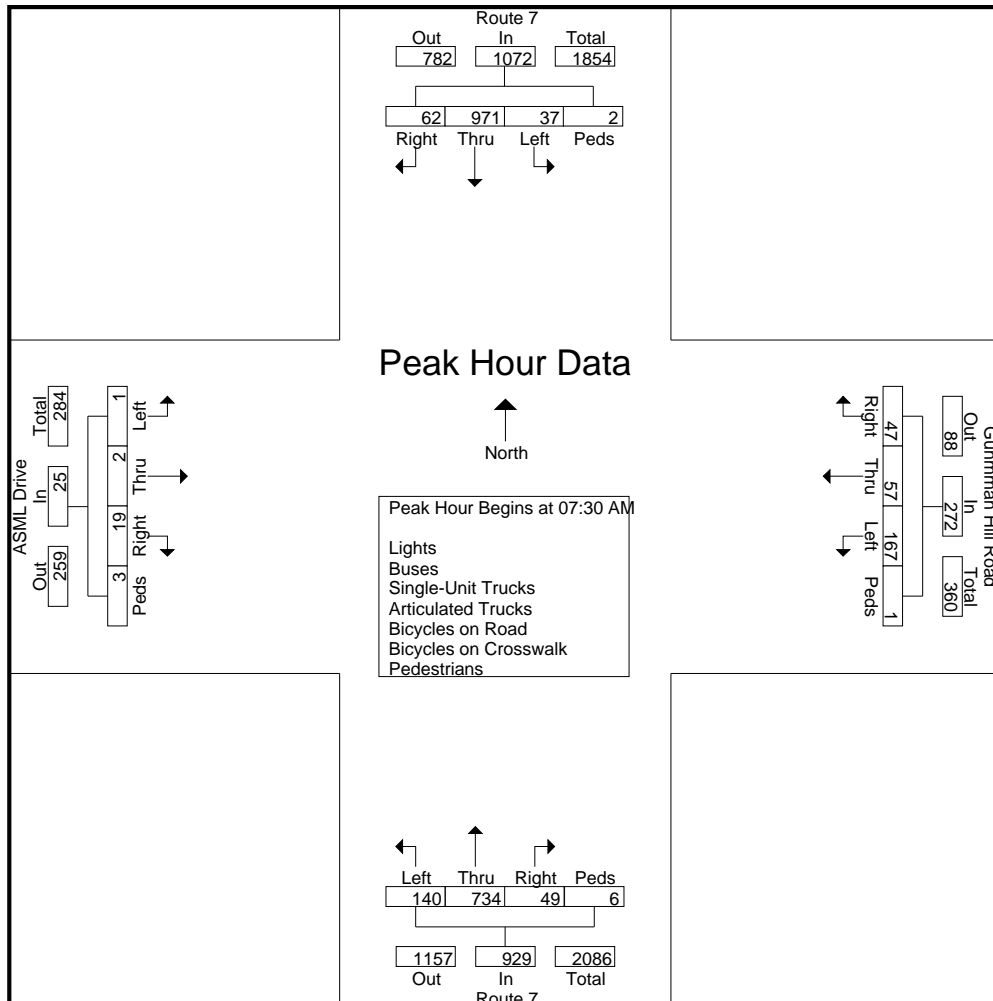
File Name : 23810
Site Code : 23810
Start Date : 11/29/2022
Page No : 4

Start Time	Route 7 From North					Gunman Hill Road From East					Route 7 From South					ASML Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 12:00 AM to 09:45 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:30 AM

07:30 AM	25	234	1	0	260	8	17	32	1	58	5	202	30	0	237	7	2	1	0	10	565
07:45 AM	17	236	6	0	259	16	16	54	0	86	11	191	39	1	242	2	0	0	0	2	589
08:00 AM	9	253	10	1	273	12	16	39	0	67	11	168	44	2	225	5	0	0	1	6	571
08:15 AM	11	248	20	1	280	11	8	42	0	61	22	173	27	3	225	5	0	0	2	7	573
Total Volume	62	971	37	2	1072	47	57	167	1	272	49	734	140	6	929	19	2	1	3	25	2298
% App. Total	5.8	90.6	3.5	0.2		17.3	21	61.4	0.4		5.3	79	15.1	0.6		76	8	4	12		
PHF	.620	.959	.463	.500	.957	.734	.838	.773	.250	.791	.557	.908	.795	.500	.960	.679	.250	.250	.375	.625	.975



Connecticut Counts LLC

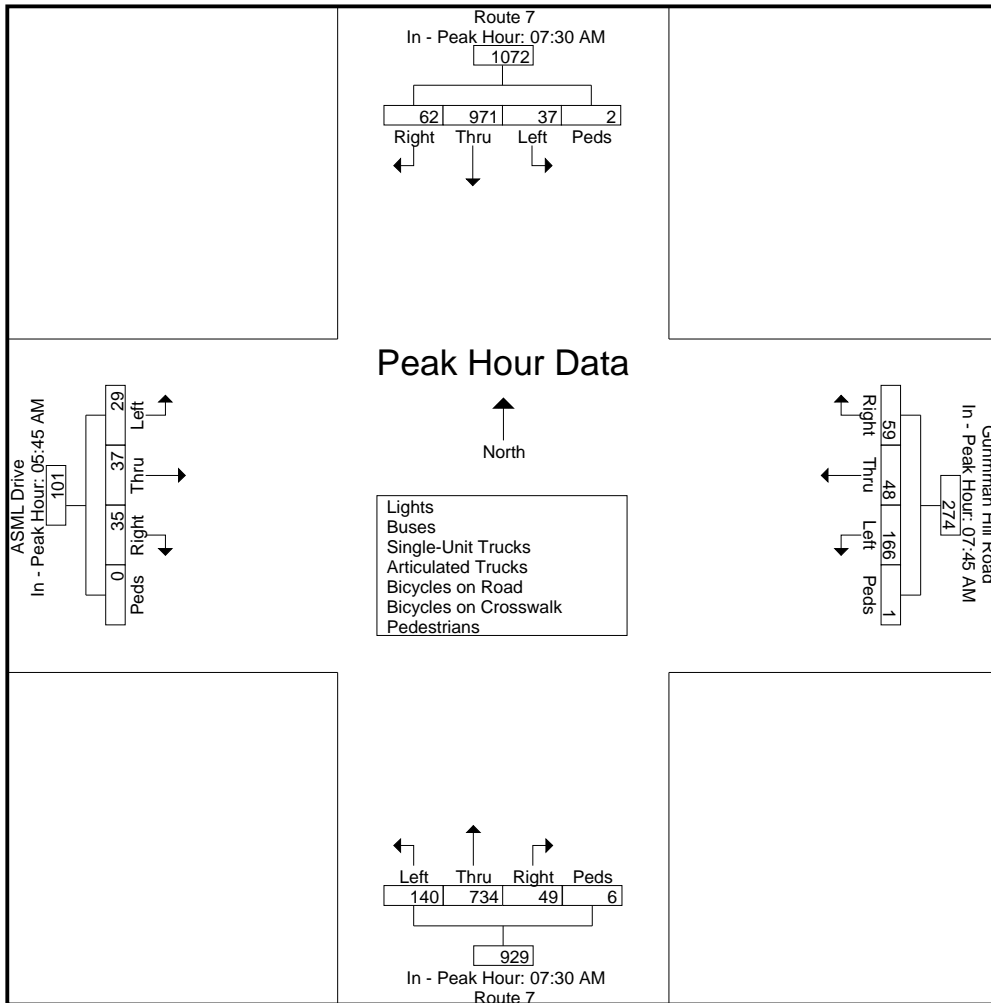
Kensington, Connecticut 06037
(860) 828-1693

File Name : 23810
Site Code : 23810
Start Date : 11/29/2022
Page No : 5

Start Time	Route 7 From North					Gunman Hill Road From East					Route 7 From South					ASML Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 12:00 AM to 09:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM					07:45 AM					07:30 AM					05:45 AM				
+0 mins.	25	234	1	0	260	16	16	54	0	86	5	202	30	0	237	9	6	0	0	15
+15 mins.	17	236	6	0	259	12	16	39	0	67	11	191	39	1	242	9	5	6	0	20
+30 mins.	9	253	10	1	273	11	8	42	0	61	11	168	44	2	225	7	5	9	0	21
+45 mins.	11	248	20	1	280	20	8	31	1	60	22	173	27	3	225	10	21	14	0	45
Total Volume	62	971	37	2	1072	59	48	166	1	274	49	734	140	6	929	35	37	29	0	101
% App. Total	5.8	90.6	3.5	0.2		21.5	17.5	60.6	0.4		5.3	79	15.1	0.6		34.7	36.6	28.7	0	
PHF	.620	.959	.463	.500	.957	.738	.750	.769	.250	.797	.557	.908	.795	.500	.960	.875	.440	.518	.000	.561

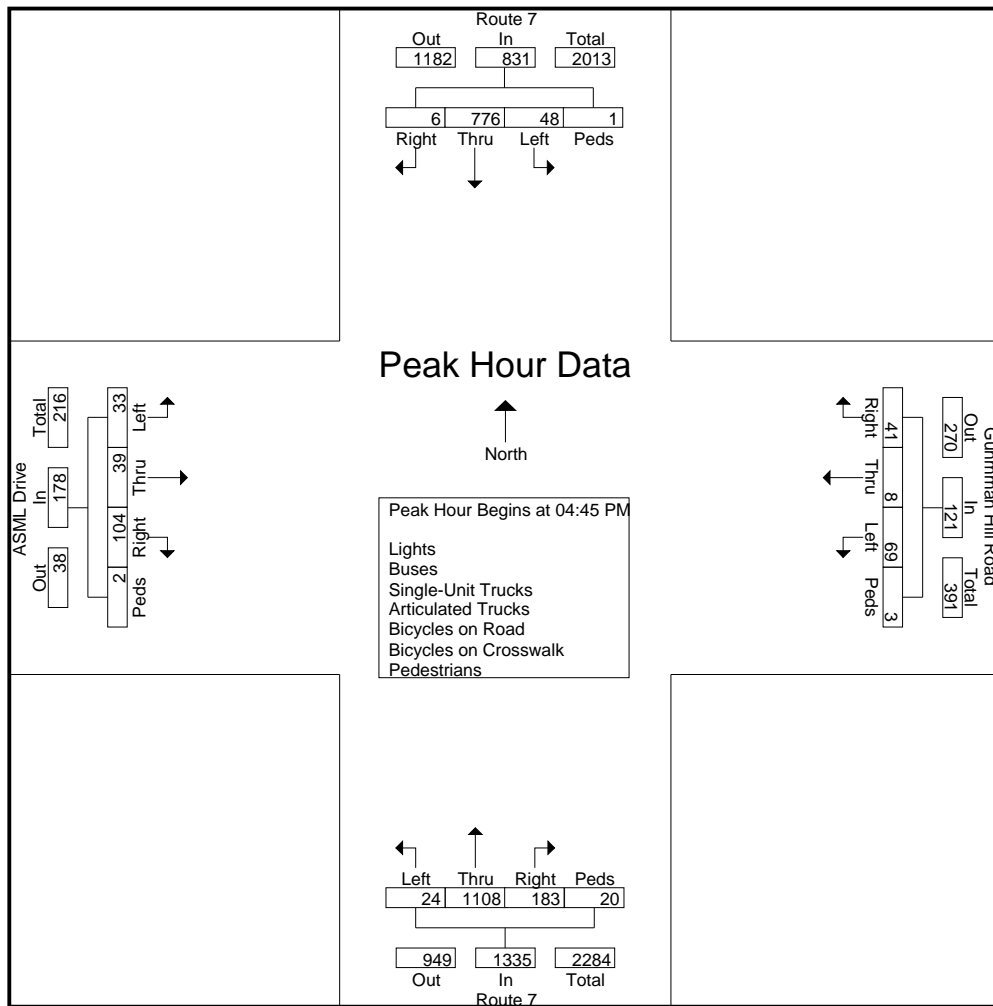


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File Name : 23810
Site Code : 23810
Start Date : 11/29/2022
Page No : 8

Start Time	Route 7 From North					Gunman Hill Road From East					Route 7 From South					ASML Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 11:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	181	5	1	187	17	0	20	2	39	51	296	9	6	362	26	17	12	2	57	645
05:00 PM	1	210	15	0	226	10	2	16	0	28	45	234	3	12	294	31	9	8	0	48	596
05:15 PM	3	177	15	0	195	6	4	15	0	25	55	305	5	2	367	25	10	4	0	39	626
05:30 PM	2	208	13	0	223	8	2	18	1	29	32	273	7	0	312	22	3	9	0	34	598
Total Volume	6	776	48	1	831	41	8	69	3	121	183	1108	24	20	1335	104	39	33	2	178	2465
% App. Total	0.7	93.4	5.8	0.1		33.9	6.6	57	2.5		13.7	83	1.8	1.5		58.4	21.9	18.5	1.1		
PHF	.500	.924	.800	.250	.919	.603	.500	.863	.375	.776	.832	.908	.667	.417	.909	.839	.574	.688	.250	.781	.955



Connecticut Counts LLC

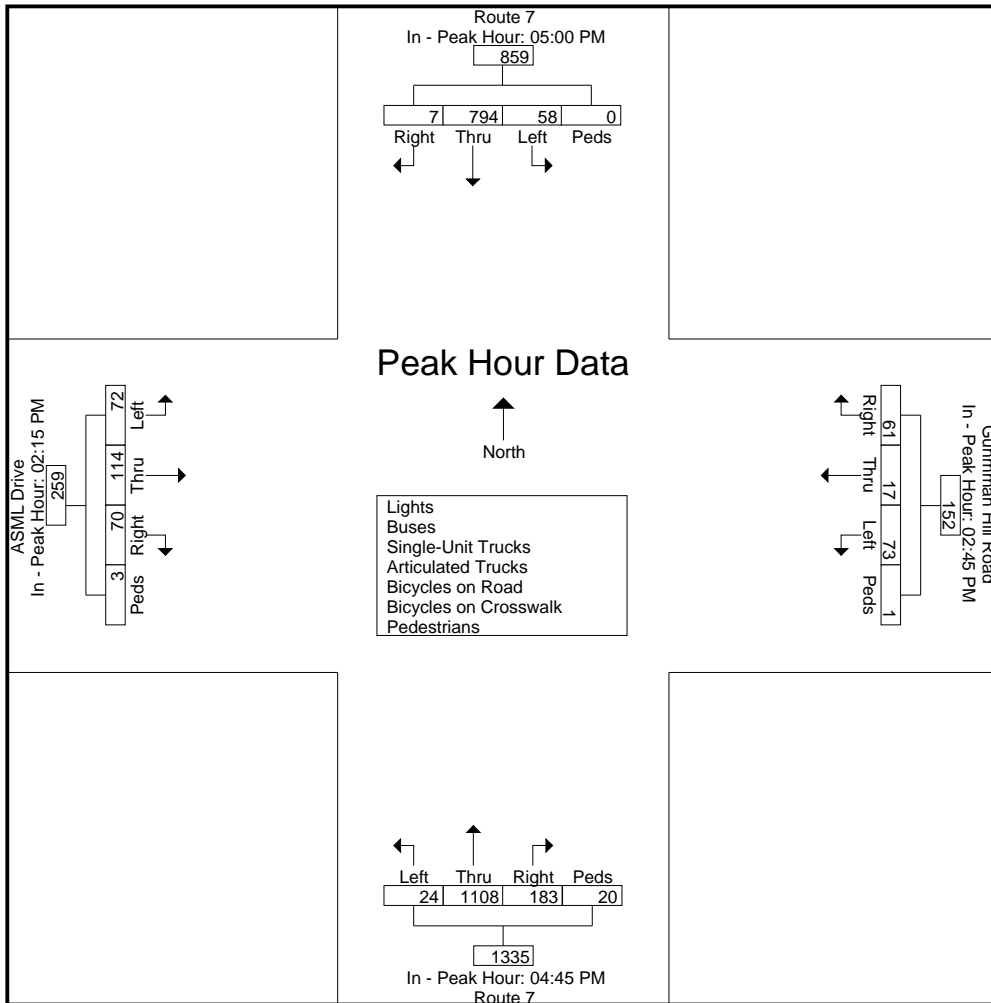
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File Name : 23810
Site Code : 23810
Start Date : 11/29/2022
Page No : 9

Start Time	Route 7 From North					Gunman Hill Road From East					Route 7 From South					ASML Drive From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 02:00 PM to 11:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM					02:45 PM					04:45 PM					02:15 PM				
+0 mins.	1	210	15	0	226	4	14	17	0	35	51	296	9	6	362	11	15	11	0	37
+15 mins.	3	177	15	0	195	19	3	18	0	40	45	234	3	12	294	31	48	24	0	103
+30 mins.	2	208	13	0	223	25	0	21	1	47	55	305	5	2	367	19	27	23	1	70
+45 mins.	1	199	15	0	215	13	0	17	0	30	32	273	7	0	312	9	24	14	2	49
Total Volume	7	794	58	0	859	61	17	73	1	152	183	1108	24	20	1335	70	114	72	3	259
% App. Total	0.8	92.4	6.8	0		40.1	11.2	48	0.7		13.7	83	1.8	1.5		27	44	27.8	1.2	
PHF	.583	.945	.967	.000	.950	.610	.304	.869	.250	.809	.832	.908	.667	.417	.909	.565	.594	.750	.375	.629



**OFFICE OF THE STATE TRAFFIC ADMINISTRATION (OSTA)
ADMINISTRATIVE DECISION REQUEST - DRAINAGE**

Name of Facility	Town	State Route(s)
ASML - MICC & Cafeteria Expansion	Wilton	U.S. Route 7 (Danbury Rd)

Location (complete street address; if none, provide map/block/lot information)

77 Danbury Road, Wilton, CT 06897

Stormwater Runoff (at least one of the following must be checked to qualify):

- The proposed project will not increase impervious area at the site.
- Stormwater runoff from the site does not drain nor is directed to State property or State owned/maintained drainage facilities.

Diversions (the following must be checked to qualify):

- Proposed drainage patterns on the site are maintained as closely as possible to the existing site conditions. No diversion of stormwater or stream flow is proposed that will potentially affect State or private property.

State Drainage System Modifications (the following must be checked to qualify):

- There are no new connections or modifications to State owned/ maintained drainage systems.
- There are no modifications to the development drainage system that a State drainage connects or discharges to.

Drainage Rights/Easements (Check all that apply. Response will be used to determine if new/additional ROW is required.):

- State drainage facilities are not located on the subject site.
- Runoff from any adjacent State highway or railroad facility does not discharge onto the subject site.
- Existing and/or proposed site drainage does not connect to a State owned/maintained drainage facility.
- Existing site drainage connects to a State owned/ maintained drainage facility. A record of the connection exists / does not exist at the DOT District office.
- Land records were searched and no State drainage rights/ easements were found for the subject site.
- A State "drainage right of way" or "easement" is recorded on the land records for the property.

Description of State drainage right of way or easement (type & location)
A state drainage easement currently exists, but is in the process of being purchased by the property owner.

- The proposed project will not affect an existing State drainage right of way or easement on the subject property.

Flood History (the following must be checked to qualify):

- The subject site does not have a history of flooding or known drainage problems. The applicant has consulted with the municipality and the DOT District Drainage office regarding any flood history or known drainage problems at the site. Copies of the meeting/telephone reports are attached.

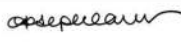
Signoff from District Drainage Engineer attached. Signoff from Town Engineer requested and will be provided upon receipt.

Other Approvals

Has the drainage design and stormwater management for the project been approved at the local level? Yes No

Professional Engineer Certification

I have conducted a site investigation and reviewed the proposed project plans relative to the information required for this document. Based on my review and reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, I hereby certify that the information provided on this document is complete and true.

Name	PE Number
Joseph Canas, PE	20873
	09/01/2023
Signature	Date



Affix P.E. Stamp Here

From: Ingarra, Todd A <Todd.Ingarra@ct.gov>
Sent: Thursday, September 1, 2022 10:20 AM
To: Joseph A. Canas <JACanas@tighebond.com>
Subject: Re: 77 Danbury Road (US Route 7), Wilton - Known Flooding Issues?

[Caution - External Sender]

Joe,

I am unaware of any issues for this parcel.

Thanks.

Todd Ingarra

Drainage Engineer, Special Services Section

District 3 – New Haven

Connecticut Department of Transportation

Email: Todd.Ingarra@ct.gov

Desk: (203) 389-3026

Cell: (860) 841-5469

From: Joseph A. Canas <JACanas@tighebond.com>
Sent: Monday, August 29, 2022 12:39 PM
To: Ingarra, Todd A <Todd.Ingarra@ct.gov>
Subject: 77 Danbury Road (US Route 7), Wilton - Known Flooding Issues?

You don't often get email from jacanas@tighebond.com. [Learn why this is important](#)

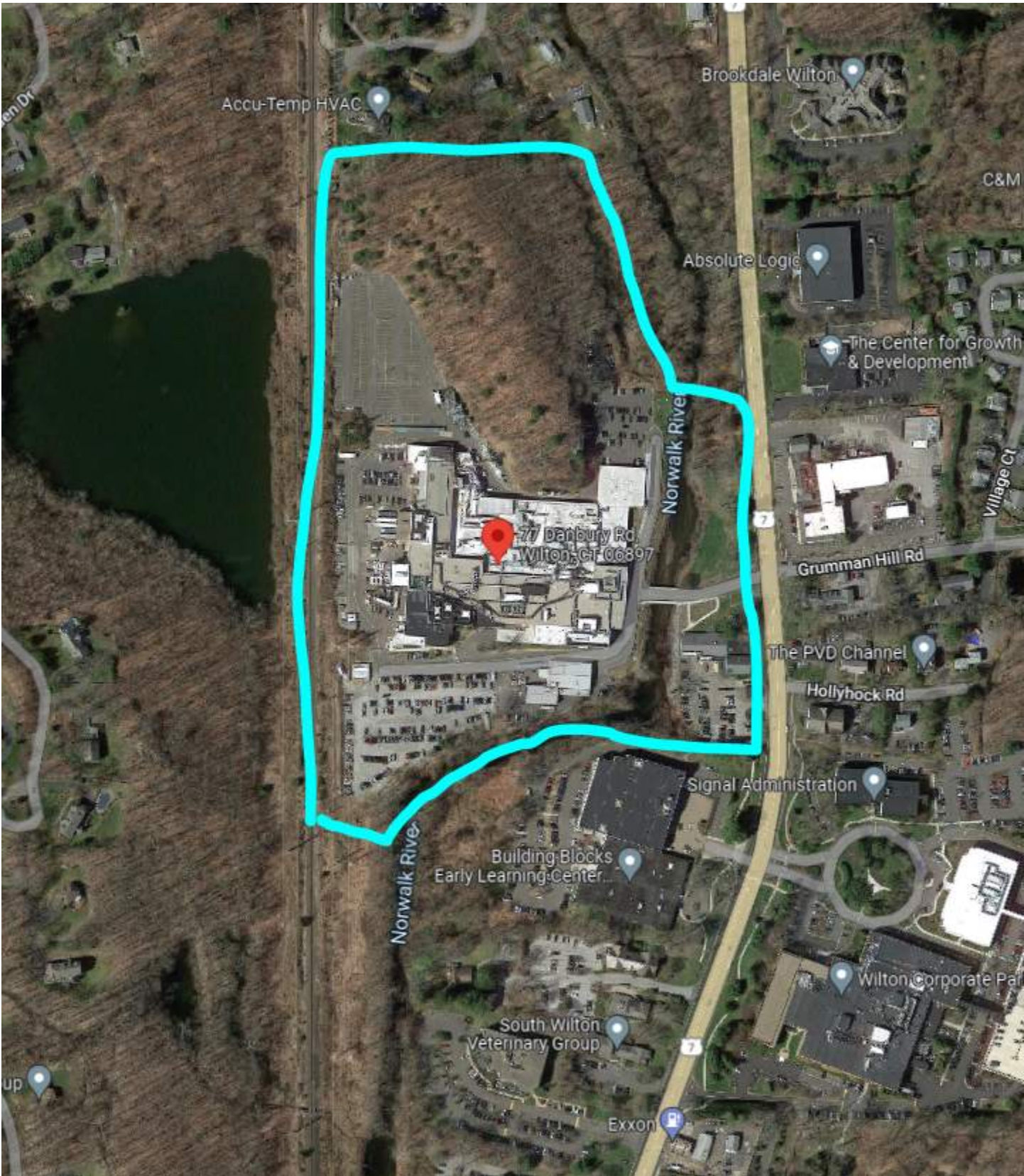
EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Todd-

Good afternoon.

We are preparing an OSTA AD application to the state for minor improvements at 77 Danbury Road in Wilton. One of the requirements is that we consult with the District concerning known flooding issues along the state highway (Route 7) in the vicinity of the site. Would you please provide in an email response so we can include it in our application? A screenshot of the property is shown below.

Thank you for the help, and please advise if you have any questions related to this request.



Joseph Canas, PE, LEED AP, CFM

Principal Engineer