DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)

Massachusetts Environmental Policy Act

Project:

United Material Management of Leominster
200 Tanzio Road
Leominster, Massachusetts 01453

EEA#16878

August 2025

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Table of Contents

Chapter	Topic	Page(s)
0	Table of Contents	1-3
1	Overview of MEPA Status	4
2	Project Summary	5-6
3	Project Description	7-10
4	Alternatives	11-26
5	Existing Environment	27
5.1	Topography, geology, and soils	27-28
5.2	Surface water and Groundwater	28-29
5.3	Air Quality, GHG Emissions, Noise	30-31
5.4	Plant and Animal Species and Habitat	31-32
5.5	Traffic, Transit, and Pedestrian and Bicycle Transportation	32
5.6	Scenic Qualities, Open Space, and Recreational Resources	33
5.7	Historic Structures or Districts, and Archaeological Sites	34
5.8	Built Environment	34-35
5.9	Rare or Unique Features	35
5.10	Public Health Conditions	35-38
6	Impacts	39
6.1	Solid Waste	39-42
6.2	Environmental Justice	43-48
6.3	Transportation/Traffic	49-76
6.4	Greenhouse Gas Emissions	77-80
6.5	Noise Impacts	81-84
6.6	Air Quality Impacts	85-109
6.7	Odor Impacts	110-112
6.8	Construction Period Impacts	113
7	Climate Change	114
8	Mitigation and Draft Section 61 Findings	115-123
9	Response to Comments	124-132
10	Summary of Public Meeting	133-135

Continued on next page

Table of Contents, Continued

Tables	Table No.
Alternative Comparison Summary	1
Vulnerable Health Criteria within 1 mile of the Project	2
Summary of Air Monitoring Data	3
Maximum Daily Trip Generation	4
Hourly Distribution	5
Projected Hourly Truck Volumes	6
Peak Hour Truck Trip Generation	7
Signalized Intersection Overall LOS	8
Unsignalized Intersection Overall LOS	9
Motor Vehicle $C0_2$ Emissions Summary	10
Potential Sources of Pollution within 1 mile of the Site	11
Environmental Indicator Percentages	12
Mesoscale Emissions Summary	13
Level of Service Summary	14
Required State Agency Actions	15
Mitigation Commitment Summary	16
Summary of Public Comment Topics	17

Continued on next page

Table of Contents, Continued

Figures	Figure No.
Alternatives #1 and #3- EJ Areas	1
Alternative #2- EJ Area	2
Alternative #4- EJ Area	3
Alternative #5- EJ Area	4
Alternative #6- Site Location	5
Alternative #6- EJ Area	6
Vulnerable Health Criteria Graph- Leominster	7
Environmental Justice Map	8
Study Area Intersections	9
Existing Peak Hourly Traffic-AM	10
Existing Peak Hourly Traffic PM	11
Daily Traffic Counts	12
Truck Distribution – Packers/Roll-offs	13
Truck Distribution - Trailers	14
2032 No Build Weekday Peak Hour Traffic- AM	15
2032 No Build Weekday Peak Hour Traffic -PM	16
Net New Project Trips- Weekday Morning Peak Hour	17
Net New Project Trips- Weekday Afternoon Peak Hour	18
2032 Build Traffic Volumes- Weekday Morning Peak Hour	19
2032 Build Traffic Volumes- Weekday Afternoon Peak Hour	20
CIA Mapping Tool for K-8 schools within 1 mile of Site	21
EJ Designated Geographic Area	22
Monthly Diesel VOC Emissions- Worcester County	23
Monthly Diesel NOx Emissions- Worcester County	24
Monthly Diesel $PM_{2.5}$ Emissions- Worcester County	25
Monthly Diesel DPM/PM_{10} Emissions- Worcester County	26
Attachments	**Attachment No.**
MEPA ENF Certificate	1
Project Site Plans	2
Traffic Impact Study	3
Sound Study	4
Odor Study	5
Greenhouse Gas and Environmental Justice Air Quality Analyses	6
ENF Comment Letters	7
Odor, Noise and Dust Complaint Log	8
Community Outreach / Public Involvement Plan (PIP)	9
2070 Precipitation Values	10

1. Overview

Project Overview	The project consists of a tonnage increase for the existing United Material Management of Leominster solid waste transfer station located at 200 Tanzio Road, Leominster, Massachusetts (the facility). The construction of this facility was originally reviewed by MEPA in 2018 under EEA #16878. Green Seal Environmental, LLC (GSE) prepared an Environmental Notification Form (ENF) on behalf of United Material Management of Leominster, LLC (UMML) for the proposed project in 2024; this Draft Environmental Impact Report (DEIR) is being submitted following the issuance of the ENF Certificate as further described below.
ENF and Secretaries Certificate(s)	The ENF was noticed in the Environmental Monitor on September 25, 2024. After a review and comment period, a Certificate (EEA#16878) was issued by the Secretary of the Executive Office of Energy and Environmental Affairs on December 9, 2024. A copy of the Secretaries Certificate is included as Attachment 1.
DEIR Format	The DEIR has been developed in accordance with the format provided at 301 CMR 11.07(6) (the MEPA Regulations) with consideration of the scope presented in the ENF Certificate. A separate section in the DEIR has been provided for each of the categories/sections identified in the MEPA Regulations and/or as amended by the MEPA ENF Certificate.

2.Project Summary

Project Information	Project Name: United Material Management of Leominster EEA#: 16878 Project Description: Increase the daily capacity of the existing transfer station from 1,000 tons per day (tpd) to 1,500 tpd.
Project Changes since ENF	No changes to the Project have occurred since the review of the ENF.
Summary of Permits	Following the MEPA process, two additional permits will be required: • Minor Modification to Site Assignment, Leominster Board of Health • Modification of a Large Handling Facility, BWP SW 07, MassDEP Solid Waste **Both of these permits will be sought after the MEPA process*.
Summary of Project Alternatives	The ENF included an alternatives analysis that evaluated No Build and Millbury Facility Expansion Alternatives. The MEPA Certificate required the DEIR evaluate the alternatives presented in the 2023 ENF (Alternatives 1 & 2), the sites evaluated in the prior 2018 ENF (Alternatives 3 & 4), and new site(s) (Alternative 5 & 6): 1. The existing Leominster Facility (preferred alternative) 2. Expansion at the existing UMM Millbury Facility in Millbury 3. Expansion at the existing Waste Management Facility in Leominster 4. Development of new facility at a vacant parcel in Leominster 5. Expansion at the existing AKS Facility in Fitchburg 6. Development of a new facility outside of an Environmental Justice area.
Summary of Potential Impacts	As identified in the MEPA Certificate, potential impacts include the following: • Noise • Odor • Emissions • Traffic

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2.Project Summary, Continued

Summary of Measures to Avoid or Minimize Damage

As identified in the ENF, the Facility uses Best Management Practices to minimize potential impacts to the Site and surrounding environment. The following BMPs are implemented at the Facility:

- All tipping, handling, and loading is performed within a fully-enclosed waste handling building.
- The building floor is impervious concrete that will prevent any potential contact with or contamination of groundwater. Any liquids released from the waste is collected in an interior floor drain system. The liquid collected in this system is routed through an oil/water separator and discharged to the sanitary sewer system pursuant to their existing discharge permit.
- Use of a fine atomized misting system within the Waste Handling Building effectively controls fugitive dust and odor.
- Utilize overhead doors to contain any excessive dusty or odorous materials that may be delivered.
- Regular daily cleanup and sweeping occurs on the external paved surfaces to mitigate any dust or windblown litter.
- Enhanced stormwater controls that meet or exceed MassDEP Stormwater Standards to minimize impacts to stormwater.
- Use of rail for exportation of materials, effectively reducing diesel-related emissions.

Summary of Mitigation Measures

UMML has identified the following mitigation measures to reduce potential impacts due to the tonnage increase:

- Close one overhead tipping door during operations after 4 pm to reduce noise impacts to nearby receptors.
- Limit MSW tonnage to 600 tons on the floor overnight.
- Install enhanced filters on existing air ventilation system to reduce potential odors and/or dust. Filtration may include the addition of coarse particulate filters.
- Plant additional trees on site to mitigate carbon impacts.
- Work with City to install new signage on Malburn Street to provide notice and discourage any trucks (new to facility) from traveling through the residential neighborhood.
- Evaluate the modification of the existing air handling units to reduce noise.
- Modify existing misting system to increase odor counteractant application and efficiency (completed).
- Based on need (waste storage volumes), the Facility may also add carbon filtration to increase odor control.

3.Project Description

Existing Conditions

The 13.46-acre existing project site is located on the west side of Tanzio Road in an industrial area in southeastern Leominster. The site is bordered to the west by a CSX rail line; to the north by Fall Brook, an electrical transmission line and vacant properties; to the east by Tanzio Road and an active sand and gravel facility; and to the south by an undeveloped area with wetlands and woods. Tanzio Road is located off Route 117 (New Lancaster Road), which provides vehicular access to Interstate-190 (I-190) approximately 1.5 miles south of the site. Approximately 3.69 acres of the site are impervious; no new impervious area is proposed. A site Locus Plan is included in Attachment 2 as Sheet EX-1.

The existing transfer station, on-site roadways, and other ancillary structures are located in a level part of the site which generally ranges in elevation from 366 ft NAVD 88 to 372 ft NAVD 88. A small area in the northernmost part of the project site, in which no activities are proposed, is within the Outer Riparian Zone of the Riverfront Area associated with Fall Brook. An unnamed perennial stream (a tributary of Fall Brook) and associated Bordering Vegetated Wetlands (BVW), Bordering Land Subject to Flooding (BLSF) and Riverfront Area are located in the southern portion of the site. As shown on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) number 250314007B, effective date September 16, 1982, the 100-year floodplain associated with Fall Brook north of the site has a Base Flood Elevation (BFE) of 344 ft NAVD 88 and the 100-year floodplain associated with the stream in the southern part of the site has a BFE of 350 ft NAVD 88. As mapped on the FIRM, the 500-year floodplain is confined to the area immediately adjacent to Fall Brook and the unnamed tributary and does not extend onto any part of the site where handling operations take place. The Site is shown on C-1 included in Attachment 2.

The project site is located within an Environmental Justice (EJ) population designated as Minority, and within one mile of eight additional EJ populations in Leominster, including two designated as Minority, five designated as Minority and Income, and one designated as Minority, Income, and English Isolation. The project site is located within five miles of 25 additional EJ populations designated as Minority; Minority and Income; Minority and English Isolation; and Minority, Income, and English Isolation located in Leominster, Fitchburg, Lancaster, and Shirley. EJ Populations are shown on EX-5 in Attachment 2.

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3.Project Description, Continued

Existing Conditions, Continued

Currently the facility is permitted to accept up to 1,000 tons per day (tpd) of solid waste including municipal solid waste and construction and demolition debris (C&D). Waste handling occurs inside an existing 32,400 square foot (sf) handling building that includes a dedicated rail loadout bay, three tipping doors, and a material processing line that separates out recyclable material from the C&D waste stream. There are two scales on site to serve inbound and outbound vehicles which minimizes time vehicles are on site and potentially idling, thereby reducing emissions on site.

Refer to site plans included herein as Attachment 2.

Objectives and Benefits

The objectives and benefits of the project include the following:

- Increase available waste handling and recycling capabilities in the region as in-state capacity continues to decrease and forces out-of-state disposal.
- Use existing infrastructure minimizing construction impacts.
- Use rail infrastructure which is 4 times as efficient as trucking, reducing potential diesel emissions and traffic.

Proposed Conditions

This Project is for the increase of allowed daily accepted tonnage only, no construction is proposed as part of this project. Handling of the increased tonnage will occur within the existing site infrastructure.

Planning Consistency

The project is designed to utilize existing site infrastructure and have no construction-related impacts. This includes using all existing access roads, rail infrastructure, stormwater management features, buildings, and utilities. A site plan depicting existing project features is included within Attachment 2.

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3.Project Description, Continued

Planning Consistency, Continued

Solid Waste Master Plan

The proposed project meets the goals of the Massachusetts Solid Waste Master Plan in several ways. The Master Plan states that Massachusetts landfill capacity is declining as landfills are closed and are not replaced and "this tightening of disposal capacity has weakened the resiliency of Massachusetts waste disposal infrastructure." Waste disposal in Massachusetts landfills was approximately 6.5 million tons in 2008, and was at 5.5 million tons in 2019. Although diversion has reduced overall waste disposal in times of population growth and growth in the state domestic product, there is still not enough disposal solutions in Massachusetts to handle our waste in state, and therefore it must be sent elsewhere.

The Master Plan identifies increasing export of waste to disposal facilities in other states as a means of making up for the loss of landfill capacity. A tonnage increase at an existing rail-served facility makes out-of-state disposal a viable option, especially for a state that will rely significantly on out of state exportation as a means to satisfy the Commonwealth's disposal needs.

One of the goals of the Master Plan is to reduce annual solid waste disposal by 30% by the year 2030. It is expected that this reduction will happen through a combination of source reduction, material reuse, recycling, composting, and using source-separated materials as fuels or other beneficial uses.

Montachusett Master Plan

The Montachusett Regional Planning Commission issued a five-year Montachusett Region Comprehensive Economic Development Strategy (July 2019-July 2024). This Plan identifies the support of housing improvements and supply of housing; and commercial and industrial land development by community and economic planning and development proponents in the region. The Plan identifies the need to have affordable housing stock to attract people to the region from the Cities and keep existing residents in the region. The plan also discusses industrial development to bring jobs to the region and redevelop vacant properties (available for EDA funding) to incentivize building and job creation.

Increasing solid waste handling at an existing transfer station can lead to the creation of sustainable jobs related to the waste management sector, for example in trucking, recycling, and rail operations. These new jobs contribute to the local economy and provide employment opportunities for residents. Additionally, if the waste handling includes recycling and resource recovery initiatives, it can lead to the development of new businesses and industries that rely on recycled materials, further supporting the local economy.

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3.Project Description, Continued

Planning Consistency, Continued

Increased waste handling can attract investment in transportation and other waste management infrastructure and facilities, which can be considered as an essential business asset. A well-developed waste management network can be showcased as a regional strength, promoting responsible waste management and recycling practices. Moreover, the increased waste handling can attract attention from businesses seeking to invest in eco-friendly solutions to waste processing, contributing to the emergence of a green economy cluster in the region.

Increased capacity for waste handling and recycling as a sanitary public service will also support population growth in the region.

Leominster Master Plan

The Leominster Master Plan is outdated (1959) and is not a plan that is presently relied upon by the City. As such, GSE gathered information that is relevant to the project and assessed how the project is consistent with the goals and initiatives of the City. Secondly, the Leominster Economic Development Office also provided other plans for review such as the "Leominster Community Development Plan" dated 2004, submitted to the City of Leominster by the Montachusett Regional Planning Commission, and the "Fitchburg-Leominster Consortium Five-Year Consolidated Plan 2022-2026 and Program Year 48 Annual Action Plan".

According to the Leominster Economic Development Office, industrial development in Leominster is a priority, as was evident by the Montachusett Regional Comprehensive Economic Development Strategy (CEDS) that was referenced in the grant application that helped construct Tanzio Road. This region boasts a highly skilled workforce, with historic emphasis in the manufacturing industries. At the time of the grant application, the then-proposed Industrial Park sat on land that is part of the Borden Chemical Economic Opportunity Area (EOA). The development of this area helps the City to better attract industrial businesses including manufacturing, research & development, and biotechnology firms. The array of industries that this project attracts is of great economic development benefit to the region as a whole, creating much needed jobs, as well as promoting local investment and increasing the tax base. The existing facility was approved as being consistent with the City's economic goals, and increased throughput will also be consistent.

4.Alternatives to the Project

Introduction

The project is proposed to meet increasing demand for MSW and C&D waste disposal in Massachusetts. According to MassDEP, solid waste transfer facilities are necessary to divert and dispose of waste to conserve the state's declining landfill capacity. The ENF included an alternatives analysis that evaluated No Build and Millbury Facility Expansion Alternatives. The MEPA Certificate required the DEIR evaluate the alternatives presented in the 2023 ENF (Alternatives 1 & 2), the sites evaluated in the prior 2018 ENF (Alternatives 3 & 4), and new sites (Alternatives 5 & 6):

1. The existing Leominster Facility (Preferred Alternative)
2. Expansion at the existing UMM Millbury Facility in Millbury
3. Development of new facility at parcel 320-1E in Leominster
4. Expansion at the existing Waste Management Facility in Leominster
5. Expansion at the existing AKS Facility in Fitchburg
6. Development of new facility outside of an EJ area, in the Leominster vicinity

No Build Alternative

The No Build Alternative would maintain the facility's existing capacity of 1,000 tpd. According to the ENF, because of the regional demand for waste management and coupled with the lack of landfill capacity, exportation of waste will be the primary method of waste disposal in the state. Waste material that would be transported to the facility would have to be transported elsewhere at potentially greater distances with greater air emissions, particularly if rail were not available for transportation of waste.

This No-build alternative would not provide the needed future waste disposal, processing, and recycling capacity that the state will need as in-state disposal capacity continues to decrease.

Alternative #1- Existing UMML Facility

A tonnage increase of 500 tons per day at the existing UMML facility at 200 Tanzio Road in Leominster, MA is the preferred alternative. The Facility is sited on a 13.46-acre parcel of land located west of Tanzio Road and east of the existing CSX Corporation Railroad line. To the north of the Site is land containing a power easement with transmission towers with vacant, industrially-zoned land beyond. To the south is an unnamed brook with commercial properties beyond. The Facility has no immediately-adjacent residences and the overall parcel size provides adequate buffer to adjacent properties. The Facility currently is permitted for the operation as a C&D and MSW solid waste handling facility. A modified site assignment from the Leominster Board of Health would be required to allow the tonnage increase, along with a Permit Modification from the MassDEP.

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4.Alternatives to the Project, Continued

Alternative #1-Existing UMML Facility, Continued

Access. The Facility has exceptional truck access to both Tanzio Road and Route 117, which provide access to Route 2 via I-190. The Facility is of sufficient size to accommodate truck traffic and on-site queuing from an expanded operation without modification. The closest residential homes are located over 500 feet away with the elevated existing CSX railroad line between the existing Facility and nearest residential properties.

This Facility is the preferred alternative due to its direct access and proximity to the rail line, location within an industrial park, proximity to major roads, overall distances to resource areas and sensitive receptors, and parcel size. It is already constructed and in operation, so no new construction-related impacts will occur. This use has an already established presence on the roadway and rail network.

The current site has been in operation for three years and its function is well-established, with a record of successful operation and compliance. It has a major advantage over any other new facility locations – incumbency. The impacts from construction have already occurred, the operation has been fine-tuned, and ongoing regulatory compliance is established. Any new location, if available, would not provide these beneficial characteristics and could have greater impacts to the community and the environment. Considering these factors, analysis of potential new locations would provide no environmental benefit and has not been explored.

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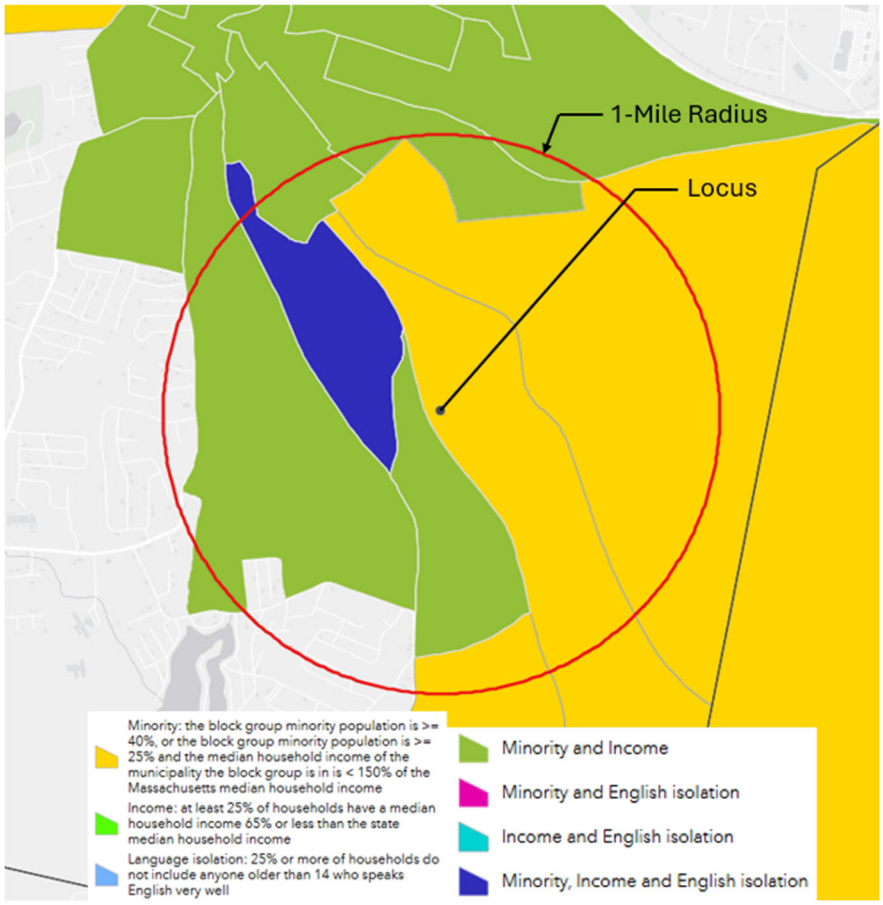
4.Alternatives to the Project, Continued

Alternative #1- Existing UMML Facility, Continued

Environmental Justice. The Site is located within an EJ area designated as Minority, and within one mile of eight additional EJ populations in Leominster, including two designated as Minority; five designated as Minority and Income; and one designated as Minority, Income, and English Isolation, as shown in Figure 1 below. Please also refer to Sheet EX-5 in Attachment 2.

Figure 1- EJ Populations Surrounding Preferred Location- Alternative #1



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4.Alternatives to the Project, Continued

Alternative #1-Existing UMML Facility, Continued

Impacts. The Preferred Alternative will minimize environmental impacts by using an existing facility that was originally designed and constructed with the capacity to accommodate additional waste. The facility transports most outbound waste from the site using rail cars rather than trucks, which minimizes traffic and air quality impacts. Transporting waste by rail is four times more fuel efficient than transporting waste by trucks; trains can move a ton of freight over 470 miles on a single gallon of fuel whereas a truck can move a ton of freight only approximately 134 miles per gallon of fuel. The Facility is located within a mapped community with Vulnerable Health Criteria for Heart attack at a 1.4% to 2.1% rate. The same Vulnerable Health Criteria and rate applies for the entire 1-mile radius around the Facility.

Adhering to the current operational plan and best management practices, with consideration of possible operational modifications can minimize odor and noise impacts. Following the three public hearings held as part of the MEPA process, the Facility is assessing the ability to reduce noise from the ventilation system either by increasing the fan size to reduce revolutions, thereby reducing vibrational noise, or adding sound dampening materials to the unit. The ventilation units as originally installed were designed with the motors inside the building to mitigate for noise. Also the Facility is assessing whether or not the overhead door mechanisms can be modified to allow the doors to close quicker if operations are odorous and needs to be contained to prevent impacts. Adjustments to the misting system and odor counteractant application have been recently made in response to public comments submitted as part of the ENF process. These measures are in addition to the Facility's standard operating procedures of good housekeeping, first-in, first-out protocols, use of misting system and filters on ventilation, handling materials indoors, and others as identified in the Facility's O&M Plan and as presented in the ENF. Other measures the Facility will take to minimize traffic-related impacts is continued use of rail for transporting outbound materials to reduce the amount of vehicles accessing the Facility and emissions, adhering to anti-idling rules, and maintain communications with haulers and those using the Facility to ensure and enforce rules of Facility use including trucks are not parking /queuing outside the Facility, not using Malburn St, following signage, etc.

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4.Alternatives to the Project, Continued

Alternative #2- Existing UMMM Facility

Alternative #2 is the UMM processing facility in Millbury that was an identified alternative in the 2018 ENF (under EEA # 15868). This parcel is approximately 6.33 acres in size and is located on Bob Millers Way in Millbury. To the north of the Site are commercial properties along Route 20. To the south is wooded undeveloped land with I-90 beyond. To the west is the Wheelabrator/WIN Innovations Waste-to-Energy facility; and the east is wetlands with residential properties beyond. The residential properties are approximately 700-feet away from the handling building, and the building orientation with the tipping doors facing north, reduces potential impacts these properties. The site is zoned Industrial, and is site assigned for waste handling. The Facility currently is permitted for the operation as a C&D and MSW solid waste handling and processing facility.

The Millbury Facility Expansion Alternative would involve expansion of the capacity of the Proponent's existing facility in Millbury by 500 tpd, from 1,000 tpd to 1,500 tpd. The Millbury facility is a processing and transfer facility owned by the Proponent that is second-closest to the Leominster facility. The Millbury facility is not served by rail, and therefore all material would be transported to and from the site by trucks, which is four times less efficient in terms of fuel use and emissions than rail transport. Furthermore, the Millbury facility is farther away from the sources that would otherwise dispose of waste in the Leominster area, and would therefore generate greater air emissions from truck delivery of waste to the site. The Facility is of sufficient size to accommodate truck traffic and on-site queuing from an expanded operation without significant modification, although a second scale installation would be necessary to accommodate the additional trucks and maintain traffic flow on site. The closest residential homes are located over 650 feet away with trees and a wetland between the existing Facility and nearest residential properties, and tipping doors facing away from residential receptors.

Access. The Facility is located on Bob Millers Way with direct access from Route 20 which provides access to I-90 via Route 146 to the west and Route 122 to the east. Trucks using Route 122 to get to I-90 would pass residential homes.

Environmental Justice. The Millbury facility is located within approximately 200 feet of a mapped EJ population designated as Minority. This is the only mapped EJ population within one mile of the site. This mapped EJ area includes Route 20 which is the main access road to the site from nearby I-90, therefore, trucks delivering waste material to and from the site passes through an EJ population.

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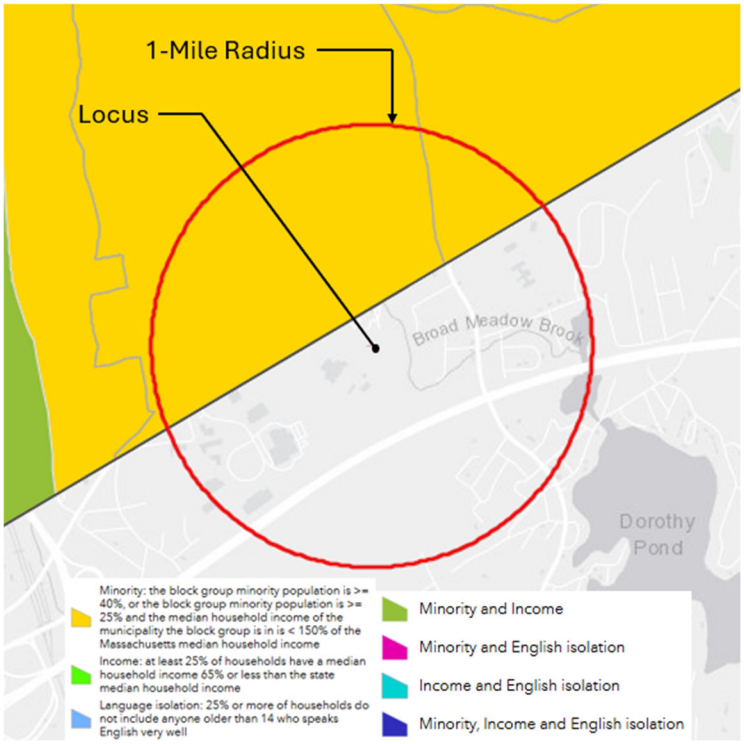
4.Alternatives to the Project, Continued

Alternative #2- Existing UMMM Facility, Continued

Figure 2- EJ Populations Surrounding Alternative Location #2



Impacts. As indicated in the ENF, the Milbury Facility Expansion Alternative was not pursued because of the greater distances that trucks would need to travel and the lack of rail service which lends to increased emissions and related impacts. The Facility is located within a mapped community with Vulnerable Health Criteria for Heart Attack at a 1.4% to 2.1% rate. Within one-mile of this Alternative Facility, the same Vulnerable Health Criteria applies with a portion being classified with the same 1.4-2.1% rate, and a portion classified at an increased 2.8% to 3.5% rate.

Alternative #3- New Facility at Parcel 320-1E in Leominster

Alternative #3 is Parcel 320-1E in Leominster that was an identified alternative in the 2018 ENF (under EEA # 15868). This parcel is approximately 7.61 acres in size and is located in Leominster, off Tanzio Road across the street from the existing UMM Leominster facility. The property is privately-owned, vacant, and was previously operated as a sand and gravel pit. The site is properly zoned Industrial, which allows transfer stations with the approval of local permits and is identified on the Leominster Assessors Map as Parcel ID 320-1E.

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4.Alternatives to the Project, Continued

Alternative #3- New Facility at Parcel 320-1E in Leominster, Continued

The site currently has no permit status or site assignment with respect to construction and operation of a C&D or MSW waste handling facility. A site assignment from the Leominster Board of Health would also be required to accept the proposed project tonnage increase of 500 tons per day.

Although the site is of sufficient square footage, its shape does not allow construction of the necessary building to be located outside of the required regulatory MassDEP Solid Waste 500-foot residential setback requirement. Additionally, the property does not have rail access which is crucial to allow the facility to access to long term solid waste outlets that are generally not viable based on long haul trucking and future operation. A rail spur would need to be constructed beneath the existing power easement and across Tanzio Road to service the site, which would require Also, rail has the ability to minimize outbound truck traffic impacts.

Access. The site has exceptional truck access to both Tanzio Road and Route 117, which provide access to Route 2 via I-190, and is the same access that the current UMML facility has. However, this alternative site does not abut the existing rail line and it is unlikely that a rail spur could be built to adequately service the property or integrate with UMML without purchasing additional property and constructing a rail crossing across Tanzio Road. Furthermore, the existing electrical easement that bisects Tanzio Road adjacent to the UMML facility and this Alternative site could pose logistical complications with construction and offsets/setbacks.

Environmental Justice. This Alternative site is located within and in proximity to the same EJ area as the existing UMML facility- the preferred alternative, which is in EJ area designated as Minority, and within one mile of eight additional EJ populations in Leominster, including two designated as Minority; five designated as Minority and Income; and one designated as Minority, Income, and English Isolation.

Impacts. The impacts of this Alternative would be significant based upon its very close proximity to residential properties solely. Other impacts would include that from construction of both a new facility and rail spur which would require significant earthwork, tree removal, and likely work in Riverfront Area. More importantly, based on the assessment by GSE, the site does not meet all of the site assignment criteria in 310 CMR 16.00; and would not be feasible to obtain a positive determination of Site Suitability from MassDEP nor site assignment from the Leominster Board of Health due to its proximity to residential dwellings.

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4.Alternatives to the Project, Continued

Alternative #3-New Facility at Parcel 320-1E in Leominster, continued

The Solid Waste Regulations require a minimum setback to residential properties as a minimum mitigation measure to prevent impacts. The Facility is located within a mapped community with Vulnerable Health Criteria for Heart attack at a 1.4% to 2.1% rate. The same Vulnerable Health Criteria and rate applies for the entire 1-mile radius around the Facility.

Alternative #4-WM Facility in Leominster

Alternative #4 is an expansion of an existing MSW transfer station located at 256 New Lancaster Road (Route 117) in Leominster, which is owned and operated by a private entity. The facility is site assigned and permitted to transfer 650 tons of MSW per day. The Facility is sited on a 6.68-acre parcel of land located northeast of Route 117/ New Lancaster Road, and west of Route I-190. Lancaster Street with the North Nashua River beyond is to the north of the site, with commercial properties to the south along New Lancaster Road. The closest residential property is located approximately 600 feet to the north.

In order to increase tonnage capacity an additional 500 tons over its currently permitted daily average tonnage of 650, the existing building would need to be expanded from its current size of 20,000 sf to at least 30,000 sf. Based upon the size of the 6.68-acre lot and GSE's limited assessment, it would likely be feasible to expand the building to accommodate the increase in tonnage however because of property line setback requirements, the new building addition could not be extended along one side and would require a L-shaped building, which does not allow for appropriate traffic flow in front of the tipping doors. The other major drawback to this potential site is that there is no rail access which is crucial to future solid waste disposal as local landfills close and limiting the commensurate ability to reduce outbound truck traffic. It is unlikely and infeasible to build a rail spur to service the facility considering the location and proximity to existing rail lines. There is no current rail line availability in the area. This Facility is also only permitted to accept MSW, and the site assignment would need to be modified to accept C&D.

However, to consider this as an alternative for the Proponent, it would need to be purchased, and it is unlikely that the current owner of the transfer station is willing to sell or seek to expand. It would be less cost effective to purchase this Facility and construct an building addition and add a recycling processing line than the preferred alternative that is already owned by the Proponent and does not require construction of a building addition.

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4.Alternatives to the Project, Continued

Alternative #4-WM Facility in Leominster, continued

Access. The site driveway is located approximately 1,300 feet from the I-190 exit ramps to Route 117, which provides quick access to I-190 and Route 2 without traveling by residential properties.

Environmental Justice. The Site is located within an EJ area designated as Minority, and within one mile of one additional EJ population in Leominster designated as Minority and Income.

Figure 3- EJ Populations Surrounding Alternative Location #4

Continued on next page

4.Alternatives to the Project, Continued

Alternative #4-WM Facility in Leominster, continued

Impacts. Facility appurtenances are located just outside of the Riverfront Area to the North Nashua River, and the Johnny Appleseed Park and Cook Conservation area is located on the other side of the River in proximity to the Facility. As indicated above construction of a building addition would be necessary to handle the additional 500 tons however because of property line setback requirements, the new building addition could not be extended along one side and would require a L-shaped building, which does not allow for appropriate traffic flow in front of the tipping doors and could cause on-site queuing delays and increase emissions on site. This site would also have more traffic and emissions impacts under an expansion scenario than the preferred alternative due to the lack of rail service to this site, such that all outbound material would need to be trucked.

Additionally, this Alternative facility is located in the same minority EJ area as the preferred alternative, therefore there are no perceived benefits to the EJ areas under this Alternative Facility scenario. The Facility is located within a mapped community with Vulnerable Health Criteria for Heart attack at a 1.4% to 2.1% rate. The same Vulnerable Health Criteria and rate applies for the entire 1-mile radius around the Facility.

Alternative #5-AKS Facility in Fitchburg

Alternative #5 is an existing solid waste facility in Fitchburg, Massachusetts, owned by the Proponent which is the nearest UMM-owned solid waste operation to the UMML facility. This facility is located at 15 Cobbler Drive and is currently site assigned and permitted to accept 500 tpd (250 tpd MSW and 250 tpd C&D). The Facility collectively consists of three parcels of land that is not contiguous, and of which only one 3.1-acre parcel of land is site assigned for waste handling. The site is located north and west of the Fitchburg Municipal Airport, east of the Nashua River and south of commercial/industrial properties along Airport Road/Crawford Street. The closest residential property is located approximately 1,800 feet to the northeast.

As presented in the ENF, rail is 4 times as efficient than trucking in terms of fuel usage and emissions. Therefore, having a solid waste handling facility that has the ability to utilize rail as a viable alternative for transportation reduces environmental impacts of this needed service. Since this Facility is not equipped with rail service, it does not pose an advantage over the proposed Leominster facility.

Access. The Site has good vehicular access through an industrial zoned area to Route 12 that connects to Route 2 via Crawford and Benson Streets. Trucks traveling on Route 12 do pass by some residential homes intermixed among mostly commercial properties.

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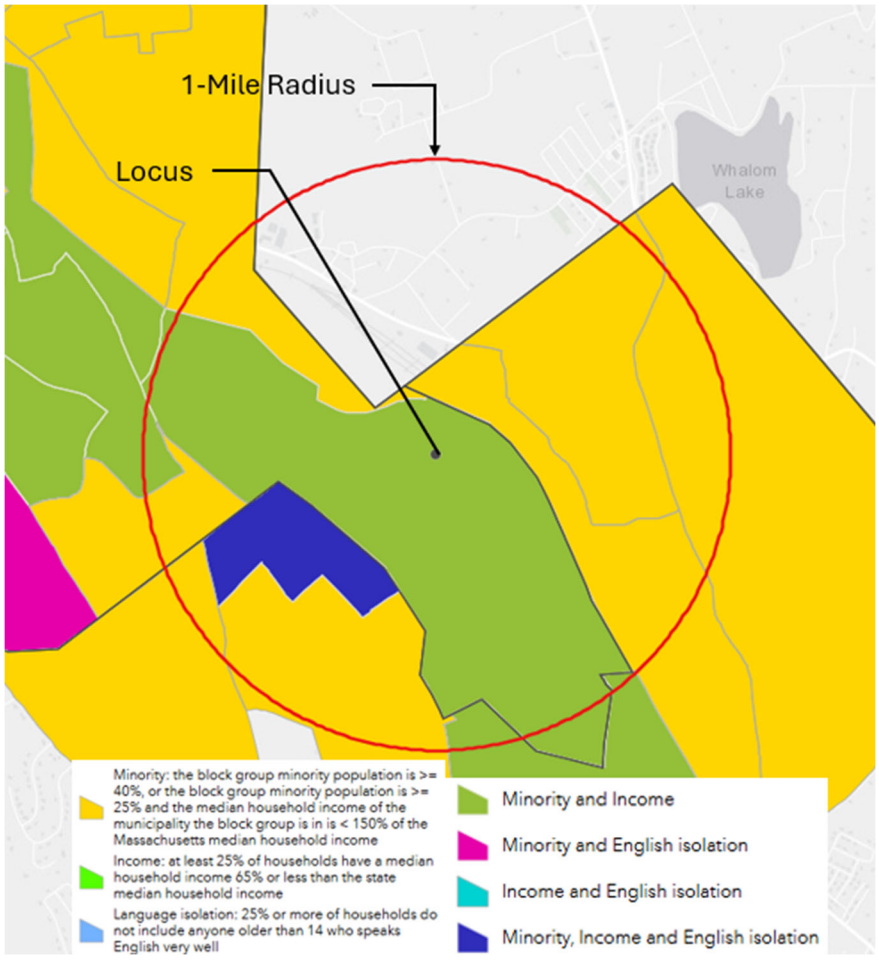
4.Alternatives to the Project, Continued

Alternative #5- AKS Facility in Fitchburg, continued

The site does not have rail access, although the MBTA rail line is located approximately 1,000 feet to the north and east at its closest point. Rail access is likely not possible due to the existing industrial development surrounding the facility and easements through the Airport property that would be required to construct a rail spur.

Environmental Justice. The Site is located within an EJ area designated as Minority and Income, and within one mile of six additional EJ populations including two non-adjacent areas designated as Minority in Fitchburg and two in Leominster; an area in Leominster designated as Minority and Income; and an area designated as Minority, Income, and English Isolation in Leominster.

Figure 4- EJ Populations Surrounding Alternative Location #5



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4.Alternatives to the Project, Continued

Alternative #5-AKS Facility in Fitchburg, continued

Impacts. The impacts of this Alternative would include that from construction and traffic. The existing handling building would need to be expanded to handle the additional tonnage. As the existing site assigned parcel is small, additional adjacent property would need to be purchased, site assigned, and redeveloped appropriately for waste handling. This would result in added waste generation from renovation or demolition of any existing buildings that need modification and noise, air, and traffic impacts from construction vehicles. This site would have more traffic and emissions impacts under an expansion scenario than the preferred alternative due to the lack of rail service to this site, such that all outbound material would need to be trucked. The Facility is located within a mapped community with Vulnerable Health Criteria for Heart Attack at a 0.7% to 1.4% rate. Within one-mile of this Alternative Facility, the same Vulnerable Health Criteria applies with a portion being classified with the same 0.7 to 1.4% rate, and a portion classified at an increased 1.4% to 2.8% rate.

Alternative #6-New Facility adjacent to the Sterling Landfill

GSE reviewed the Environmental Justice area mapping and cross-referenced area municipal zoning maps to identify the closest industrial-zoned area to Leominster that was not in an Environmental Justice area, to identify a sixth potential alternative site, Alternative 6 as requested by MEPA. Lunenburg has two industrial zones both of which overlap a portion of a rail line, however both were within 1-mile of a mapped EJ area and therefore was eliminated. Lancaster has a small section of existing rail line located outside of an EJ area but is not within an industrial zone, and is within 1 mile of an EJ area. The remainder of rail line in Lancaster abuts the Fort Devens Military Reservation of which already has a large handling Facility sited within it, and therefore was eliminated. Princeton has four different industrial-zoned areas of which only two overlap a rail line. However, although these areas are zoned business industrial, they are developed residential and/or preserved as open space. Sterling has five industrial-zoned areas of which only two overlap the rail line. One of these two areas was further eliminated as it is located within 1 mile of an EJ area as well as in close proximity to the Wachusett Reservoir and protected open space. A parcel was identified in the northeast portion of Sterling adjacent to the closed Sterling Landfill which is located greater than 1 mile to the nearest EJ area, and has been designated as Alternative #6. See Figure 5 below.

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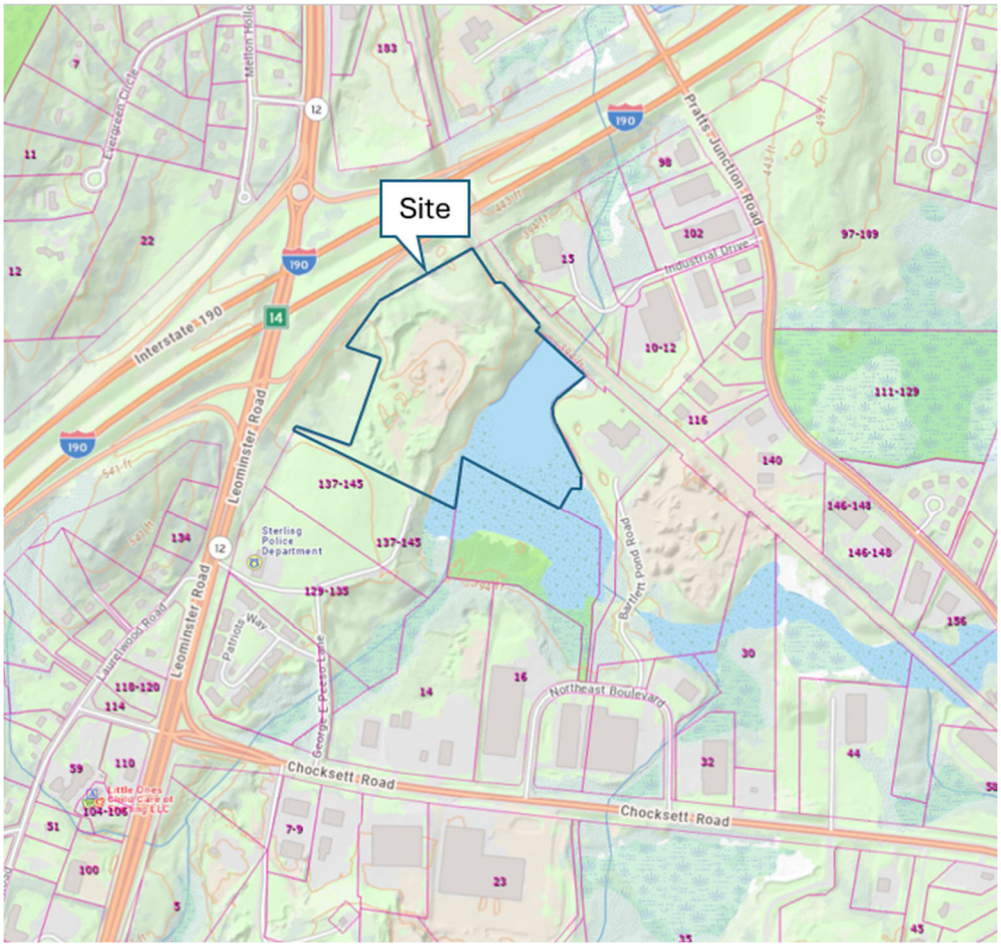
4.Alternatives to the Project, Continued

Alternative #6- New Facility adjacent to the Sterling Landfill, continued

Figure 5- Alternative #6 Locus Map



The parcel is identified on the Sterling Assessors Map as Parcel 51-7. It is 24 acres in size and encompasses a portion of Bartlet's Pond on the east side. It is bordered by the closed Sterling Landfill to the southwest, Route I-190 and the eastbound on-ramp to the west and northwest, the CSX Fitchburg rail line to the northeast, and a portion of Bartlet's Pond and conservation land to the southeast. It is currently owned by the Town of Sterling and per 2023 aerial imagery from MassGIS, it is undeveloped but appears to be used for municipal DPW operations with observable piles of soils, pipe, wood, etc, as well as potential mining of soils.

Continued on next page

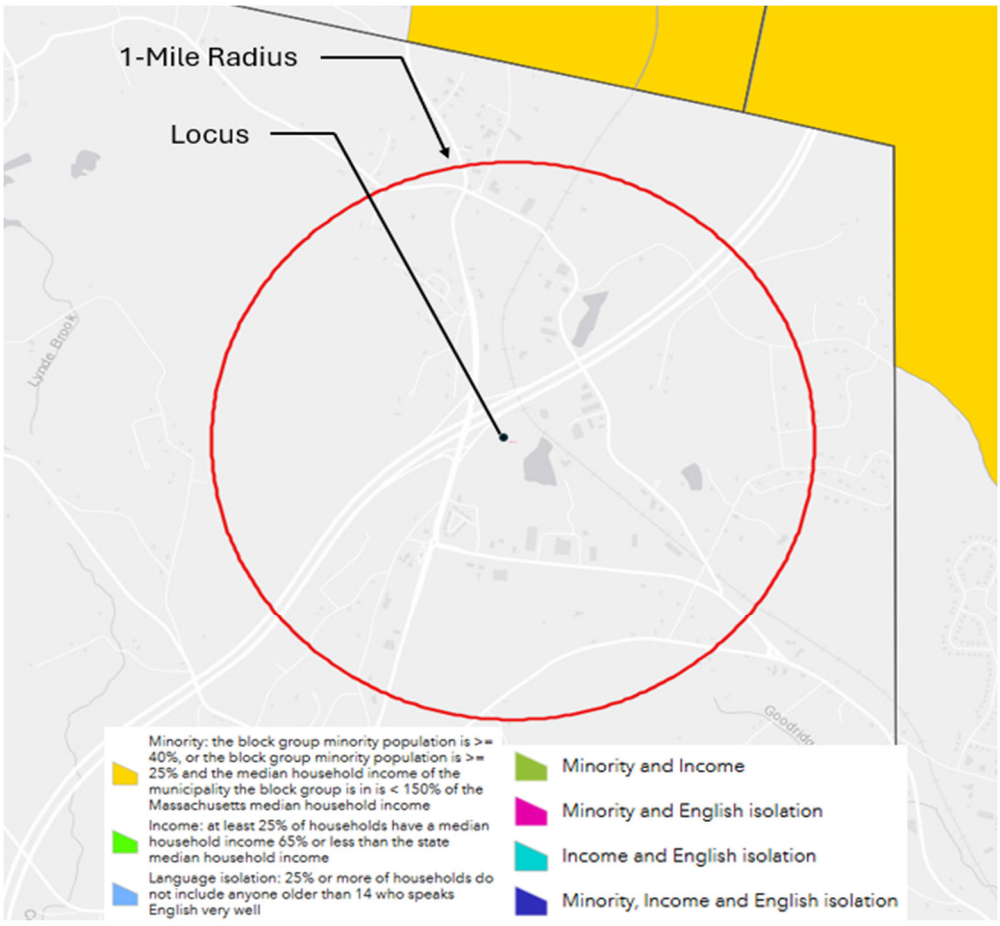
4.Alternatives to the Project, Continued

Alternative #6- New Facility adjacent to the Sterling Landfill, continued

Access. Access to/from the site is from Exit 14 off I-190 onto Route 12, Leominster Road. The site is accessed off George Peeso Lane which connects to both Leominster Road to the west (and the primary access to the police station) and to Chocksett Road to the south. In between these two intersections, a residential condominium complex is located. There is an additional residential neighborhood to the southwest of the site and the likely-truck route along Route 12. As this Alternative site is located near the I-190 interchange it provides good access and minimizes regional trucks travelling on local roads and through residential neighborhoods.

Environmental Justice. The Site is located outside one mile of the nearest EJ population to the north which is designated as Minority and is within Leominster, as shown below as Figure 6.

Figure 6- EJ Populations Surrounding Alternative Location #6



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4.Alternatives to the Project, Continued

Alternative #6-New Facility adjacent to the Sterling Landfill, continued

Suitability. Although this Alternative is located adjacent to an existing solid waste facility (the landfill), review of the parcel in accordance with the Site Suitability Criteria at 310 CMR 16.40 (3) (d) was conducted to verify suitability for development of a new handling Facility. Upon review, the Alternative location failed the suitability criteria 16.40(3)(d) 2, as it is located within a mapped Zone II drinking water protection area, and therefore would not be approved by MassDEP as suitable.

Impacts. The impacts of this Alternative would include that from construction of both a new facility and rail spur which would require significant earthwork, tree removal, and likely work in the buffer zone to Bartlet's Pond. The earthwork would be significant to construct a rail spur as the main line is approximately 394 feet in elevation, and the Alternative #6 site is approximately at 443 feet, almost 50 feet in difference. More importantly, based on the assessment by GSE, the site does not meet all of the site assignment criteria in 310 CMR 16.00; and would not be feasible to obtain a positive determination of Site Suitability from MassDEP nor site assignment from the Sterling Board of Health due to its location within a Zone II drinking water protection area. A traffic study would need to be conducted to assess the impact of added trucks to the area and if turning lanes, lights, or roadway widening or other improvements would be necessary. The parcel is located within a mapped community with Vulnerable Health Criteria for Heart attack at a 2.8% to 3.5% rate. The same Vulnerable Health Criteria and rate applies for the entire 1-mile radius around the parcel.

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4.Alternatives to the Project, Continued

Alternative Summary

The Following table summarizes different comparison criteria as presented in the preceding paragraphs, for the six alternatives, and assigns a score for each. As the Table indicates, the preferred alternative is the most advantageous and has the least impacts. Please refer the table footnotes for scoring method.

Table 1: Summary of Alternatives

Comparison Criteria [1]	Alternatives [2]					
	#1	#2	#3	#4	#5	#6
Rail Access [3]	3	1	2	1	2	1
Feasibility [4]	3	1	1	2	1	1
Suitability [5]	3	2	0	2	1	0
Impacts [6]	2	2	1	2	2	1
EJ Community	1	1	1	1	1	3
Vulnerable Health Criteria Community	1	1	1	1	1	1
Construction [7]	3	2	1	2	2	1
Availability [8]	3	3	1	1	3	1
Cost	3	2	1	1	2	1
Comparison Score	**24**	**15**	**9**	**13**	**15**	**12**

Notes:

1. Each comparison criteria is assigned a score of 0 to 3, with zero being not allowed, one (1) being non-advantageous, two (2) being neutral, and three (3) being advantageous, generally. More specific components of scoring for certain criteria are presented in the table notes below.
2. Alternatives are as follows:
   #1. UMML
   #2. UMMM
   #3. Undeveloped parcel 320-1E in Leominster
   #4. WM Leominster
   #5. AKS Fitchburg
   #6. Undeveloped parcel in Sterling
3. Rail Access: 3- has rail access, 2- near rail and connection is uncertain, 1- not near rail, connection not possible.
4. Feasibility criteria includes assessment of how the parcel or existing facility could be modified so that internal operations and traffic flow functions well.
5. Suitability criteria refers to suitability criteria and permitting needs under 310 CMR 16.00: 0=not suitable, 1=needs new site assignment, 2= needs major modification to site assignment, 3= needs minor modification to site assignment.
6. Impacts in general terms of proximity to residential receptors.
7. Construction: 3= none required, 2=building addition, 1=all new construction
8. Availability: 3=owned by proponent, 1=not owned by proponent

5.Existing Environment

Overview

In accordance with 310 CMR 10.11.10 (6), the Form and Content of an EIR, this Existing Environment section provides a description and analysis of the physical, biological, chemical, economic, and social conditions of the Project site, its immediate surroundings, and the region (in sufficient detail to provide a baseline in relation to which the Project and its alternatives can be described and analyzed and its potential environmental and public health impacts and mitigation measures can be assess). Topics to be included include the following:

1. Topography, geology, and soils;
2. Surface and groundwater hydrology and quality;
3. Air quality, GHG emissions, and noise;
4. Plant and animal species and habitat;
5. Traffic, transit, and pedestrian and bicycle transportation;
6. Scenic qualities, open space, and recreational resources;
7. Historic structures or Districts, and Archaeological Sites;
8. The built environment, human use of the Project site, and its immediate surroundings.
9. Rare or unique features
10. Publicly available data on public health conditions in the immediate vicinity of the Project site.

Note: the Project site is not located in tidelands or locked tidelands, so those topics do not apply to this DEIR.

1. Topography, Geology, and Soils

The Project site are located within a level part of property at elevations between 366 feet NAVD 88 to 372 feet NAVD 88. The existing CSX rail line is located above the site at elevations of between 380 and 384 feet NAVD 88, creating a berm which assists with sound attenuation and screening of the facility to adjacent properties to the west. The electrical easement located to the north of the Project site is also mostly elevated with maximum elevations between 374 and 392 feet NAVD88. An unnamed stream is located on the south side of the property which has a base flood elevation of 350 feet NAVD 88. Fall Brook is located north of the site which has a Base Flood elevation of 344 feet NAVD 88. Per the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) number 250314007B, effective September 16, 1982, the 500-year floodplains of Fall Brook and the unnamed stream does not extend onto any part of the developed site where transfer operations occur. Prior to development of a transfer station in 2019-2020, the Project site was a sand and gravel pit. Test pits conducted for design of the stormwater treatment system confirmed subsurface soils were sand.

Continued on next page

5.Existing Environment, Continued

1. Topography, Geology, and Soils, Continued

Areas of prime farmland, farmland of unique importance, and farmland of statewide importance as identified by soils classification on the MassGIS system are mapped at the site and are indicated on EX-3. Farmland of state wide importance was identified overlapping three areas within the Site.

Based on a soil investigation performed by APEX prior to the original siting of the Facility, the findings of the Detailed Soil Survey determined that all areas within the area to be Site Assigned previously designated as having soils classified by NRCS as Farmland of Statewide Importance were not present but instead consisted of other soil mapping units, 600 – Pits, gravel and 602 – Urban Land, that are not such farmland designations due to previous excavation and extraction of sand and gravel at the Site. Additionally, there is at least a 100-foot buffer between the Facility and those lands as evidenced by the results of a detailed soil survey and the actual use of land. The mapping on Figure 3 (in Attachment 2) represents the limits based upon the soil survey and shows the areas confirmed not having soils classified as farmland. No waste handling activities occur within Farmland soils or within 100 feet of mapped soils.

2. Surface Water and Groundwater

Surface water at the Project site includes an unnamed brook located on the south side of the property, and associated wetlands. Fall Brook and its associated wetlands is located near the very edge of the northern property line near the rail line and spur connection. The Site is developed with some pavement and/or rail track within the 200-foot Riverfront Areas. No waste handling activities occur in the Riverfront Area. The existing Facility is located outside of the 100-year flood plains of both the unnamed Brook to the south of the site and Fall Brook to the north of the site. Wetland buffer zones extend over a small portion of the site across the northern boundary from wetlands surrounding Fall Brook and over a more significant portion of the southern end of the site from the wetlands categorized as wooded swamp with mixed trees. No development is located within the regulatory 100-foot buffer zone. The Water Resources Plan (EX-2 in Attachment 2) depicts wetlands as obtained from MassGIS within a ½-mile radius of the site. The Existing Conditions Plan (C-1 in Attachment 2) shows the wetland areas to the south and north of the Site and associated 100-foot wetlands buffer zone.

Groundwater at the Project site generally flows southeast towards the unnamed stream. Test pits conducted prior to stormwater system design and permitting for initial Facility construction confirmed groundwater to be at a minimum of 11-feet below the elevation of the lowest handling building floor elevation.

Continued on next page

5.Existing Environment, Continued

2. Surface Water and Groundwater, Continued

Solid Waste Regulations require a minimum separation of 2-feet between waste handling and maximum groundwater elevation. The existing Facility meets this separation requirement.

Stormwater on the developed portion of the Project site is collected, treated, and attenuated in accordance with Massachusetts Stormwater Management Policy. Roof runoff is collected and discharged to a subsurface infiltration system which recharges groundwater in accordance with Standard 2. Stormwater from the paved surfaces are collected in deep-sump catch basins with oil hoods to treat for suspended sediments, oils, and floatables. From there, stormwater flows through oil/grit separators to further treat for sediment, floatables and oils before it is discharged to one of two additional subsurface infiltration systems for attenuation and groundwater recharge. Stormwater outside paved surfaces either flow to the south towards the unnamed brook, or towards the east where a swale directs stormwater along Tanzio Road and south the unnamed brook.

Surface Water and Groundwater Protection Areas

Proposed Drinking Water Source Areas. The Site is not located within or adjacent to a proposed drinking water source area. The nearest mapped high-yield aquifer is located approximately 1-mile northwest of the site. No Water Management Permits or Applications for permits were listed for Leominster on MassDEPs website. Please note that all waste handling operations will take place indoors.

Zone A & B. The Site is not located within or adjacent to a Zone A or B of a public drinking water supply area. The nearest Zone A and B of a public drinking water supply is at the Fall Brook Reservoir 1.9 miles southwest of the Site and the Morse Reservoir 2.2 miles northwest of the Site. This is well beyond the ½ mile radius from the Site and is not depicted on the Water Resources Plan.

Zone I. The Site is not located within or in close proximity to a Zone I of a public water supply. The nearest Public Water Supply Wells are located approximately 2 miles east of the Site.

IWPA and Zone II. The Site is not located within an IWPA or Zone II. The nearest Zone II is approximately 1.7 miles south of the existing facility. The nearest IWPA is approximately 1.8 miles northeast of the existing facility.

Continued on next page

5.Existing Environment, Continued

3. Air Quality

Airborne particulate emissions associated with the acceptance of C&D and/or MSW can occur. However, Massachusetts existing C&D handling infrastructure has had a long history on how to successfully reduce and control the potential for particulate emissions. Nuisance dust mitigation measures currently implemented at the Facility includes the following:

Control	Function
Pavement	Minimize potential for dust emissions associated with access ways and parking areas.
Sweeping	Minimize potential for dust emissions associated with access ways and parking areas by wet sweeping or vacuum sweeping on a regular basis.
Building	Minimize potential for dust emissions by handling the material in a controlled environment.
Atomized Misting System	Controls dust within building.

3. GHG

The intent of any transfer station is to gain efficiencies especially those associated with transportation. This Facility primarily uses rail as well as larger trucks when necessary to make sure that the waste is effectively consolidated when it's transported greater distances. The use of rail is 4 times more efficient than trucking, and thereby reduces overall emissions.

As no new building construction is proposed, stationary GHG emissions (from the facility building) will not increase in proposed conditions. Analysis using the Emissions Footprint Estimation Tool indicated that the Project would generate 80 tons per year (tpy) of CO_2, well below the 2,000 tpy threshold requiring a GHG emission analysis per the "MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations". Therefore no additional analysis is required as part of DEIR.

Additional GHG mesoscale analysis assessed existing conditions which is further presented in Section 6.4 (Impacts- Greenhouse Gas) and in the Greenhouse Gas and Environmental Justice Air Quality Analyses report included as Attachment 6.

Continued on next page

5.Existing Environment, Continued

3. Noise

Noise on site is minimized by both the design of the site and operational procedures including the following:

- Conducting all tipping, handling, and loading of waste materials within an enclosed building and only within the permitted hours.
- The orientation of the handling building has been strategically located on the site to have the tipping/delivery doors facing the northeast, which is away from the closest receptor and the two closest residential neighborhoods.
- The orientation of the building acts as a sound buffer to the closest receptor.
- Backup alarms on dedicated site equipment are the squawker type which has a lower white-noise sound frequency and is therefore quieter at distance but still provides the required on-site safety measure.
- Ventilation fans and motors are located inside the Facility and exhaust under positive pressure through vents on the wall of the Facility, reducing motor and vibrational noise.

The ENF presented a sound study which analyzed sound impacts associated with the Facility operation under proposed conditions. In the ENF Certificate, MEPA requested further discussion of whether additional measures could be taken to reduce noise impacts and a response to public comments regarding noise.

An update to the sound study is presented in a memorandum dated July 29, 2025, included as Attachment 4.

Discussion of the sound studies, findings, and impacts are presented in the standalone Impacts-Noise section of this report.

4. Plant and Animal Species

According to MassGIS, there is Priority Habitat of Rare Species and an Estimated Habitat of Rare Wildlife located approximately 0.5 miles west of the subject Site. These areas are separated from the Site by the existing rail line, commercial/residential properties, and Route 12. The areas of Rare Species Habitat and Habitat of Rare Wildlife are depicted on EX-3 included in Attachment 2.

GSE reviewed the Division of Fisheries and Wildlife website and MassWildlife Lands Viewer for information regarding Wildlife Management Areas. No Wildlife Management Areas are located within a ½ mile of the Site boundary.

Continued on next page

5.Existing Environment, Continued

4. Plant and Animal Species, continued

According to MassGIS, there is an Area of Critical Environmental Concern (ACEC) located approximately 0.4 miles east of the subject Site within the Johny Appleseed State Park. The area is separated from the Site by commercial/residential properties and Route 117. The ACEC is depicted on EX-3 in Attachment 2.

5. Traffic

The Facility's established truck route consists of accessing the Facility from Tanzio Road directly via Lancaster Road. Trucks are not allowed to access or depart the Facility using Tanzio Road to Aspinwall Avenue to Malburn Street to Lancaster St. "Right turn only" and "No left turn" signs are posted at the Facility exit on both sides of the exit, to direct and prevent vehicles from exiting left and north towards Aspinwall and Malburn streets. According to the Proponent, no trucks have turned left out of the Facility driveway. If one does at any point in the future, the Facility would verify the truck per the scale records, and contact the owner to issue a warning.

A majority 75% of the trucks access the Facility from the south with 65% from I-190 and 10% from Willard Street (that connects Rt. 12 to Rt. 117). The remaining 25% are local trucks accessing the Facility from the north via Lancaster Street (Rt. 117) and Viscoloid Avenue. It is expected that local trucks originating from within Leominster delivering to the Facility would likely travel from local collector roadways to access the site, as the study shows. Additional traffic counts were collected in March 2025 to discern the number of trucks traveling on Lancaster Road that is associated with the Facility in comparison to general truck traffic on the road in current conditions. This data is presented in an updated TIS dated May 2025, included as Attachment 3.

Discussion of the traffic studies, findings, and impacts are presented in the standalone Impacts-Traffic section of this report.

Continued on next page

5.Existing Environment, Continued

6.Open Space and Recreation

The Land Use Plan included in Attachment 2 as Sheet EX-3 depicts open space by type within a one-half mile radius of the Project Site. The types of open space shown are per the Solid Waste Regulations, 310 CMR 16.00.

GSE reviewed the Department of Conservation and Recreation website for information regarding State forests. No State forests were identified within a ½ mile of the Site boundary.

Saint Leo Cemetery is located north of the existing Facility across Route 117 (Lancaster Street) and is also separated from the Site by commercially developed properties. The Fuller Street Conservation Area is located northwest of the Site and is separated from the Site by the CSX Railroad and Litchfield Street. The Leominster Lassie League Field Complex is located approximately 0.48 miles west of the Site and is separated from the Site by the CSX railroad, Litchfield Street, Route 12, commercially developed properties, and residential dwellings. Eagles Field and the Old Deerfield Woods Estates Conservation Areas are separated from the Site by Route 12 (Central Street), commercially developed properties, and residential dwellings. The Johnny Appleseed State Park is located approximately 0.36 miles east of the Site and is separated from the Site by commercially developed properties, residential dwellings, and Route 117.

No Department of Conservation and Recreation (DCR, formerly MDC) parks were identified within ½ mile of the existing Facility.

GSE did not identify any lands with conservation, preservation, agricultural, or watershed protection restrictions approved by the secretary of EOEA within a ½ mile of the Site.

GSE did not identify any privately owned public access conservation lands in close proximity to the subject Site. Based on the existing location, the subject Site will not have adverse impacts on the physical environment of local conservation lands.

Continued on next page

5.Existing Environment, Continued

7. Historical

There are no historic structures, districts, or archaeological sites in the immediate vicinity of the Project Site. There are two mapped MassHistoric inventory points (per MassMapper) within one mile of the site:

- Phineas Carter House, 838 Lancaster Road
  Significance: 1757-Colonial Revival architecture and exploration settlement (0.53-miles away)
- Jonathan A. Herrick House, 42 Old Mill Road
  Significance: 1790-Federal Colonial Architecture and Agriculture (0.75-miles away)

Both of these historic properties are not located on a major haul route to/from I-190 or Route 2, therefore the Project will not impact these properties.

8.Built Environment

The Project Site is located within an Industrial zoning district. The abutting properties to the south, east, and west are all also zoned Industrial. The property abutting the very north of the Project property is zoned Multi-Use I, which allows business/commercial, institutional, and industrial uses. Refer to EX-4 in Attachment 2 for the zoning surrounding the Project site. The City of Leominster had previously designated the area of Tanzio Road as an Economic Target Area and sought funding from the MORE grant program to complete an economic development project including the construction of roadway and utilities on the land owned by the City of Leominster, now Tanzio Road. This funding was applied towards the installation of 2,600 linear feet of roadway with all utilities to assist in the development of road frontage. The installation of the necessary infrastructure, including roadway and utilities had removed the major roadblocks preventing the productive use of this prime industrial land, allowing the existing facility to be constructed. The facility location has excellent access to transportation infrastructure, including highways and rail access, allowing for the increased tonnage with minimal impacts.

As previously presented, the Project site is located with an industrial park. The site is bound to the east by Tanzio Road and the west by a rail line. A portion of the parcel to the north contains an electrical easement with transmission towers. Vacant industrial-zoned land is further north. Additional vacant land with a wooded wetland area surrounding a brook is located at the southern portion of the Site.

Residential dwellings exist greater than 500-feet away from the waste handling area to the southwest across the elevated rail line, and other residential dwellings are located over 800 feet to the east.

Continued on next page

5.Existing Environment, Continued

8.Built Environment, continued

Tanzio Road is served with municipal water, sewer, and drainage systems. Natural gas and above-ground electricity and communications are also available along Tanzio Road.

9.Rare/Unique Features

No rare or unique environmental or social features have been identified at the Project Site or within its immediate surroundings that would result in an unusual or disproportionate effect on environmental resources or quality, or public health.

10.Public Health

The Massachusetts Department of Public Health (DPH) EJ Tool was used to identify whether any municipality or census tract that is within the EJ populations exhibits the following vulnerable health criteria:

- Heart attack hospitalization
- Childhood asthma
- Childhood blood lead
- Low birth weight

Table 2 presents the four vulnerable health criteria within one mile of the Project compared to the 110% statewide rate. Figure 7 below is excerpted from the DPH EJ Tool at https://dphanalytics.hhs.mass.gov/. Although reported as such in the ENF, there are no additional adjacent municipalities within one-mile of the Project site.

As outlined in the MEPA Interim Protocol, health criteria exceeding the 110% statewide rate could be viewed as exhibiting "vulnerable health EJ criteria," and therefore, potentially bearing an "unfair or inequitable" environmental burden and related public health consequences. Three of the four vulnerable health criteria were identified to be below the 110% statewide rate. Heat attack rate for Leominster is 36.4 per 10,000, which is above the 110% statewide rate of 28 per 10,000. This is equivalent to approximately 0.4% of Leominster's population. Therefore, it is not anticipated that this health criteria represents an unfair or inequitable environmental burden or related public health consequences even when looked at on the census-tract level.

Continued on next page

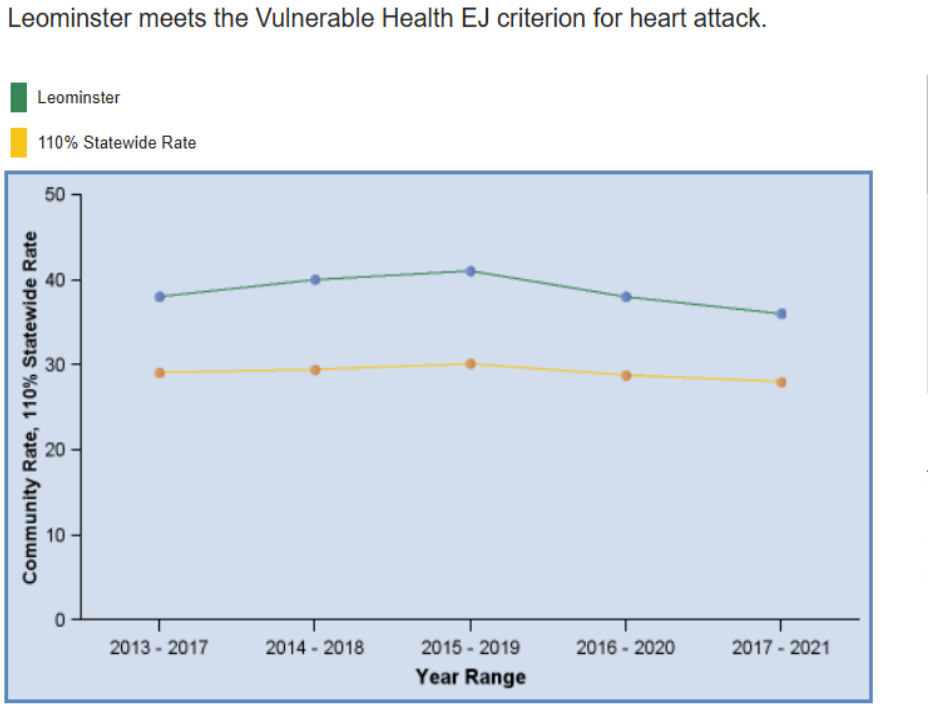
5.Existing Environment, Continued

10.Public Health, continued

Table 2- Vulnerable Health Criteria within 1 mile of the Project

Vulnerable Health Criteria	Leominster	110% Statewide Rate	Above 110% Statewide Rate (Yes/No)
Childhood Asthma (per 10,000)	28	65.7	No
Heart Attack (per 10,000)	*36.4*	*28*	*Yes*
Elevated Blood Lead Prevalence (per 1,000)	8.8	14.1	No
Low Birth Weight (per 1,000)	157.7	238.5	No

Figure 7- Vulnerable Health EJ Criteria Graph- Leominster



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5.Existing Environment, Continued

10.Public Health, continued

Air Permits

Based upon MassGIS, there are no facilities listed with air permits in Leominster. Table 13 in the "Impacts- Air Quality" section of this DEIR tabulates this data as well as other potential sources of pollution within 1 mile of the Project (the Project DGA) sourced from the DPH EJ Tool. The two closest facilities with identified air permits are located over 5-miles away in Westminster:

- Fitchburg Westminster sludge landfill, 101 Fitchburg Road
- NE Renewable Power Fitchburg, 2 Rowtier Drive

Existing Air Quality and Monitoring Data

Table 3 summarizes the MassDEP air monitoring data, for the most recent three-year period (2021-2023), that are considered to be representative of the Project Area. The closest, most representative, MassDEP monitors for all pollutants is Summer Street, Worcester, MA. Table 3 shows that the existing air quality in the Project Area is generally much better than the NAAQS. The highest impacts relative to NAAQS is for the annual $PM_{2.5}$ and ozone.

As presented in the GHG and EJ Air Quality Analyses dated August 2025 prepared by Tech Environmental (included as Attachment 6), and the "Impacts - Air Quality" section of this report, the anticipated emissions from the Facility expansion represent an extremely small fraction of the total vehicles when including background traffic volumes without the Project, and therefore air dispersion modeling would result in insignificant impacts when compared to NAAQS, AALs, and TELs. Section 6.6 (Impacts- Air Quality) further discusses the historical and future improvement in NOx, $PM_{2.5}$, and DPM/PM_{10} emissions in Worcester County and how the Project-related emissions compare to Worcester County emissions in the future.

Continued on next page

5.Existing Environment, Continued

10.Public Health, continued

Table 3- Summary of Representative MassDEP Air Monitoring Data (ug/m^3)

Pollutant	Monitoring Location	Averaging Period	2021	2022	2023	Selected Background	NAAQS (ug/m3)	% of NAAQS
NO_2	Summer St. Worcester, MA	1-hour	82.8	90.3	77.1	83.4	188	44.4%
		Annual	17.5	19.0	17.2	19.0	100	19.0%
SO_2		1-Hour	6.3	5.8	5.5	5.8	196	3.0%
CO		1-Hour	1,114	1,380	1,596	1,596	40,000	4.0%
		8-Hour	802	802	1,260	1,260	10,000	12.6%
$PM_{2.5}$		24-Hour	19.0	17.9	21.0	19.3	35	55.1%
		Annual	9.07	8.61	7.03	8.2	9	91.5%
PM_{10}		24-Hour	31.0	45.0	23.0	45.0	150	30.0%
O_3 (ppm)	Airport, Worcester, MA	8-Hour	124	124	106	118	137	86.0%

Source: MassDEP, https://www.mass.gov/lists/massachusetts-annual-air-quality-reports, downloaded January 31, 2025.

Notes:
1. Annual averages are highest measured during the most recent three-year period for which data are available (2021 - 2023). Values for periods of 24 hours or less are highest and second highest over the three-year period unless otherwise noted.
2. The eight-hour ozone value is the three-year average of the annual fourth-highest values; the 24-hour $PM_{2.5}$ value is the three-year average of the 98th percentile values; the annual $PM_{2.5}$ value is the three-year average of the annual values; the one-hour NO_2 value is the three-year average of the 98th percentile values; the one-hour SO_2 value is the three-year average of the 99th percentile values. These are the values used to determine compliance with the NAAQS for these air pollutants.

6.1 Impacts-Solid Waste

Introduction

The UMM Leominster Transfer Station is a permitted solid waste facility by MassDEP and has valid solid waste permits. A minor modification to the existing Site Assignment from the Leominster Board of Health and a major modification to the existing solid waste Authorization to Operate (ATO) permit from MassDEP will be required for the tonnage expansion.

The capacity increase of 500 tons per day triggers MEPA review as the solid waste threshold at 301 CMR 11.03 (9)(b)(1) is exceeded. A mandatory ENF is required for the tonnage increase, and an EIR is required because the Facility is located within one mile of an Environmental Justice community.

Site Suitability Criteria

To be permitted, solid waste facilities must meet the siting criteria at 310 CMR 16.00 for their design, location, and operational controls to be considered "suitable" as a solid waste facility. As part of the ENF, a draft Site Suitability permit application was prepared to present the facility's suitability for the capacity increase. MassDEP Solid Waste Department provided comments on the draft site suitability narrative included in the ENF in a letter dated November 29, 2024, which indicated that submittal of a Site Suitability Application would not be required, and that a minor modification to Site Assignment though the BOH would be the next permitting step following MEPA review of the FEIR.

The Draft Site Suitability Report included in the ENF outlined each of the siting criteria per 310 CMR 16.00 and described how the Project complies with each criterion. Most of the siting criteria provides protections to the environment (i.e., establishing minimum distances to rivers and drinking water sources, etc.) and nearby receptors (i.e., nuisance condition controls, minimum distances to residential dwellings, daycares, and schools, etc.). No site shall be determined to be suitable or be assigned as a solid waste management facility where the establishment or operation of the facility would result in nuisance conditions which would constitute a danger to the public health, safety or the environment.

Continued on next page

6.1 Impacts-Solid Waste, Continued

Site Suitability Criteria, continued

Siting Criteria include the following:

Zone I	ACEC
IWPA/Zone II	Protection of Open Space
Zone A	Air Quality Impacts
Private Water Supplies	Nuisance Conditions
Occupied Dwellings/Facilities	Size of the Facility
Riverfront Area	Areas Previously Used for Solid Waste Disposal
Depth to Groundwater	Existing Disposal Facilities
Agricultural Land	Other Sources of Contamination or Pollution
Traffic Impacts	Regional Participation
Wildlife Habitat	

More information on these criteria and how the Project complies with the above-listed suitability criteria is contained in the Draft Site Suitability report appended to the prior ENF submittal. The DEIR includes additional information pertaining to specific nuisance conditions, including Traffic Impacts, Air Quality, and Sound, which are presented in individual report sections herein.

Good solid waste design and operational controls mitigate and control the potential for nuisance conditions. The Facility was designed to have overhead doors facing away from nearest residential receptors to mitigate the potential for noise, and use the building and concrete pushwalls as sound barriers. The Facility is equipped with an atomized misting system to control dust and provide odor control with odor counteractant additives. Overhead doors provide enclosure to operations, and can control vectors, dust, noise, and odor with strategic operation. The Facility is equipped with two scales which minimizes the time trucks are on site (reducing emissions and noise). Standard operating procedures such as good housekeeping, managing materials on a first-in, first-out basis, maintaining facility and equipment in good repair, and contracting with a vector-control company all contribute to a well-operated, clean Facility.

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6.1 Impacts-Solid Waste, Continued

Solid Waste Permitting

Following the MEPA process, the Applicant will request a minor modification to Site Assignment from the Board of Health. Following approval of the Minor Modification, the Applicant will submit a Major Modification of a Large Handling Facility (BWP SW 07) to MassDEP to align the operating permit with the newly modified Site Assignment.

Compliance with Existing Permits

In order to accept the increased tonnage and operate the Facility in accordance with permits and the applicable regulations, the following items related to the Size of the Facility were assessed:

- Facility
- Queuing
- Tipping factors at doorways
- Storage area in the building
- Processing line capacity
- Operations /logistics

Queuing

As discussed earlier in this section, under Size of the Facility, the Facility has ample interior accessways to provide adequate truck queuing space for inbound and outbound vehicles, and use of two scales to assist in traffic flow and to minimize delays.

Tipping Factors

As presented in the Draft Site Suitability Report in the ENF, the doorway tipping factors show that the existing number of doorways are adequate to handle the proposed amount of daily inbound materials, for a range of vehicle scenarios.

Storage Area

As presented earlier in the Draft Site Suitability Report in the ENF and shown on Sheet C-2 of the appended plan set, the handling building has adequate interior area to stockpile and temporarily store up to 2,200 tons of C&D residuals or MSW, and up to 800 additional tons of C&D separate from the tipping and loadout areas. This equates to storage of 2 days of full inbound capacity, and is adequate storage space. In accordance with the Facility's Authorization to Operate Permit (ATO), maximum quantities of material that can be stored within the handling building overnight are limited to the following: 375 tons/1,500 cy of unprocessed C&D; 1,000 tons/2,000 cy of C&D Residuals and Bulky Waste combined; 600 tons/2,400 cy of MSW; and 60 cy of Rejected Materials. These storage limits will be adhered to in future expansion conditions.

Continued on next page

6.1 Impacts-Solid Waste, Continued

Compliance with Existing Permits, continued

Processing Line Capacity

The processing /sorting line has a design capacity of 50 tons per hour, however operates at a general capacity of 30 tons per hour. At a permitted 13-hour operational day, the processing line can process approximately 390 tons of Category 1 C&D per day. Per the annual solid waste reports, the Facility averages 198 tons of C&D per day, which is well below the processing line capacity and feasibly allows for inbound C&D to double in the proposed project.

Operations/Logistics

The Facility will need to continue to execute operational controls, communications with vendors regarding hours of operation and truck routes, and good housekeeping as outlined in the O&M Plan to ensure the Facility continues to be well managed when operating at an increased tonnage.

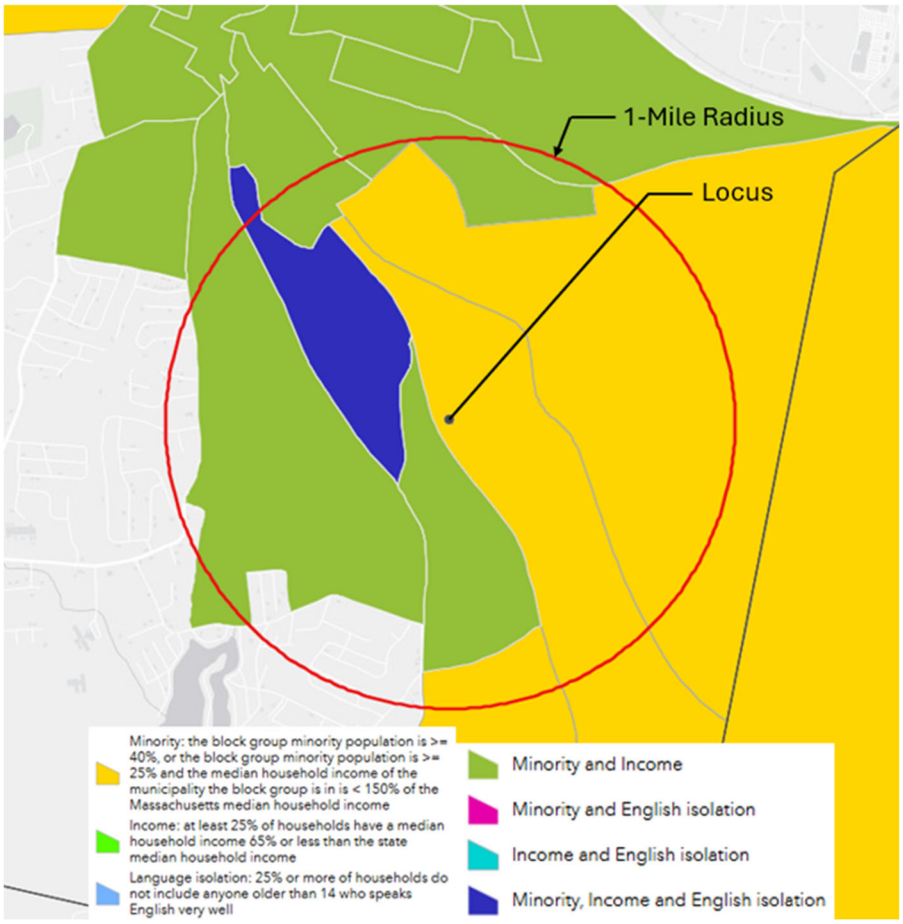
6.2 Impacts-Environmental Justice

Introduction

The Environmental Justice (EJ) component of the Draft Environmental Impact Report (DEIR) provides an overview of the measures used to avoid, minimize, and reduce potential air-related impacts on EJ populations within one-mile of the proposed solid waste facility and how the project is implementing the enhanced public participation requirements under the Massachusetts Environmental Policy Act (MEPA).

The project site is located within an Environmental Justice (EJ) population designated as Minority, and within one mile of eight additional EJ populations in Leominster, including two designated as Minority, five designated as Minority and Income, and one designated as Minority, Income, and English Isolation.

Figure 8: Environmental Justice Communities within 1-mile DGA



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6.2 Impacts-Environmental Justice, Continued

Introduction, Continued

As the Project is within an EJ Area, enhanced public outreach is a component of the Project permitting. The project's submitted Environmental Notification Form (ENF) included a Public Involvement Plan. Updates to the PIP as requested in the MEPA Certificate and per discussions on May 20, 2025 are incorporated into the PIP (see Attachment 11). As part of the ENF Certificate, the Project must continue to provide enhanced public outreach of the DEIR to EJ populations in Leominster. The enhanced public participation requirements as described in the ENF Certificate are listed below and UMML's implementation of each requirement is discussed.

Enhanced Public Participation

Enhanced Public Participation as directed by MEPA:

1. *Update the Public Involvement Plan (PIP) to include a full description of measures the Proponent intends to undertake to promote public involvement of the identified EJ populations during the remainder of the MEPA process. Include discussion of any best practices to be employed as listed in the MEPA EJ Public Involvement Protocol. Consult with MEPA and EEA EJ Offices on updates.*

   The PIP was updated as requested, and is included as Attachment 11. Coordination with Alex Strysky and Kate Harson of MEPA occurred on May 20, 2025 in development of the PIP updates.

2. *The DEIR, or summary thereof, should be distributed to the EJ Reference list used as part of the ENF and as updated. The Proponent shall obtain an updated EJ Reference List from MEPA to confirm contact information.*

   The Proponent obtained an updated EJ Reference List on June 9, 2025, which has been appended to the PIP included in Attachment 11. Upon submittal of the DEIR, a link will be distributed to the EJ Reference List as well as the entire Project Distribution List as updated which includes commenters, other interested parties, and City officials. The Project Distribution list will be notified of the publication of the DEIR and will be reminded of the website that includes the DEIR.

Continued on next page

6.2 Impacts-Environmental Justice, Continued

Enhanced Public Participation, Continued

3. *The Proponent should hold at least one public meeting prior to filing the DEIR and consult with MEPA and EEA EJ Offices in planning this meeting.*

   A public meeting was held at the Franco American War Veterans facility located at 300 Water Street in Leominster, on June 24, 2025. Notice was sent to the Project Distribution list via email on June 11, 2025. The public meeting was advertised in the Sentinel in English and the Vocero Hispano newspaper and online in Spanish. The meeting notice was provided to the City of Leominster and the Spanish American Center in both Spanish and English to be posted at the Library and in City Hall. Coordination with Alex Strysky and Kate Harson of MEPA occurred in planning the meeting.

Environmental Justice Populations

EJ populations are those segments of the population that the Executive Office of Environmental Affairs (EEA) has determined to be most at risk of being unaware of or unable to participate in environmental decision-making or to gain access to state environmental resources, or are especially vulnerable. They are defined as neighborhoods (U.S. Census Bureau census block group data for minority criteria, and American Community Survey (ACS) data for state median income and English isolation criteria) that meet *one or more* of the following:

- 25 percent of households within the census block group have a median annual household income at or below 65 percent of the statewide median income for Massachusetts; or
- 25 percent or more of the residents are minority; or
- 25 percent or more of the residents have English isolation.

EEA has designated specific areas of the state that meet one or more of the criteria above as EJ areas. Within one mile of the proposed site, there is an area designated as an EJ area for minority populations, minority and income populations, and minority, income, and English isolation populations (in other words, 25 percent or more of the residents that reside in these are minority, minority and low-income, or minority, low-income, and English isolation). The location of the site and areas designated as EJ areas are shown above in Figure 8.

Continued on next page

6.2 Impacts-Environmental Justice, Continued

Environmental Justice Impacts Analysis

The Certificate required the use of DPH EJ Tool to identify any census tract or municipality in which EJ populations are located exhibiting "vulnerable health criteria". The term Vulnerable Health Criteria is defined in the tool to include any one of four environmentally related health indicators that are measured to be 110% above the statewide rates based upon a 5-year rolling average.

As identified in Section 5.1, the Facility is located within one-mile of an area with a Vulnerable Health Criteria of Heart Attack.

The ENF Certificate identified the specific items to be addressed in the DEIR related to Environmental Justice. These items and the report sections they are addressed within are summarized below:

#	Item	Refer to
1	Truck routes through EJ areas	Section 6.3 Attachment 3- Traffic Impact Study
2	Air Quality Analysis	Section 6.6 Attachment 6- GHG and EJ Air Quality Analyses
3	Cumulative Impact Analysis for asthma prevalence along truck routes in EJ	
4	Vulnerable Health Criteria	
5	Baseline Assessment of existing Environmental Burden	
6	Identify sources of additional pollution	Section 5.10 Section 6.6 Attachment 6- GHG and EJ Air Quality Analyses
7	Identify air quality indicators in EPA's EJ Screen that are elevated	Section 6.6 Attachment 6- GHG and EJ Air Quality Analyses

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6.2 Impacts-Environmental Justice, Continued

Mitigation

As part of the enhanced environmental justice analysis, mitigation of on-site and off-site activities must be considered. This section describes the mitigation steps that will be taken to minimize impacts on the surrounding receptors.

The analysis shows that, under maximum expected operating conditions which include the stationary sources as well as the mobile on-site and off-site (i.e., traffic) sources and using conservative assumptions, that the project's air impacts will comply with all applicable health-protective standards. Specifically:

- The National Ambient Air Quality Standards (NAAQS) will not be exceeded. Per EPA, these standards "provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly.[1]"
- MassDEP has developed "health- and science-based air guidelines - known as Ambient Air Limits (AALs) and Threshold Effect Exposure Limits (TELs) - to evaluate potential human health risks from exposures to chemicals in air.[2]" The Massachusetts AALs and TELs will not be exceeded offsite.

Controls, Procedures, and Mitigation Measures:

- Close one overhead tipping door during operations after 4 pm to reduce noise impacts to nearby receptors.
- Limit MSW tonnage to 600 tons on the floor overnight.
- Install enhanced filters on existing air ventilation system to reduce potential odors and/or dust. Filtration may include the addition of coarse particulate filters.
- Plant additional trees on site to mitigate carbon impacts.
- Work with City to install new signage on Malburn Street to provide notice and prevent any trucks (new to facility) from traveling through the residential neighborhood.
- Evaluate the modification of the existing air handling units to reduce noise such as the addition of lower decibel fan motors or increasing size of fan to decrease rotational noise.
- Modify existing misting system to increase odor counteractant application and efficiency (this is already completed).
- Based on need (e.g., seasonality and waste storage overnight), the Facility may also add carbon filtration to treat odors when deemed appropriate.

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[1] https://www.epa.gov/criteria-air-pollutants/naaqs-table

[2] https://www.mass.gov/service-details/massdep-ambient-air-toxics-guidelines

6.2 Impacts-Environmental Justice, Continued

Mitigation, continued

Vegetative Buffers

As described in the air and odor modeling report, emissions from the proposed project are relatively minor in magnitude and do not require an air permit from MassDEP. The initial development of the facility in 2019 maintained the vegetated buffer to the south, and enhanced the plantings (trees and shrubs) between the tree line and the limit of pavement to restore buffer zones to resource areas as well as provide visual buffer to the east and south. This buffer now maturing, may also reduce noise from idling trucks, and reduce concentrations of CO_2 in the vicinity of the Facility.

6.3 Impacts-Traffic

Introduction

The traffic component of the Draft Environmental Impact Report (DEIR) provides an overview of the analysis completed to document the traffic impacts associated with the proposed project. A Traffic Impact Study (TIS) was conducted for the proposed development by Bowman Consulting Group, Ltd. (Bowman) dated April 2024 which was included in the ENF. This section of the DEIR provides a summary of the additional traffic analysis conducted at nearby intersections along Lancaster Road north of the Project. This section addresses potential traffic impacts associated with the proposed transfer station as well as a response to the related comments provided as part of the ENF Certificate. An updated Traffic Impact Study reflecting the analysis presented in the DEIR is provided in Attachment 3.

Existing Conditions

To effectively evaluate the potential traffic impacts associated with the proposed development, an assessment of existing conditions including an inventory of the roadway and intersection geometries and traffic control devices, collection of peak-period traffic volumes, and a review of recent crash history was completed. A discussion of this information is presented below.

Study Area and Roadway Network

Three intersections were previously identified for detailed analysis in the April 2024 study which were determined based on a review of the surrounding roadway network serving the project site.

- New Lancaster Road (Route 117) at Willard Street
- Lancaster Street (Route 117) at Tanzio Road
- Tanzio Road at existing Site Driveway (200 Tanzio Road)

The following intersection was identified for additional detailed analysis in response to public comments regarding overall traffic and distribution on Lancaster Street.

- Lancaster Street (Route 117) at Viscoloid Avenue

The study area intersections are identified in Figure 9.

Continued on next page

6.3 Impacts-Traffic, Continued

Figure 9 -Study Area Intersections

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6.3 Impacts-Traffic, Continued

Existing Conditions, continued

The expected route for vehicles accessing the site is via Tanzio Road directly from Lancaster Street (Route 117).

Lancaster Street (Route 117) is classified as an urban principal arterial under MassDOT jurisdiction within the study area running in the east-west direction. Lancaster Street is primarily a two-way roadway providing one lane in each direction, abutted by commercial and residential properties. Lancaster Street typically provides 10- to 12-foot-wide travel lanes in both directions. No other pedestrian or bicycle facilities are provided along New Lancaster Road/Lancaster Street within the study area.

Willard Street is classified as a major collector west of Route 117 and a local roadway east of Route 117 under the City of Leominster jurisdiction. Willard Street generally runs in an east-west direction and provides access to Route 12 to the west and Route 117 to the east. Willard Street is primarily a two-lane, two-way roadway abutted by residential and commercial land uses. Willard Street typically provides travel lanes ranging from 11 to 16 feet in width in both directions.

Tanzio Road is classified as a local roadway under City of Leominster jurisdiction. Tanzio Road connects to Route 117 to the southeast. It runs in the north-south direction and provides one 12-foot wide travel lane in each direction with 5-foot-wide shoulders.

Viscoloid Avenue is classified as an urban minor arterial under the City of Leominster jurisdiction. Viscoloid Avenue generally runs in a north-south direction and provides access to Route 117 to the south. Viscoloid Avenue is a two-lane, two-way roadway abutted by residential and commercial land uses as well as the Frances Drake Elementary School. Viscoloid Avenue typically provides 11-foot-wide travel lanes and 5-foot-wide bicycle lanes in both directions. Sidewalks, measuring approximately 6-feet-wide, are provided on both sides of the roadway.

Public Transportation

The MART Bus Route #9 provides service along Willard Street. There is no public transportation routes along Lancaster Street (Route 117) or Tanzio Road.

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6.3 Impacts-Traffic, Continued

Existing Conditions, continued

Pedestrian and Bicycle Facilities

There are no pedestrian or bicycle facilities provided along Tanzio Road. A 5-foot-wide bituminous concrete sidewalk is provided along the west side of Route 117 south of the Willard Street intersection, and a wheelchair ramp with a detectable warning panel is provided at the southwest corner of the intersection. Approximately 6-foot-wide sidewalks and five-foot-wide dedicated bicycle lanes are provided along Viscoloid Avenue. Approximately 6-foot-wide sidewalks are provided along both sides of Route 117 in the vicinity of Viscoloid Avenue.

Existing Traffic Volumes

To assess peak hour traffic conditions, manual turning movement counts (TMCs) were conducted at the initial study area intersections in 2023 during the weekday morning and weekday afternoon periods. Counts were conducted on Wednesday, March 29, 2023, during the weekday morning (7:00 AM to 9:00 AM) and weekday afternoon (3:00 PM to 6:00 PM) peak. Based on a review of that traffic data, the weekday morning peak hour for the study area intersections occurs between 7:00 AM and 8:00 AM and the weekday afternoon peak hour occurs between 4:15 PM and 5:15 PM. The results of the turning movement counts are tabulated by 15-minute periods and were provided in Appendix A of the Traffic Impact Study included with the ENF.

To assess distribution of trucks accessing the Facility from both the south and north of Tanzio Road along Lancaster Street in response to comments, additional data was collected at the Study Area Intersections. To assess peak hour traffic conditions, turning movement counts (TMCs) were conducted at the study area intersections for a 14-hour period (5:00 AM to 7:00 PM) over a five-day period beginning Monday, March 17, 2025 and ending Friday, March 21, 2025. In addition to the TMCs, 24-hour automatic traffic recorder (ATR) data was collected at the Site Driveway for the same five-day period (Monday through Friday). Ticketing data collected at the existing site was also reviewed to determine the amount of material processed each day for the five-day period, consistent with the TMCs.

The ticketing data and the turning movement count data were reviewed to identify the weekday in which the existing facility processed the most materials and had the highest volume of general-purpose traffic. Based on a review of the data, the existing site processed the most material on Monday, March 17, 2025 and the study area roadways had the highest volume of general-purpose traffic on Wednesday, March 19, 2025.

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6.3 Impacts-Traffic, Continued

Existing Conditions, continued

To capture the peak operations of the facility while also analyzing a typical weekday (Tuesday, Wednesday, Thursday) consistent with MassDOT guidelines, the ticketing data for the facility on Monday, March 17, 2025 was used to evaluate the projected site operations, and the traffic volume data collected at the study area intersections on Wednesday, March 19, 2025 (also correlates to the highest recorded volumes which is conservative) was used as a basis for the traffic analysis.

Turning Movement Count Data

The TMC data collected at the study area intersections included classification data for trucks accessing the existing site. In addition to passenger vehicle data, this included classification data for packer trucks, roll-off trucks, and tractor trailers. The results of the Wednesday TMCs are tabulated by 15-minute periods and are provided in Appendix A. The four highest consecutive 15-minute intervals during each of these count periods constitute the peak hours that are the basis of the traffic analysis provided in this report. Based on a review of the peak period traffic data, the weekday morning peak hour of the study area was identified as 7:45 AM to 8:45 AM and the weekday afternoon peak hour was identified as 3:45 PM to 4:45 PM. This is a slight change in the peak hours presented in the 2024 TIS, that identified the morning peak from 7:00 to 8:00 AM and the afternoon peak of 4:15 to 5:15 PM.

Automatic Traffic Recorder Data

ATR data was obtained at the Site Driveway. The ATR counts were collected over a full week from Monday, March 17, 2025 to Friday, March 21, 2025, consistent with the TMCs. The ATR data is provided in Appendix A. The highest day of site generated traffic was used for the analysis to be conservative when calculating the trip generation for the site. The highest day of site generated traffic was Monday, March 17, 2025.

Seasonal Variation

Based on MassDOT's 2023 Weekday Seasonal Factors, March traffic volumes are approximately four percent higher than an average month on principal arterial roadways and approximately six percent higher than during an average month on minor arterials and local roadways. Therefore, to present a conservative analysis, the March volumes were not reduced to average month conditions. The MassDOT weekday seasonal factors are provided in Appendix B. The resulting 2025 Existing weekday morning and weekday afternoon peak hour traffic volumes are presented in the traffic projection model provided in Appendix C of the TIS included in Attachment 3 and are presented in Figures 10 and 11, respectively below.

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Figure 10- 2025 Existing Traffic Volumes- Weekday Morning Peak Hour

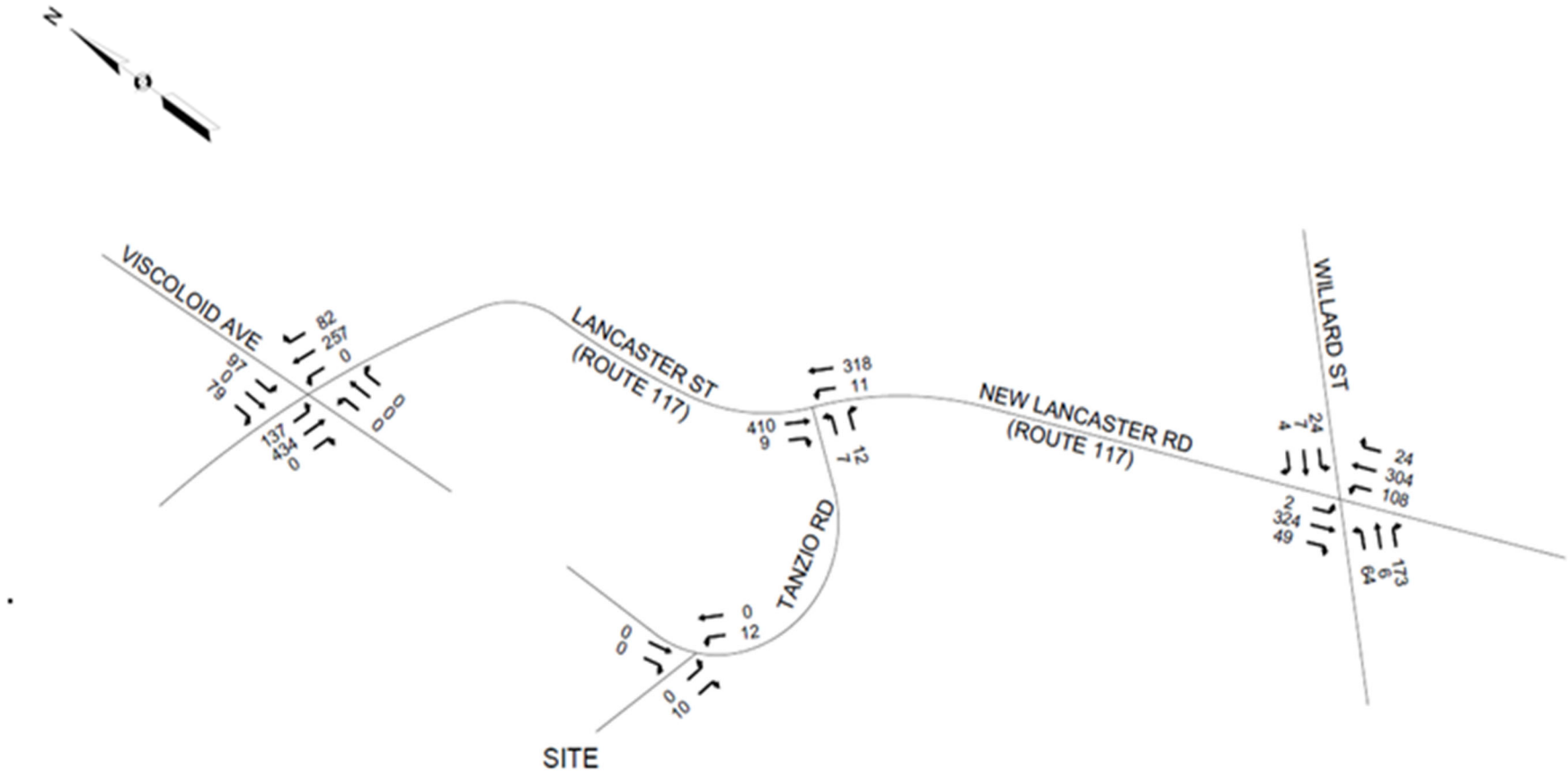

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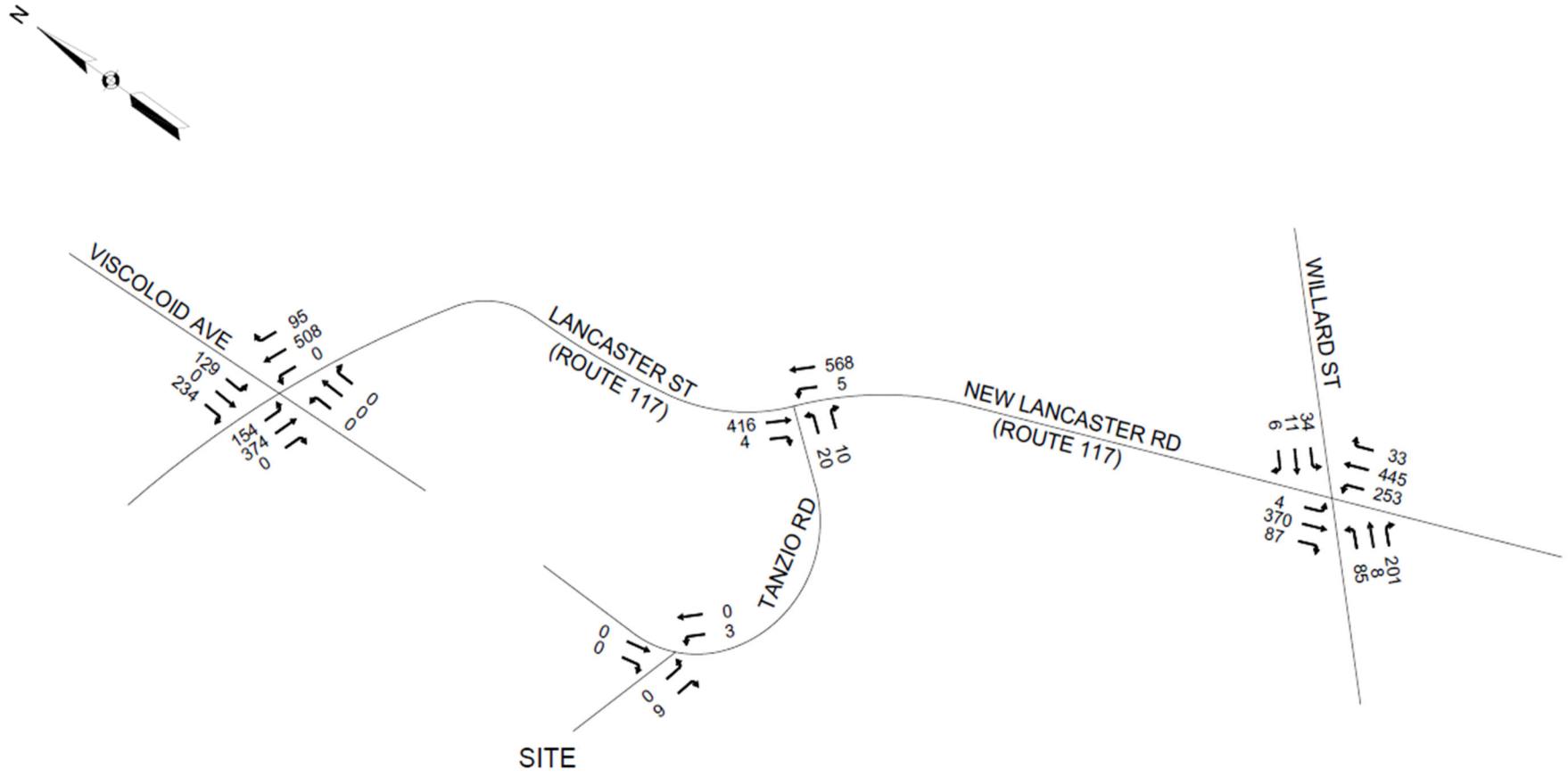
Figure 11- 2025 Existing Traffic Volumes- Weekday Afternoon Peak Hour



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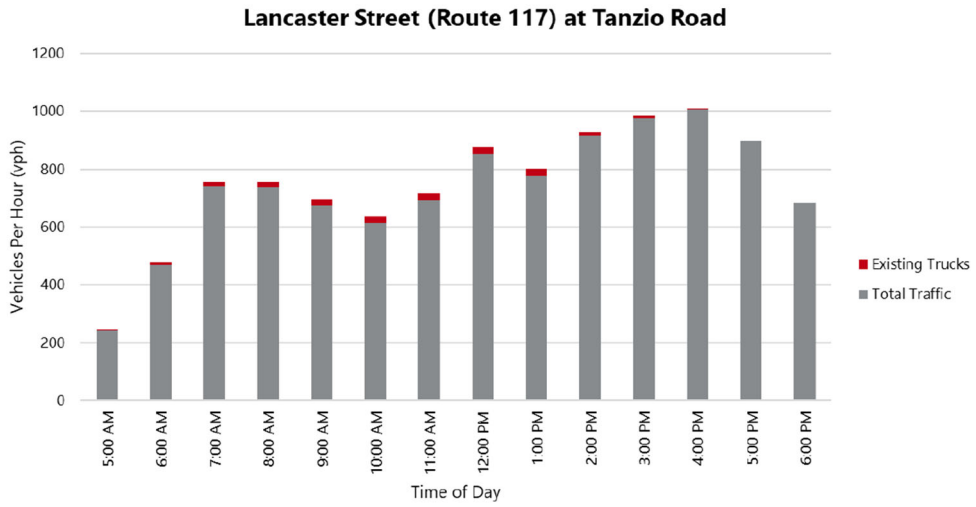
6.3 Impacts-Traffic, Continued

Existing Conditions, continued

Traffic counts were conducted over a 14-hour period (5 AM to 7 PM) for 5 consecutive days (Monday to Friday) in March 2025. As indicated previously, Monday had the greatest amount of material delivered to the Facility, but Wednesday exhibited the highest volume of total vehicles on Lancaster Road that week. Figure 12 below shows the total vehicle volume for the entire 14-hour period on Wednesday, March 19, 2025. A total of 10,284 vehicles travelled along Lancaster St at Tanzio Road over the course of 14 hours. Of that, 189 were Facility-related vehicles, equivalent to 1.8% of the total traffic. Using the automatic traffic data recorder data, it was further determined that of 112 waste handling vehicles identified traveling on Lancaster Road at Tanzio Road, 20 were not associated with this Facility. It should be noted that other commercial/industrial businesses operate along Tanzio Road and have truck traffic associated with it.

Figure 12- Daily Traffic Counts



The traffic data collected also identified the truck distribution patterns of inbound and outbound trucks. All tractor trailers traveled to and from the Facility via I-190 to the south. Smaller packer and roll-off trucks arrived and departed the site from different directions, with 75% of the trucks traveling to/from the south (65% I-190 and 10% Willard Street) and 25% traveling to/from the north (15% Viscoloid Avenue and 10% Lancaster Street). Figures 13 and 14 below (source: Figures 6 and 7, TIS) shows these distributions.

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Figure 13- Truck Distribution- Travel Directions- Packer/Roll-offs

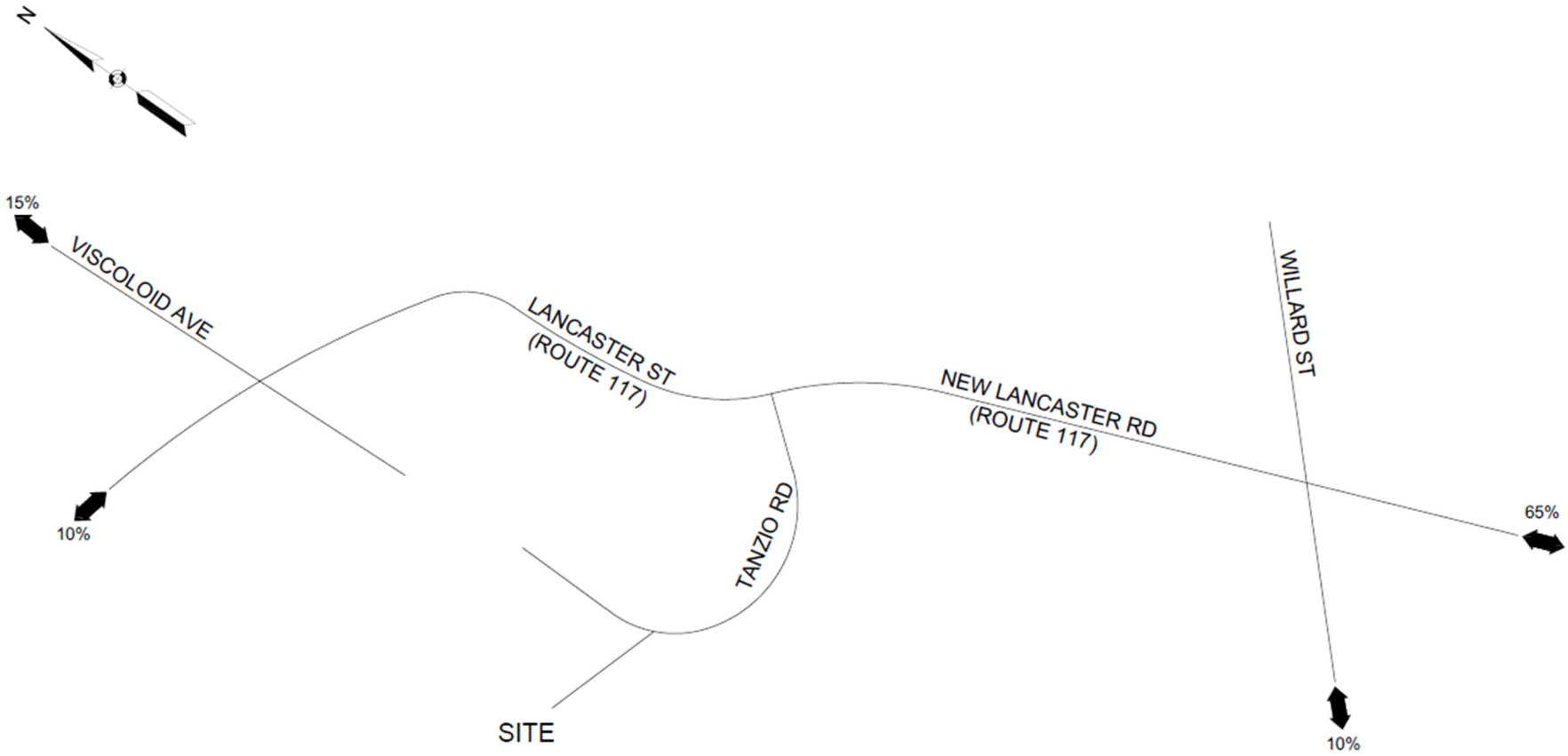

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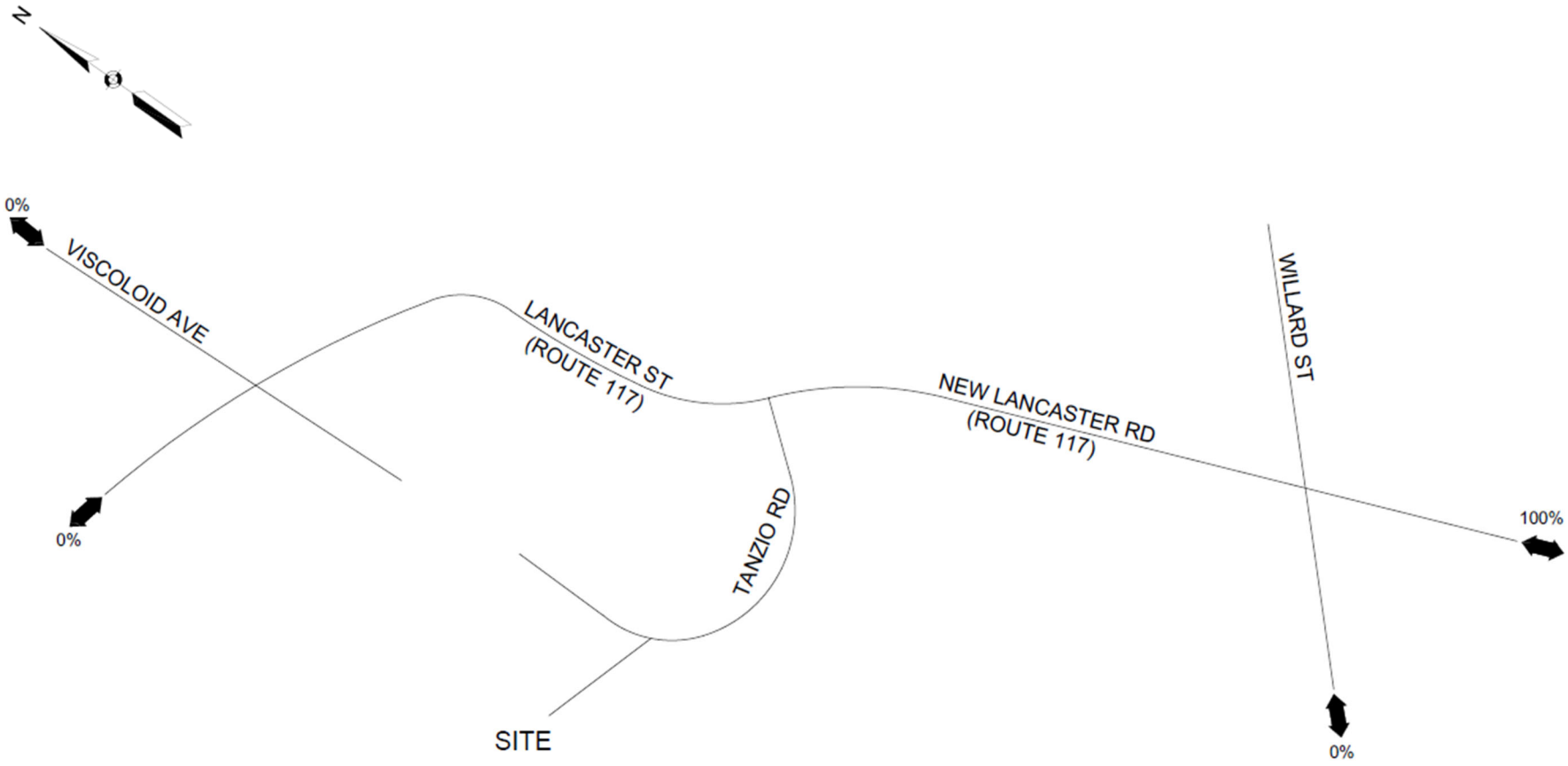
Figure 14- Truck Distribution- Travel Directions- Tractor Trailers



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6.3 Impacts-Traffic, Continued

Existing Conditions, continued

Crash Summary

Crash history was obtained from the MassDOT Interactive Mapping Portal for Analysis and Crash Tracking (IMPACT) database for the most recent five-year period available, 2016 through 2020, in order to evaluate the existing safety conditions at the study area intersections. A summary of the crash data is provided in Appendix C of the Traffic Impact Study.

The crash rates at the study intersections were calculated to determine whether the crash frequencies at the study area intersections were unusually high given the travel demand. The intersection crash rate is expressed in crashes per million entering vehicles (C/MEV). The crash rate for each intersection was then compared to the average rate for signalized and unsignalized intersections Statewide and within MassDOT District 3. For signalized intersections, the Statewide and MassDOT District 3 average crash rates are 0.78 and 0.89 C/MEV, respectively. For unsignalized intersections, the Statewide and MassDOT District 3 average crash rates are 0.57 and 0.61 C/MEV, respectively.

The signalized intersection of Lancaster Street (Route 117) at Viscoloid Avenue had a total of 15 reported crashes over the five-year period analyzed, resulting in a crash rate of 0.61 crashes per MEV, which is lower than both the State and District averages for a signalized intersection.

Of the 15 reported crashes, five crashes were rear-end collisions, four crashes were angle collisions, two crashes were head-on collisions, two crashes were single vehicle collisions, one crash was a sideswipe collision, and one crash was a collision with a pedestrian. Five crashes resulted in personal injury, with the remaining 10 crashes resulting in property damage only. No fatal crashes were reported at the intersection.

The April 2024 TIS analyzed crash rates for the most-recent available 5-year time period of 2016 to 2020. The updated 2025 TIS presented herein, presents updated crash rate data for the time period of 2017-2021. No changes to the state averages for crash rates have occurred since reported in the 2024 TIS included in the ENF at the other Study Area intersections. Crash rates at the individual study area intersections have been updated, as summarized in the paragraphs below.

The signalized intersection of Route 117 at Willard Street had a total of 20 reported crashes over the five-year period analyzed, resulting in a crash rate of 0.78 crashes per MEV, which is the same as the State Average and lower than the District 3 average for a signalized intersection.

Continued on next page

6.3 Impacts-Traffic, Continued

Existing Conditions, continued

This rate has increased from 0.63 since last reported in the April 2024 TIS. Of the 20 reported crashes, nine crashes were rear-end collisions, seven crashes were angle collisions, three crashes were sideswipe collisions, and one crash was a single vehicle collision. Five crashes resulted in personal injury, with the remaining 15 crashes resulting in property damage only. No fatal crashes were reported at the intersection. The unsignalized intersection of Route 117 at Tanzio Road had a total of one reported crash over the five-year period analyzed, resulting in a crash rate of 0.06 crashes per MEV, which is significantly lower than both the State and District averages for an unsignalized intersection. This rate has decreased from 0.18 since last reported in the April 2024 TIS. The crash was a single vehicle collision resulted in personal injury.

The signalized intersection of Lancaster Street (Route 117) at Viscoloid Avenue had a total of 15 reported crashes over the five-year period analyzed, resulting in a crash rate of 0.61 crashes per MEV, which is lower than both the State and District averages for a signalized intersection. Of the 15 reported crashes, five crashes were rear-end collisions, four crashes were angle collisions, two crashes were head-on collisions, two crashes were single vehicle collisions, one crash was a sideswipe collision, and one crash was a collision with a pedestrian. Five crashes resulted in personal injury, with the remaining 10 crashes resulting in property damage only. No fatal crashes were reported at the intersection. No crashes were reported at the unsignalized intersection of Tanzio Road at Site Driveway during the five-year period analyzed. This has not changed since last reported in the April 2024 TIS.

Future Conditions

To determine future traffic demands on the study area roadways and intersections, the 2025 Existing traffic volumes were projected to the future-year 2032, in accordance with MassDOT guidelines. Traffic volumes on the study area roadways in 2032 are considered to include existing traffic, as well as new traffic resulting from general growth in the study area and from other planned development projects, independent of the Project. The potential background traffic growth, unrelated to the Project, was considered in the development of the 2032 No Build (without Project) peak hour traffic volumes. The estimated traffic increases associated with the Project were then added to the 2032 No Build volumes to reflect the 2032 Build (with Project) traffic conditions. A more detailed description of the development of the 2032 No Build and 2032 Build traffic volume networks is presented below.

Continued on next page

6.3 Impacts-Traffic, Continued

Future Conditions, continued

Background traffic growth accounts for changes in traffic volumes associated with general changes in population and other developments that are not known at this time. To be consistent with regional growth rates as provided by the Montachusett Regional Planning Commission (MRPC), a compounded background growth rate of 2.0 percent per year was used for this project to grow the 2025 volumes to future year 2032.

The City of Leominster Planning Department was contacted to inquire about additional developments in the area. Based on these discussions, there are no additional projects that would be anticipated to impact future traffic volumes on the study area roadways.

2032 No Build Traffic Volumes

The 2025 Existing peak hour traffic volumes were grown increased by 2.0 percent per year, compounded annually, over the seven-year study horizon to establish the 2032 No Build volumes. The resulting 2032 No Build weekday morning and weekday afternoon peak hour traffic volumes are documented in the traffic projection model presented in Appendix C of Attachment 3 and illustrated in Figures 15 and 16, respectively.

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Figure 15-2032 No Build Weekday Morning Peak Hour Traffic Volumes

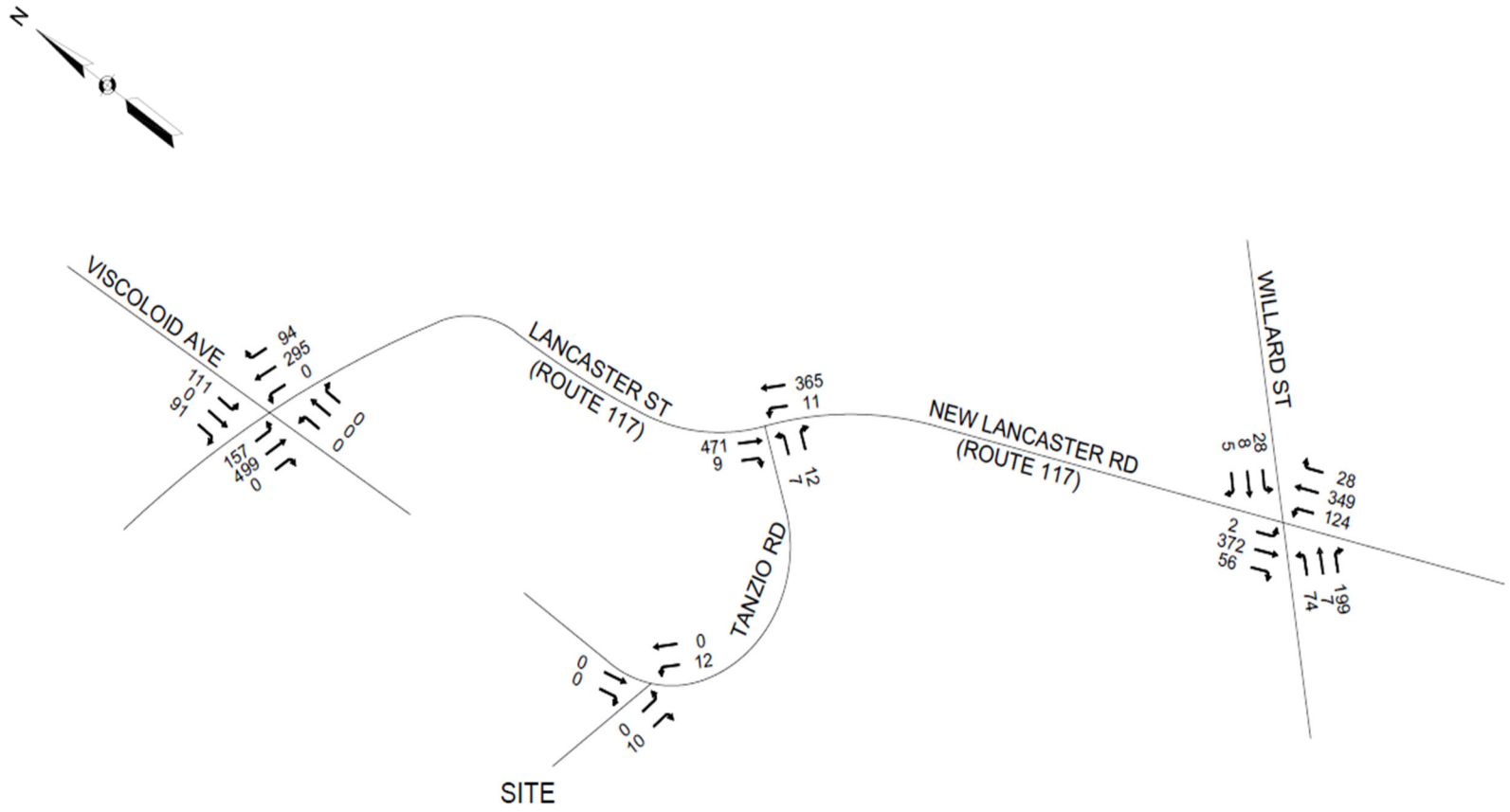

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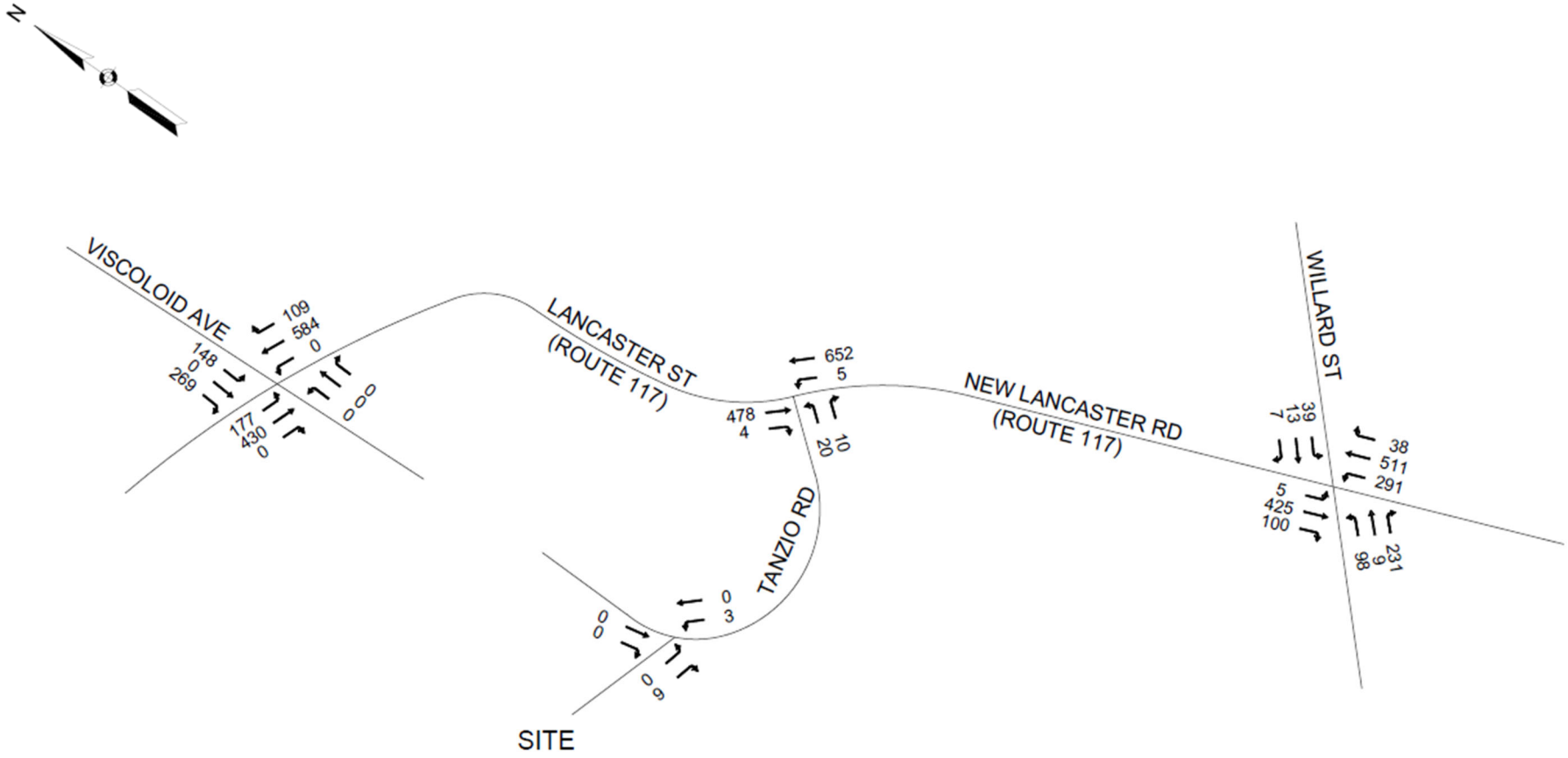
Figure 16-2032 No Build Weekday Afternoon Peak Hour Traffic Volumes



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6.3 Impacts-Traffic, Continued

Future Conditions, continued

Trip Generation

The Facility's permitted hours of operation per it's permits are 6:00 AM to 7:00 PM, Monday through Friday and 7:00 AM to 3:00 PM on Saturdays, although the Facility has posted delivery hours (for third-party clients) from 6:30 AM to 3:30 PM, Monday through Friday and 7:00 to 11:30 on Saturdays. As part of the proposed facility expansion, the site would accept a maximum of 1,500 tpd of solid waste (MSW and C&D) per day. The number of employees at the facility are not anticipated to be impacted as a result of the proposed expansion. Employee-related vehicles are estimated to remain around 24 per day (48 trips), as previously indicated. To estimate the trip generation for the additional trucks associated with the expansion, the proponent provided truck ticketing data collected at the existing facility for Monday, March 17, 2025, consistent with the highest day of site-generated traffic. The ticketing data includes total tons per day of inbound and outbound material processed, and total number of trucks transporting each type of material. The truck ticketing data for March 17, 2025 is provided in Appendix E of the TIS included as Attachment 3.

The Facility is served by rail, with a majority of outbound materials from the existing Facility being transported from the site via rail, with the exception of recyclables. The use of rail for outbound materials is expected to continue under the proposed conditions, however, to present a conservative analysis, the trip generation and level-of-service analysis presented in this study assume all outbound materials associated with the proposed expansion would be transported from the site by truck.

In addition, when outbound materials are transported by truck, it is standard industry practice to use backhauls, where a truck delivering inbound materials reloads and removes material from the site rather than departing empty. To present a conservative analysis coupled with the conservative variable presented above, the estimated trip generation does not include the use of backhauls; (i.e., all trucks transporting inbound materials were assumed to leave the site empty, and all trucks transporting outbound material were assumed to arrive at the site empty.)

Based on assessment of truck ticketing data provided by the facility, inbound material is currently transported to the site at an average rate of 9.4 tons per load via packer trucks and roll-off trucks. The ticketing data for Monday, March 17, 2025 indicates that there was one tractor trailer carrying approximately 14 tons of outbound materials (recyclables), which is reflective of the current use of rail to process outbound materials. A typical tractor trailer has an estimated capacity of 28 tons. To be conservative, the trip generation estimates associated with the proposed expansion do not account for the use of rail to transport outbound materials.

Continued on next page

6.3 Impacts-Traffic, Continued

Future Conditions, continued

The consolidated outbound materials associated with the expansion were considered to be transported by tractor trailer for the purposes of the analysis.

Daily Trip Generation

Under existing permits which allows for 1,000 tpd to be accepted at the Facility, the site would generate a maximum of 214 one-way truck trips per day (107 entering, 107 exiting) transporting inbound materials to the site. As noted above, the majority of outbound materials are currently transported from the site by rail and do not generate additional trips on the roadway network (besides recyclables). If the rail was not in operation and assuming no backhauls, the existing facility would generate a maximum of 86 one-way truck trips per day (43 entering, 43 exiting) transporting outbound material off-site. These trips assume that 20% of the outbound material are recyclables and leave in 14-ton capacity trucks, and 80% is waste and leaves in 28-ton capacity trucks.

Under the proposed expansion to 1,500 tpd and based on the assumption that inbound material arrives at the site with an average load of 9.4 tons per truck, the Facility would generate a maximum of 320 one-way truck trips (160 entering, 160 exiting) transporting inbound material. In addition, assuming no rail service or backhauls that would be used as a means to reduce traffic-related impacts, the Facility would generate 130 one-way truck trips (65 entering, 65 exiting) transporting outbound material off-site. In total, the expanded Facility could generate a maximum of 450 daily one-way truck trips. Table 4 below (source: TIS, Table 2) summarizes the maximum daily truck trip generation and net change from existing conditions for the facility under existing and proposed conditions assuming no rail service and no use of backhauls.

Table 4- Maximum Daily Trip Generation

	Existing Operations (1,000 tpd)			Expanded Operations (1,500 tpd)			Net Change		
Description	In	Out	Total	In	Out	Total	In	Out	Total
Inbound Material	107	107	214	160	160	320	53	53	106
Outbound Material	1	1	2	65	65	130	64	64	128
Total Trips	**108**	**108**	**216**	**225**	**225**	**450**	**117**	**117**	**234**

As shown in Table 4 above, the proposed Facility expansion could result in a net increase of up to 234 one-way truck trips per day on the study area roadway network considering no rail service, no use of backhauls, and projecting that 20% of outbound materials are recyclables and transported in smaller trucks at 14 tons capacity.

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6.3 Impacts-Traffic, Continued

Future Conditions, continued

These trip generation numbers differ slightly from the April 2024 TIS included in the ENF submittal in that 450 total potential trips are accounted for in expanded operations which is greater than the 428 trips estimated previously for the same scenario without rail use. However, this unlikely worst-case truck trip count as modelled still does not indicate any significant impacts to the area roadways.

Hourly Distribution

The hourly distribution of new truck trips at the site was determined using the existing arrival patterns based on truck ticketing data obtained for March 17, 2025 from the Facility, consistent with the highest day of site-generated traffic. The resulting hourly distribution is shown in Table 5 below (source: TIS, Table 3).

Table 5- Hourly Distribution

Time	Existing Hourly Distribution
6:00-7:00 AM	6%
7:00-8:00 AM	9%
8:00-9:00 AM	14%
9:00-10:00 AM	12%
10:00-11:00 AM	14%
11:00 AM-12:00 PM	11%
12:00-1:00 PM	12%
1:00-2:00 PM	9%
2:00-3:00 PM	7%
3:00-4:00 PM	5%
4:00-5:00 PM	1%
5:00-6:00 PM	0%
6:00-7:00 PM	0%
7:00-8:00 PM	0%
Total	**100%**

This hourly distribution is generally consistent with that presented in the 2024 TIS.

Table 6 below (source: TIS, Table 4) summarizes the hourly distribution of truck trips (round trip) as worst-case scenario with no rail service and no use of backhauls.

Continued on next page

6.3 Impacts-Traffic, Continued

Future Conditions, continued

Table 6- Projected Hourly Truck Volumes

Time	Hourly Distribution	Existing Operations (1,000 tpd)		Proposed Expansion (1,500 tpd)		Net Change	
		Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
6:00-7:00 AM	6%	12	0	18	8	6	8
7:00-8:00 AM	9%	20	0	30	12	10	12
8:00-9:00 AM	14%	30	0	44	18	14	18
9:00-10:00 AM	12%	26	0	38	16	12	16
10:00-11:00 AM	14%	30	2	44	18	14	16
11:00 AM-12:00 PM	11%	24	0	36	14	12	14
12:00-1:00 PM	12%	26	0	38	16	12	16
1:00-2:00 PM	9%	20	0	30	12	10	12
2:00-3:00 PM	7%	14	0	22	8	8	8
3:00-4:00 PM	5%	10	0	16	6	6	6
4:00-5:00 PM	1%	2	0	4	2	2	2
5:00-6:00 PM	0%	0	0	0	0	0	0
6:00-7:00 PM	0%	0	0	0	0	0	0
7:00-8:00 PM	0%	0	0	0	0	0	0
Total Trips	**100%**	**214**	**2**	**320**	**130**	**106**	**128**

As previously noted, the weekday morning peak hour along the street network occurs from 7:45 to 8:45 AM and the weekday afternoon peak hour along the street network occurs from 3:45 to 4:45 PM. Based on the truck ticketing data, the weekday morning peak hour of the site occurs from 8:00 AM to 9:00 AM and the weekday afternoon peak hour occurs from 3:00 PM to 4:00 PM. To provide a conservative analysis, the weekday morning and weekday afternoon peak hours of the site were applied to the peak hours of adjacent street traffic. As an additional conservative measure, the trip generation considers that all trucks transporting inbound material would depart from the site empty, and all trucks transporting outbound material would arrive at the site empty, with no reduction for the use of backhauls) and no rail service. The resulting peak hour trip generation estimates for the Project are summarized in Table 7 below (source: TIS, Table 5).

Continued on next page

6.3 Impacts-Traffic, Continued

Future Conditions, continued

Table 7- Peak Hour Truck Trip Generation

Description	Weekday Morning Peak Hour Trips In	Out	Total	Weekday Afternoon Peak Hour Trips In	Out	Total
Existing Operations (1,000 tpd)	**15**	**15**	**30**	**5**	**5**	**10**
Inbound	*15*	*15*	*30*	*5*	*5*	*10*
Outbound	*0*	*0*	*0*	*0*	*0*	*0*
Proposed Expansion (1,500 tpd)	**31**	**31**	**62**	**11**	**11**	**22**
Inbound	*22*	*22*	*44*	*8*	*8*	*16*
Outbound	*9*	*9*	*18*	*3*	*3*	*6*
Net New Trips	**16**	**16**	**32**	**6**	**6**	**12**
Inbound	*7*	*7*	*14*	*3*	*3*	*6*
Outbound	*9*	*9*	*18*	*3*	*3*	*6*

As shown in Table 7 above, using the conservative trip generation methodology described in previous sections of this report, the proposed Facility could accept an additional 32 truck trips (16 entering and 16 exiting) during the weekday morning peak hour and an additional 12 truck trips (6 entering and 6 exiting) during the weekday afternoon peak hour.

2032 Build Traffic Volumes

To establish the 2032 Build peak hour traffic volumes, the distributed Project trips shown in Figure 17 and Figure 18 were added to the 2032 No Build peak hour traffic volumes to establish the 2032 Build peak hour traffic volumes. The resulting 2032 Build weekday morning and weekday afternoon peak hour traffic volumes are documented in the traffic projection model presented in Appendix C of the TIS included in Attachment 3 and presented in Figure 19 and Figure 20, respectively.

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Figure 17-Net New Project Trips- Weekday Morning Peak Hour

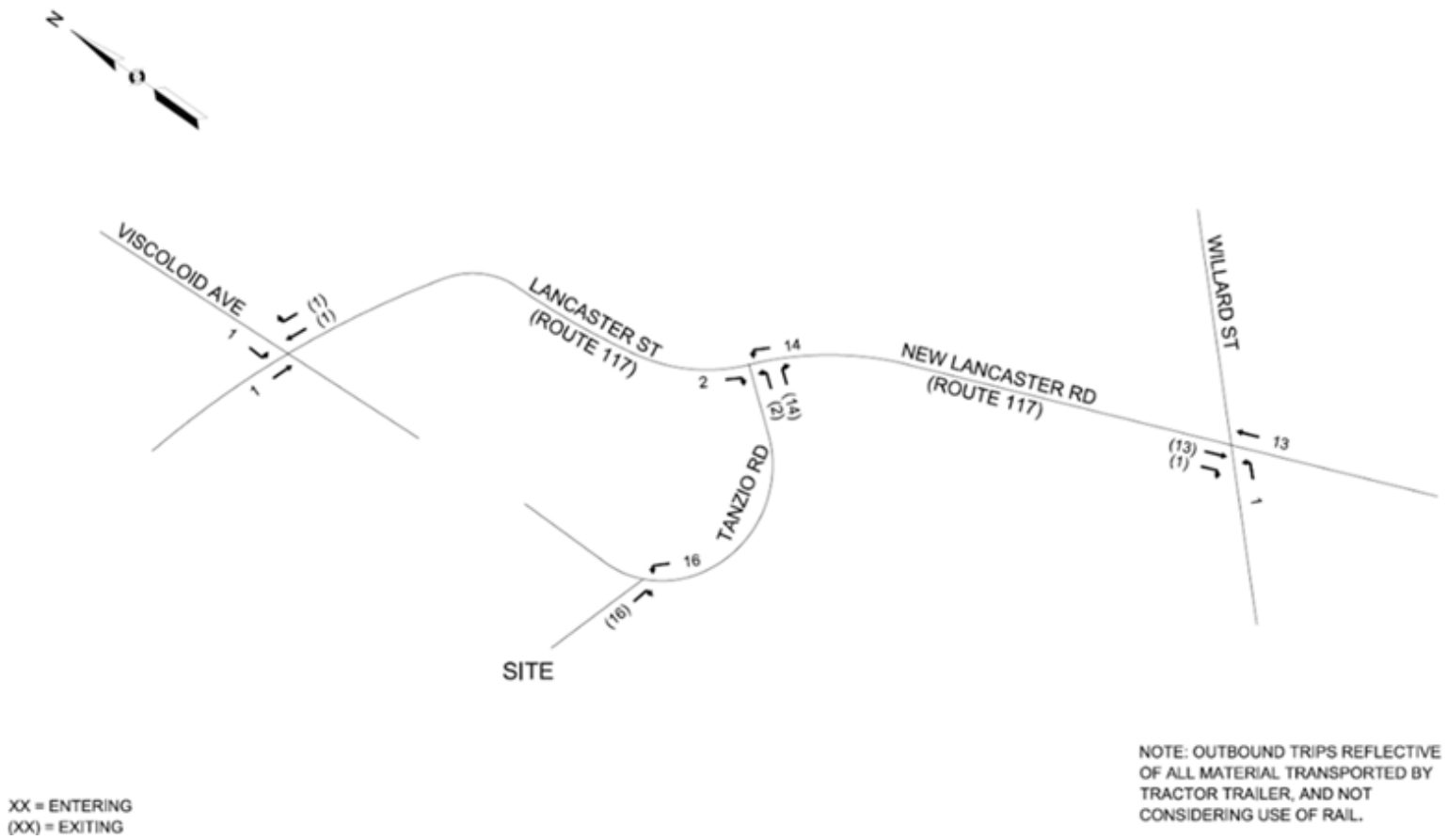

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Figure 18-Net New Project Trips - Weekday Afternoon Peak Hour

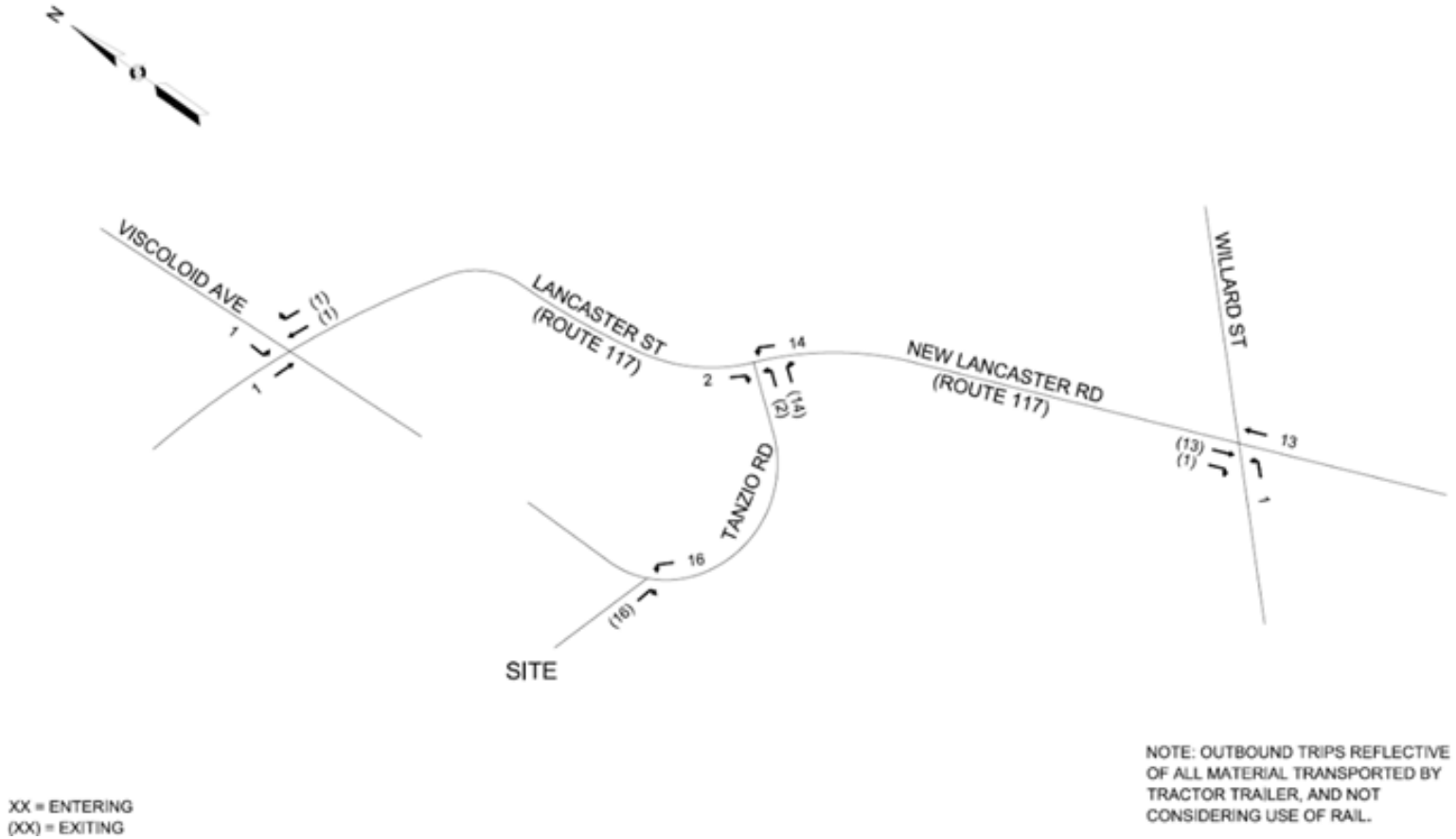

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Figure 19-2032 Build Weekday Morning Peak Hour Traffic Volumes

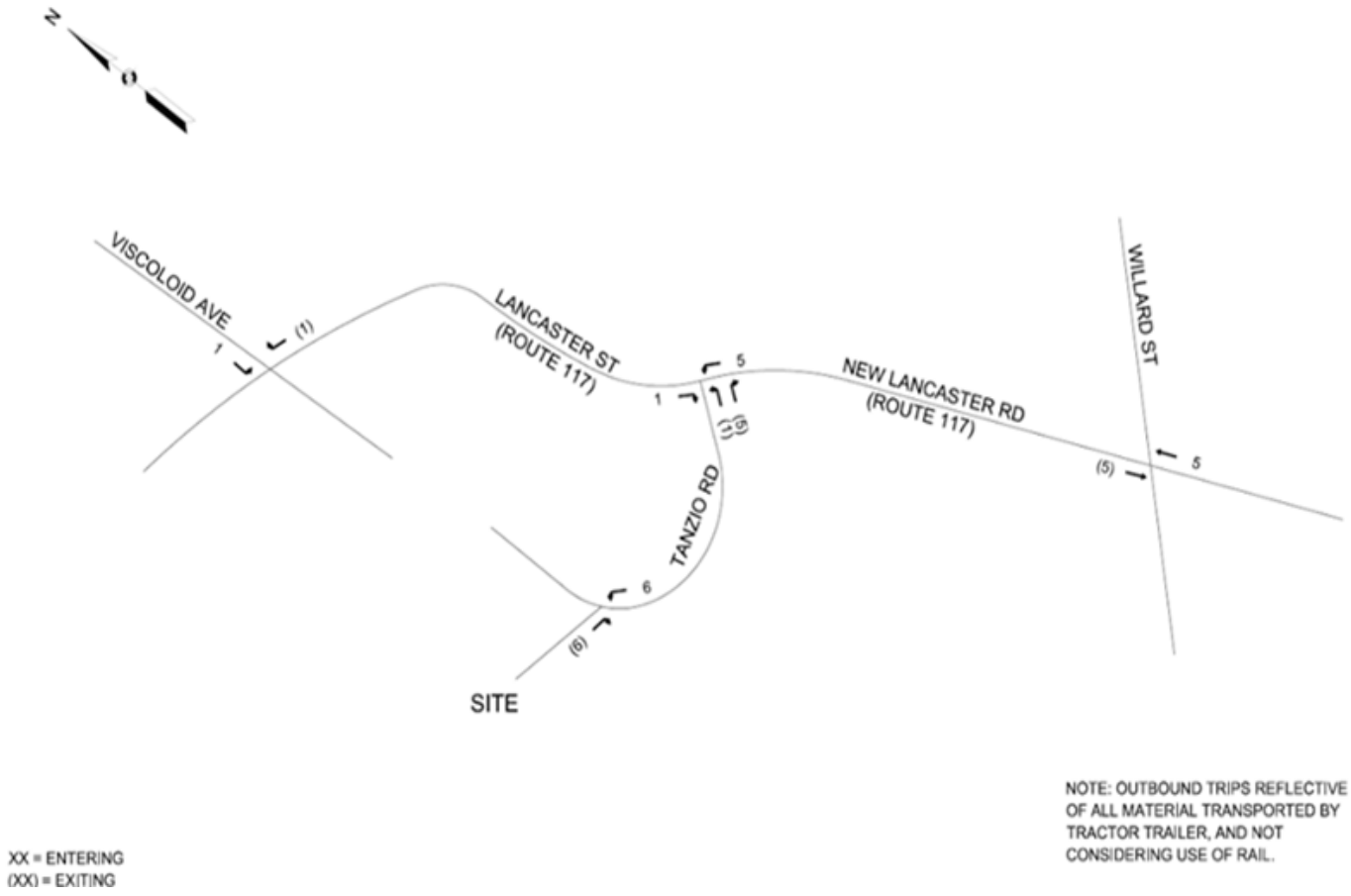

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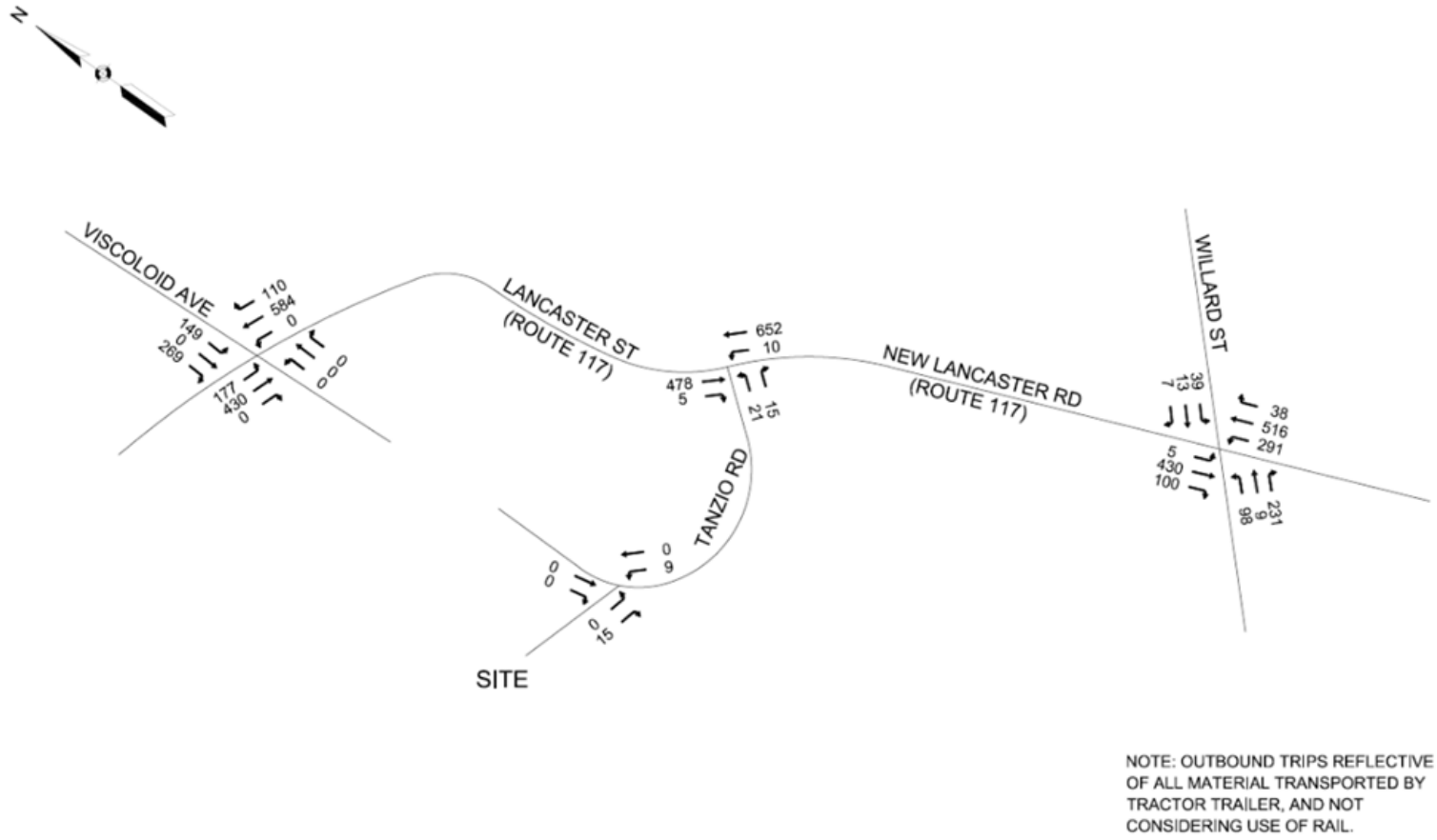
Figure 20-2032 Build Weekday Afternoon Peak Hour Traffic Volumes



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6.3 Impacts-Traffic, Continued

Future Conditions-Traffic Operations Analysis

Traffic Operations Analysis

This section describes the overall quality of the traffic flow at the study area intersections during the weekday morning and weekday afternoon peak hours. To complete this assessment, intersection capacity analysis was conducted using the Synchro capacity analysis software at the study area intersections under the 2025 Existing, 2032 No Build, and 2032 Build scenarios for the two peak-hour traffic conditions. The analyses performed for this Project are based on capacity analysis methodologies and procedures contained in the Highway Capacity Manual, 6th Edition (HCM), which are summarized in Appendix F of the TIS included as Attachment 3. A discussion of the evaluation criteria and a summary of the results of the capacity analysis are presented below.

Level-of-Service Criteria

Average total vehicle delay is reported as level-of-service (LOS) on a scale of A to F. LOS A represents delays of 10 seconds or less, while LOS F represents delays in excess of 50 seconds for unsignalized intersections and greater than 80 seconds for signalized intersections.

Capacity Analysis Results

Intersection capacity analysis was conducted using the Synchro capacity analysis software for the study area intersections to evaluate the 2025 Existing, 2032 No Build, and 2032 Build traffic conditions during the weekday morning and weekday afternoon peak hours. The peak hour traffic volumes utilized as part of this analysis are provided in the traffic projection model, attached in Appendix C of the TIS included as Attachment 3.

Continued on next page

6.3 Impacts-Traffic, Continued

Future Conditions-Traffic Operations Analysis, continued

The Synchro capacity analysis results for the 2025 Existing, 2032 No Build, and 2032 Build traffic conditions are presented in Appendix G, Appendix H, and Appendix I, respectively within the TIS included as Attachment 3. The capacity analysis results for the signalized and unsignalized study area intersections are presented below in Table 8 and Table 9, respectively. The results of the specific capacity analysis at the study area intersections are discussed below, with a more detailed summary of the capacity analysis for the study area intersections provided in Appendix J of the TIS included as Attachment 3.

Table 8- Signalized Intersection Overall Levels-of-Service

		2025 Existing			2032 No Build			2032 Build		
Intersection	Period	LOS[1]	Delay[2]	ICU[3]	LOS	Delay	ICU	LOS	Delay	ICU
New Lancaster Rd (Rte 117) at	AM	B	18.5	0.46	B	19.4	0.49	B	19.7	0.50
Willard St	PM	C	21.6	0.55	C	23.5	0.59	C	23.6	0.59
Lancaster St (Rte 117) at	AM	B	16.8	0.67	B	17.9	0.74	B	17.9	0.75
Viscoloid Ave	PM	C	20.3	0.89	C	31.9	1.00	C	32.1	1.00

1 Level-of-Service
2 Average vehicle delay, in seconds
3 Intersection capacity utilization

As tabulated above, the signalized intersection of Route 117 at Willard Street is shown to currently operate at overall LOS B during the weekday morning peak hour and at overall LOS C during the weekday afternoon peak hour. The intersection is projected to continue to operate at overall LOS B during the weekday morning peak hour and at overall LOS C during the weekday afternoon peak hour under 2032 No Build and 2032 Build conditions. There will be no change in LOS as a result of this Project, as projected as a worst-case scenario (e.g., no rail and no backhauls).

Continued on next page

6.3 Impacts-Traffic, Continued

Future Conditions-Traffic Operations Analysis, continued

The signalized intersection of Route 117 at Viscoloid Avenue is shown to currently operate at overall LOS B during the weekday morning peak hour and at overall LOS C during the weekday afternoon peak hour. The intersection is projected to continue to operate at overall LOS B during the weekday morning peak hour and at overall LOS C during the weekday afternoon peak hour under 2032 No Build and 2032 Build conditions. There will be no change in LOS as a result of this Project, as projected as worst-case scenario.

Table 9- Unsignalized Intersection Levels-of-Service

			2025 Existing			2032 No Build			2032 Build		
Intersection	Period	Movement	LOS[1]	Delay[2]	V/C[3]	LOS	Delay	V/C	LOS	Delay	V/C
Lancaster St (Rte 117) at Tanzio Rd	AM	EB - LR	B	14.6	0.06	C	15.6	0.06	C	16.5	0.11
	PM		C	20.2	0.14	C	24.0	0.15	C	24.3	0.17
Tanzio Rd at Site Driveway	AM	EB - LR	A	9.0	0.01	A	9.0	0.01	A	9.2	0.03
	PM		A	8.8	0.01	A	8.8	0.01	A	9.0	0.02

1 Level-of-Service
2 Average vehicle delay, in seconds
3 Volume to capacity ratio

As tabulated above, the Tanzio Road eastbound approach to Route 117 is shown to currently operate at LOS B during the weekday morning peak hour and at LOS C during the weekday afternoon peak hour. Under 2032 No Build and 2032 Build conditions, the eastbound approach is projected to operate at LOS C during the weekday morning and weekday afternoon peak hours. It should be noted that the Project itself is not anticipated to change the LOS in future conditions (as projected as wort-case scenario- no rail).

The Site Driveway eastbound approach to Tanzio Road is shown to currently operate at LOS A during the weekday morning and weekday afternoon peak hours. Under 2032 No Build and 2032 Build conditions, the eastbound approach is projected to continue to operate at LOS A during the weekday morning and weekday afternoon peak hours.

The study area intersections are located within an EJ population. As presented in the capacity analysis results, the Project is not anticipated to result in changes to the peak hour LOS at the study areas intersections located within an EJ population between the 2032 No Build and 2032 Build conditions.

Continued on next page

6.3 Impacts-Traffic, Continued

Proposed Project Site

Site Access/Circulation

Under the proposed plan, the site is proposed to be accessed via the existing site driveway on Tanzio Road, which leads to an internal one-way loop roadway surrounding the proposed facility.

It is expected that the majority of traffic entering the site (including all heavy vehicle traffic) will utilize Route 117 to Tanzio Road, but a small portion of employee traffic in passenger cars may utilize Malburn Street to access the Facility. To minimize the amount of traffic accessing the site from the north, drivers are instructed to strictly use the Lancaster Street / Tanzio Road connection for access to the Facility. Furthermore, the Facility will work with the City to determine if a No-thru truck sign will be installed on Malburn Street to further reinforce prohibiting trucks from using that access way.

Parking

The proposed tonnage increase will not include any construction or an increase in employees (that weren't already accounted for), and therefore no required adjustments to parking will be necessary. Currently a portion of the employees that are hired through a local placement agency vanpool to the site, reducing overall employee vehicle counts and parking needs.

6.4 Impacts-Greenhouse Gas Emissions

Introduction

As presented in the ENF, the Project does not include any construction which would increase conditioned spaces, and does not exceed any mandatory EIR review thresholds related to air quality that would be subject to review under the MEPA GHG Policy. In order to determine if analysis is required under MEPA EJ protocols, GHG emissions were calculated using the GHG Emissions Footprint Estimation Tool.[3]

GHG Analysis-Stationary Sources

The GHG emissions analysis was performed to show that the Project does not expect to generate 2,000 or more tons per year (tpy) of CO_2 emissions. The estimate of GHG emissions generated by the building was determined using Emissions Footprint Estimation Tool. The analysis is based on the 2010 MEPA Greenhouse Gas Emissions Policy and Protocol (the "2010 GHG Policy"). According to the policy, the analysis should provide energy efficiency modeling to support GHG estimates for the Base Case and Design Case. To the extent a project is already required to conduct a GHG analysis under the 2010 GHG Policy, that analysis will satisfy the requirements of Part IV.B. [4]

The Emissions Footprint Estimation Tool was used to calculate CO_2 emissions for the Project. Based on the existing building area of 33,660 square feet (sf), the tool calculated annual CO_2 emissions of 80 tons in both existing and proposed conditions (Base and Design case) as no construction is proposed. Appendix A of the GHG and EJ Air Quality Analyses included as Attachment 6 presents the Emissions Footprint Estimation Tool output.

GHGs were estimated for the stationary sources emissions at the Facility using the GHG Emissions Footprint Estimation Tool. Sources identified and inputted into this tool included the following spaces:

- Handling Building (unconditioned warehouse)
- 1260-sf office conditioned space

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[3] https://www.mass.gov/doc/ghg-emissions-calculator/download

[4] MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations Effective Date: January 1, 2022.

6.4 Impacts-Greenhouse Gas Emissions, Continued

GHG Analysis-Transportation GHG Emissions

The transportation portion of the GHG analysis calculated emissions of CO_2 for the traffic study area for three traffic analysis scenarios:

- 2025 Existing
- 2032 No-Build
- 2032 Build

The vehicle miles traveled (VMT) for the major roadway segments in the traffic study area was calculated by multiplying the length of each road segment by the average daily traffic (ADT) volume on the segment. The CO_2 emissions for each roadway segment were calculated with the EPA MOVES4 model. The average daily traffic volumes were provided by Bowman Consulting Group, Ltd. Appendix B within the GHG and Air Quality report in Attachment 6 presents the VMT and emission calculations. Idling emissions were calculated for truck queuing on site and the weigh scales. Moving and idling transportation CO_2 emissions are summarized in Table 10 below. The emissions listed for the No-Build and Build cases include both existing volumes on the roadway network and new project-generated trips. The project's transportation emissions are calculated by subtracting the No-Build values from those for the Build case. Since there were no roadway improvements or traffic demand measures (TDMs) proposed for the Project, there were no CO_2 emission reductions calculated. The increase in mobile source CO_2 emissions from the expansion of the Facility is 1.14 tons/year.

Trucks that may queued on site will be required to shut down to comply with 310 CMR 7.11, the anti-idling regulation. Signs will be posted requiring compliance with the regulation. The total stationary and mobile source CO_2 emissions will be 85.07 tons/year.

Table 10- Motor Vehicle CO_2 Emissions Summary

Total Predicted CO_2 Emissions Burden		
2025 Existing	**2032 No-Build**	**2032 Build**
69.43 kg/day	72.58 kg/day	87.22 kg/day
		Project: 14.64 kg/day
26.83 tons/year	28.43 tons/year	33.49 tons/year
		Project: 5.07 tons/year

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6.4 Impacts-Greenhouse Gas Emissions, Continued

Emissions from Mobile Sources-Mitigation

The project is expected to reduce GHG by using freight rail to haul waste to various end-point facilities outside of New England. By using rail, the use of diesel trucks for outbound material is significantly reduced as emissions per mile travelled is reduced by approximately 75%, thereby reducing overall emissions at the Facility as well as along the outbound truck route south of the Facility. The Facility also will utilize inbound trucks for backhauling, when practicable, in an effort to reduce one-way truck trips to and from the Facility. The emission calculations (See Attachment 6) for the build condition used the worst-case scenario as modeled in the traffic impact study which did not account for backhauls nor use of rail to assess potential worst-case conditions relative to traffic.

Transportation Demand Management (TDM) Measure Considerations

Transportation Demand Management measures are strategies, incentives, and initiatives to reduce traffic congestion and its associated impacts. These measures have a goal of reducing single-occupancy travel, and encourage the use of alternative and public transportation, such as carpooling, biking, and walking.

The Project includes two types of vehicle traffic: Diesel truck traffic and employee vehicles. The diesel truck traffic which comprises 90% of the overall Facility-related traffic is part of operations and cannot be reduced using alternative transportation measures due to the nature of the truck's functions of hauling waste and recyclable materials for disposal and/or recycling.

Employee trips which are approximately 10% of the overall Facility-related traffic is not expected to increase for this Project, and are not likely to contribute to overall diesel traffic. The Facility is not equipped with EV charging stations and would likely need to upgrade the electrical panel in order to install, at a considerable expense.

As indicated in the Traffic Impact Study, employee shifts do not coincide with peak traffic hours, which alleviates peak traffic congestion. The facility is equipped with changing rooms and shower facilities for anyone who may opt to commute by bicycle.

The Facility contracts with a local employment agency to staff the recycling operations. This agency provides vanpooling services for those employees working at the Facility.

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6.4 Impacts-Greenhouse Gas Emissions, Continued

Emissions from Mobile Sources-Mitigation, continued

The TIS didn't identify any required traffic improvements or mitigation measures due to degradation of the roadways Level of Service. The TIS also identified that there are no existing pedestrian or bicycle facilities along Tanzio Road, however as Tanzio Road is a side street that its purpose is to serve the industrial park, it is not anticipated that it would be used as a pedestrian route. Additionally, the regional Montachusett Regional Transit Authority (MART) bus routes do not travel past Tanzio Road, with the closest stop being approximately a mile away from Tanzio Road on New Lancaster Road, south of Willard Street. To propose roadway improvements to provide pedestrian or bike lanes for 24 non-diesel vehicles of which constitutes 10% of the total worst-case estimated traffic (225 trucks + approximately 24 employee vehicles), would not be an equitable mitigation for the 10% fraction of vehicles this could provide alternative transportation for.

The use of rail and backhauls remain the two most significant mitigation measures for reducing traffic impacts.

6.5 Impacts - Sound

Sound Impacts Introduction

A sound study dated July 2, 2024 prepared by Tech Environmental (Tech), was included in the ENF that analyzed sound level impacts associated with the proposed Project. A supplemental memo was prepared to address comments received on the ENF and mitigation measures, as included in Attachment 4.

This section of the DEIR provides a summary of the sound study and supplemental memo followed by discussion of mitigation measures implemented to reduce noise; and responses to noise-related public comments provided as part of the ENF process.

The Project is designed (in existing and proposed conditions) to avoid noise impacts to residences, and UMML has proposed mitigation measures to minimize sound levels at nearby residences to the extent practicable.

Summary of Sound Study

The sound study dated July 2, 2024 analyzed noise impacts associated with the operation of the Facility under proposed conditions. The analysis compared modeled noise levels to two ambient noise scenarios including normal daytime conditions and end-of-day conditions after normal tipping operations (weekdays 5 PM to 7 PM and Saturday 1 PM to 3 PM). Sound monitoring was conducted to establish ambient sound levels at the Facility which ranged from 41 to 55 dBA (normal daytime) and 39 to 44 dBA (end of day). [dBA: sound levels are measured and quantified using the logarithmic decibel (dB) scale. Frequencies are adjusted based on the A-weighting network because it most closely approximates how the human ear responds to sound at various frequencies.]

The sound analysis incorporated various sources of both indoor and outdoor noise associated with the operation of the Facility including handling and processing equipment, idling trucks, stationary processing equipment, mechanical equipment, and rail car moving equipment operating simultaneously and at maximum loading. These sounds were then inputted into an acoustic model to calculate projected sound levels at 22 residential receptors surrounding the Facility.

The modeling results were compared to the MassDEP's Noise Policy which indicated compliance with the Policy for both sound level increases and pure tone conditions.

Continued on next page

6.5 Impacts - Sound, Continued

Mitigation Measures

The following controls and mitigation measures are in place to reduce sound impacts from the Facility operations:

1. Overall design of the building includes the positioning of the tipping and loadout bay doors facing north away from the nearest residential receptors to the southwest and east.
2. Limiting tipping hours to the current 6:30-4:00 timeframe which is within the allowed operational hours.
3. Handling and processing materials inside the building.
4. Limiting outside rail car mover activity to within permitted operational hours and not before 6am.
5. Require trucks with tailgates to remain inside the building until the tailgates are closed to reduce noise associated with tipping, unless trucks are otherwise equipped with seals or gaskets.
6. Limiting equipment operation outside the building prior to 6 AM (weekdays) and 7 AM (Saturday); and after 7 PM (weekdays) and 3 PM (Saturday).
7. Although the sound study assessed sound impacts from equipment at maximum operating levels to assess worst-case, the Facility will regularly operate equipment at normal and reduced speeds to minimize wear and tear and resultingly minimize sound levels.
8. Ventilation fans and motors are located inside the building to reduce sound impacts.
9. Use of rollup doors at tipping floor and rail loadout bay outside of peak operating hours to contain sound from within the building.
10. On-site storage of spare rollup door parts to minimize potential time a door is inoperable if damaged.
11. Provide regular communications with haulers/clients regarding truck routes, hours of operation, and consequences of arriving early or not following traffic routes.
12. Adhere to anti-idling laws.

Continued on next page

6.5 Impacts - Sound, Continued

Mitigation Measures, continued

The following mitigation measures have been implemented or in development since the filing of the ENF and in direct response to public comments received throughout the MEPA process:

1. Identified truck(s) that were parking on Lancaster Road prior to facility opening and issued warning to company(ies) that if activity continues, they will not be allowed to use the facility.
2. Provided reminder to all facility customers of hours of operation and that no early arrivals or idling/queuing anywhere outside of Facility that is not otherwise designated as a truck stop is allowed.
3. Investigating feasibility of implementing sound dampening measures on ventilation fans and the resulting sound reduction rate of those measures. Alternatively, assessing feasibility of replacing current fans with low noise fans capable of achieving the same resulting exhaust flow rates.
4. One of three doors will remain closed at a minimum after 4pm (weekdays) to reduce sound during end-of-day operations.

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6.5 Impacts - Sound, Continued

Public Comments-Sound

As summarized in Table 17 (Chapter 9-Response to Comments), the following public comments were received during the ENF process regarding sound:

1. Increase in train traffic will lead to increased noise.
2. Condition of Lancaster Street increases noise from truck traffic.
3. Ventilation fan noise (commenter from south of the site).

Please note that no comments were received regarding sound during the pre-DEIR submittal public meeting held on June 24, 2025.

Response to comments:

1. The added tonnage will increase daily rail service by 1 switch (1 day). Currently, the Facility is serviced 3 times/week (every other day) and will require only one additional switch per week in proposed conditions (serviced 4 times/week). Rail service is approximately 20-30 minutes in duration.

2. The applicant understands that the condition of Lancaster Street is in need of repair. The road condition was discussed at the June 2025 public meeting in which City Council representatives were in attendance to hear the concerns of the residents. As also presented at the same hearing, traffic from the facility was calculated to be 1.8% of the total traffic on Lancaster Street (based upon a 14-hour peak travel monitoring period, 5 am – 7 pm). As presented in the July 2025 supplemental sound memo, the increase in truck traffic would need to more than double than what was evaluated in the traffic study to generate a perceptible change in ambient noise, (approximately 3 dBA). The study already includes a worst- case scenario of all outbound material is transported by truck and not rail which overestimates truck traffic.

3. The Facility is investigating feasibility of implementing sound dampening measures on ventilation fans and the resulting sound reduction rate of those measures. GSE notes that AIS located to the southeast of the Facility and commenter has a 555,000-sf building equipped with roof ventilation which also could be a significant source of noise in the area.

6.6 Impacts- Air Quality

Introduction

The air quality component of the Draft Environmental Impact Report (DEIR) provides an overview of the analysis completed to document the air impacts associated with the proposed tonnage increase. An Air Quality Study was conducted for the Project by Tech Environmental, Inc. (Tech) dated July 10, 2024. This study calculated the project emissions, which were both less than the 1-ton-per-year reporting threshold and the National Ambient Air Quality Standards (NAAQS), including the lower $PM_{2.5}$ annual NAAQS of 9 ug/cm promulgated by the EPA on February 7, 2024.

An update to the analysis was prepared based on the scope of work outlined in the Environmental Notification Form (ENF) Certificate, as summarized below:

The ENF Certificate identified that the DEIR should include an air quality analysis in accordance with the *MassDEP Guidelines for Performing Mesoscale Analysis of Indirect Sources (1991)*. Data on NOx, PM_{10}, $PM_{2.5}$, and Diesel Particulate Matter (DPM), in addition to GHG and VOCs should be provided to the extent they are available for roadway segments included within the traffic study area used for the TIS. Additional analysis of air quality at intersections adjacent to EJ populations should be conducted in accordance with the Environmental Justice Scope above. MEPA is aware that MassDEP has proposed regulatory changes to adopt the California Air Resources Board (CARB)'s Medium and Heavy Duty (MHD) engine and vehicle regulations. These MHD regulations include three parts: 1) GHG Phase 2 Standards for MHD Engines and Vehicles starting in model year (MY) 2025; 2) Heavy-Duty Omnibus Regulation which contains a comprehensive set of emission standards and other emission-related requirements for heavy duty engines and vehicles, starting in MY 2025; and 3) Advanced Clean Trucks Regulation resulting in offers of zero emission vehicle (ZEV) sales starting in MY 2025 and ramping up to 55% of Class 2b-3, 75% of Class 4-8 and 40% of Class 7-8 tractor sales being ZEVs in MY 2035. Given this transition to a cleaner truck fleet as of MY 2025, it is MEPA's expectation that mitigation commitments relative to mobile source emissions will address diesel vehicle traffic; early adoption of future mandates relative to its truck fleet is strongly encouraged.

As detailed in Attachment 6 (Greenhouse Gas and Environmental Justice Air Quality Analysis), a greenhouse gas (GHG) analysis for the assessment of environmental burdens and an Environmental Justice (EJ) mesoscale air quality analyses was performed for the proposed tonnage expansion for at the UMML Facility.

Continued on next page

6.6 Impacts- Air Quality, Continued

Introduction, continued

This analysis included the following:

- Perform a quantitative GHG emissions of main facility building to demonstrate that emissions reductions are negligible.
- Perform an assessment on the environmental burdens, and pediatric asthma prevalence for school K-8.
- Perform air quality emissions calculations for CO_2, NO_x, VOC, $PM_{2.5}$, PM_{10}, and DPM for project related vehicle trips based within the traffic study area in EJ and non-EJ communities using traffic data supplied by Bowman Consulting Group, Ltd. (Bowman) and the EPA MOVES model.
- Perform a qualitative air quality microscale analysis for traffic intersections included in the traffic study performed by Bowman.

Continued on next page

6.6 Impacts- Air Quality, Continued

GHG Analysis

A GHG emissions calculation was conducted which showed that the Project does not expect to generate 2,000 or more tons per year (tpy) of CO_2 emissions, which would require further GHG Analysis in accordance with the 2010 MEPA GHG Policy. Additional GHG evaluation on mobile source emissions was also conducted, with both analyses included in Section 6.4 (Impacts-Greenhouse Gas) of this report and included in the Greenhouse Gas and Environmental Justice Air Quality Analysis included as Attachment 6.

GHG Analysis- Transportation GHG Emissions

The transportation portion of the GHG analysis calculated emissions of CO_2 for the traffic study area for three traffic analysis scenarios:

- 2025 Existing
- 2032 No-Build
- 2032 Build

The vehicle miles traveled (VMT) for the major roadway segments in the traffic study area was calculated by multiplying the length of each road segment by the average daily traffic (ADT) volume on the segment. The CO_2 emissions for each roadway segment were calculated with the EPA MOVES4 model. The average daily traffic volumes were provided by Bowman. Appendix B within the GHG and Air Quality report in Attachment 6 presents the VMT and emission calculations. Idling emisisons were calculated for trucks queuing on site including time at the weigh scales. Moving and idling transportation CO_2 emissions are summarized in Table 10 (presented above in section 6.4 (Impacts- Greenhouse Gas). The emissions listed for the No-Build and Build cases include both existing volumes on the roadway network and new project-generated trips. The project's transportation emissions are calculated by subtracting the No-Build values from those for the Build case. Since there were no roadway improvements or traffic demand measures (TDMs) proposed for the Project, there were no CO_2 emission reductions calculated. The increase in mobile source CO_2 emissions from the expansion of the Facility is 5.07 tons/year.

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6.6 Impacts- Air Quality, Continued

GHG Analysis- Transportation GHG Emissions, continued	Trucks that may queued on site will be required to shut down to comply with 310 CMR 7.11, the anti-idling regulation. Signs will be posted requiring compliance with the regulation. The total stationary and mobile source CO_2 emissions will be 85.07 tons/year.
Existing Environmental Burden and Public Health Assessment	Under Section 58 of the Climate Roadmap Act and consistent with the new 301 CMR 11.07(6)(n) and the "MEPA Public Involvement Protocol for EJ Populations" (January 1, 2022), an assessment of the existing vulnerable health concerns and potential sources of pollution, and environmental indicators within the Designated Geographic Area (DGA) of any environmental justice (EJ) population within one mile was performed. As per the ENF Certificate, a more detailed analysis of pediatric asthma prevalence for K-8 schools was also performed.
Vulnerable Health Environmental Justice Criteria	As presented in the "Existing Environment- Public Health" section of this report, the Massachusetts Department of Public Health (DPH) EJ Tool[5] was used to identify whether any municipality or census tract that is within the EJ populations exhibits the following vulnerable health criteria: • Heart attack hospitalization • Childhood asthma • Childhood blood lead • Low birth weight Table 2 (as previously presented) summarized the four vulnerable health criteria within one mile of the Project compared to 110% of the statewide rate. As outlined in the MEPA Interim Protocol, health criteria exceeding the 110% statewide rate could be viewed as exhibiting "vulnerable health EJ criteria," and therefore, potentially bearing an "unfair or inequitable" environmental burden and related public health consequences.

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[5] https://matracking.ehs.state.ma.us/Environmental-Data/ej-vulnerable-health/environmental-justice.html

6.6 Impacts- Air Quality, Continued

Vulnerable Health Environmental Justice Criteria, continued

Three of the four vulnerable health criteria were identified to be below the 110% statewide rate. Therefore, it is not anticipated that these health criteria represents an unfair or inequitable environmental burden or related public health consequences when looked at on the census-tract level. The vulnerable health criteria of heart attack is above 110% of the Statewide Rate. Heart attacks for Leominster is 36.4 per 10,000, which is above the 110% statewide rate of 28 per 10,000. This is equivalent to approximately 0.4% of Leominster's population. Therefore, it is not anticipated that this health criteria represents an unfair or inequitable environmental burden or related public health consequences even when looked at on the census-tract level.

Potential Sources of Pollution

The DPH EJ Tool was also used to access additional data layers to assess other potential sources of pollution within one (1) mile of the site. Table 11 below shows the additional 13 mapping layers that were assessed from the DPH EJ Tool, which equated to a total of 38 potential sources of pollution. The enforcement history of those facilities permitted by Massachusetts Department of Environmental Protection (MassDEP)[6] was researched and it was determined that out of the 38 potential sources of pollution, the enforcement history revealed only six sources have had historical notices of non-compliance.

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[6] Enforcement information is available at https:/ /eeaonline.eea.state.ma.us/Portal/#!/search/enforcements

6.6 Impacts- Air Quality, Continued

Potential Sources of Pollution, continued

Table 11- Potential Sources of Pollution within 1 mile of the Site

Sources of Pollution	Description	# of Sources	Notice of Non-Compliance
MassDEP Major Air and Waste Facilities	Air Operating Permits	0	2
	Large Quantity Generators	3	
	Large Quantity Toxic User	2	
MGL c. 21E sites	n/a	3	0
Tier II Toxics Use Reporting Facilities	Sites that have quantities of chemicals that meet certain reporting thresholds	9	4
MassDEP-Sites with Activity and Use Limitations (AULs)	n/a	1	0
MassDEP Groundwater Discharge Permits	n/a	0	0
MassDEP Public Water Suppliers	n/a	0	0
Underground Storage Tanks	n/a	3	n/a
EPA Facilities	Superfund Site Boundaries	0	n/a
	Toxic Release Inventory Sites	3	n/a
Road Infrastructure	MassDOT Roads	3	n/a
MBTA Bus and Rapid Transit	MBTA Commuter Rail Lines	0	n/a
	MBTA Commuter Rail Stations	0	n/a
Other Transportation Infrastructure	Airports	0	n/a
	Freight Rail Yards	0	n/a
	Railroad Tracks	3	n/a
Regional Transit Agencies (RTA)	RTA stops	2	n/a
Energy Generation and Supply	Power Plants	0	n/a
	Transmission Lines	6	n/a

Continued on next page

6.6 Impacts- Air Quality, Continued

Environmental Indicators

The U.S. EPA's Environmental Justice Screening and Mapping Tool was used to obtain percentile ranking by census block group and statewide averages for thirteen (13) environmental indicators[7]. Table 12 below shows the percentile for each EJ block of the 13 indicators within a mile of the project site and highlights in orange the percentiles that are elevated at or above the 80th percentile of the statewide average. Figure 22 below identifies the location of each EJ block. There are one to two EJ blocks with a percentile that is greater than or equal to 80th percentile of the statewide average for the following indicators: Nitrogen Dioxide, Lead Paint, Hazardous Waste Proximity and Underground Storage Tank. There are five EJ Blocks that are greater than or equal to 80th percentile of the statewide average for the Superfund Proximity Indicator.

Table 12- Environmental Indicator Percentages

EJ Blocks within 1 mile Radius	Environmental Indicators					
	$PM_{2.5}$ (annual average)	**Ozone [1]**	**Nitrogen Dioxide (NO_2)**	**DPM (ug/m^3)**	**Toxic Release to Air**	**Traffic Proximity and Volume [2]**
EJ Block #1	41%	39%	60%	22%	19%	45%
EJ Block #2	51%	50%	62%	28%	23%	51%
EJ Block #3	58%	53%	76%	33%	27%	67%
EJ Block #4	43%	38%	72%	28%	25%	57%
EJ Block #5	62%	55%	84%	49%	39%	72%
EJ Block #6	46%	65%	65%	36%	26%	48%
EJ Block #7	34%	24%	41%	20%	14%	32%
EJ Block #8	43%	40%	57%	30%	21%	43%

Notes:
1. Ozone as summer seasonal average, daily 8-hour maximum
2. Daily traffic count/distance to road

Continued on next page

[7] The EPA EJ Tool website was unavailable so the following was used instead to obtain the information needed. https://pedp-ejscreen.azurewebsites.net/

6.6 Impacts- Air Quality, Continued

Environmental Indicators, continued

Table 12- Environmental Indicator Percentages, continued

EJ Blocks within 1 mile Radius	Environmental Indicators					
	Lead Paint Indicator [3]	Superfund Proximity [4]	RMP Proximity [5]	Hazardous Waste Proximity [5]	USTs Indicator [6]	Wastewater Discharge Indicator [7]
EJ Block #1	48%	73%	50%	54%	73%	50%
EJ Block #2	52%	81%	57%	61%	69%	58%
EJ Block #3	88%	86%	67%	80%	81%	64%
EJ Block #4	67%	80%	56%	67%	73%	60%
EJ Block #5	93%	90%	70%	83%	67%	76%
EJ Block #6	60%	83%	51%	57%	63%	69%
EJ Block #7	30%	63%	36%	37%	50%	41%
EJ Block #8	7%	59%	48%	46%	70%	54%

Notes:
1. Ozone as summer seasonal average, daily 8-hour maximum
2. Daily traffic count/distance to road
3. Lead paint: % of housing built before 1960
4. Superfund Proximity: site count/km distance
5. facility count/km distance
6. UST: Underground Storage Tank
7. Toxicity weighted concentration/distance
8. Drinking Water Non-Compliance is 0% for all EJ blocks

Pediatric Asthma Prevalence for K-8 Schools

The Massachusetts Department of Environmental Protection (MassDEP) Cumulative Impact Analysis (CIA)[8] methods were used to analyze pediatric asthma prevalence for K-8 schools in the project truck route area that is within an EJ block group, within one mile of the project site. Figure 21 shows there are three schools that are nearest to the existing and proposed Facility truck routes (note that the routes do not change as a result of this Project).

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[8] https://mass-eoeea.maps.arcgis.com/apps/webappviewer/index.html?id=5a876b759df24d10b4a9e9e5b3921310

6.6 Impacts- Air Quality, Continued

Pediatric Asthma Prevalence for K-8 Schools, continued

Out of the three schools only the Frances Drake School, located at 95 Viscoloid Avenue in Leominster, had available Indicator Data for CIA analysis[9]. The pediatric asthma prevalence for Frances Drake School is 10.7% of the students which is 87% of Massachusetts rate. The main truck route ultimately proceeds away (south) from the three identified schools towards Route I-190.

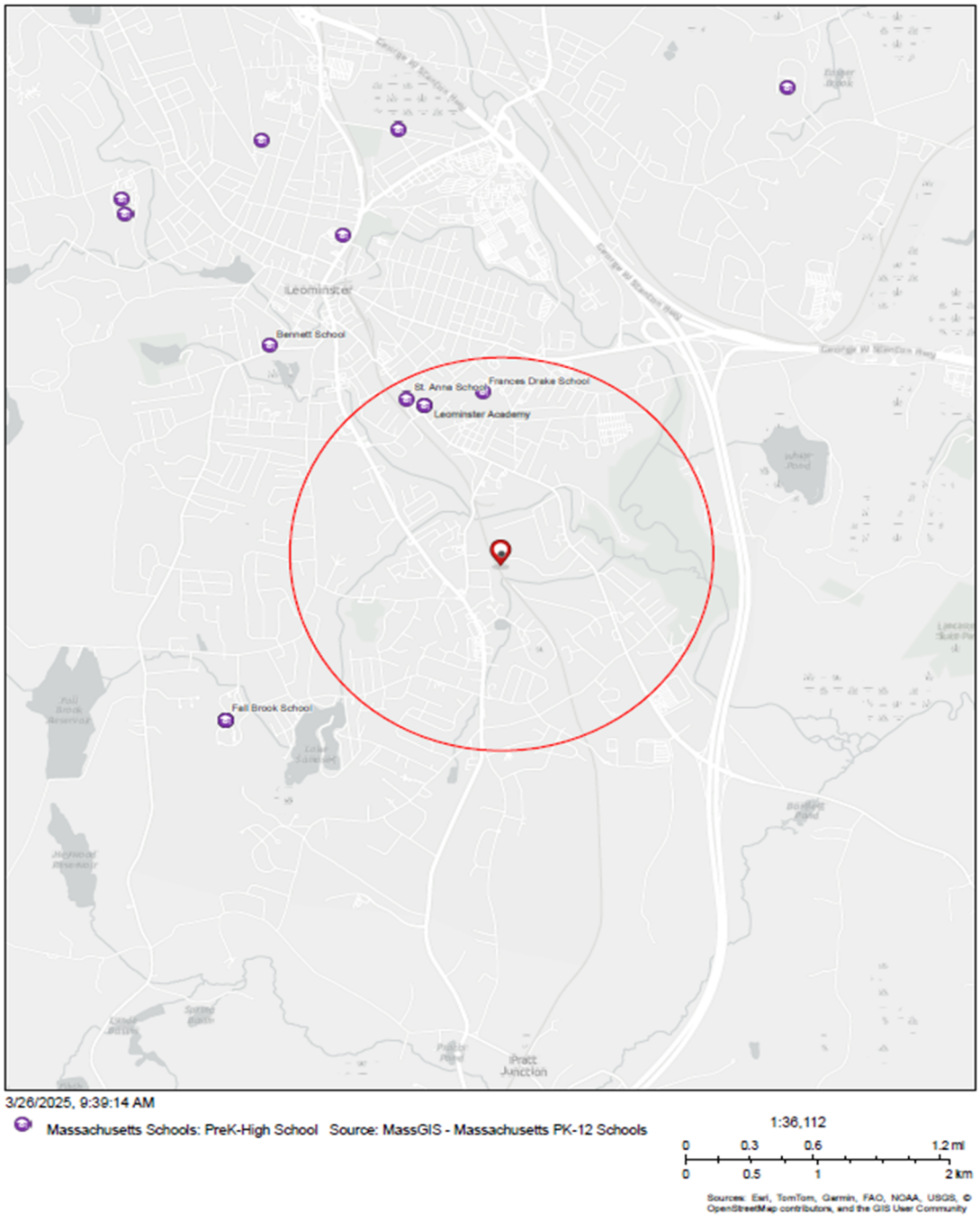
Continued on next page

[9] https://www.mass.gov/doc/indicator-data-for-cumulative-impact-analysis-updated-jan-30-2025

6.6 Impacts- Air Quality, Continued

Pediatric Asthma Prevalence for K-8 Schools, continued

Figure 21- MassDEP Cumulative Impact Analysis Mapping Tool- Leominster within 1 mile



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6.6 Impacts- Air Quality, Continued

Summary of Environmental Burden on EJ Population

Based on the data collected from the DPH EJ Screen, the vulnerable health criteria for the EJ community near the Facility are below the statewide rate, except heart attacks for Leominster is 36.4 per 10,000, which is above the 110% statewide rate of 28 per 10,000. This is equivalent to approximately 0.4% of Leominster's population. Therefore, it is not anticipated that this health criteria represents an unfair or inequitable environmental burden or related public health consequences even when looked at on the census-tract level. Out of the 38 potential sources of pollution, only 6 of those sources have historical notices of non-compliance, as previously summarized in Table 11. The EPA EJ tool was used to determine that for the following indicators: Nitrogen Dioxide, Lead Paint, Hazardous Waste Proximity, and Underground Storage Tanks, there are one to two EJ blocks with a percentile that is greater than or equal to 80th percentile of the statewide average. There are five EJ Blocks that are greater than or equal to the 80th percentile of the statewide average for the Superfund Proximity Indicator. From the four schools nearest to the project site, only one school has a report of 10.7% of the school body with pediatric asthma prevalence. From the information discussed above, the EJ population near the Project has not been impacted by unfair environmental burdens. Nonetheless, the next section assesses the Facility's air quality impact on the EJ community, and what mitigation measures that can be taken to limit any disproportionate adverse effect the Project may have on the EJ communities.

EJ- Air Quality Analysis

An air quality Environmental Justice (EJ) analysis was performed for the project consistent with the "MEPA Public Involvement Protocol for EJ Populations" (January 1, 2022) per requirements of the ENF Certificate dated December 9, 2024. Within one (1) mile there are eight EJ blocks (see Figure 22 below, source: Figure 2 in GHG Report, Attachment 6). A mesoscale air quality analysis of mobile sources was performed to determine the possible disproportionate effects it would have on the EJ populations. The Certificate scope specifically requires this analysis for roadway segments included in the traffic study (to the extent data is available).

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6.6 Impacts- Air Quality, Continued

Applicable Air Quality Standards and Existing Air Quality

The U.S. Environmental Protection Agency (EPA) has developed a set of National Ambient Air Quality Standards (NAAQS) for six air contaminants that are collectively known as criteria pollutants. These NAAQS are intended to protect public health and welfare. The six criteria pollutants are sulfur dioxide (SO_2); particulate matter (which is broken up into two categories: PM_{10} which is particulate having an aerodynamic diameter of 10 micrometers or less, and $PM_{2.5}$ which is particulate matter having an aerodynamic diameter of 2.5 micrometers or less); nitrogen dioxide (NO_2); carbon monoxide (CO); ozone (O_3); and lead (Pb). Coinciding with the NAAQS, the Commonwealth of Massachusetts has set forth its own state air quality standards called the Massachusetts Ambient Air Quality Standards (MAAQS) which are codified in 310 CMR 6.00. These MAAQS generally follow the NAAQS, though the MAAQS have not been updated to reflect some of the more recent EPA updates to the NAAQS.

On February 7, 2024, EPA announced a final rule to strengthen the NAAQS for $PM_{2.5}$. EPA is revising the level of the primary (health-based) annual $PM_{2.5}$ standard from 12.0 micrograms per cubic meter ($\mu g/m^3$) to 9.0 $\mu g/m^3$. EPA is retaining the primary 24-hour $PM_{2.5}$ standard at the level of 35 $\mu g/m^3$.

The NAAQS and MAAQS have been developed for various durations of exposure. The short-term standards typically refer to pollutant levels that are not to be exceeded except for a limited number of times per year. The long-term standards typically refer to pollutant levels that are not to be exceeded on an annual average basis. These standards can be further broken down into primary and secondary standards. Primary standards are intended to protect human health, including the health of “sensitive” populations such as asthmatics, children, and the elderly. The secondary standards are intended to provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Table 3 (previously presented) summarizes the MassDEP air monitoring data, for the most recent three-year period (2021-2023), that are considered to be representative of the Project Area. The closest, most representative, MassDEP monitors for all pollutants is Summer Street, Worcester, MA.

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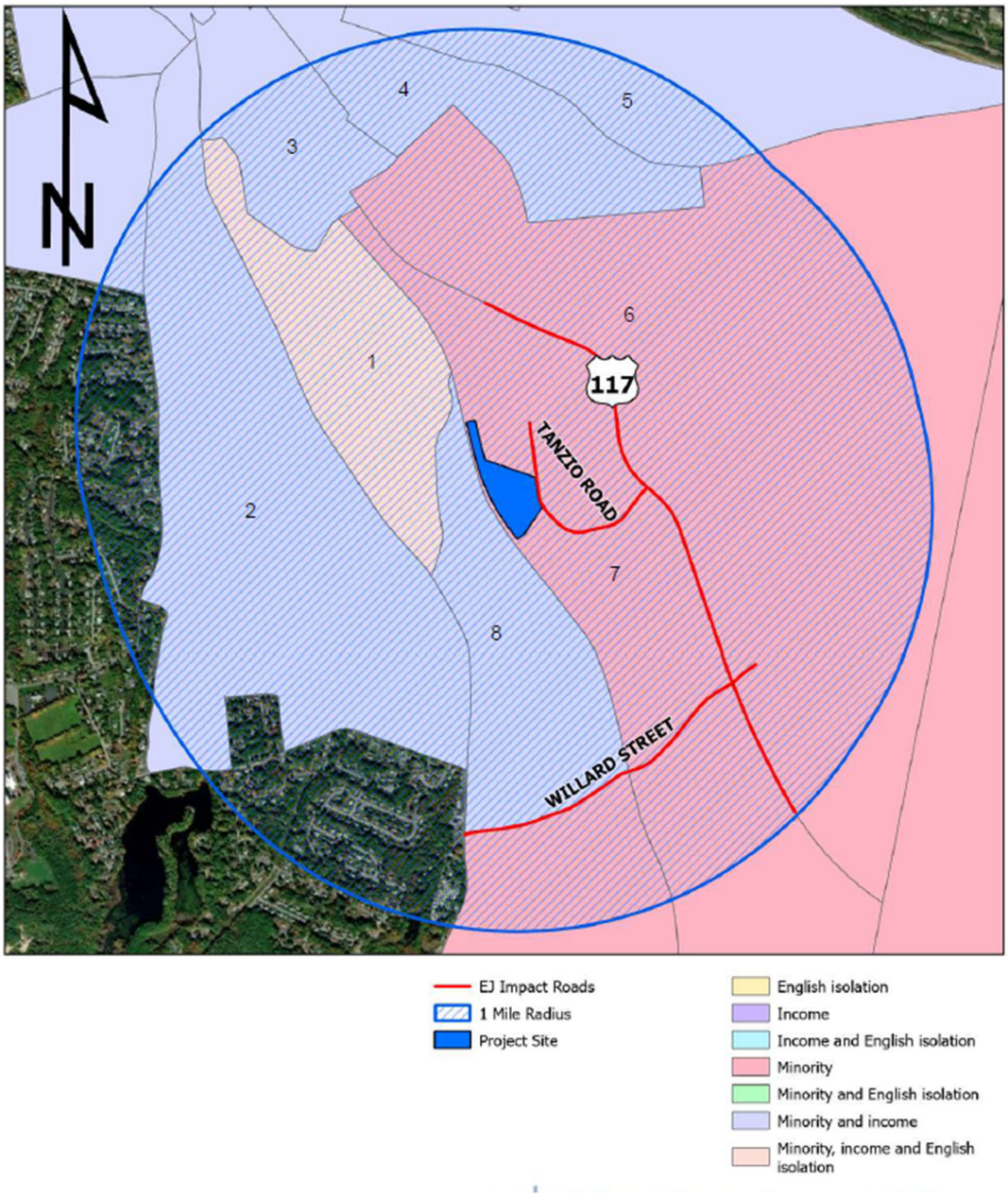
6.6 Impacts- Air Quality, Continued

Applicable Air Quality Standards and Existing Air Quality, continued

Figure 22- Environmental Justice Designated Geographic Area



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6.6 Impacts- Air Quality, Continued

Applicable Air Quality Standards and Existing Air Quality, continued

Table 3 shows that the existing air quality in the Project Area is generally much better than the NAAQS. The highest impacts relative to NAAQS is for the annual $PM_{2.5}$ and ozone. MassDEP has set forth guideline values known as the Ambient Air Limits (AALs) and Threshold Effect Exposure Limits (TELs) to allow evaluation of the potential for human health risks associated with exposure from certain chemicals in the air.

To demonstrate compliance with the NAAQS, AALs and TELs would require air dispersion modeling. However, since the Project's projected diesel truck trips represent an extremely small fraction of the total vehicle miles traveled when including background traffic volumes without the Project, air dispersion modeling would result in insignificant impacts when compared to NAAQS and AALs and TELs. Instead, the below Predicted Project Impacts section (Section 4.6 of the GHG Study in Attachment 6) presents the historical and future improvement in NO_x, $PM_{2.5}$ and DPM/PM_{10} emissions in Worcester County and how the Project-related NO_x, $PM_{2.5}$ and DPM/PM_{10} emissions compare to Worcester County NO_x, $PM_{2.5}$ and DPM/PM_{10} emissions in the future.

Assessment of the Project Air Quality Impacts

The mesoscale analysis was performed for diesel particulate matter (DPM) since DPM emissions can lead to serious health conditions such as asthma and can worsen existing heart or lung disease[10], which both fall under the category of vulnerable health criteria. This analysis used the US Environmental Protection Agency (EPA) MOVES4 Mobile Source Emission Factor Model and followed the Massachusetts Department of Environmental Protection (MassDEP) guideline for mesoscale analyses[11]. Per the requirements of the December 9, 2024 ENF Certificate, the mesoscale analysis includes volatile organic compounds (VOC), oxides of nitrogen (NOx), and fine particulate matter ($PM_{2.5}$ and PM_{10}). Furthermore, calculations were performed to compare area-wide VOC, NO_x, $PM_{2.5}$, DPM/PM_{10} emissions after the full Build conditions of the Project is implemented to existing and future No-Build emissions in the EJ community, and also compared to Worcester County emissions data.

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[10] EPA, "Learn About Impacts of Diesel Exhaust and the Diesel Emissions Reduction Act (DERA)", https://www.epa.gov/dera/learn-about-impacts-diesel-exhaust-and-diesel-emissions-reduction-act-dera

[11] Massachusetts DEP, Guidelines for Performing Mesoscale Analysis of Indirect Sources, Division of Air Quality Control, May 1991.

6.6 Impacts- Air Quality, Continued

Assessment of the Project Air Quality Impacts, continued

Elevated levels of $PM_{2.5}$, PM_{10}, and DPM are known carcinogens that can worsen existing heart or lung disease, which both fall under the category of vulnerable health criteria[12]. Elevated levels of VOC and NO2 can cause damage to the human respiratory tract and increase a person's vulnerability to, and/or the severity of respiratory infections and asthma[13].

Mesoscale Study Area

The mesoscale area was determined based on the Project Traffic Impact Study prepared by Bowman Consulting Group, Ltd (Bowman). The mesoscale study area includes the following seven (7) roadway segments, which are all within an EJ community:

- Site Driveway
- Tanzio Road between Site Driveway & Route 117
- Route 117 north of Tanzio Road
- Route 117 between Tanzio Road & Willard Street
- Willard Street west of Route 117
- Willard Street east of Route 117
- Route 117 south of Willard Street

The closest EJ community within the access route is on the east side of the Project as shown in Figure 22. Using the traffic study provided by Bowman, the roadway segments were determined to be within the EJ community, as shown in Figure 22.

Mesoscale Analysis Procedure

The mesoscale analysis calculated VOC, NOx, $PM_{2.5}$, DPM/ PM_{10} emissions over the Project study area for three cases:

- 2025 Existing
- 2032 No-Build
- 2032 Build

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[12] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm

[13] https://www.epa.gov/no2-pollution/basic-information-about-no2

6.6 Impacts- Air Quality, Continued

Mesoscale Analysis Procedure, continued

The emissions for each roadway segment were calculated by multiplying the vehicles miles per day by the EPA MOVES4 model predicted emission factors in grams per mile. The MOVES4 model was run using input files provided by MassDEP for 2025 and 2032. Average daily traffic volumes were provided by Bowman and with county specific vehicle data from MassDEP MOVES4 data. With this information the average daily truck volumes were calculated. Appendix B in Attachment 6 presents the mesoscale emissions calculations.

Predicted Project Impacts

A summary of the results of the mesoscale analysis is presented in Table 6. The total VOC emissions for the 2025 Existing case are 0.0114 kg/day. The total VOC emissions for the 2032 No-Build case are 0.0107 kg/day. This is a 5.7% decrease from the 2025 Existing VOC emissions. The total VOC emissions for the 2032 Build case are 0.00112 kg/day. This is a 1.7% decrease from the 2025 Existing VOC emissions.

The total NOx emissions for the 2025 Existing case are 0.1661 kg/day. The total NOx emissions for the 2032 No-Build case are 0.1376 kg/day. This is a 17.3% decrease from the 2025 Existing NOx emissions. The total NOx emissions for the 2032 Build case are 0.1140 kg/day. This is a 13.4% decrease from the 2025 Existing NOx emissions.

The total $PM_{2.5}$ emissions for the 2025 Existing case are 0.00717 kg/day. The total $PM_{2.5}$ emissions for the 2032 No-Build case are 0.00472 kg/day. This is a 34.1% decrease from the 2025 Existing $PM_{2.5}$ emissions. The total $PM_{2.5}$ emissions for the 2032 Build case are 0.00495 kg/day. This is a 31.0% decrease from the 2025 Existing $PM_{2.5}$ emissions.

The total DPM/ PM_{10} emissions for the 2025 Existing case are 0.00780 kg/day. The total DPM/PM_{10} emissions for the 2032 No-Build case are 0.00513 kg/day. This is a 34.1% decrease from the 2025 Existing DPM/PM_{10} emissions. The total DPM/ PM_{10} emissions for the 2032 Build case are 0.00538 kg/day. This is a 31.0% decrease from the 2025 Existing DPM/PM_{10} emissions.

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6.6 Impacts- Air Quality, Continued

Predicted Project Impacts, continued

The US EPA has established stricter emission standards for new motor vehicles than older vehicles. The MOVES4 model predicts motor vehicle VOC, NOx, $PM_{2.5}$, DPM/ PM_{10} emissions to decrease between 2025 and 2032, as new, lower polluting vehicles replace older vehicles on the roadways. The MOVES4 model predicts further declines in VOC, NOx, $PM_{2.5}$, DPM/ PM_{10} motor vehicle emission rates after 2032. These national control programs are the most effective mitigation measures for VOC, NOx, $PM_{2.5}$, DPM/ PM_{10}, all regional air pollutants. While each individual project needs to pursue all reasonable mitigation measures for motor vehicle emissions, the net effect of a single project is very small at the margins. Since the inception of this Facility, rail is used to move waste away from the facility, which is less emissions than trucks. Further discussion on the improvements in air emissions using rail compared to trucks to haul materials is presented in the Mitigation Measures section below (Section 4.8 of the report included in Attachment 6).

Table 13- Mesoscale Emissions Summary (kg/day)

Pollutant	2025 Existing	2032 No-Build	2032 Build
VOC	0.0114	0.0107	0.0112
NO_x	0.1661	0.1374	0.1440
$PM_{2.5}$	0.00717	0.00472	0.00495
DPM/ PM_{10}	0.00780	0.00513	0.00538

Build Air Quality Impacts

The total VOC emissions for the 2032 Build case are 0.00050 kg/day higher than those for the 2032 No-Build case. For comparison purposes, the 2032 Build case VOC emissions were compared to Worcester County VOC emissions. Worcester County VOC emissions were calculated using MOVES4 and countywide data for the period from 2014 to 2032. Figure 23 presents a graph of VOC emissions, in kg/day, showing a significant decrease in VOC emissions since 2014 and continuing. The primary reason for the reduction in VOC emissions is due to more stringent EPA diesel vehicle emissions standards. Figure 23 also shows the total Project 2032 Build VOC emissions, which represents an insignificant area-wide increase of approximately 0.000011 % of the projected 2032 Worcester County VOC emissions.

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6.6 Impacts- Air Quality, Continued

Build Air Quality Impacts, continued

The total NOx emissions for the 2032 Build case are 0.0065 kg/day higher than those for the 2032 No-Build case. For comparison purposes, the 2032 Build case NOX emissions were compared to Worcester County NO_X emissions. Worcester County NO_x emissions were calculated using MOVES4 and countywide data for the period from 2014 to 2032. Figure 24 presents a graph of NOx emissions, in kg/day, showing a significant decrease in NO_X emissions since 2014 and continuing into the future. The primary reason for the reduction in NO_X emissions is due to more stringent EPA diesel vehicle emissions standards. Figure 24 also shows the total Project 2032 Build NO_X emissions, which represents an insignificant area-wide increase of approximately 0.000005% of the projected 2032 Worcester County NO_X emissions.

The total $PM_{2.5}$ emissions for the 2032 Build case are 0.000226 kg/day higher than those for the 2032 No-Build case. For comparison purposes, the 2032 Build case $PM_{2.5}$ emissions were compared to Worcester County $PM_{2.5}$ emissions. Worcester County $PM_{2.5}$ emissions were calculated using MOVES4 and countywide data for the period from 2014 to 2032. Figure 25 presents a graph of $PM_{2.5}$ emissions, in kg/day, showing a significant decrease in $PM_{2.5}$ emissions since 2014 and continuing downward into the future. The primary reason for the reduction in $PM_{2.5}$ emissions is due to more stringent EPA diesel vehicle emissions standards. Figure 25 also shows the total Project 2032 Build $PM_{2.5}$ emissions, which represents an insignificant area-wide increase of approximately 0.000015% of the projected 2032 Worcester County $PM_{2.5}$ emissions.

The total DPM/PM_{10} emissions for the 2032 Build case are 0.000256 kg/day higher than those for the 2032 No-Build case. For comparison purposes, the 2032 Build case DPM/ PM_{10} emissions were compared to Worcester County DPM/ PM_{10} emissions. Worcester County DPM/PM_{10} emissions were calculated using MOVES4 and countywide data for the period from 2014 to 2032. Figure 26 presents a graph of DPM/ PM_{10} emissions, in kg/day, showing a significant decrease in DPM/PM_{10} emissions since 2014 and continuing downward into the future. The primary reason for the reduction in DPM/PM_{10} emissions is due to more stringent EPA diesel vehicle emissions standards.

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6.6 Impacts- Air Quality, Continued

Build Air Quality Impacts, continued

Figure 26 also shows the total Project 2032 Build DPM/ PM_{10} emissions, which represents an insignificant area-wide increase of approximately 0.00013% of the projected 2032 Worcester County DPM/PM_{10} emissions.

Mitigation Measures

The primary reason for the reduction in NOx. DPM/PM_{10} and $PM_{2.5}$ emissions is due to more stringent EPA diesel vehicle emissions standards. Furthermore, the Massachusetts Department of Environmental Protection (MassDEP) has proposed regulations to adopt California's Advanced Clean Trucks regulation. This requires an increasing percentage of zero-emission vehicles (ZEV) truck sales starting with Model Year 2025 and ramping up through Model Year 2035[14]. Thus, it is expected that the Project diesel vehicle fleet will meet these standards proposed by MassDEP, and the proponent will continue to work with clientele to make sure they are met. Additionally on December 20, 2024, EPA finalized the strongest-ever national clean air standards to cut smog- and soot-forming emissions from heavy-duty trucks beginning with model year 2027. The new standards, which is the first update to clean air standards for heavy duty trucks in more than 20 years, are more than 80% stronger than current standards.

MEPA requested evaluating other air quality mitigation measures that included tree plantings, highway barriers, limiting hours of operations, installing air filters on nearby residential dwellings and battery electric charging for trucks. The addition of tree plantings and/or highway barriers can make the air quality worse due to trapping or eliminating proper dispersion of pollutants[15]. However, the Facility is willing to plant additional trees on site, as space allows to improve vegetated buffers and potentially reduce carbon impacts. Limiting the times of day of travel is not a feasible option and may actually make air quality worse by re-routing traffic into neighborhood areas to avoid the time restrictions on the preferred trucking routes to major highways. The addition of air filters on nearby residences is not a feasible option depending on the age and design of residential dwellings and will be cost prohibitive.

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[14] https://www.mass.gov/news/massdep-files-new-regulations-to-reduce-emissions-advance-market-for-clean-trucks-in-the-commonwealth.

[15] https://www.greeningscience.info/post/when-greening-doesn-t-deliver-the-case-of-trees-and-air-quality.

6.6 Impacts- Air Quality, Continued

Mitigation Measures, continued

Both the Traffic Impact Study and Air Quality Study overestimates the number of truck trips associated with the proposed expansion, assuming waste is transported exclusively by truck. However, in actual operations, the project utilizes rail to transport waste away from the Facility, reducing the reliance on trucks. Research has found that rail can haul a load that would otherwise require over 300 trucks to haul and at the same time get about 75% more mileage per on hauled out of one gallon of fuel compared to trucks; thus, overall emission of rail transportation would be less when compared to trucks[16]. Finally, battery electric charging for trucks would require to be a regional or state implemented program and would require a significant change in current and future truck fleet from diesel to electric.

Comparison of Rail and Truck Transportation Efficiency

When comparing the two most widely used forms of land-based freight transportation, rail and truck transportation differ significantly in the way they operate, their efficiency, and their overall environmental footprint.

Capacity and Efficiency

One of the most significant advantages of rail transport over truck transport is its high-carrying capacity. Since rail cars can hold three to four truckloads of cargo, a single freight train can haul a load that would otherwise require over 300 trucks. This means fewer traffic congestion issues and a more efficient use of transportation infrastructure.

Distance and Fuel Efficiency

Another important factor is the transportation range and fuel efficiency. Trains excel in covering long distances. In the US for instance, freight trains can move one ton of goods approximately 470 miles on a single gallon of fuel, compared to trucking's approximate 134 miles per gallon of diesel to move the same one ton of goods. This makes rail three to four times more fuel-efficient than trucks.

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[16] Green Rail: Is Rail Better for the Environment than Trucks. https://www.rsilogistics.com/blog/is-rail-better-for-the-environment-than-trucks/. January 30, 2024.

Figure 23- Worcester County Monthly Diesel VOC Emissions

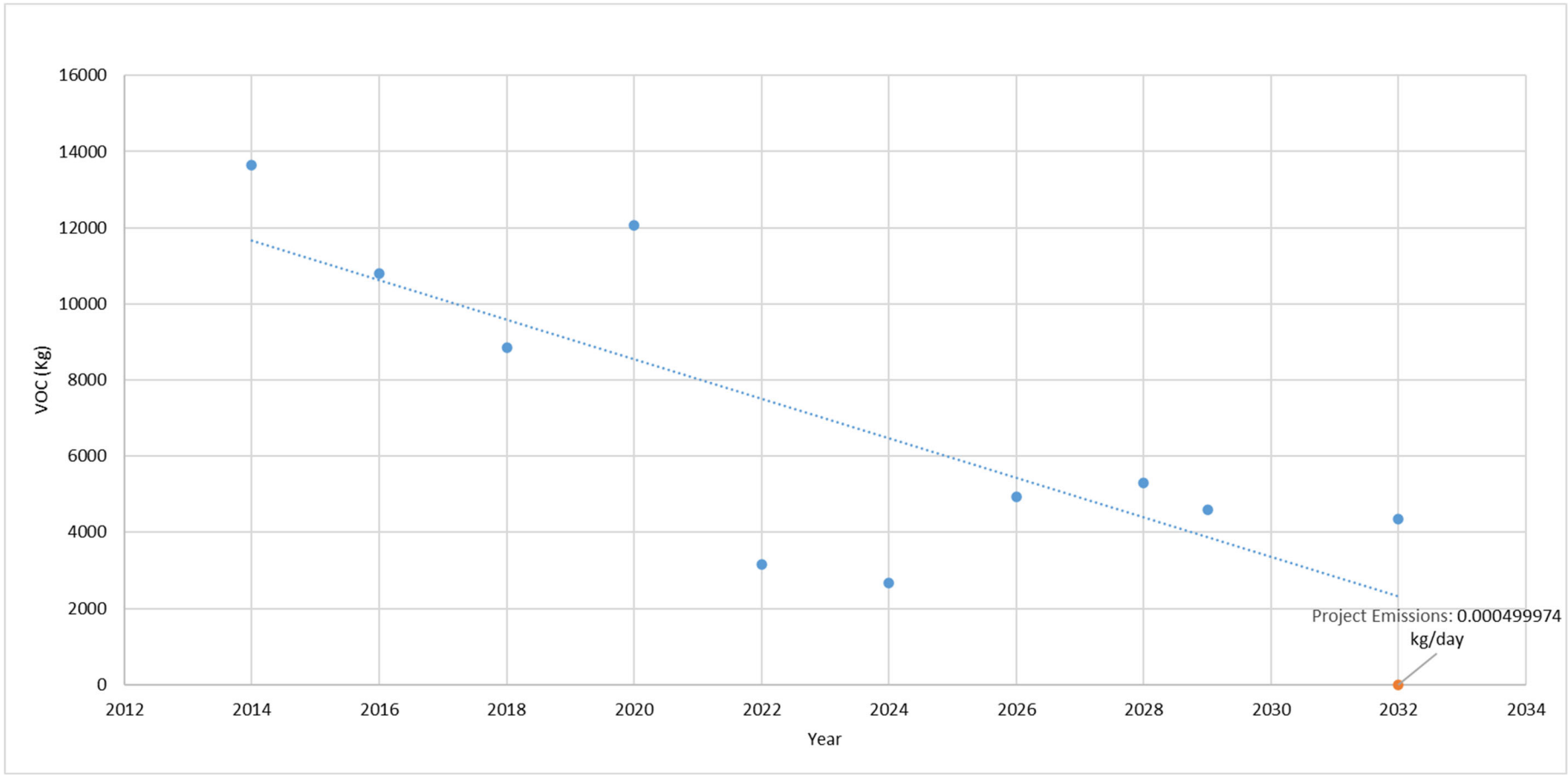

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Figure 24: Worcester County Monthly Diesel NOx Emissions

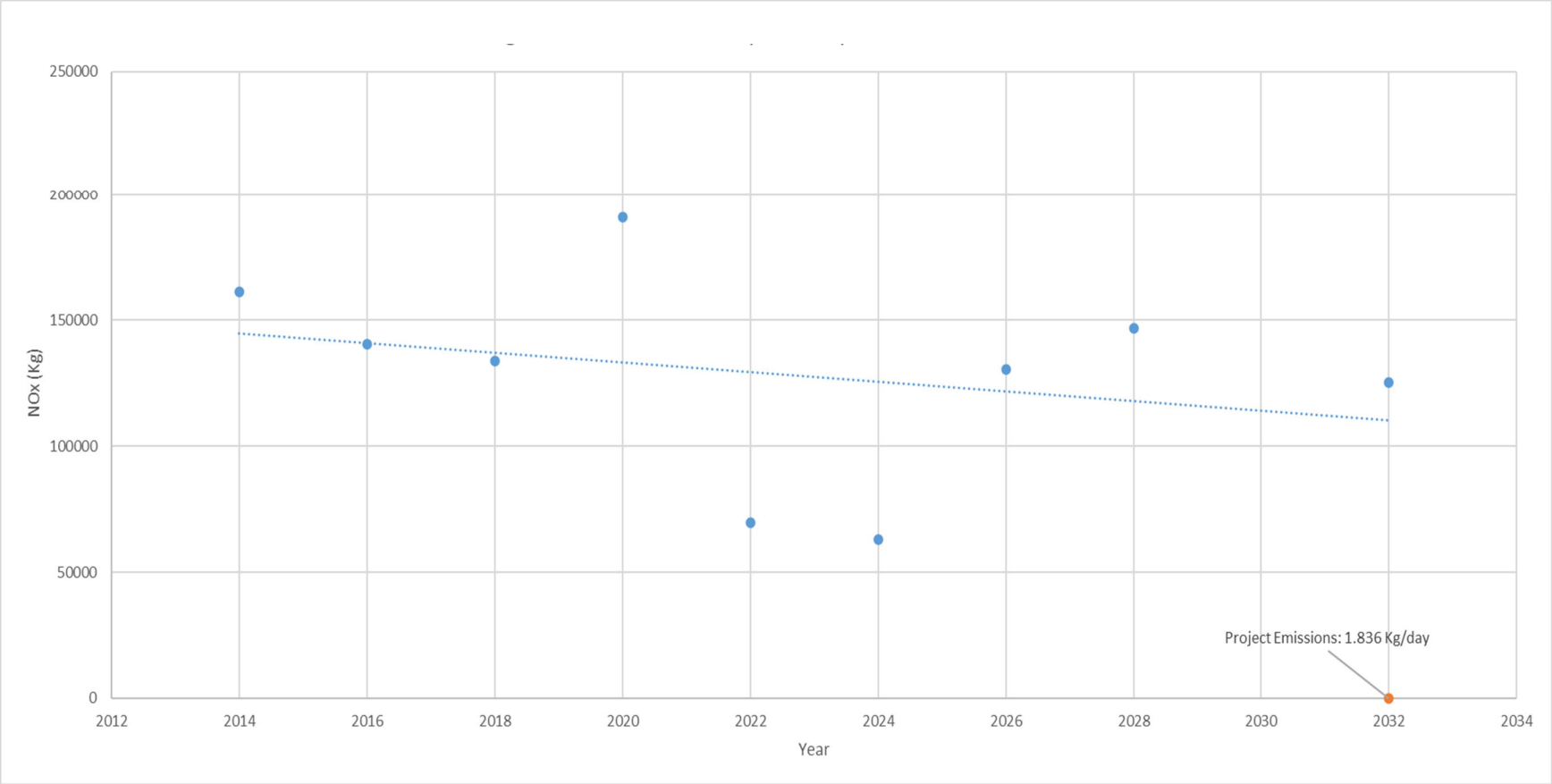

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Figure 25- Worcester County Monthly Diesel $PM_{2.5}$ Emissions

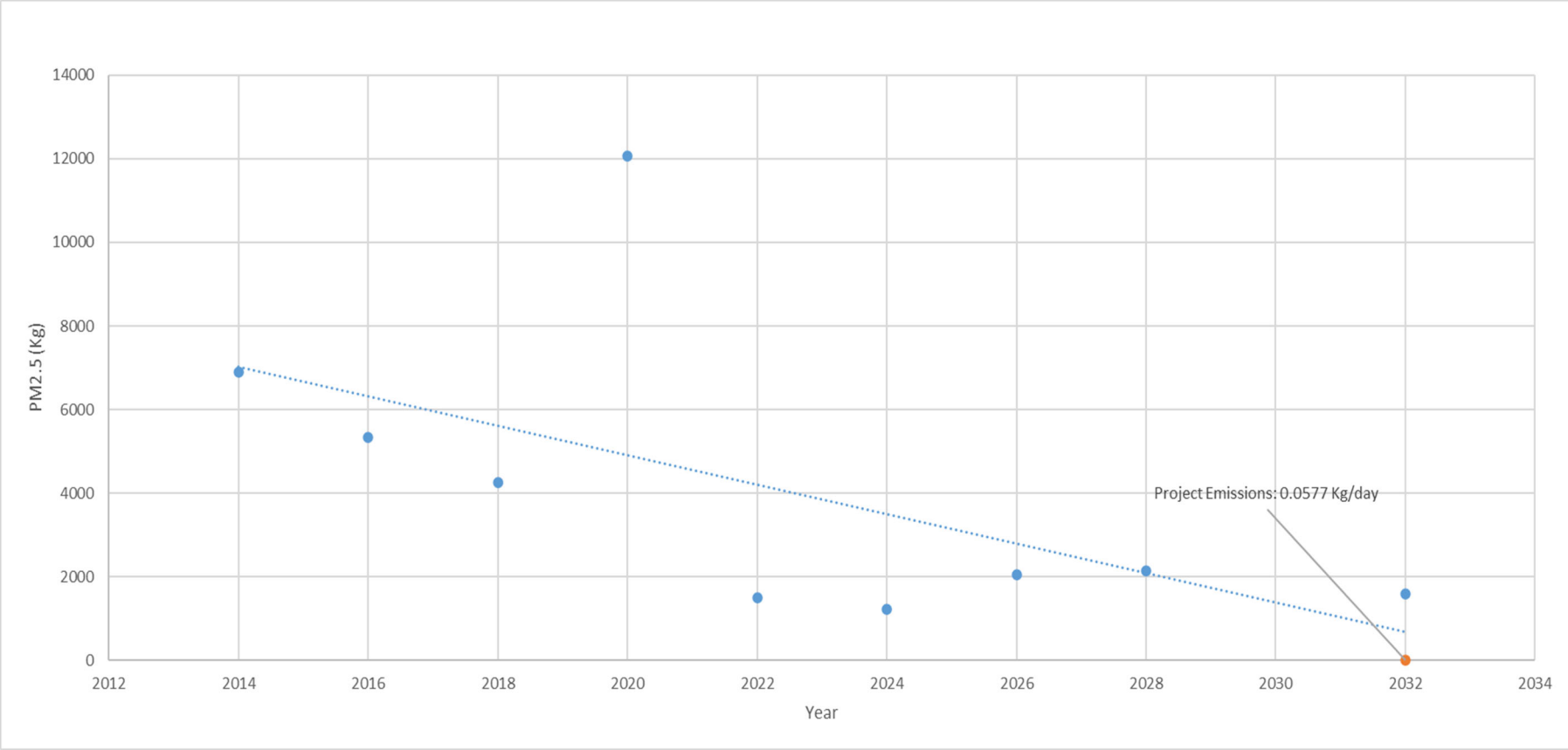

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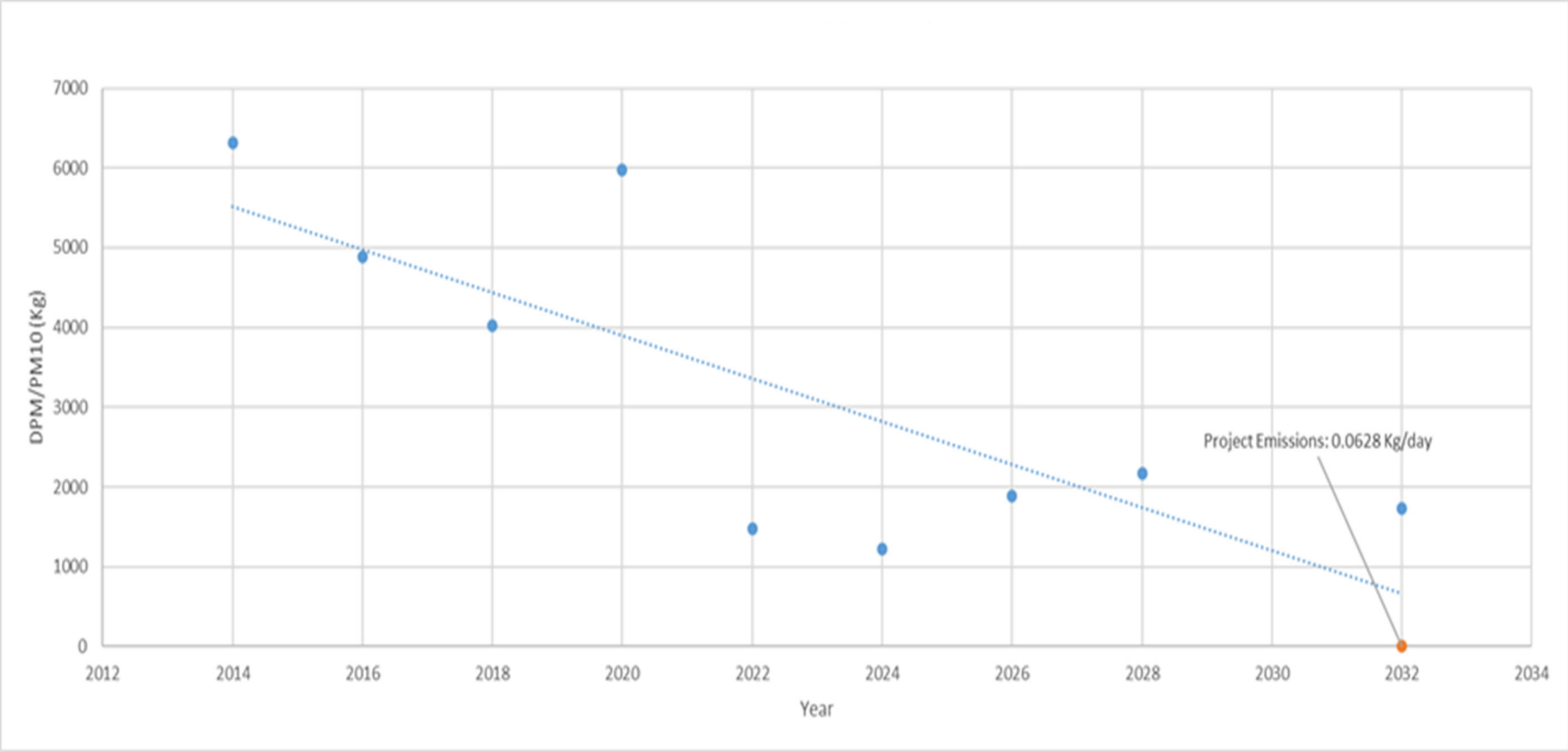
Figure 26: Worcester County Monthly Diesel DPM/PM_{10} Emissions



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6.6 Impacts- Air Quality, Continued

Microscale Analysis

The MEPA Office requested a microscale air quality analysis for any intersection in the Project study area adjacent to EJ communities, for the area where the Level of Service ("LOS") is expected to deteriorate to a rating of D or where the level of service is E or F, and the Project contributes to a reduction in LOS. For such intersections, a microscale air quality analysis is required to examine air quality concentrations at sensitive receptors near the intersection.

Table 14 (source: TIS, Table 7) provides a comparison of the Existing (2025), No-Build, and Build (2032) LOS at the three intersections as determined by the overall delay at each intersection. The Project traffic is not projected to cause the LOS to deteriorate to D, E, or F at New Lancaster Street (Route 117) at Willard Street, Lancaster Street (Route 117) at Viscoloid Avenue, Lancaster Street (Route 117) at Tanzio Road and Tanzio Road at Site Driveway intersections. As a result, the Project is expected to cause a negligible increase in air quality impacts in EJ communities; thus, a quantitative microscale analysis is not required.

Table 14- Summary of Level of Service

Intersection	2025 Existing (AM/PM)	2032 No Build (AM/PM)	2032 Build (AM/PM)	Requires Analysis?
New Lancaster St (Rt. 117) at Willard Street	B/C	B/C	B/C	No
Lancaster St (Rt. 117) at Viscoloid Ave	B/C	B/C	B/C	No
Lancaster St (rt. 117) at Tanzio Rd	B/C	C/C	C/C	No
Tanzio Rd at Site Driveway	A/A	A/A	A/A	No

The Facility intends to increase their permitted daily tonnage from 1,000 tpd (300,000 tons annually) to 1,500 tpd of C&D and MSW with a maximum annualized capacity of 450,000 tons. The results of the EJ air quality mesoscale and microscale analyses demonstrate that the Facility increased daily tonnage will not cause disproportionate impact on EJ populations.

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6.7 Impacts- Odor

Introduction

The odor component of the Draft Environmental Impact Report (DEIR) provides an overview of the analysis completed to document the odor impacts associated with the proposed project. An Odor Study was conducted for the Project by Tech Environmental, Inc. (Tech) dated July 10, 2024, which was included in the ENF. An update to the analysis was prepared based on the scope of work outlined in the ENF Certificate. This section of the DEIR provides a summary of the updated odor analyses addressing potential odor from the railcars; identification of mitigation measures implemented by the Proponent and operational practices to address odor; as well as response to odor-related comments provided as part of the MEPA process.

Odor Modeling – Rail Cars

In the original odor model, railcars were excluded due to their de minimis contribution to total site odors. Also, although throughput will increase at the Facility for the proposed tonnage increase, the number of railcars stored onsite remains limited by existing yard capacity, therefore there would be no increase in odor loading from the rail cars in comparison from existing to proposed conditions.

Tech has revised the model to include railcars. The updated modeling confirms that, with adherence to BMPs, particularly waste covering and timely railcar rotation, odors from railcars remain negligible.

It is acknowledged that enclosed railcars can reach elevated internal temperatures, especially on sunny days, increasing internal odor concentrations. However, detectable odors are generally confined to areas within a few feet of the cars and dissipate quickly due to the low emission rate. To illustrate this concept, imagine a waste-hauling railcar outdoors that heats up from 60 degrees F to a covered internal temperature of 150 F over a two-to-four-hour period. At 6,500 cubic feet of volume and an expansion ratio rounded up to 1.2, the flow rate from breathing losses would be approximately 5 to 10 cubic feet per minute, which means essentially that all breathing losses could only move off-site with wind and mixing. There is no possibility of a concentrated centerline plume with so little loading. Therefore, in order for the odor to be above detectable levels 100 feet away (noting that the closest receptor is over 500’ away), the undiluted concentration coming out of the rail cars would need to 10,000 D/T or greater.

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6.7 Impacts- Odor, Continued

Odor Modeling – Rail Cars, continued

Those odor concentrations are higher than one would typically see from second or third stage landfill gas decomposition and is completely unrealistic applied to full rail cars sitting for 24-48 hours.

Properly covering railcars, which occurs inside the building once the car is full, effectively limits emissions from a combination of wind erosion and breathing losses. Conversely, incomplete coverage or open railcars can allow wind-induced flux and odor escape.

When BMPs are followed, modeled railcar contributions remain below 1 D/T (Dilution-to-Threshold ratio), which is within the margin of error for odor detection modeling.

Ideally, railcars are dispatched within 24 hours of being filled. Combined with first-in, first-out (FIFO) processing and limited indoor storage (limited to <600 tons overnight per the permit), MSW is rarely on-site for more than 24–48 hours, minimizing odor generation.

Odor BMPs

The following Best Management Practices are utilized for controlling odors:

1. Follow first-in, first-out protocols for moving MSW through the Facility.
2. Utilize odor counteractants in the misting system.
3. Utilize overhead doors if an odorous load arrives at the Facility.
4. Handle all MSW including loadout activities inside the handling building.
5. Cover the MSW in railcars with a CSX-approved covering which can include either a lid, posi-shell, or other equivalent (ATMOS). The posi-shell and ATMOS products create a hard waterproof shell that entirely covers the waste within the rail car.
6. Limit storage of MSW in the building overnight and over weekends.
7. Good housekeeping.

If Best Management Practices are followed, odors can effectively be mitigated and controlled to prevent nuisance odor conditions from occurring.

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6.7 Impacts- Odor, Continued

Odor Mitigation

The Facility, in response to public comments made as part of the ENF process, has since modified the misting system components to increase the dosing of odor counteractant into the system, as well as replace the nozzles to increase coverage area and atomization.

Based upon odor modeling, the Facility will strive to limit overnight MSW storage on the tipping floor to 150 tons on average which will reduce potential odor loading overnight during worst-case scenarios.

Other mitigation measures proposed includes installing carbon filtration if the overall quantity of MSW acceptance increases to regularly be half of the daily permitted tonnage and storage of the 600 tons per day permit limits occurs regularly.

6.8 Impacts-Construction Period

Introduction

As previously discussed in this document, there will be no construction as part of the proposed Project. The increase in tonnage will be implemented using the existing facilities and infrastructure. Therefore, there will be no project impacts from construction.

7. Climate Change

Introduction

This section presents an assessment of the resilience of the Facility under projected 2070 climate conditions using data available through the MA Resilience Design Tool, as well as include discussion on the stormwater system, its resiliency, and its capacity compared to projected storm conditions.

Stormwater System

The Facility's stormwater management system consists of deep sump catch basins equipped with hoods that flow to oil-grit separators to treat the stormwater for Total Suspended Solids (TSS) and oils to meet state 44% pre-treatment standards. Stormwater is then directed to one of three subsurface infiltration systems on site. As the site is considered a Land Use with Higher Potential Pollutant Load) (LUHPPL), it is designed to achieve 44% pre-treatment standards prior to infiltration and is designed to treat a water quality volume of 1" over the impervious surface, instead of 0.5".

Facility Resilience

Using the MA Resilience Design Tool, precipitation intensities for the 24-hr storm event for projected 2070 climate conditions were obtained (refer to Attachment 10). The system design storms in 2019 were 3",4.5", 5.3", and 6.5", for the 2-year, 10-year, 25-year, and 100-year, 24-hour storm events, respectively. The stormwater system was designed to handle the 100-year storm event of 6.5", with only some overflow from Infiltration system 2 in the 100-year event.

The 2070 rainfall intensity for the 10-year storm event is 6.4", less than the 100-year storm intensity modeled originally as part of initial Facility design, therefore, it is known that the system could handle the 10-year storm event at the projected 2070 rainfall intensity. The 2070 rainfall intensity for the 25-year and 100-year storm events are 8.1" and 11" in 24-hours. These values were inputted into the HydroCAD modeling software to assess the systems function for these storm events. Results indicated that infiltration system 1 would need to be enlarged or modified with an outlet pipe in the projected storm event to prevent overflow; Infiltration system 2 would require a larger outlet pipe in the projected storm event to prevent overflow, and Infiltration System 3 would function in both the 2070 projected 25- year and 100-year storm events as is. Drainage structures and pipe sizing was also evaluated for surcharge. The three catch basins associated with Infiltration System 2 and the one catch basin associated with Infiltration System 1, would overtop in the 25 and 100-year 2070 projected storm events, confirming that the two infiltration systems would to be modified, as suggested above to function in those events. As storm events become larger over time as predicted, gradual expansions and upgrades to the stormwater system components can occur to adapt to climate change.

8.Mitigation and Draft Section 61 Findings

Introduction

UMML has prepared these draft Section 61 Findings to comply with the requirements of the Secretary's Certificate (the Certificate) issued on December 9, 2024 for EEA #16878, the requirements of Massachusetts General Laws, Chapter 30, Section 61, and the Massachusetts Environmental Policy Act (MEPA) regulations at 310 CMR 11.07(6)(k).

As required in the Certificate, "The DEIR should include a separate chapter summarizing all proposed mitigation measures including construction-period measures. This chapter should also include a comprehensive list of all commitments made by the Proponent to avoid, minimize, and mitigate the environmental and related public health impacts of the project, and should include a separate section outlining mitigation commitments relative to EJ populations. The filing should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation. The list of commitments should be provided in a tabular form, organized by subject matter (traffic, water/wastewater, EJ, etc.) and identify the Agency Action or Permit associated with each category of impact. Draft Section 61 Findings should be separately included for each Agency Action to be taken on the project."

Regulatory Overview

In accordance with M.G.L. c. 30, section 61, any Agency, that takes Agency Action on a Project for which the Secretary required an EIR, shall determine whether the Project is likely to, directly or indirectly, cause any Damage to the Environment and make a finding describing the Damage to the Environment and confirming that all feasible measures have been taken to avoid and minimize the Damage to the Environment.

Contents of Section 61 Findings

In all cases, the Agency shall base its Section 61 Findings on the EIR and shall specify in detail: all feasible measures to be taken by the Proponent, or any other Agency or Person, to avoid Damage to the Environment or, to the extent Damage to the Environment cannot be avoided, to minimize and mitigate Damage to the Environment to the maximum extent practicable. The Draft EIR (DEIR) is required as part of the Certificate of the Secretary of Energy and Environmental Affairs to include a separate chapter on mitigation measures associated with DEIR and that this chapter also includes Draft Section 61 Findings for all state agency actions.

Continued on next page

8.Mitigation and Draft Section 61 Findings, Continued

Regulatory Overview, continued

The Draft Section 61 Findings shall contain a clear commitment to implement mitigation, an estimate of the individual costs of the proposed mitigation, identification of the parties responsible for implementing the mitigation, and a schedule for the implementation of mitigation. In accordance with M.G.L. c. 30, section 61, the reasonably foreseeable climate change impacts of a project, including its additional GHG emissions, and effects, such as predicted sea level rise shall be taken into consideration.

Section 61 Findings and Agency Action

Provided that mitigation measures are specified as conditions to or restrictions on the Agency Action, the Agency shall:

1. Make its Section 61 Findings part of the Permit, contract or other document allowing or approving the Agency Action, which may include additional conditions to or restrictions on the Project in accordance with other applicable statutes and regulations; or

2. Refer in its Section 61 Findings to applicable sections of the relevant Permit, contract or other document approving or allowing the Agency Action.

Subject Matter Jurisdiction Limitations on Section 61 Findings

In the case of a Project undertaken by a Person that requires one or more Permits or a Land Transfer but does not involve Financial Assistance, any Participating Agency shall limit its Section 61 Findings, or any mitigation measures specified as conditions to or restrictions on the Agency Action, to those aspects of the Project that are within the subject matter of any required Permit or within the area subject to a Land Transfer.

Proposed Section 61 Findings

Proposed Section 61 Findings prepared by a Proponent in accordance with 301 CMR 11.07(6)(k) are intended to assist a Participating Agency in fulfilling its obligations in accordance with M.G.L. c. 30, section 61. The Proponent's preparation of Proposed Section 61 Findings shall not mean that a Participating Agency has made its own Section 61 Findings. Except in accordance with 301 CMR 11.06(4) and 11.08(7), the Proponent's Proposed Section 61 Findings shall not limit an Agency's discretion in making its own Section 61 Findings.

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8.Mitigation and Draft Section 61 Findings, Continued

Regulatory Overview, continued

Filing and Distribution of Section 61 Findings: The Proponent and a Participating Agency shall each file a copy of the Section 61 Findings with the Secretary, who shall publish notice of the availability of the Section 61 Findings in the next Environmental Monitor in accordance with 301 CMR 11.15(2), and shall each circulate copies of the Section 61 Findings to any Agency or Person upon request.

State Agency Actions

The following table identifies the required State Agency Actions for the Project:

Table 15- Required State Agency Actions

State Agency	Action
Executive Office of Energy and Environmental Affairs	MEPA review and Secretary's Certificate (ENF, DEIR, FEIR)
Department of Environmental Protection (MassDEP)	Major Modification to Large Handling Facility Operating Permit

Mitigation Summary

The following has been identified as Project Impacts: Traffic, Noise, Odor, and Air Quality/GHG. As requested, the below Table 16 presents a summary of Project mitigation commitments to address potential impacts, organized by type of Impact, as listed above. The table also has two additional sections to address Other Nuisance Conditions and Environmental Justice. As noted in the DEIR, no construction is proposed as part of the Project, therefore no construction-related mitigation measures are identified. Implementing this Project at an existing facility that does not need physical expansion can be considered a reduction in overall impacts, as there are no construction-related impacts.

Traffic

As identified in the updated Traffic Impact Study presented in the DEIR, intersection and roadway operations will not be impacted by the Project, and do not require any mitigation measures. Mitigation measures proposed by the Project as summarized in Table 16 are intended to minimize potential overall impacts to local roadways and traffic within Environmental Justice areas.

Continued on next page

8.Mitigation and Draft Section 61 Findings, Continued

Mitigation Summary, continued

Noise

As identified in the Sound Studies, the Project will comply with the MassDEP Noise Policy and the Leominster Noise Ordinance, and will not cause a condition of noise pollution or nuisance sound. Acoustic modeling of the Facility operations at maximum loading was performed to analyze sound levels at 22 residential receptors using sound levels data collected at the Facility. The study assumed that one of the overhead tipping doors would be closed during end-of-day conditions (between 5pm and 7 pm), therefore the mitigation proposed for noise is that one of the overhead tipping doors will be closed after 4pm to ensure compliance with the study assumptions. No other mitigation was determined necessary.

Noise from truck traffic along Lancaster Road (within a designated EJ area) was assessed as part of the DEIR and determined to be negligible as the overall Project traffic (considering worst case with no use of rail) would only equate to a 3.7% increase in overall roadway traffic. This small increase in vehicle volume would generate a negligible increase in traffic noise.

The Project will mitigate potential noise impacts from the Facility to the immediate surrounding receptors using multiple operational strategies, as identified in Table 16.

Odor

As identified in the Odor Studies, the Project will not cause an adverse impact to health, safety, or the environment with respect to odors at nearby receptors. Odor dispersion modeling was conducted to determine potential odor impacts from the Facility. The modeling indicated that the overall frequency and volume of MSW storage in the building overnight will determine if further mitigation measures may become necessary in expanded operations. As the tonnage increase does not necessarily equate to more MSW as the Facility also receives C&D, the Project does not automatically require additional mitigation measures for odors.

The Project will mitigate potential odor impacts from the Facility using multiple operational strategies, as identified in Table 16. In response to public comments, recent modifications to the atomized misting system were completed which included the replacement of the dosimeter to improve counteractant dosing control and misting nozzles to improve atomization and coverage.

Continued on next page

8.Mitigation and Draft Section 61 Findings, Continued

Mitigation Summary, continued

Air Quality

As identified in the Air Quality and the Greenhouse Gas, Environmental Justice Air Quality Studies, the Project will not generate emissions that would represent an unfair or inequitable environmental burden or related public health consequence. The studies included: a quantitative analysis of GHG emissions at the Facility including stationary and mobile) which demonstrated that emissions are negligible and do not require further assessment; mesoscale air quality analysis of mobile sources; determination that a microscale analysis was not required; assessment of pediatric asthma prevalence for K-8 schools; and public health assessment in consideration of existing environmental burdens and Vulnerable Heath Criteria. No other mitigation was determined necessary.

Air Quality will not be significantly impacted by the Project and mitigation measures proposed by the Project as summarized in Table 16 are intended to minimize potential impacts to air quality within Environmental Justice areas.

Other

Additional mitigation measures were included to address other potential impacts and nuisance conditions from operations. These included operational and good housekeeping measures to control and mitigate dust, reduce loading to the stormwater collection and treatment system, and measures implemented in response to public comments. These additional measures are also included in Table 16.

Environmental Justice

As summarized within this Mitigation Summary section and identified in the Greenhouse Gas, Environmental Justice Air Quality Study, the Project will not create impacts that would represent an unfair or inequitable environmental burden or related public health consequence within the Environmental Justice Areas in proximity to the Facility. Many of the mitigation measures presented apply to both the subject matter and Environmental Justice.

Continued on next page

8.Mitigation and Draft Section 61 Findings, Continued

Mitigation Summary, continued

Table 16 – Mitigation Commitment Summary

Impact Category	Mitigation Measure	Schedule/Cost	Responsibility
Traffic	Maximize rail transport	Ongoing/ na	UMML
	Install sign on Malburn Street indicated no truck thru traffic	Following Site Assignment modification/TBD	UMML to coordinate with City of Leominster for approval
	Maintain truck route for outbound materials	Ongoing/na	UMML
	Provide regular communications with haulers/clients regarding truck routes, ours of operation, etc.	Ongoing/$500 annually	UMML
	Direct deposit offered to employees	Ongoing / na	UMML
Noise	Conduct all waste handling activities within the confines of the building	Ongoing/ na	UMML
	Maintain tipping door locations on north side of handling building, away from the easterly and southern residential areas to maintain visual aesthetic from Tanzio Road and minimize potential noise nuisance conditions	Ongoing/ na	UMML
	Close at least one of the three of the overhead doors after 4pm to reduce noise during end-of-day conditions	Ongoing/na	UMML
	Limiting the outside rail car mover activity to within permitted operational hours and not before 6am	Ongoing/ na	UMML
	Require trucks with tailgates to remain inside the building until the tailgates are closed to reduce noise associated with tipping, unless trucks are otherwise equipped with seals or gaskets	Ongoing / na	UMML

Continued on next page

8.Mitigation and Draft Section 61 Findings, Continued

Mitigation Summary, continued

Table 16 – Mitigation Commitment Summary, continued

Impact Category	Mitigation Measure	Schedule/Cost	Responsibility
Noise	Limiting equipment operation outside the building prior to 6 AM (weekdays) and 7 AM (Saturday); and after 7 PM (weekdays) and 3 PM (Saturday)	Ongoing/na	UMML
	Assess if modifications to the interior ventilation system could reduce noise	Assessment in progress/ $TBD for assessment. Estimated @25k-$40k for upgrades	UMML to coordinate with City of Leominster for approval
	Provide regular communications with haulers/clients regarding truck routes, ours of operation, etc.	Ongoing/$500 annually	UMML
	Investigate reports of trucks parking on nearby streets prior to facility opening and issue warning to company(ies) that if activity continues, they will not be allowed to use the facility	Completed and to continue as ongoing measure/ na	UMML
Odor	Conduct all waste handling activities within the confines of the building	Ongoing/ na	UMML
	Maintain overhead door locations on north side of handling building, away from the easterly and southern residential areas to maintain visual aesthetic from Tanzio Road and minimize potential odor migration	Ongoing/ na	UMML
	Maintain overhead doors as currently constructed on one side to reduce wind tunnel effect	Ongoing/ na	UMML
	Assess if replacement of door motors could speed operation	Assessment in progress/ Estimated @25k-$40k for upgrades	UMML

Continued on next page

8.Mitigation and Draft Section 61 Findings, Continued

Mitigation Summary, continued

Table 16 – Mitigation Commitment Summary, continued

Impact Category	Mitigation Measure	Schedule/Cost	Responsibility
Odor	Limit MSW tonnage to 600 tons on the floor overnight	Ongoing/ na	UMML
	Maintain atomized misting system within the handling building to control dust and odors	Ongoing/ $40,000 annually	UMML
	Modify components (dosimeter and nozzles) of the misting system to increase coverage and dosing level capabilities	Completed summer 2025/$20,000	UMML
Air Quality/ GHG	Maximize rail transport	Ongoing/ na	UMML
	Utilize existing electrically-powered processing line with no planned replacement/conversion of components to fuel-powered equipment	Ongoing/ na	UMML
	Adhere to and enforce anti-idling requirements of vehicles on site	Ongoing/ na	UMML
	Plant additional trees on site, as space allows	Following ATO modification / TBD	UMML
Other/ Nuisance conditions	Maintain impervious pavement on all surfaces that are associated with facility operations to control dust and reduce loading to stormwater treatment system	Ongoing / unquantified	UMML
	Continue regular sweeping of outdoor paved surfaces to control dust and minimize potential sediment migration during storm events	Ongoing / unquantified	UMML
	Modify street sweeper to include magnets at the front and back to pick up nails/screws along Tanzio Road	Completed Winter 2024/25 / $na	UMML

Continued on next page

8.Mitigation and Draft Section 61 Findings, Continued

Mitigation Summary, continued

Table 16 – Mitigation Commitment Summary, continued

Impact Category	Mitigation Measure	Schedule/Cost	Responsibility
Other	Maintain stormwater controls and BMPs throughout ongoing operations	Ongoing/ $10,000 annually	UMML
	Maintain compliance with on-going operations & maintenance (O&M) and inspection procedures	Ongoing/ unquantified	UMML
	Maintain complaint log to record instances of complaints and follow-up measures	Ongoing/na	UMML
	Utilize existing infrastructure to handle the proposed increase in tonnage, eliminating construction-related impacts	na/$0	UMML
EJ	Maximize rail transport	Ongoing/ na	UMML
	Utilize existing electrically-powered processing line with no planned replacement/conversion of components to fuel-powered equipment	Ongoing/ na	UMML
	Adhere to and enforce anti-idling requirements of vehicles on site	Ongoing/ na	UMML
	Plant additional trees on site, as space allows	Following ATO modification / TBD	UMML
	Maintain truck route for outbound materials	Ongoing/na	UMML
	Provide regular communications with haulers/clients regarding truck routes, ours of operation, etc.	Ongoing/ na	UMML
	Direct deposit offered to employees	Ongoing / na	UMML

Notes:
Mitigation costs provided are those which have already been completed. Costs that are indicated as unquantified indicates there are variables that make assigning a value difficult. na: Not Applicable.

9.Response to Comments

Introduction

This section provides responses to comment letters submitted during the comment period for the ENF. Comment letters from individuals and regulatory agencies were attached to the Secretaries Certificate. Other comment letters submitted to the MEPA Office after the Secretaries Certificate was issued are also addressed in this section.

The DEIR is divided into sections as defined in 301 CMR 10.07 (6) and the Scope section of the Secretaries Certificate. Each section of the DEIR addresses the issues detailed in the Secretaries Certificate. A response to each issue in the Secretaries Certificate is not repeated in this section.

This section includes a brief synopsis of the comment, followed by a response and identification of the location within the DEIR that the comment is addressed. Comments that are addressed are identified by a letter/number designation in the margin of the comment letter or document. The comment letters included with the Secretaries Certificate with the comment identification in the margin is included in Attachment 7.

The following is a list of the agencies, organizations, and individuals that submitted comments on the EENF. The letter code used for identification of the commenter is noted in parentheses. The letter code is followed by a dash and a number to indicate the number of comments on different topics were made by the commenter.

- Michelle Powell (MP) - 3
- Deb Buckley (DB) - 1
- Paul Brayton (PB) - 2
- Frank Bangrazi (FB) - 2
- David Dill (DD) - 4
- Lisa Christy (LC) - 5
- Steven Allain (SA) – 4
- Massachusetts Department of Transportation (MassDOT) - 1
- Terri Stymiest (TS) - 1
- Yancarlos Alvarez (YA) - 1
- Vincent Seretto (VS) - 1
- Massachusetts Department of Environmental Protection /Central Regional Solid Waste Office (MassDEP) - 2

Continued on next page

9.Response to Comments, Continued

Introduction, continued

The following table summarizes the main topic of concern raised in the comment letters received as part of the ENF process.

Table 17: Summary Table of Public Comment Topics

Commenter		Comment Topics						
		Traffic	Noise	Odor	Against[1]	Vectors	Other	Support
1	MP	x	x	x				
2	DB				x			
3	PB		x	x				
4	FB		x	x				
5	DD					x	xxx	
6	LC	x		x		x	x	
7	SA	x	x				xx	
8	MassDEP						x	x
9	MassDOT						x	
10	TS	x					xxx	
11	YA							x
12	VS							x

1. General statement they are against project with no specified concern/ topic of concern.

After reviewing the comments submitted and as tabulate above, it was determined that many of the comments addressed the same issues. As such, rather than responding to each individual comment, a general response to each of the issues raised in comments has been prepared.

In the following section a summary of each of the topics addressed in comment letters is provided. A response to the comments follows the summary of each topic. The right margin indicates where the response to a specific comment is addressed. The comment numbers in the index use the numbering system defined above.

Continued on next page

9.Response to Comments, Continued

Traffic

Comment Summary:

Numerous comments were received regarding truck and rail traffic associated with the proposed facility. The comments received are summarized below:

- Larger traffic volumes for roads leading up to facility (MP-3)
- Increased train traffic will lead to additional delays at Litchfield St. crossing and noise (PB-2)
- Increased wear and tear on roadway due to increased traffic (DD-1, SA-1, LC-4)
- Increased debris on roadways due to increased waste delivery (DD-2)
- Trucks not using specified route from Lancaster Street to Tanzio Road (DD-3)
- Traffic along Litchfield Street due to blocked railroad crossings, may lead to hazards during emergency situations (LC-3)
- Traffic along Lancaster Street is already congested, this would worsen conditions (SA-2)
- Traffic could be hazard towards pedestrians (SA-3)
- Debris along Tanzio Road and other surrounding streets from increased trucking (TS-1)
- Traffic Impact Study did not consider traffic on Lancaster Street north of Tanzio Road. (SA-4)

Index
MP-3
PB-2
PB-3
DD-1
DD-2
DD-3
LC-3
LC-4
SA-2
SA-3
TS-1
TS-2

Response to Comments:

The Facility since inception has implemented a truck route that included access to and from the Facility from Tanzio Road to Lancaster Street directly, with no trucks to travel on Malburn Street. Signage exists at the Facility exit prohibiting left hand turns. The Proponent acknowledges that vehicles new to the Facility may use GPS systems that direct them to Malburn Street (although there is no record of this happening), however asserts that the regular customers utilizing the Facility follow the prescribed route. As this concern was raised at the November 2024 public meeting, the Facility has re-noticed all its customers regarding the prohibition of trucks using Malburn Street. The Facility also will coordinate with the City on the installation of a “no thru trucks” sign on Malburn Street near the intersection with Lancaster Street.

Continued on next page

9.Response to Comments, Continued

Traffic

An updated Traffic Impact Study has been prepared (provided in Attachment 3 of the DEIR) for the Project, which includes additional traffic counts at intersections off Lancaster Street to the north of Tanzio Road and a comparison of UMML's truck traffic to the overall truck traffic on Lancaster Street. The Traffic section of this DEIR presents these findings. The additional traffic study found that on the day of the highest volume of traffic, 10,284 vehicles were recorded on Lancaster Street (Rt. 117) at the intersection of Tanzio Road. Of that, 189 vehicles were associated with this Facility. This equates to the Facility vehicles only being 1.8% of the total traffic on Route 117. Furthermore, additional cameral data indicated that of 112 waste-handling vehicles observed in one monitoring period, 20 were not associated with this facility indicating that not all the waste handling trucks travelling on Lancaster Road is associated with UMML, therefore potential impacts (road condition, noise, litter).

Both traffic studies looked at roadway configurations and pedestrian safety, and concluded that there is no danger to public health and safety with consideration to pedestrian safety.

In response to comments about debris on the road, the Facility has since installed magnets on both ends of the street sweeper to pick up any stray nails/screws during regular street sweeping activities along Tanzio Road.

Traffic/backups associated with train crossings was also discussed at the November 2024 public meeting. Since that meeting, the Proponent has facilitated direct conversation between the City and CSX to discuss the safety of the crossing at Litchfield Street near Elm Hill Avenue. Contact information for CSX was also provided to the City Council, as requested by one of the city counselors in attendance at the June 2025 public meeting.

Continued on next page

9.Response to Comments, Continued

Noise

Comment Summary:

Index

1. Noise from trains (MP-2) — MP-2
2. Noise from traffic on Lancaster Street (PB-4) — PB-4
3. Noise from Facility ventilation (LC-1) — LC-1

Comment Response:

1.The facility uses a small railcar mover to stage rail cars on-site. It is understood that the locomotive (engine car) used by CSX to service the site (drop off empty cars, pick up full cars) is louder than the small railcar mover used on site. Currently the site is serviced once per day, every other day (approximately 3 days per week). Under the proposed project, one more switch per week would be required. The Facility does not have any control on when the site is serviced, but has requested with CSX that service occurs during Facility operational hours to minimize noise impacts outside of normal working hours.

2.As previously indicated, the revised traffic study shows a daily volume of over 10,000 vehicles on Lancaster Street, of which under 2% is associated with trucks traveling to and from the Facility. Therefore vehicle noise associated with this Facility is a fraction of the general ambient traffic noise. The sound study addendum dated July 29, 2025 indicates that the increase in truck traffic from the expanded operation would need to double before there was even a perceptible change in ambient noise. It should be noted that this is based upon the traffic study projections that accounted for worst case conditions with all outbound material leaving via truck and no use of rail.

The overall road condition which may contribute to overall noise from vehicles was discussed with City council members in attendance at the last public meeting,

3.The Facility has committed to altering the ventilation units to reduce its operational noise. The Facility will assess whether replacing the fans or installing a noise-dampening media around the fans will be more practical and effective at reducing noise and will implement the better modification.

Continued on next page

9.Response to Comments, Continued

Odor/Air Quality

Comment Summary:

Index
MP-2
PB-4
FB-3

- Odor in surrounding area of facility (MP-2, PB-4)
- Air quality surrounding facility (FB-3)

Comment Response:

The Facility has received five complaints related to six instances of odor since 2021 (under current ownership). The complaints as summarized in the complaint log included as Attachment 8 included the dates of 4/7/21, 8/8/2021, 4/29/23, 9/23/24 (includes days of 9/6 and 9/20), and 3/18/25 and were from one source on Calza Street located to the southwest of the site. The prevailing wind direction is from the southwest, therefore the Facility is located upwind of the Calza Street area, in normal wind conditions.

Upon receipt of any complaints, the Leominster BOH investigates each odor complaint with a site visit to the complainant location and notifies the Facility. MassDEP has visited the site regularly as well as after receipt of odor complaints, and has not identified any nuisance odor at the Facility at any of those times.

An update to the odor study was prepared as part of the DEIR process included as Attachment 5). The odor study update addressed responses to public comments regarding odor, as well as potential odor loading from railcars on-site and overnight storage considerations per the Certificate and DEIR Scope of Work. The July 2025 odor study update assessed the number of odor related complaints (per the Facility's complaint log) received from April 2021 to July 2025, and calculated the odor complaint occurrence rate to be 0.4%. Although odor was noted during two of the complaint evaluations, in both instances it was noted as either very faint or extremely intermittent. These observations cannot reasonably be considered confirmations of nuisance potential. Even if these two faint detections were considered "confirmed" complaints, the odor occurrence rate would be only about 0.1% of the time. Over the full period for which complaint logs were available, all nuisance complaints—whether for odor, dust, open doors, noise, or other issues—occurred on less than 1% of the total days. Furthermore, all odor complaints originated from a single individual. These findings support the assertion made in the ENF, and reiterated here, that validated odor complaints since startup have been minimal.

Continued on next page

9.Response to Comments, Continued

Odor/Air Quality, continued

Upon review of the complaint history (see summary log in Attachment 9), which included complaints of the doors being open overnight, no correlating odor complaints were made during the time in which the doors were broken and waiting repair.

The Facility has procedures and controls in place to manage odorous material and respond quickly to any complaints received, which they take very serious. Roll-up tipping doors can be used to isolate odorous materials within the handling building; odor counteractant can be added to the misting system (misting system has recently been modified for better dosage of odor counteractants); utilizing a first-in, first-out procedure to move materials quickly through the transfer station so that waste does not degrade while on site; limiting overnight storage of MSW to reduce the potential for odor accumulation in the building overnight; using appropriate covering (lids, posi-shell, etc.) on rail cars to prevent odors from emanating from rail cars; and maintaining good housekeeping and operational procedures.

Vermin

Comment Summary:

Index
DD-4
LC-2

Two comments were received regarding an increase in rats in the neighborhood. The comments received are summarized below:

- A rat infestation has started in the local neighborhood and concerned it will get worse. (DD-4)[lives on Malburn Terrace]
- Needed to contact pest management company regarding rats (LC-2) [lives on Calza Street near Litchfield]

Comment Response:

The Facility utilizes a pest management service to control vectors such as rats. This service provides bait stations and conducts inspections monthly. The Facility will continue to contract with a management service to monitor and control any potential vectors at the site. The Facility will continue to employ good housekeeping measures, use first-in, first-out procedures to minimize attractants, and maintain the building such that vectors are not attracted to and have access to any material.

Continued on next page

9.Response to Comments, Continued

Vermin, continued

The local newspaper, the Enterprise, reported back in 2019 a rat infestation that was determined to be caused by chicken coops. Having chickens are becoming more popular as reported by many news outlets, especially due to the pandemic. Based on 2022 correspondence with the Leominster BOH, the City has seen an increase in rats in the City overall since COVID.

It was also noted that there are outdoor dumpsters associated with the condo complexes located on Malburn Terrace, which may be an attractant if they are not regularly serviced.

Other

Comment Summary:

- A comment was received indicating general opposition to the project with no other specific comments (DB-1)
- Illegal dumping occurring in empty lots on Tazio Road next to UMML (TS-4)

Index
DB-1
DD-1
MassDEP
MassDOT

Comment Response:
The Proponent understands the general opposition to solid waste projects, and reiterates the need for these facilities to handle the waste that the general public generates every day.

It is understood that illegal dumping happens everywhere and for different reasons. Typically dumping occurs because people don't want to pay to properly dispose of items (TVs, electronics, white goods, etc.) or when the state implements new recycling requirements and are misunderstood by the general public (e.g., the occurrences of illegal mattress dumping increased when MassDEP required recycling of mattresses instead of straight disposal). It should be noted that even before this Facility was constructed, illegal dumping was observed on these vacant properties, so the issue has existed prior to this Facility and should not be considered a direct cause of it. MassDEPs Solid Waste Master Plan references their Illegal Disposal Surveillance Program and their initiative to work with municipalities with Environmental Justice populations to combat illegal dumping. If illegal dumping is an ongoing problem in Leominster, MassDEP can assist with enforcement.

Continued on next page

9.Response to Comments, Continued

Other, continued

Summary of Comments that do not need specific response in DEIR:

- A minor modification to site assignment will be required and not a major modification. (MassDEP)
- "MassDEP encourages this type of solid waste transfer facility to assist in managing Massachusetts waste including the reuse/recycling of construction and demolition materials. Proper waste management and waste diversion in important to conserved the state's declining landfill space and resources if accomplished in an environmentally sound manner". (MassDEP)
- "based upon minimal transportation impacts on the state highway system, MassDOT recommends no additional MEPA review will be required for this project based upon transportation issues". (MassDOT)
- "we encourage the Proponent to consult with the MassDOT rail and Transit Division regarding the feasibility of a IRAP grant" (MassDOT)

10.Summary of Public Meeting

Pre-filing Public Meeting

A public meeting was held prior to filing this DEIR as requested by MEPA. The meeting was held in person on Tuesday June 24, 2025 at 6pm, at the Franco American War Veterans Hall, located at 300 Water Street in Leominster.

Notice of the meeting included the following:

- Email to Project Distribution List on June 11, 2025
- Public Notice in Sentinel on June 12, 2025
- Public Notice in Vocero (in Spanish) on June 20, 2025 with notice available online June 13, 2025
- Posted meeting notice in the Leominster Library and City Hall in both English and Spanish
- Posted on City Calendar
- Posted meeting notice on Project website
- Posted on Leominster Health Department Facebook page

Translation services were offered by request, however no requests for translation services were made.

The meeting was recorded and posted to the Project website the week following the meeting.

Attendance

The public meeting was attended by residents, Health Department representatives, City Council members, and MEPA representatives, as well as the project proponents. Attendees were asked to sign in.

Summary of Presentation and Discussion

The meeting format included a power point presentation presented by representatives of UMML, the Project's engineer, and the Project's traffic consultant. The presentation consisted of the following:

- an overview of the facility and the company as a whole
- project benefits
- timeline of the permitting process
- progress and improvements since last public meeting
- traffic study results

Continued on next page

10.Summary of Public Meeting, Continued

Summary of Presentation and Discussion, Continued

The presentation was followed by a question and answer discussion period. A summary of the post-presentation discussions is provided below.

1. Update on discussions with CSX about unsignalized crossing on Litchfield Street: CSX contact provided to City. UMML will provide contact to Ward Counselors as well.
2. Increase will vary with the seasonal markets. Increase in overall daily tonnage will be gradual and not immediate.
3. There will be approximately 50% more inbound trucks per day than currently, estimated at 53 trucks, as presented in traffic report.
4. Hours of operation will not change.
5. Odor complaints received by the Facility are investigated immediately. If complaints are made to the BOH, the BOH calls the facility and goes to the site to investigate. The Facility has measures they can take to mitigate any odors if promptly notified.
6. Per the Traffic Study, approximately 25% of the vehicles traveling to the site is from the north along Rt 117. The remaining 75% come from I-190 to the south. 100% of the trucks transporting outbound materials travel south to I-190.
7. The Facility anticipates one additional switch (rail service) per week to accommodate the additional tonnage (52 cars to 72 cars per week).
8. The misting system is operating daily during operations with odor counteractant additives.
9. A sound study has been conducted.
10. The air ventilation fans are equipped with filters.

Continued on next page

10.Summary of Public Meeting, Continued

Summary of Presentation and Discussion, continued

The Facility's busiest times are May/June and September/October. In 2024, the Facility approached its current permitted daily tonnage of 1000 tons, accepting between 990 and 1000 tons a total of 8 days out of the year. In 2023, the Facility accepted between 990 and 1000 tons a total of 16 days out of the year. Based upon annual operating days this equates to the facility approaching maximum daily capacity 3-5% of the time. The Facility expects to reach the expanded maximum daily capacity of 1,500 tons the same amount of days during the busy seasons.

1. The Facility at this time does not plan to seek out a larger client base with the expansion. The expansion will serve existing clients and will allow the Facility to not turn away residents and clients due to capacity issues during the busy seasons.
2. Projections on where the Facility would like to be in 4 years: many variables to consider such as economy, status of Fitchburg landfill capacity, etc.
3. Other facilities mentioned, in comparison to the proposed 1,500 tpd capacity: Millbury-1,500 tpd, Fitchburg Landfill-1,725 tpd; Taunton-2,000 tpd.
4. Changes to royalty payments to the City for the increase is in discussions.
5. Concerns about the condition of Lancaster Street and when it was last paved were discussed by residents and City council representatives in attendance.
6. A comment was made regarding litter on Lancaster Street and if UMML could do anything. Litter may not be directly related to Facility trucks, however Facility continues to sweep along Tanzio Road and monitor trucks for use of tarps.

A Facility tour was offered to concerned residents. The Facility followed up with one resident after the meeting and again offered a tour/site visit. That Facility visit has not been accepted and/or scheduled as of the date of this report.

ATTACHMENT 1

MEPA ENF CERTIFICATE

The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Maura T. Healey
GOVERNOR

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LIEUTENANT GOVERNOR

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http://www.mass.gov/eea

December 9, 2024

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: United Material Management of Leominster
PROJECT MUNICIPALITY	: Leominster
PROJECT WATERSHED	: Nashua River
EEA NUMBER	: 16878
PROJECT PROPONENTS	: United Mineral Management of Leominster, LLC
DATE NOTICED IN MONITOR	: September 25, 2024

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62L) and Section 11.06 of the MEPA Regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of a mandatory Draft Environmental Impact Report (DEIR).

Project Description

As described in the Environmental Notification Form (ENF), the project consists of increasing the waste handling capacity of an existing transfer station from 1,000 tons per day (tpd) (300,000 tons per year (tpy)) to 1,500 tpd (450,000 tpy). The facility will continue to handle, sort, and transfer municipal solid waste (MSW) and construction and demolition (C&D) debris. The proposed increase in tonnage does not require any new or expanded buildings, changes to the exterior of the property, or changes in operations procedures; however, more waste will be delivered to the site by a larger number of trucks and removed from the site by more train cars and trucks. The facility will continue to operate six days a week (Monday through Saturday). The existing facility was reviewed by MEPA when it was originally proposed for construction in an ENF submitted in August 2018. A Certificate was issued on the ENF on September 7, 2018 and did not require preparation of an EIR. The general operations of the existing facility will not change from what was described in the 2018 ENF.

Project Site

The 13.46-acre project site is located on the west side of Tanzio Road in an industrial area in southeastern Leominster. The majority of the site has been disturbed and cleared of large trees. It is covered in brush and shrub vegetation with an unpaved road through the site. The site is bordered to the west by a CSX rail line; to the north by Fall Brook, an electrical transmission line and vacant properties; to the east by Tanzio Road and an active sand and gravel facility; and to the south by an undeveloped area with wetlands and woods. Tanzio Road is located off Route 117 (New Lancaster Road), which provides vehicular access to Interstate-190 (I-190) approximately 1.5 miles south of the site. According to the ENF, approximately 3.69 acres of the site are impervious; no new impervious area is proposed.

The existing transfer station, on-site roadways, and other ancillary structures are located in a level part of the site which generally ranges in elevation from 366 ft NAVD 88 to 372 ft NAVD 88. A small area in the northernmost part of the project site, in which no activities are proposed, is within the Outer Riparian Zone of the Riverfront Area associated with Fall Brook. An unnamed perennial stream (a tributary of Fall Brook) and associated Bordering Vegetated Wetlands (BVW), Bordering Land Subject to Flooding (BLSF) and Riverfront Area are located in the southern portion of the site. As shown on the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) number 250314007B, effective date September 16, 1982, the 100-year floodplain associated with Fall Brook north of the site has a Base Flood Elevation (BFE) of 344 ft NAVD 88 and the 100-year floodplain associated with the stream in the southern part of the site has a BFE of 350 ft NAVD 88. As mapped on the FIRM, the 500-year floodplain is confined to the area immediately adjacent to Fall Brook and the unnamed tributary and does not extend onto any part of the site where transfer station operations will take place.

The project site is located within an Environmental Justice (EJ) population designated as Minority, and within one mile of eight additional EJ populations in Leominster, including two designated as Minority, five designated as Minority and Income, and one designated as Minority, Income, and English Isolation. The project site is located within five miles of 25 additional EJ populations designated as Minority; Minority and Income; Minority and English Isolation; and Minority, Income, and English Isolation located in Leominster, Fitchburg, Lancaster, and Shirley.

Environmental Impacts and Mitigation

Environmental impacts associated with the project include generation of 110 New truck trips per day in addition to the approximately 224 truck trips generated by operation of the existing facility (334 total truck trips under proposed conditions). The ENF did not identify the number of employee vehicle trips, which was previously estimated to be 42 average daily trips (adt) in the 2018 ENF; the DEIR should confirm the number of non-truck vehicle trips associated with the site under existing and proposed conditions. The increase in vehicle trips will cause higher air emissions. The increase in capacity has the potential to cause additional odor and noise impacts.

Measures to avoid, minimize, and mitigate environmental impacts include continued use of Best Management Practices to minimize noise, odor, and air emissions associated with operation of the facility. Additional measures should be identified in the DEIR, including measures to minimize and mitigate off-site impacts in EJ populations associated with project-generated trucks and train traffic and

other operations of the facility.

Jurisdiction and Permitting

This project is subject to MEPA review because it requires Agency Action and exceeds the ENF threshold at 301 CMR 11.03(9)(b)(1), New Capacity or Expansion in Capacity for combustion or disposal of any quantity of solid waste, or storage, treatment or processing of 50 or more tpd of solid waste, unless the Project is exempt from site assignment requirements. The project is required to prepare an EIR pursuant to 301 CMR 11.06(7)(b) because it is located within a Designated Geographic Area (or DGA) (as defined in 301 CMR 11.02) around one or more EJ populations. The project requires a Modification of a Large Handling Facility (BWP SW 07) permit from the Massachusetts Department of Environmental Protection (MassDEP). The project requires a Minor Modification to an Existing Solid Waste Site Assignment from the Leominster Board of Health.

Because the project is not seeking Financial Assistance from an Agency, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of any required or potentially required Agency Actions and that may cause Damage to the Environment, as defined in the MEPA regulations.

SCOPE

General

The ENF described the project and its impacts largely in a format consistent with the application form for a Site Suitability Modification permit from MassDEP. The DEIR should not be prepared in the permit application format. The DEIR should be prepared in accordance with Section 11.07 of the MEPA regulations for outline and content, and it should provide the information and analyses required in this Scope. It should demonstrate that the Proponent will pursue all feasible measures to avoid, minimize and mitigate Damage to the Environment to the maximum extent feasible.

Project Description and Permitting

The ENF included a brief description of existing and proposed conditions, preliminary project plans, an alternatives analysis, and measures to avoid, minimize and mitigate environmental impacts. During the review period, the Proponent distributed a copy of an analysis of the project's transportation impacts. Consistent with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency, the ENF contained an output report from the MA Climate Resilience Design Standards Tool prepared by the Resilient Massachusetts Action Team (RMAT) (the "MA Resilience Design Tool"),[1] together with information on climate resilience strategies to be undertaken. The DEIR should provide a more detailed description of the impacts and mitigation measures, as set forth in this Scope.

The DEIR should provide detailed plans, sections, and elevations to accurately depict existing and proposed conditions, including proposed above- and below-ground structures, resiliency and other mitigation measures. The DEIR should identify, describe, and assess the environmental impacts of any

[1] https://resilientma.org/rmat_home/designstandards/

changes in the project that have occurred between the preparation of the ENF and DEIR. It should provide updated calculations of impacts in a tabular format. The DEIR should identify and describe state, federal and local permitting and review requirements associated with the project, provide an update on the status of each of these pending actions, analyze applicable statutory and regulatory standards and requirements, and provide a discussion of the project's consistency with those standards.

The information and analyses identified in this Scope should be addressed within the main body of the DEIR and not in appendices. In general, appendices should be used only to provide raw data, such as drainage calculations, traffic counts, capacity analyses and energy modelling, and such data and analyses should be summarized with text, tables and figures within the main body of the DEIR. Information provided in appendices should be indexed with page numbers and separated by tabs, or, if provided in electronic format, include links to individual sections. Any references in the DEIR to materials provided in an appendix should include specific page numbers to facilitate review.

Alternatives Analysis

The project is proposed to meet increasing demand for MSW and C&D waste disposal in Massachusetts. According to MassDEP, solid waste transfer facilities are necessary to divert and dispose of waste to conserve the state's declining landfill capacity. The ENF included an alternatives analysis that evaluated No Build and Millbury Facility Expansion Alternatives. The No Build Alternative would maintain the facility's existing capacity of 1,000 tpd. According to the ENF, because of the regional demand for waste management and the lack of landfill capacity, exportation of waste will be the primary method of waste disposal in the state. Waste material that would be transported to the proposed facility would have to be transported elsewhere at potentially greater distances with greater air emissions, particularly if rail were not available for transportation of waste.

The Millbury Facility Expansion Alternative would involve expansion of the capacity of the Proponent's existing facility in Millbury by 500 tpd, from 1,000 tpd to 1,500 tpd. The Millbury facility is the transfer facility owned by the Proponent that is closest to the Leominster facility. According to the ENF, the Millbury facility is not served by rail, and therefore all material would be transported to and from the site by trucks, which is four times less efficient in terms of fuel use and emissions than rail transport. Furthermore, the Millbury facility is farther away from the sources that would otherwise dispose of waste in Leominster, and would therefore generate greater air emissions from truck delivery of waste to the site. The Millbury facility is located adjacent to, but not within an EJ population; however, trucks delivering waste material to and from the site would pass through an EJ population. According to the ENF, the Milbury Facility Expansion Alternative was not pursued because of the greater distances that trucks would need to travel and the lack of rail service.

According to the ENF, the Preferred Alternative will minimize environmental impacts by using an existing facility that was originally designed and constructed with the capacity to accommodate additional waste. The facility transports all waste from the site using rail cars rather than trucks, which minimizes traffic and air quality impacts. According to the ENF, transporting waste by rail is four times more fuel efficient than transporting waste by trucks; trains can move a ton of freight over 470 miles on a single gallon of fuel whereas a truck can move a ton of freight only approximately 134 miles per gallon of fuel.

The DEIR should review additional alternative sites for a new or expanded transfer facility, including the locations previously reviewed in the 2018 ENF. To the extent specific sites were considered for either expansion or construction of a new facility, the DEIR should present a full comparison of environmental impacts, including impacts to nearby EJ populations, as between those locations and the currently proposed site. The DEIR should also discuss whether operations at the current location could be modified to further minimize traffic, odor and noise impacts as compared to the Preferred Alternative.

Environmental Justice

As noted above, the project site is located within an EJ population designated as Minority, and within one mile of eight additional EJ populations in Leominster, including two designated as Minority, five designated as Minority and Income, and one designated as Minority, Income, and English Isolation. Within the census tracts containing the above EJ Populations within one mile of the project site, Spanish and Spanish Creole were identified as spoken by 5% or more of residents who also identify as not speaking English very well.

Effective January 1, 2022, all new projects in DGAs as defined in 301 CMR 11.02, as amended around EJ populations are subject to new requirements imposed by Chapter 8 of the Acts of 2021: *An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy* ("Climate Roadmap Act") and amended MEPA regulations at 301 CMR 11.00. Two related MEPA protocols – the MEPA Public Involvement Protocol for Environmental Justice Populations ("MEPA EJ Public Involvement Protocol") and MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations ("MEPA Interim Protocol for Analysis of EJ Impacts") – are also in effect for new projects filed on or after January 1, 2022. Under the new regulations and protocols, all projects located in a DGA around one or more EJ populations must take steps to enhance public involvement opportunities for EJ populations, and must submit analysis of impacts to such EJ populations in the form of an EIR. The ENF identified the DGA as one mile.

Community Engagement

The Proponent prepared an EJ Screening Form which was distributed to a list of community-based organizations (CBOs) and tribes/indigenous organizations (the "EJ Reference List") provided by the MEPA Office and to the Leominster Spanish American Center, local elected officials and City agencies. Upon filing the ENF, the Proponent visited nearby homes to alert local residents of the filing and provide project information. The project distribution list was expanded after the public informational meeting noted below to include attendees of the meeting, and will be further expanded to include anyone expressing an interest in the project. After providing advance notice of the filing of the ENF and prior to its filing, the Proponent held a public informational meeting at the Leominster Public Library on July 22, 224. The meeting was publicized through advertisements in local English and Spanish-language newspapers, by providing notice in English and Spanish to the City and to the Leominster Spanish American Center, and by posting notice of the meeting and other project-related materials in English and Spanish on the project website (www.ummleominster.com). A Spanish-language interpreter was available for the meeting, but translation services were not requested. In addition to the Proponent, the meeting was attended by two people, including the state representative for the district and a representative of the City's Board of Health. Meeting attendees inquired about new

jobs that may be created by the project; according to the Proponent, up to 18 positions may be created in connection with adding a second shift for C&D processing.

A MEPA site visit and hybrid consultation session were held on Wednesday November 13, 2024. The site visit, which included a tour of the facility and explanation of facility operations under existing and proposed conditions, was held at the project site at 4:00 PM and was attended by MEPA staff, the Proponent's representatives, and four members of the Leominster City Council. The consultation session was held at 6:00 PM at the Franco American War Veterans Function Hall in Leominster. A Spanish interpreter was available at the consultation session, but his services were not requested. The Proponent's presentation and a recording of the meeting are posted on the project website. In addition to MEPA staff and the Proponent's representatives, the consultation session was attended in person by a member of the Leominster City Council, two City of Leominster staff members, and four residents; two additional residents participated remotely. Issued raised by residents included truck traffic, including associated noise, through residential areas; train safety at road crossings; noise from trains late at night; and trash, including construction debris such as nails, from trucks delivering waste to the site littering area streets and wetlands. Residents recommended that the Proponent conduct more frequent sweeps along truck routes to pick up trash, work with the City and railroad operator to provide motorists with notice when roads will be closed due to train crossings, and revise the traffic study to include container trucks passing through residential areas to access the site after collection curbside trash in Leominster. As detailed below, the Proponent should address these issues in the DEIR.

The ENF included a Public Involvement Plan (PIP) which describes ongoing public engagement efforts to be implemented by the Proponent, including additional public informational meetings if requested by the public, distribution of notices of future public hearings to the project distribution list, maintaining updated project information on the project website, and continuing communication with elected representatives, City officials, and the Spanish American Center.

The DEIR should include an updated PIP that contains a full description of measures the Proponent intends to undertake to promote public involvement by the identified EJ populations during the remainder of the MEPA review process, including a discussion of any of the best practices listed in the MEPA EJ Public Involvement Protocol that the project intends to employ. The DEIR, or a summary thereof, should be distributed to the EJ Reference List that was used to provide notice of the ENF. The Proponent should obtain a revised EJ Reference List from the MEPA Office to ensure that contact information is updated. I note that the purpose of the MEPA Public Involvement Protocol is to require direct and meaningful engagement with EJ populations, including low-income and minority residents as well as those who lack resources to fully participate in public processes. The Proponent is strongly encouraged to develop public involvement strategies that seek meaningful input from EJ populations that may be affected by the project by engaging directly with residents and community organizations. In addition, the Proponent should hold at least one public meeting prior to filing the DEIR. The Proponent is encouraged to seek input from the MEPA and EEA EJ Offices in planning this meeting and updating the project PIP.

Baseline Assessment and Project Impacts

The DEIR should include a baseline assessment of any existing unfair or inequitable Environmental Burden and related public health consequences impacting EJ Populations within the

DGA in accordance with 301 CMR 11.07(6)(n)1 and the MEPA Interim Protocol for Analysis of EJ Impacts. Specifically, the DEIR should use the DPH EJ Tool to identify any census tract or municipality in which the EJ populations are located as exhibiting "vulnerable health EJ criteria"; this term is defined in the DPH EJ Tool to include any one of four environmentally related health indicators that are measured to be 110% above statewide rates based on a five-year rolling average. In addition, sources of potential pollution should be identified within the identified EJ populations, based on the mapping layers available in the DPH EJ Tool. The DEIR should also identify any air quality related indicators in EPA's EJ Screen that are elevated at or above the 80th percentile of statewide average and provide these data for each EJ census block within the 1-mile DGA (not aggregated across the entire 1-mile radius) and as appropriate, along anticipated truck routes outside the 1-mile DGA. The DEIR should identify the number and type of facilities within 1 mile that operate under MassDEP air or solid waste permits, and state how this number compares to statewide totals.

According to the ENF, all project-generated trucks will use a truck route that passes entirely through EJ populations located between the site and I-190. The ENF did not identify routes through EJ populations used by trucks that transport waste to the site from other directions, including trucks collecting curbside wase in Leominster; these routes, and the number of project-generated trucks using the routes should be described in the DEIR. The DEIR should provide air quality analysis consistent with the *MassDEP Guidelines for Performing Mesoscale Analysis of Indirect Sources (1991)*, as indicated in the Air Quality Scope below. For the EJ block groups along truck routes, the DEIR should also utilize Massachusetts Department of Environmental Protection (MassDEP) Cumulative Impact Analysis (CIA) methods[2] to analyze asthma prevalence at a finer scale via pediatric asthma prevalence for k-8 schools. The data for pediatric asthma prevalence can be downloaded on the MassDEP CIA website (Indicator Data for Cumulative Impact Analysis) and all pre-kindergarten to twelfth grade (PK-12) public schools can be viewed on the online MassDEP CIA Mapping Tool.[3] These data should be provided for all schools servicing the any EJ neighborhoods along truck routes within the DGA, and the DEIR should report any rates that are above the statewide average. The DEIR should discuss the extent to which Transportation Demand Management (TDM) measures will serve to reduce diesel vehicle traffic, including delivery trucks, associated with project operations. It should also discuss other potential mitigation measures, such as early adoption of federal and state clean truck mandates for any fleet vehicles, installation of EV charging infrastructure onsite for trucks and vehicles, and re-routing of or time limitations on truck routes. If impacts are unavoidable, the DEIR should consider measures to improve air quality in affected EJ neighborhoods, such as tree plantings, air monitoring, indoor air filters, and contributions to local public health services.

Commenters identified a number of impacts along transportation routes used by project-generated trucks and trains, including noise, particularly early in the morning and late at night; queuing of trucks along Lancaster Street and New Lancaster Road; odor and scattering of trash from tucks that are not adequately covered; rodents along the transportation routes; and traffic disruptions associated with the at-grade train crossing on Litchfield Street. According to the ENF, waste transported to and from the site is required to be covered to minimize potential odor and trash deposition. The DEIR should describe measures that will be implemented by the Proponent to further minimize these impacts. It should identify potential sources of noise associated with transport of waste and review alternatives for

[2] MassDEP recently finalized regulations related to a CIA framework for certain air permits. The regulations and associated guidance are available here: https://www.mass.gov/info-details/cumulative-impact-analysis-in-air-quality-permitting.
[3] MassDEP CIA Mapping Tool

minimizing impacts, such as management of trucks arriving during early morning hours. The DEIR should include a discussion of proposed mitigation and include such measures in draft Section 61 findings. I note that generalized project benefits should not be analyzed to "net out" project impacts, unless the benefit serves to mitigate the specific impact analyzed. Particular focus should be given to benefits that serve to promote the equitable distribution of Environmental Burdens, or reduce any existing Environmental Burdens identified for the EJ population. Moreover, the Proponent is encouraged to invest in strategies that provide support and resources to the surrounding EJ neighborhoods. For example, the Proponent could consider commitments to employ a greater proportional of residents in surround EJ communities, monetary contributions to community activities (e.g., local sports teams, local non-profit organizations, or local infrastructure improvements).

Public Health

The DEIR should include a separate section on "Public Health," and discuss any known or reasonably foreseeable public health consequences that may result from the environmental impacts of the project. Particular focus should be given to any impacts that may materially exacerbate "vulnerable health EJ criteria," in accordance with the MEPA Interim Protocol for Analysis of EJ Impacts. In addition, other publicly available data, including through the DPH EJ Tool, should be surveyed to assess the public health conditions in the immediate vicinity of the project site, in accordance with 301 CMR 11.07(6)(g)10. Any project impacts that could materially exacerbate such conditions should be analyzed. To the extent any required Permits for the project contain performance standards intended to protect public health, the DEIR should contain specific discussion of such standards and how the project intends to meet or exceed them. The DEIR should discuss whether other nearby facilities are subject to MassDEP air permitting, and whether the cumulative impact of this project and nearby facilities would materially impact air quality in the area. The DEIR should provide available data from nearby air monitoring stations and report on whether existing air quality is under National Ambient Air Quality Standards (NAAQS) that are derived from public health risk standards.

Solid Waste Management

The project will increase the solid waste transfer capacity of the existing facility by 500 tpd (from 1,000 tpd to 1,500 tpd). Because the entire site is already site assigned, the project requires a minor modification (rather than a major modification) to the Site Assignment from the Leominster Board of Health. The project also requires a Modification of a Large Handling Facility permit from MassDEP, which will be reviewed after the Board of Health's decision on the Site Assignment modification. Comments from MassDEP indicate that the Department encourages this type of solid waste transfer facility to assist in managing Massachusetts waste, including the reuse/recycling of C&D materials. MassDEP indicates that proper waste management and waste diversion is important to conserve the state's declining landfill space and resources if accomplished in an environmentally sound manner.

The existing transfer station consists of a 33,600-square foot (sf) building with 32,400-sf of waste handling space and 1,260 sf of office space; a scale house and two scales; a rail yard; parking areas for employees; internal site drives; and a stormwater management system. Trucks delivering waste to the facility will enter the site from Tanzio Road and proceed in a counter-clockwise direction through the site. Trucks will first drive across the inbound scale to be weighed; then proceed to a paved tarmac

area where they can back up into the building through one of three off-loading doorways; deposit waste onto the tipping floor; exit the building through the same doorway; drive around the building to be weighed again on the outbound scale; then exit the site through the same driveway on Tanzio Road.

All solid waste handling is and will continue to be handled within the fully-enclosed building. Solid waste deposited on the tipping floor is inspected for unacceptable materials, such as waste ban materials or hazardous waste. Any recyclable C&D material will be processed on-site with the existing sorting line and transported by truck to an off-site facility or consolidated for off-site shipment to another MassDEP-approved C&D processor. Acceptable waste is either pushed by a front-end loader or excavator to a waste staging area in the southwestern portion of the building or consolidated in the waste tipping area and pushed to an outbound loading area located along the western portion of the interior of the building. Waste is then loaded onto a rail car parked within a rail loading bay in the west side of the building. Once fully loaded and covered, rail cars are pulled out of the building by a rail car pusher, rather than a locomotive, onto railroad tracks along the west side of the site and stored there until picked up by a train for off-site disposal. Rail cars are typically picked up three times per week under existing conditions, and a fourth weekly pickup is anticipated to be added to accommodate the additional waste.

According to the ENF, the facility was developed using state-of-the-art Best Management Practices (BMPs) to minimize potential impacts to the environment. The following BMPs are implemented at the Facility:

- All tipping, handling, and loading is performed within a fully-enclosed processing and handling building
- The building floor is impervious concrete that will prevent any potential contamination of groundwater. Any liquids released from the waste will be collected in a floor drain system. The liquid collected in this system is routed through an oil/water separator and discharged to the sanitary sewer system pursuant to site's existing discharge permit
- Use of a fine atomized misting system within the waste handling building effectively controls fugitive dust and odor in the building
- External paved surfaces are subject to daily cleanup and sweeping
- The site includes a stormwater management system that meets or exceed MassDEP Stormwater Management Standards

The DEIR should review existing permitting requirements established by MassDEP and the Leominster Board of Health and describe how the proposed increase in capacity will comply with existing permit conditions and identify any changes that may be necessary to accommodate the additional waste.

Noise

The ENF included a sound study which analyzed noise impacts associated with operation of the facility under proposed conditions. The analysis compared modeled noise levels to two ambient noise level scenarios: a "normal daytime" condition and an "end of day" condition, which reflects ambient noise levels for two hours (5:00 PM to 7:00 PM on weekdays and 1:00 PM to 3:00 PM on Saturdays) after active tipping operations. Ambient sound levels under "normal daytime" conditions ranged from 41

to 55 decibels (dBA) and ambient sound levels under the “end of day” scenario condition ranged from 39 to 44 dBA.

The following sources of noise associated with operation of the facility (both indoor and outdoor activities) were modeled:

- A front-end loader and two excavators operating (continuously) inside the building to move materials
- An idling haul truck inside the building (limited by the Proponent to no more than five minutes, per anti-idling regulations)
- A C&D recycling system inside the building, the noise from which is dominated by the electrically- powered screener
- Four elevated building ventilation fans (three on the west wall and one on the north wall)
- A front-end loader or skid steer operating continuously outside the building (however, in practice this occurs infrequently because waste handling occurs indoors)
- A railcar mover outside the building to move rail cars in the rail yard
- An idling haul truck outside the building (limited by the Proponent to no more than five minutes, per anti-idling regulations)
- A street sweeper outside of the building (not expected to operate continuously)
- A compactor outside of the building (not expected to operate continuously)
- Haul trucks traveling to and from the facility

The modeling results were compared to the standards of MassDEP’s Noise Policy (Policy Statement 90-001, February 1, 1990), which is used to assess nuisance noise levels defined in the Air Pollution Control Regulations at 310 CMR 7.10. The Noise Policy identifies violations of the regulation as occurring if the sources cause either an increase in the broadband sound pressure level of more than 10 dBA above the ambient sound level, or a "pure tone" condition. Future maximum sound levels were predicted at 22 residential receptors surrounding the facility. Under both the “normal daytime” scenario and the “end of day” scenario, predicted noise levels at all receptors were no more than 10 dbA higher than ambient levels. As stated above, the DEIR should discuss whether additional measures could be taken to reduce noise impacts, including through limitations on truck traffic or hours of operation. The DEIR should provide a thorough response to comments that raise noise concerns or suggest additional mitigation measures for this impact.

Odor

According to the ENF, the primary source of odor at the site is MSW, rather than C&D waste. The existing facility is permitted to store a maximum of 600 tons of MSW overnight within the building; however, according to the ENF, the Proponent implements a “first-in, first-out” policy for MSW or odorous waste, and the facility is operated so that no more than 100 tons of MSW is stored in the building overnight. Additional odor mitigation measures implemented at the facility include confining all waste handling activities to within the enclosed building, covering trailers, rail cars, and containers, an atomized misting system, use of odor counteractants in the misting system as necessary, and minimizing overnight stockpiles of MSW.

The ENF included an odor study to determine the potential odor impacts from the facility on residential and commercial receptors near the site. To provide a worst-case scenario, the study assumed that all the doors of the facility would be open at all times and that all the waste at the site is MSW; however, in practice, the doors are closed except to allow trucks to enter and exit, and the facility receives more C&D material than MSW. Potential odor impacts were modeled using the AEROMOD dispersion model. The model provided estimates of odor intensity expressed as a dilution-to-threshold (D/T) value, which reflects the amount of air required to dilute an odor source to a point where less than 50% of the people will be able to detect it. The study established an impact threshold of 5 D/T for 15 minutes or more in residential areas; an odor intensity of 5 D/T would require 5 units of ambient air to dilute one unit of odorous air to an acceptable level. Two scenarios were modeled: 1) 150 tons per day of MSW were left on the tipping floor overnight, which reflects an increase from the Proponent's 100-ton policy limit consistent with the proposed 50% increase in waste capacity; and 2) 600 tons of MSW were left on the tipping floor overnight. Both modeling scenarios assumed that no odor mitigation measures were implemented. For the 150 tons of MSW scenario, the model determined a potential maximum hour concentration of 2 D/T at the nearest residences, and that an odor concentration of 5 D/T would be experienced 13 times for 15 minutes over a period of a year, which corresponds to 0.15% of the time. According to the ENF, no odor mitigation is required under the 150-ton scenario. Under the 600 tons of MSW scenario, the model determined the maximum hour concentration to be 8 D/T at the nearest residences, and that an odor intensity of 5 D/T would be experienced 480 times for a period of 15 minutes, which corresponds to 5.5% of the time. According to ENF, the 600-ton scenario requires mitigation due to the intensity of odor determined in the model.

The odor study also modeled the effect of odor mitigation measures to minimize impacts of the 600 tons of MSW scenario. The mitigation measures included the addition of an odor counteractant to the existing water misting system and exhaust filters on the exhaust fans; to provide a conservative estimate, the analysis assumed that two-thirds of the odor would be treated, and one-third of the odors would pass untreated through the open doors. Under this scenario, the maximum hour concentration at the nearest residences would be 5 D/T and that an odor intensity of 5 D/T would be experienced 127 times for a period of 15 minutes, which corresponds to 1.4% of the time.

According to the ENF, the policies, controls, and procedures currently implemented at the facility have been effective in preventing nuisance odor conditions, and the facility has operated since 2020 without odor complaints. The modeling results summarized above predict minimal odor impacts under expected operating conditions, and identify mitigation measures that could be implemented to minimize odors if more MSW were to be stored overnight than is currently stored. However, I received comments from residents from the neighborhood closest to the site that indicate that odors from the facility are detectable at those locations and have been reported to the Leominster Board of Health and MassDEP. In some cases, comment letters identified specific dates and locations where odors were detected. The odor modelling described above does not appear to account for odors emanating from loaded railcars stored outside the facility; the DEIR should explain how this potential source of odor is accounted for as a potential impact in the model or through other means under existing and proposed conditions, and identify mitigation measures implemented by the Proponent to minimize odors from exterior sources. The DEIR should include a review of any odor complaints received by MassDEP and the Leominster Board of Health, and the incidences identified in comment letters. Using information regarding the date and/or general location of the reported incidences, the Proponent should review weather conditions and any records maintained by the Proponent concerning the volume and type of

waste handled on those days to assess the conditions that were present and may have contributed to the odorous conditions. The DEIR should identify any operational measures and treatment practices that could be implemented to address conditions corresponding to the odor complaints. The DEIR should discuss how the Proponent will operate the facility to ensure that no more MSW is stored overnight on the tipping floor than can be adequately mitigated through the use of odor controls, whether this limit will be a term of the Board of Health or MassDEP permit.

Air Quality

The ENF included an Air Quality Study which evaluated emissions of particulate matter (PM_{10} and $PM_{2.5}$) at the project site by the following four sources associated with operation of the facility:

- Loading and unloading materials into and out of trucks inside the building
- Conveying, screening, and sorting of C&D inside the building
- Non-road diesel equipment exhaust emissions inside and outside the building
- On-road diesel trucks idling inside and outside the building

A summary of the facility-wide emissions of PM_{10} and $PM_{2.5}$ is shown in Table 1. The total emissions at the facility are below the 1 ton per year (tpy) air permitting threshold.

Table 1. Project emissions of particulate matter (tons per year). Derived from Table 1 in the Air Quality Study.

Emissions Source	PM_{10}	$PM_{2.5}$
Truck Loading/Unloading	0.064	0.008
C&D Processing	0.50	0.075
Non-Road Diesel Equipment Exhaust	0.032	0.031
On-Road Diesel Truck Idling Exhaust	0.071	0.065
Total	0.66	0.18

The Proponent used the U.S. Environmental Protection Agency's (EPA's) AERMOD air dispersion model to estimate the concentration of PM_{10} and $PM_{2.5}$ at receptors within a grid extending 3,280 feet (1,000 meters) in all directions from the property fence line. The model was used to predict the 24-hour average and annual average concentrations of $PM_{2.5}$ and the annual average concentration of PM_{10}. The modeling results showing the maximum modeled concentrations, which occurred at the property line, in comparison to the National Ambient Air Quality Standards (NAAQS) are shown in Table 2.

Table 2. Maximum modeled particulate matter concentrations (micrograms per cubic meter). Derived from Table 3 in the Air Quality Study.

Pollutant	Averaging Period	Project emissions	Background concentrations	Total concentration	NAAQS limit
$PM_{2.5}$	24-hour	1.9	16.7	18.6	35
$PM_{2.5}$	Annual	0.4	8.2	8.6	12
PM_{10}	Annual	11.0	45.0	56.0	150

According to the ENF, the maximum concentrations of particulate matter emitted at the project site were measured in the model at the property line, and the concentrations were modeled to decrease further away from the property line. As shown in Table 2, the project will not cause an exceedance of the NAAQS. According to the ENF, the project will also meet the lower $PM_{2.5}$ annual NAAQS of 9 micrograms per cubic meter promulgated by the EPA on February 7, 2024.

According to the ENF, measures to minimize air emissions from operation of the facility include handling all waste within the enclosed building, use of a water-based misting system in the building to control dust, and using equipment which complies with EPA emissions standards for diesel engines. The DEIR should identify any additional measures that can be implemented by the Proponent to further minimize air emissions associated with operation of the facility.

The DEIR should include an air quality analysis in accordance with the *MassDEP Guidelines for Performing Mesoscale Analysis of Indirect Sources (1991)*. Data on NOx, $PM_{2.5}$, PM_{10}, and Diesel Particulate Matter (DPM), in addition to GHG and VOCs, should be provided to the extent they are available for roadway segments included within the traffic study area used for the TIA. Additional analysis of air quality at intersections adjacent to EJ populations should be conducted in accordance with the Environmental Justice Scope above. I am aware that MassDEP has proposed regulatory changes to adopt the California Air Resources Board (CARB)'s Medium and Heavy Duty (MHD) engine and vehicle regulations. These MHD regulations include three parts: 1) GHG Phase 2 Standards for MHD Engines and Vehicles starting in model year (MY) 2025; 2) Heavy-Duty Omnibus Regulation which contains a comprehensive set of emission standards and other emission-related requirements for heavy-duty engines and vehicles, starting in MY 2025; and 3) Advanced Clean Trucks Regulation resulting in offers of zero emission vehicle (ZEV) sales starting in MY 2025 and ramping up to 55% of Class 2b-3, 75% of Class 4-8 and 40% of Class 7-8 tractor sales being ZEVs in MY 2035. Given this transition to a cleaner truck fleet as of MY 2025, it is my expectation that mitigation commitments relative to mobile source emissions will address diesel vehicle traffic; early adoption of future mandates relative to its truck fleet is strongly encouraged.

Traffic and Transportation

The ENF included a transportation study generally consistent with the EEA/MassDOT *Transportation Impact Assessment (TIA) Guidelines* issued in March 2014 which analyzed the impacts of the increased truck traffic associated with the project. It described existing and proposed roadway conditions, roadway and intersection volumes, and roadway safety issues. The analysis reviewed future conditions and vehicular operations under No Build and Build scenarios using a seven-year planning horizon. According to the ENF, all truck traffic will continue to enter and exit the site using the driveway off Tanzio Road; all trucks will use only Tanzio Road, Lancaster Street, and New Lancaster Road to travel between the site and the nearest exit on I-190. When exiting the site, project-generated traffic is prohibited from turning left onto the northern section of Tanzio Road in order to prohibit trucks from cutting through the residential area along Aspinwall Avenue and Malburn Street to access Lancaster Street. According to the ENF, all project-generated truck traffic will travel on the section of Route 117 south of the site between Tanzio Road and I-190. However, the DEIR should include an analysis of routes used by trucks accessing the site from other directions, such as packer trucks delivering waster to the site directly from curbside trash collection.

The TIA analyzed the transportation impacts of the project in a study area including the following intersections:

- New Lancaster Road (Route 117) at Willard Street
- Lancaster Street (Route 117) at Tanzio Road
- Tanzio Road at Site Driveway

The number of new truck trips was estimated based on the truck trips associated with existing operations. According to the ENF, inbound solid waste is delivered to the site with an average load of 9.4 tons per truck; therefore, under existing conditions, up to 107 truck deliveries per day (314 total truck trips) are generated by the facility to accept the maximum of 1,000 tpd. Under proposed conditions, a total of up to 160 truck deliveries (320 total trips per day) will be needed to deliver a maximum of 1,500 tpd of waste to the site, an increase of 54 truck deliveries (108 total additional truck trips). In addition, the number of outbound trucks transporting recyclables from the site to other processing facilities will increase from 5 (10 truck trips total) to 7 (14 total truck trips). Based on these calculations, the total number of truck trips associated with the facility will increase from 224 under existing conditions to 334 truck trips under proposed conditions, an increase of 110 truck trips. These calculations are based on the use of rail to transport all waste material off-site. According to ENF, if trucks were used to transport waste off-site, the total number of truck trips under existing conditions would be 286 trips, which would increase by 142 trips to 428 truck trips under proposed conditions; however, trucks have not been used to transport waste off-site in the past and the Proponent proposes to continue to use only rail for this purpose. According to the ENF, project-generated truck trips are distributed fairly evenly during the day, with eight new truck trips (a total of 22 truck trips for the entire facility including existing truck trips) during the AM peak period and two new truck trips (eight total truck trips) during the PM peak period. The DEIR should provide additional documentation in support of the estimate of new truck trips that will be generated by the project. It should describe the type and capacity of trucks that will bring waste to the site. The DEIR should document that the use of an average of 9.4 tons of waste per truck accurately reflects the range in truck sizes that will transport waste to the site; according to the Air Quality Study included in the ENF, C&D waste tends to be delivered in smaller trucks

The ENF provided peak period capacity analyses and level-of-service (LOS) designations for through traffic and each turning movement at study area intersections. The LOS reflects the overall operations of an intersection, including traffic speed, delay, and capacity. For urban intersections, LOS D reflects an acceptable level of operations; LOS E or F reflects significantly congested conditions and long delays.

Existing 2023 conditions were established using turning movement counts (TMCs) collected in March, 2023. The No Build 203 condition incorporates a 2.0% compounded annual growth rate added to traffic volumes under Existing 2023 conditions. Build 2030 conditions include the addition of project-generated truck trips to the No Build 2030 scenario. According to the ENF, all study area intersections will operate LOS C or better during peak periods under all the No Build and Build scenarios, and no changes in LOS are expected from No Build 2030 to Build 2030 conditions. No mitigation was proposed in the ENF because project-generated truck

trips will have minimal impacts on traffic operations in the study area, as shown by the lack of change in LOS between the No Build 2030 and Build 2030 scenarios.

The 2018 ENF indicated that the project will generate 42 average daily trips (adt) associated with employee trips to and from the site; however, the ENF currently under review did not identify the project's non-truck vehicle trip generation. The DEIR should quantify the daily and peak period employee vehicle trip generation, and identify any impacts on study area intersections associated with the project's total trip generation (employees and trucks) under proposed conditions.

The DEIR should provide additional analysis of truck operations that are not reflected by the capacity analysis, including a description of queuing of trucks that are waiting to enter the site prior to the opening of the facility or during periods when the facility is at capacity with respect to the number of trucks that can be managed on-site. The DEIR should identify truck routes used by packer trucks or other trucks transporting waste to the site from curbside collection in Leominster or from locations that do not require access from I-190; quantify the number and hourly distribution of said trucks; and provide an analysis of traffic operations at affected intersections. As noted above, the potential impacts of these trucks on EJ populations with respect to noise, odor, and trash should be evaluated.

Climate Change

Adaptation and Resiliency

Effective October 1, 2021, all new projects are required to submit an output report from the MA Resilience Design Tool to assess the climate risks of the project. Based on the output report attached to the ENF, the project site has a "High" exposure rating based on the project's location for riverine flooding associated with extreme precipitation, and "Moderate" exposure ratings for extreme heat and urban flooding associated with extreme precipitation. Based on the 30-year useful life identified for the project and the self-assessed criticality of the existing transfer station building, the MA Resilience Design Tool recommends a planning horizon of 2050 and a return period associated with a 25-year (4% chance) storm event for extreme precipitation when considering resiliency design measures and the 90th heat percentile when planning for extreme heat conditions. The recommendations for extreme precipitation appear to be based on a "Medium" criticality assessment of the project. According to the ENF, the existing stormwater management stormwater management system was designed to accommodate up to the present-day 100-year storm event and incorporated infiltration to the maximum extent practicable. According to the ENF, both the 100-year and 500-year flood elevations are well below the elevation where waste processing activities take place, and the site is not likely to be subject to flooding under future climate conditions.

The DEIR should include an assessment of the resilience of the facility under projected 2070 climate conditions using data available through the MA Resilience Design Tool. The DEIR should describe the components of the stormwater management system, including measures required of land uses with higher potential pollutant loads, and compare its capacity to precipitation depths under projected storm conditions. The DEIR should describe any measures incorporated into the design of the existing facility, including its stormwater management system, that will provide resiliency to the identified climate risks. It should identify potential adaptation strategies that could be implemented in the future, if necessary, to respond to unanticipated climate risks.

Greenhouse Gas (GHG) Emissions

As the project does not exceed mandatory EIR thresholds, it is not subject to review under the May 5, 2010 MEPA GHG Policy. However, analysis may be required under MEPA EJ protocols, if the facility's stationary-source emissions exceed 2,000 tpy of GHG emissions for conditioned spaces using the GHG Emissions Footprint Estimation Tool.[4] The DEIR should report on the anticipated GHG emissions using this tool. The ENF indicates that no changes are proposed to the building and, therefore, it did not provide an analysis of the project's GHG stationary or mobile source emissions. If stationary source emissions for conditioned spaces exceed 2,000 tpy, the DEIR should provide a GHG analysis in accordance with the 2010 MEPA GHG Policy.

The DEIR should include an evaluation of potential GHG emissions associated with the project's mobile source emissions. The DEIR should follow the guidance provided in the GHG Policy for *Indirect Emissions from Transportation* to determine mobile emissions for Existing Conditions, Build Conditions, and Build Conditions with Mitigation. The DEIR should describe truck loading and staging activities and estimate GHG emissions from idling. The Proponent should thoroughly explore means to reduce overall single occupancy vehicle trips and to minimize air emissions from diesel vehicle traffic. The DEIR should also review measures to promote the use of low-emissions vehicles, including installing EV charging stations and providing designated parking spaces for these vehicles (a minimum of 25% of proposed spaces) with the balance of spaces being EV ready for future installation.[5] The Build with Mitigation model should incorporate TDM measures, and any roadway improvements implemented by the project, and document the associated reductions in GHG emissions. The DEIR should explain how TDM measures will be monitored and adjusted over time and provide a methodology for quantifying emission reductions impacts rather than an assumed percentage reduction.

Mitigation and Draft Section 61 Findings

The DEIR should include a separate chapter summarizing all proposed mitigation measures including construction-period measures. This chapter should also include a comprehensive list of all commitments made by the Proponent to avoid, minimize and mitigate the environmental and related public health impacts of the project, and should include a separate section outlining mitigation commitments relative to EJ populations. The filing should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation. The list of commitments should be provided in a tabular format organized by subject matter (traffic, water/wastewater, EJ, etc.) and identify the Agency Action or Permit associated with each category of impact. Draft Section 61 Findings should be separately included for each Agency Action to be taken on the project.

Responses to Comments

The DEIR should contain a copy of this Certificate and a copy of each comment letter received on the ENF. The DEIR should contain a direct response to the scope items in this Certificate. The DEIR should include direct responses to comments on the ENF and the scope items in this Certificate that

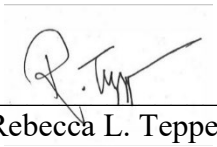
[4] https://www.mass.gov/doc/ghg-emissions-calculator/download
[5] More information on EV infrastructure can be obtained from the MassEVolves program at www.massevolves.org.

specifically address each issue raised in the comment letter or Certificate; references to a chapter or sections of the DEIR alone are not adequate and should only be used, with reference to specific page numbers, to support a direct response. This directive is not intended to, and shall not be construed to, enlarge the Scope of the DEIR beyond what has been expressly identified in this certificate.

Circulation

In accordance with 301 CMR 11.16, the Proponent should circulate the DEIR to each Person or Agency who commented on the ENF, each Agency from which the project will seek Permits, Land Transfers or Financial Assistance, and to any other Agency or Person identified in the Scope. Pursuant to 301 CMR 11.16(5), the Proponent may circulate copies of the DEIR to commenters in a digital format (e.g., CD-ROM, USB drive) or post to an online website. However, the Proponent should make available a reasonable number of hard copies to accommodate those without convenient access to a computer to be distributed upon request on a first come, first served basis. A copy of the DEIR should be made available for review in the Leominster Public Library.

December 9, 2024
Date



Rebecca L. Tepper

Comments received:

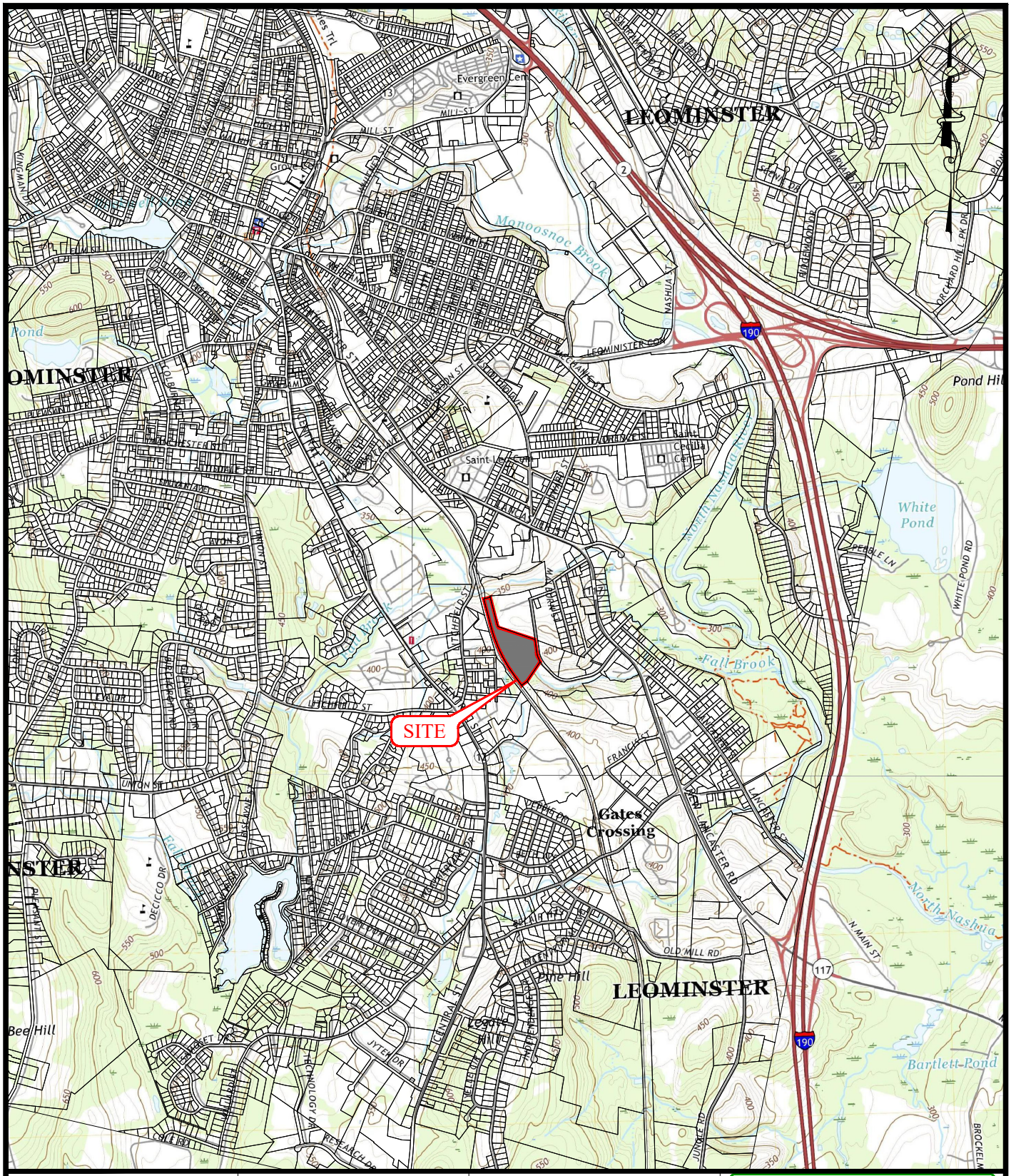
10/01/2024 Michelle Powell
10/04/2024 Deb Buckley
10/07/2024 Paul Brayton
10/10/2024 Frank Bangrazi
10/14/2024 David Dill
10/14/2024 Lisa Christy
10/14/2024 Steven Allain
10/15/2024 Massachusetts Department of Transportation (MassDOT)
10/16/2024 Terri Stymiest
11/12/2024 Yancarlos Alvarez
11/13/2024 Vincent Seretto
11/29/2024 Massachusetts Department of Environmental Protection (MassDEP)/Central Regional Office (CERO)

RLT/AJS/ajs

ATTACHMENT 2

PROJECT PLAN SET:

LOCUS PLAN- EX-1
WATER RESOURCES PLAN- EX-2
LAND USE PLAN- EX-3
ZONING PLAN- EX-4
EJ POPULATION PLAN- EX-5
EXISTING/PROPOSED EXTERIOR LAYOUT PLAN- C-1
EXISTING/PROPOSED INTERIOR LAYOUT PLAN- C-2
TRAFFIC PATTERN PLAN- C-3



NOTE: USGS TOPOGRAPHIC MAP WAS PROVIDED BY THE OFFICE OF GEOGRAPHIC AND ENVIRONMENTAL INFORMATION (MassMapper), COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS CURRENT TO JUNE 2021.

REVISIONS	
NO./ DATE	COMMENT

DRAWING TITLE:

SITE LOCUS MAP

CAD TECH:	CHECKED BY:
D. HAZEN	L. BUGAY
ENGINEER:	DATE:
L.BUGAY	5/22/2024

PREPARED FOR:

UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC

Green Seal Environmental, LLC
114 State Road, Building B
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Tel: (508) 888-6034
Fax: (508) 888-1506
www.gseenv.com

LOCUS:

200 TANZIO ROAD
LEOMINSTER, MA 01453

SCALE:

1" = 2,500'

SHEET:

EX-1

0.5 MILE RADIUS FROM PROPERTY BOUNDARY

LANCASTER STREET (RTE 117)

WELL ID: 258974
511 LANCASTER STREET

500 FOOT RADIUS FROM PROPERTY BOUNDARY

RESERVOIR BROOK

FALL BROOK

100-FOOT WASTE HANDLING AREA SETBACK

CSX CORPORATION RAILROAD

TANZIO ROAD

SOLID WASTE HANDLING FACILITY

WELL ID: 261137
8 REED STREET

WELL ID: 272701
CRISCI STREET
(STREET # NOT PROVIDED)

FALL BROOK

LITCHFIELD STREET

SITE

WELL ID: 272723
TANZIO ROAD
(STREET # NOT PROVIDED)

MEDIUM YIELD AQUIFER (TYP)

BROOK (UNNAMED)

NHESP CERTIFIED VERNAL POOL

WELL ID: 137336
30 HUDSON STREET

200' OUTER RIPARIAN ZONE TO RIVERFRONT AREA (TYP)

100' WETLAND BUFFER ZONE (TYP)

LITCHFIELD STREET

100 YEAR FLOOD LIMIT (TYP)

WETLAND (TYP)

WELL ID: 258693
823 LANCASTER STREET

CENTRAL STREET (RTE 12)

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LEGEND

- DEP WETLANDS
- 100' BUFFER ZONE
- MEDIUM YIELD AQUIFER
- NHESP CERTIFIED VERNAL POOL
- PRIVATE WELL
- SITE SETBACK
- SITE PROPERTY LINES
- ABUTTER PROPERTY LINE
- FEMA 100 YEAR FLOOD LIMIT
- 200' OUTER RIPARIAN ZONE TO RIVERFRONT AREA
- STREAM

LEGEND OF FEATURES NOT FOUND

THE FOLLOWING FEATURES WERE SEARCHED FOR AND NOT FOUND WITHIN THE AREA DEPICTED ON THE PLAN:

- ZONE A
- ZONE B
- ZONE I
- ZONE II
- IWPA
- PROPOSED DRINKING WATER SOURCE AREAS
- HIGH YIELD AQUIFER
- MUNICIPAL SUPPLY WELL
- PUBLIC WATER SUPPLY WELL
- POTENTIAL VERNAL POOL

NOTES:

1. THE INFORMATION SHOWN ON THIS PLAN WAS OBTAINED FROM MASSMAPPER.
2. WELL RECORDS WERE RESEARCHED AT MASS.GOV EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS DATA PORTAL AND CITY OF LEOMINSTER HEALTH DEPARTMENT.
3. PROPOSED DRINKING WATER SOURCE AREAS RESEARCHED ON MASSDEP WATER MANAGEMENTACT PERMITS AND DECISIONS WEBSITE

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Dimensions are as indicated.

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It is the responsibility of the user to confirm discrepancies with the Engineer prior to use.

REVISIONS

NO.	DATE	COMMENT

PURPOSE:

SITE SUITABILITY MODIFICATION

LOCUS:

200 TANZIO ROAD
LEOMINSTER, MA 01453

PREPARED FOR:

UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC

DRAWING TITLE:

WATER RESOURCES PLAN

CAD TECH:	CHECKED BY:
D. HAZEN	L. BUGAY
ENGINEER:	DATE:
L. BUGAY	5/22/2024
	SCALE: 1" = 200'
	SHEET: EX-2

S:\SOLID WASTE DEPARTMENT\CLIENTS\UNITED WASTE MANAGEMENT LEOMINSTER\ACTIVE\DRAWINGS\DRAWINGS PURPOSE 2023-2025\SITE SUITABILITY\CAD\LEOMINSTER FIGURES.DWG

ST LEO'S CEMETERY

0.5 MILE RADIUS FROM PROPERTY BOUNDARY

NHESP ESTIMATED HABITATS OF RARE WILDLIFE

NHESP PRIORITY HABITATS OF RARE SPECIES

LANCASTER STREET (RTE 117)

SOLE PROPRIETOR SOCIAL WORKER

FARMLAND OF UNIQUE IMPORTANCE (TYP)

FULLER STREET CONSERVATION AREA

PRIME FARMLAND (TYP)

500 FOOT RADIUS FROM PROPERTY BOUNDARY

RESERVOIR BROOK

LEOMINSTER LASSIE LEAGUE FIELD COMPLEX

LINCOLN WOODS

FARMLAND OF STATEWIDE IMPORTANCE (TYP)

AREA OF CRITICAL ENVIRONMENTAL CONCERN (TYP)

SOLID WASTE HANDLING FACILITY

CSX CORPORATION RAILROAD

TANZIO ROAD

LITCHFIELD STREET

JOHNNY APPLESEED STATE PARK

100 FOOT WASTE HANDLING AREA SETBACK

SITE INDUSTRIAL DISTRICT

EAGLES FIELD

LITCHFIELD STREET

CENTRAL STREET (RTE 12)

OLD DEERFIELD WOODS ESTATES CONSERVATION AREA

TAK CENTER FOR MENTAL HEALTH-MEDICAL OFFICE

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LEGEND

- FARMLAND OF UNIQUE IMPORTANCE
- FARMLAND OF STATEWIDE IMPORTANCE
- PRIME FARMLAND
- AREA NO LONGER FARMLAND
- CONSERVATION LAND
- CONSERVATION AND RECREATION AREA
- HISTORICAL/CULTURAL AREA
- AREAS OF CRITICAL ENVIRONMENTAL CONCERN
- NHESP ESTIMATED HABITATS OF RARE WILDLIFE
- NHESP PRIORITY HABITATS OF RARE SPECIES
- SITE SETBACK
- WASTE HANDLING AREA SETBACK
- SITE PROPERTY LINES
- ABUTTER PROPERTY LINE
- HEALTHCARE

LEGEND OF FEATURES NOT FOUND

THE FOLLOWING FEATURES WERE SEARCHED FOR AND NOT FOUND WITHIN THE AREA DEPICTED ON THE PLAN:

- STATE FORESTS
- OTHER SOLID WASTE FACILITIES
- WILDLIFE MANAGEMENT AREAS
- MDC RESERVATIONS

NOTES:

1. THE INFORMATION SHOWN ON THIS PLAN WAS OBTAINED FROM MASSGIS.
2. NO PRISONS, CHILDREN'S PRE-SCHOOLS, ELEMENTARY SCHOOLS, MIDDLE SCHOOLS, HIGH SCHOOLS, DAYCARES, SENIOR CENTERS OR YOUTH CENTERS WERE FOUND WITHIN A ONE-HALF MILE RADIUS OF THE SITE.
3. SEE FIGURE 4 FOR ZONING AND OVERLAY MAP.
4. NO OTHER SOLID WASTE FACILITIES WERE FOUND WITHIN ONE-HALF MILE OF THE SITE.

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REVISIONS

NO.	DATE	COMMENT

PURPOSE:

SITE SUITABILITY MODIFICATION

LOCUS:

200 TANZIO ROAD
LEOMINSTER, MA 01453

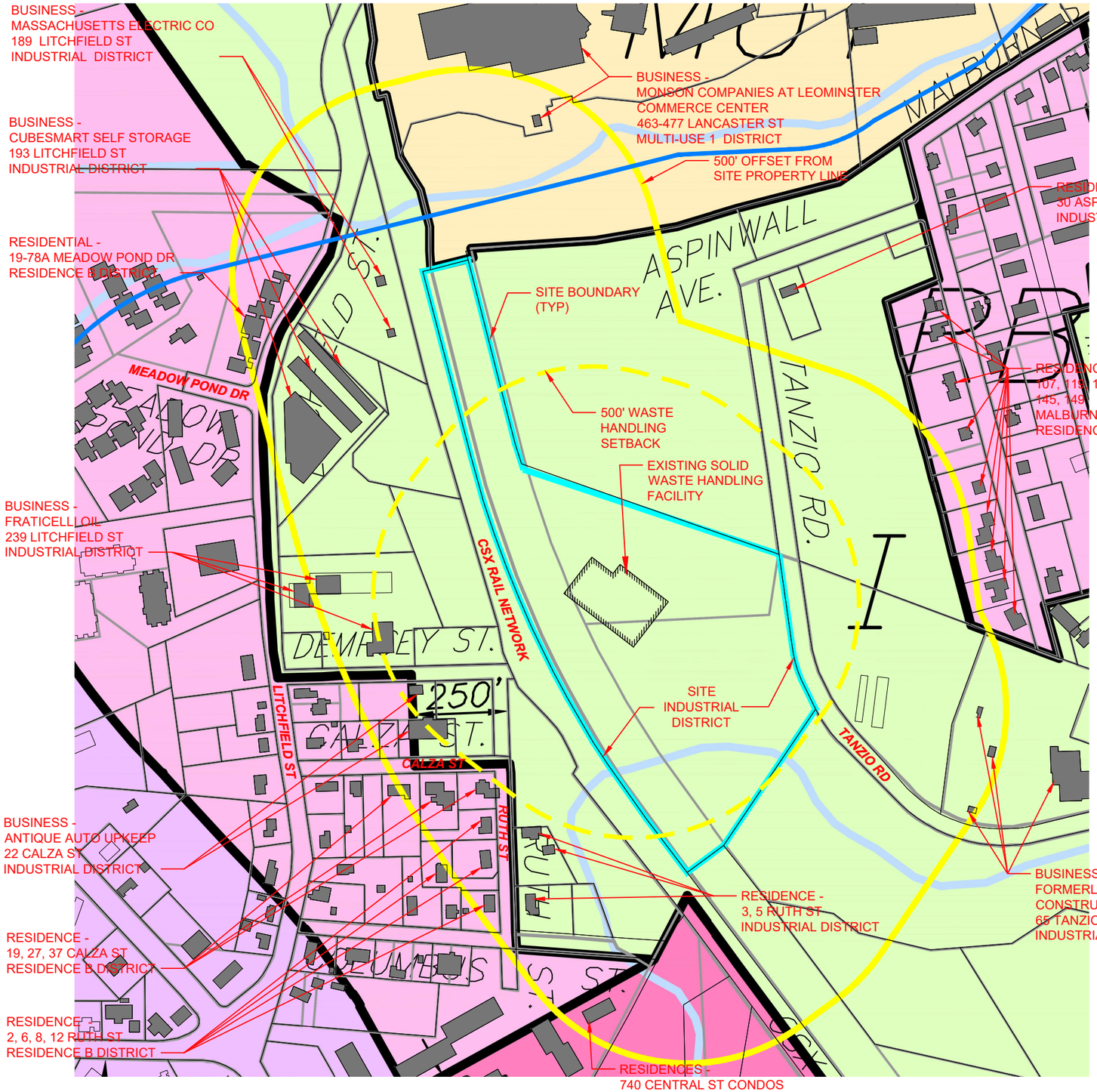
PREPARED FOR:

UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC

DRAWING TITLE:

LAND USE PLAN

CAD TECH:	CHECKED BY:
D. HAZEN	L. BUGAY
ENGINEER:	DATE:
L. BUGAY	5/22/2024
	SCALE: 1" = 200'
	SHEET: EX-3



January 14, 2013

Sheet 1 of 2:

Water Supply Protection and Underlying Districts

LEGEND

- WSP — WATER SUPPLY PROTECTION DISTRICT

UNDERLYING DISTRICTS:

- RR — RURAL RESIDENCE AND AGRICULTURE
- RA — RESIDENCE A
- RB — RESIDENCE B
- RC — RESIDENCE C
- BA — BUSINESS A
- BB — BUSINESS B
- C — COMMERCIAL
- I — INDUSTRIAL
- MU1 — MULTI-USE 1
- MU2 — MULTI-USE 2
- V — VILLAGE
- AREA OF CITY DEPICTED ON SHEET 2
- INTERSTATE HIGHWAY
- STATE NUMBERED ROUTE
- PUBLIC OR PRIVATE STREET OR WAY
- HIGHWAY OR STREET TRAVEL LANE
- PARCEL PROPERTY LINE
- WATER BODY
- WATER COURSE
- EXISTING STRUCTURE
- SITE PROPERTY LINES

NOTE:

THE INFORMATION SHOWN ON THIS PLAN WAS OBTAINED FROM THE CITY OF LEOMINSTER AND MASSMAPPER.

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REVISIONS

NO.	DATE	COMMENTS

PROJECT:

SITE SUITABILITY MODIFICATION

LOCUS:

200 TANZIO ROAD
LEOMINSTER, MA 01453

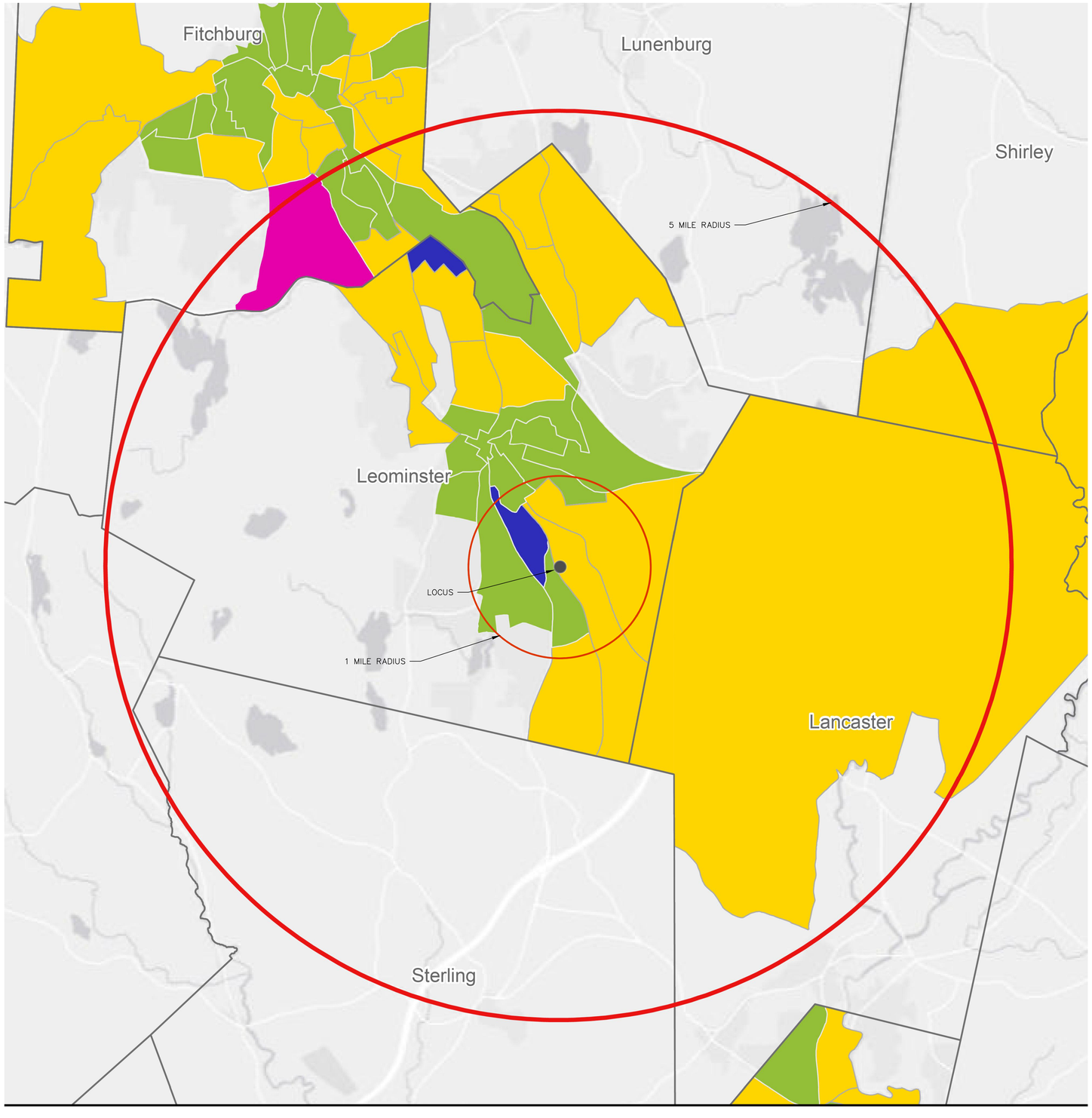
PREPARED FOR:

UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC

DRAWING TITLE:

ZONING & OVERLAY MAP

ENGINEER: L. BUGAY
CAD TECH: D. HAZEN
CHECKED BY: L. BUGAY
SCALE: Not to Scale
DATE: 5/22/2024
SHEET: EX-4



Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income

Income: at least 25% of households have a median household income 65% or less than the state median household income

Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well

Minority and Income

Minority and English isolation

Income and English isolation

Minority, Income and English isolation

NOTES:
1. THESE DATA WERE OBTAINED FROM https://www.mass.gov/info-details/massgis-data-2020-environmental-justice-populations
2. PER GUIDELINES, PROJECT IS SUBJECT TO THE 1-MILE DESIGNATED GEOGRAPHIC AREA (DGA) FOR ENVIRONMENTAL JUSTICE RELATED PROTOCOLS.

LOCUS MAP
N.T.S.

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REVISIONS

NO.	DATE	COMMENT

PURPOSE:

SITE SUITABILITY MODIFICATION

LOCUS:

200 TANZIO ROAD
LEOMINSTER, MA 01453

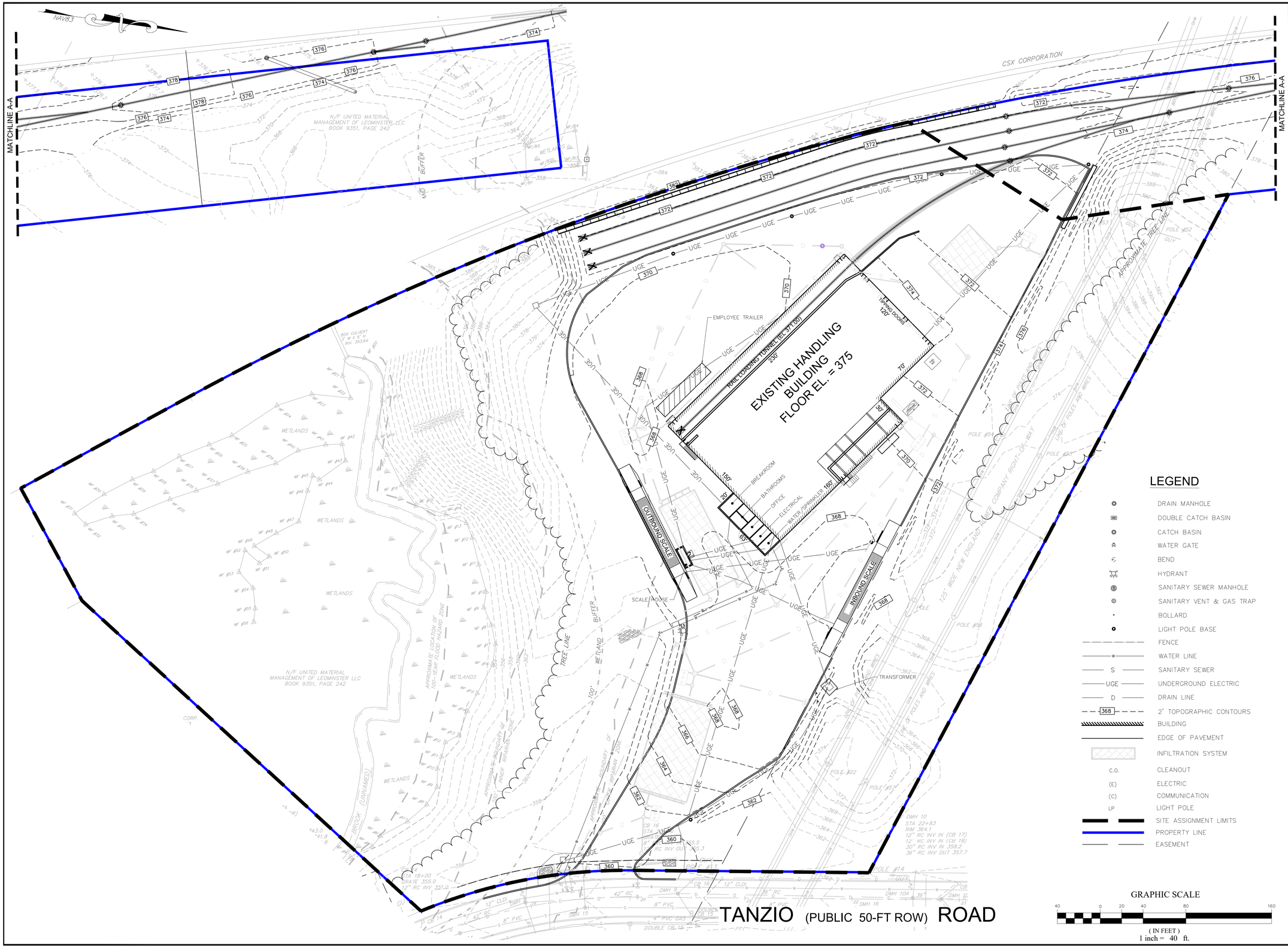
PREPARED FOR:

UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC

DRAWING TITLE:

ENVIRONMENTAL JUSTICE POPULATIONS 2020

CAD TECH:	CHECKED BY:
D. HAZEN	L. BUGAY
ENGINEER:	DATE:
L. BUGAY	5/22/2024
	SCALE: 1"=3000'
	SHEET: EX-5



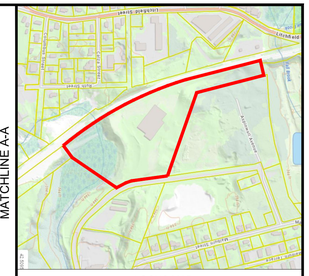
LEGEND

- DRAIN MANHOLE
- DOUBLE CATCH BASIN
- CATCH BASIN
- WATER GATE
- BEND
- HYDRANT
- SANITARY SEWER MANHOLE
- SANITARY VENT & GAS TRAP
- BOLLARD
- LIGHT POLE BASE
- FENCE
- W — WATER LINE
- S — SANITARY SEWER
- UGE — UNDERGROUND ELECTRIC
- D — DRAIN LINE
- 368 — 2' TOPOGRAPHIC CONTOURS
- BUILDING
- EDGE OF PAVEMENT
- INFILTRATION SYSTEM
- C.O. — CLEANOUT
- (E) — ELECTRIC
- (C) — COMMUNICATION
- LP — LIGHT POLE
- SITE ASSIGNMENT LIMITS
- PROPERTY LINE
- EASEMENT

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.



LOCUS MAP
N.T.S.

Green Seal Environmental, LLC
114 State Road, Building B
Sagamore Beach, MA 02562
Tel: (508) 888-6034
Fax: (508) 888-1506
www.gsenv.com

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REVISIONS

NO.	DATE	COMMENT

PURPOSE:

SITE SUITABILITY MODIFICATION

LOCUS:

200 TANZIO ROAD
LEOMINSTER, MA 01453

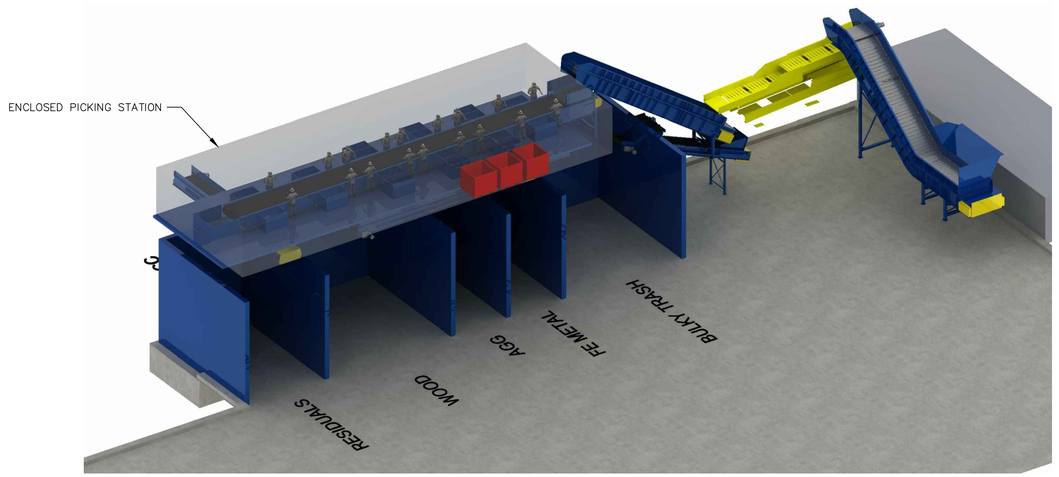
PREPARED FOR:

UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC

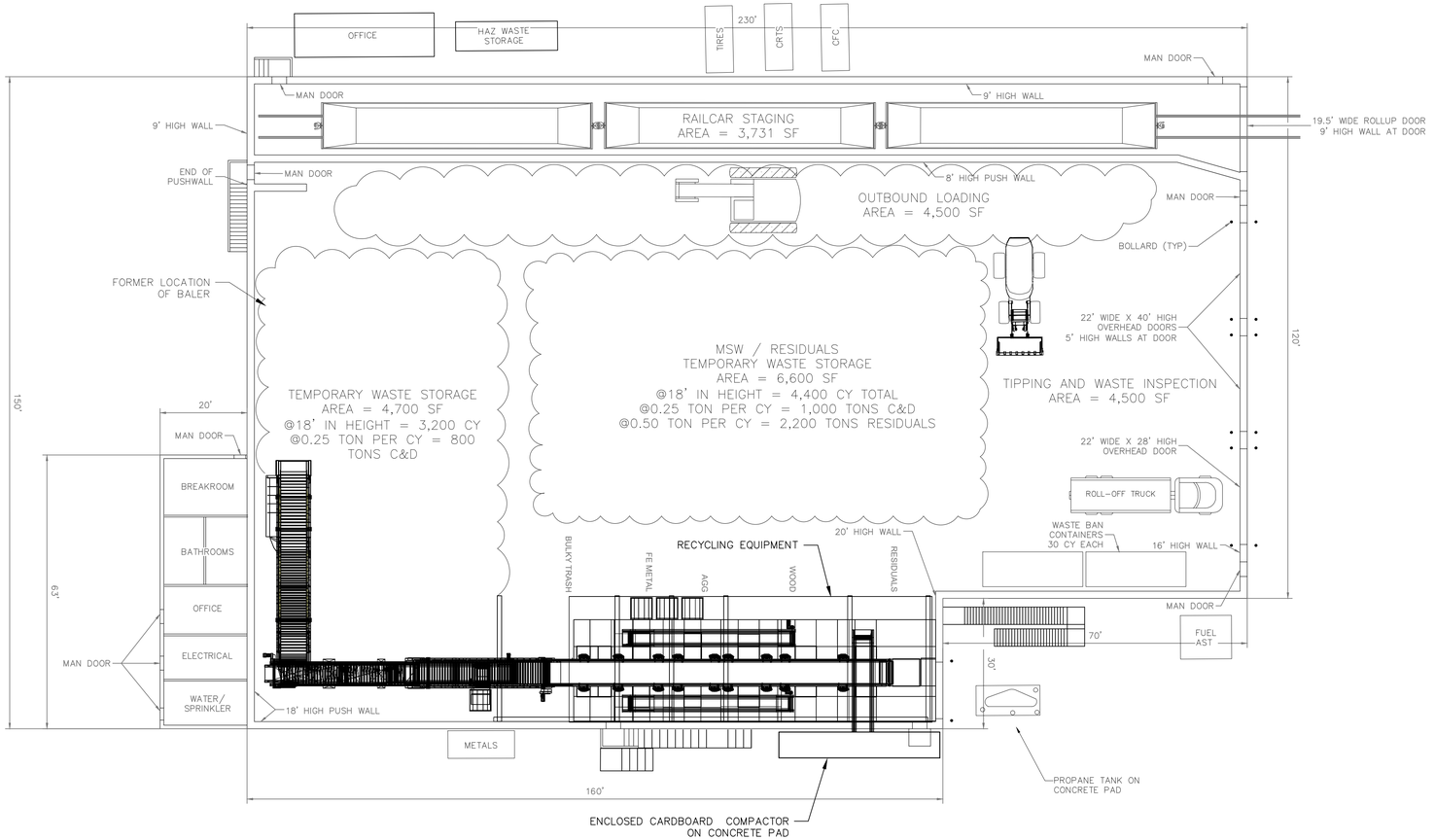
DRAWING TITLE:

EXISTING AND PROPOSED CONDITIONS PLAN - EXTERIOR

CAD TECH:	CHECKED BY:
M. MIXON	L. BUGAY
ENGINEER:	DATE:
L. BUGAY	8/15/2024
	SCALE: 1"=40'
	SHEET: C-1



GENERAL ARRANGEMENT FOR
RECYCLING EQUIPMENT
NOT TO SCALE



NOTE: LOCATION OF WASTE BAN CONTAINERS
AND/OR RECYCLING CONTAINERS MAY VARY

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

LOCUS MAP
N.T.S.

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REVISIONS

NO.	DATE	COMMENT

PURPOSE:

SITE SUITABILITY MODIFICATION

LOCUS:

200 TANZIO ROAD
LEOMINSTER, MA 01453

PREPARED FOR:

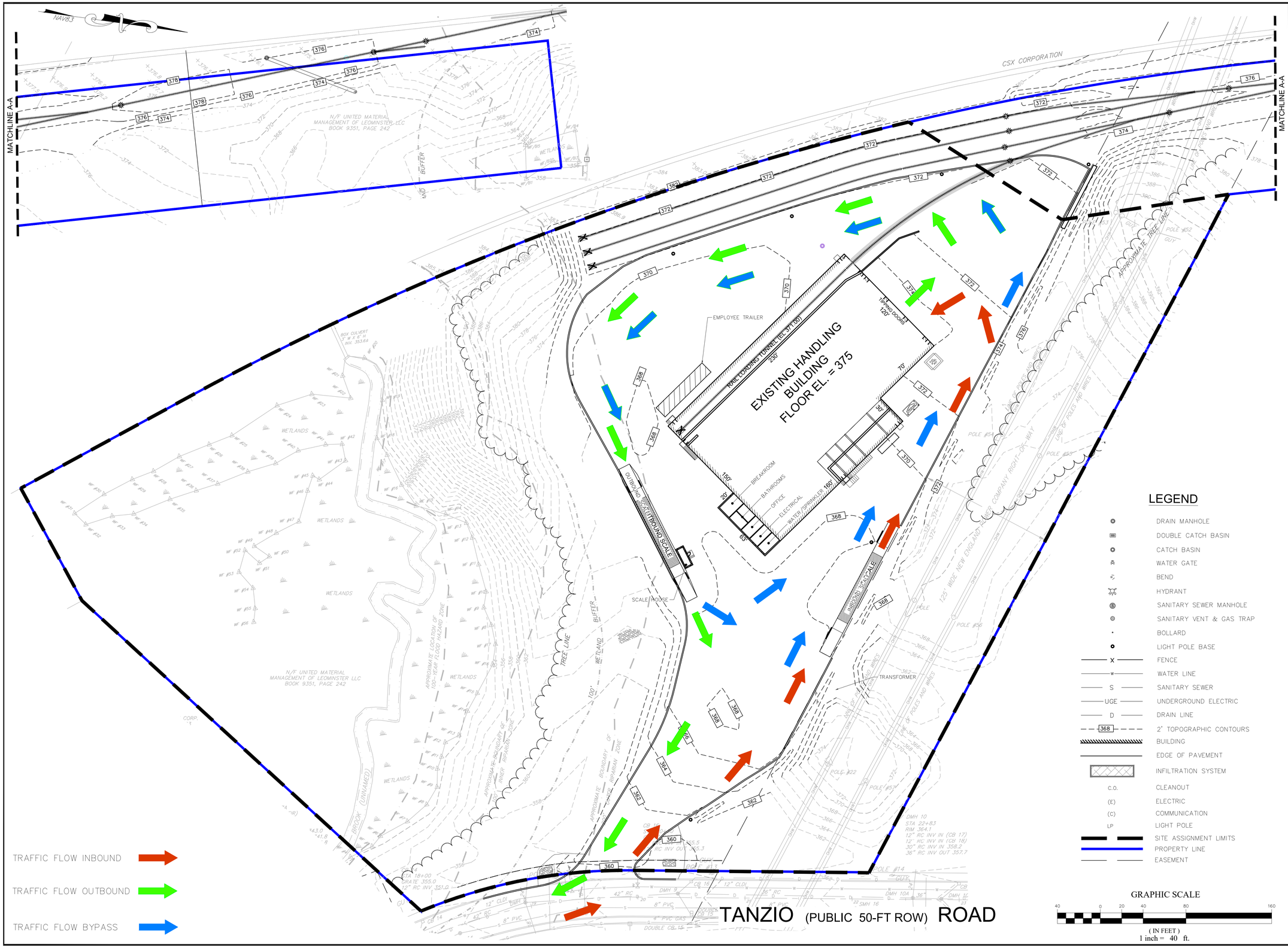
UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC

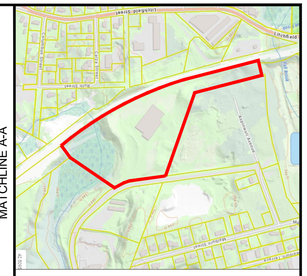
DRAWING TITLE:

EXISTING AND PROPOSED CONDITIONS PLAN - INTERIOR

CAD TECH:	CHECKED BY:
D. HAZEN	L. BUGAY
ENGINEER:	DATE:
L. BUGAY	5/22/2024
	SCALE: AS NOTED
	SHEET: C-2

S:\Solid Waste Department\Clients\United Waste Management (Leominster)\Active\Permitting\Tonnage Increase 2023-2025\Site Suitability\CAD\Figure 6.dwg





LOCUS MAP
N.T.S.

LEGEND

- DRAIN MANHOLE
- DOUBLE CATCH BASIN
- CATCH BASIN
- WATER GATE
- BEND
- HYDRANT
- SANITARY SEWER MANHOLE
- SANITARY VENT & GAS TRAP
- BOLLARD
- LIGHT POLE BASE
- FENCE
- WATER LINE
- SANITARY SEWER
- UNDERGROUND ELECTRIC
- DRAIN LINE
- 2' TOPOGRAPHIC CONTOURS
- BUILDING
- EDGE OF PAVEMENT
- INFILTRATION SYSTEM
- C.O. CLEANOUT
- (E) ELECTRIC
- (C) COMMUNICATION
- LP LIGHT POLE
- SITE ASSIGNMENT LIMITS
- PROPERTY LINE
- EASEMENT

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

Green Seal Environmental, LLC
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Dimensions are as indicated.

Use of this plan constitutes acceptance of terms and conditions set forth in accompanying project documentation.

It is the responsibility of the user to confirm discrepancies with the Engineer prior to use.

REVISIONS

NO.	DATE	COMMENT

PURPOSE:

SITE SUITABILITY MODIFICATION

LOCUS:

200 TANZIO ROAD
LEOMINSTER, MA 01453

PREPARED FOR:

UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC

DRAWING TITLE:

TRAFFIC PATTERN PLAN

CAD TECH:	CHECKED BY:
M. MIXON	L. BUGAY
ENGINEER:	DATE:
L. BUGAY	8/15/2024
	SCALE: 1"=40'
	SHEET: C-3

ATTACHMENT 3

TRAFFIC IMPACT STUDY

Bowman

TRAFFIC IMPACT STUDY
SOLID WASTE TRANSFER STATION – TONNAGE EXPANSION

200 Tanzio Road

Leominster, MA

Prepared by

Bowman Consulting Group, Ltd.

350 Myles Standish Boulevard, Suite 103

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508.823.2245

Prepared for

Green Seal Environmental, LLC

Updated July 2025

Table of Contents

Introduction **1**
Project Description 1
Study Methodology 3
Study Area Intersections 3
Existing Conditions **4**
Roadway Network 4
Signalized Intersections 5
Unsignalized Intersections 5
Area Transit Services 5
Pedestrian & Bicycle Facilities 6
Existing Traffic Volumes 6
Crash Summary 10
Future Conditions **11**
Planned Roadway Improvements 11
Background Traffic Growth 11
Trip Generation 14
Trip Distribution and Assignment 17
2032 Build Traffic Volumes 18
Traffic Operations Analysis **25**
Level-of-Service Criteria 25
Capacity Analysis Results 25
Site Access and Circulation 27
Sight Distance 27
Conclusion **29**

List of Figures

Figure 1: Site Location Map 2
Figure 2: 2025 Existing Weekday Morning Peak Hour Traffic Volumes 8
Figure 3: 2025 Existing Weekday Afternoon Peak Hour Traffic Volumes 9
Figure 4: 2032 No Build Weekday Morning Peak Hour Traffic Volumes 12
Figure 5: 2032 No Build Weekday Afternoon Peak Hour Traffic Volumes 13
Figure 6: Direction of Arrivals and Departures Trip Patterns 19
Figure 7: Weekday Morning Peak Hour New Project Trips 20
Figure 8: Weekday Afternoon Peak Hour New Project Trips 22
Figure 9: 2032 Build Weekday Morning Peak Hour Traffic Volumes 23
Figure 10: 2032 Build Weekday Afternoon Peak Hour Traffic Volumes 24

List of Tables

Table 1: Hourly Traffic Volume Comparison 7
Table 2: Maximum Daily Trip Generation 15
Table 3: Hourly Distribution of Truck Trips 16
Table 4: Projected Hourly Truck Volumes 16
Table 5: Peak Hour Truck Trip Generation 17
Table 6: Signalized Intersection Overall Levels-of-Service 26
Table 7: Unsignalized Intersection Levels-of-Service 26
Table 8: Stopping Sight Distance Evaluation 28

List of Appendices

Appendix A: Traffic Count Data
Appendix B: Seasonal Adjustment Data
Appendix C: Traffic Projection Model
Appendix D: Crash Summary
Appendix E: Ticketing Data
Appendix F: Highway Capacity Manual Methodologies
Appendix G: 2025 Existing Capacity/Level-of-Service Analysis
Appendix H: 2032 No Build Capacity/Level-of-Service Analysis
Appendix I: 2032 Build Capacity/Level-of-Service Analysis
Appendix J: Capacity/Level-of-Service Analysis Summary

Introduction

Bowman has completed a review of the existing traffic operations and potential traffic impacts associated with the proposed tonnage expansion at the existing solid waste facility located at 200 Tanzio Road in Leominster, MA (herein referred to as the "Project"). The purpose of this traffic impact study (TIS) is to evaluate existing and projected traffic operations and safety conditions associated with the Project within the study area. The TIS is based on a review of existing traffic volumes, recent crash data, and the anticipated traffic generating characteristics of the Project. The study examines existing and projected traffic operations (both with and without the Project) at key intersections in the vicinity of the Project site. This study provides a detailed analysis of traffic operations during the weekday morning and weekday afternoon peak hours, when the combination of adjacent roadway volumes and Project trips is expected to be the greatest.

Bowman previously prepared a TIS for this Project dated April 2024. As part of the Massachusetts Environmental Protection Act (MEPA) review process, an Environmental Notification Form (ENF) was submitted for the Project and an ENF certificate was issued dated December 9, 2024. This updated TIS provides information in response to comments received in the ENF Certificate. The capacity analysis results presented in this TIS reflect the 500 tons per day (tpd) increase of construction and demolition debris (C&D) and municipal solid waste (MSW) proposed as part of the facility expansion.

Based on the analysis presented in this study, the Project is not expected to have a significant impact on the safety and operations of the area roadways. The following report documents these findings.

Project Description

The existing site, shown in Figure 1, is occupied by United Material Management of Leominster (UMML), a solid waste facility operated by WIN Waste Innovations. The existing site is approved by the Massachusetts Department of Environmental Protection (MassDEP) and the City of Leominster for a maximum allowable tonnage of 1,000 tons per day (tpd). The site is bounded by Tanzio Road to the east, railroad tracks and commercial properties to the west, and undeveloped wooded land to the north and south. The Project proposes to modify the existing facility's Site Assignment to increase the maximum allowable intake of municipal solid waste (MSW) and construction and demolition (C&D) materials from 1,000 tpd to 1,500 tpd.

The site is currently accessed via one full access driveway on the west side of Tanzio Road. The existing site access is not proposed to change with the increase in tonnage.

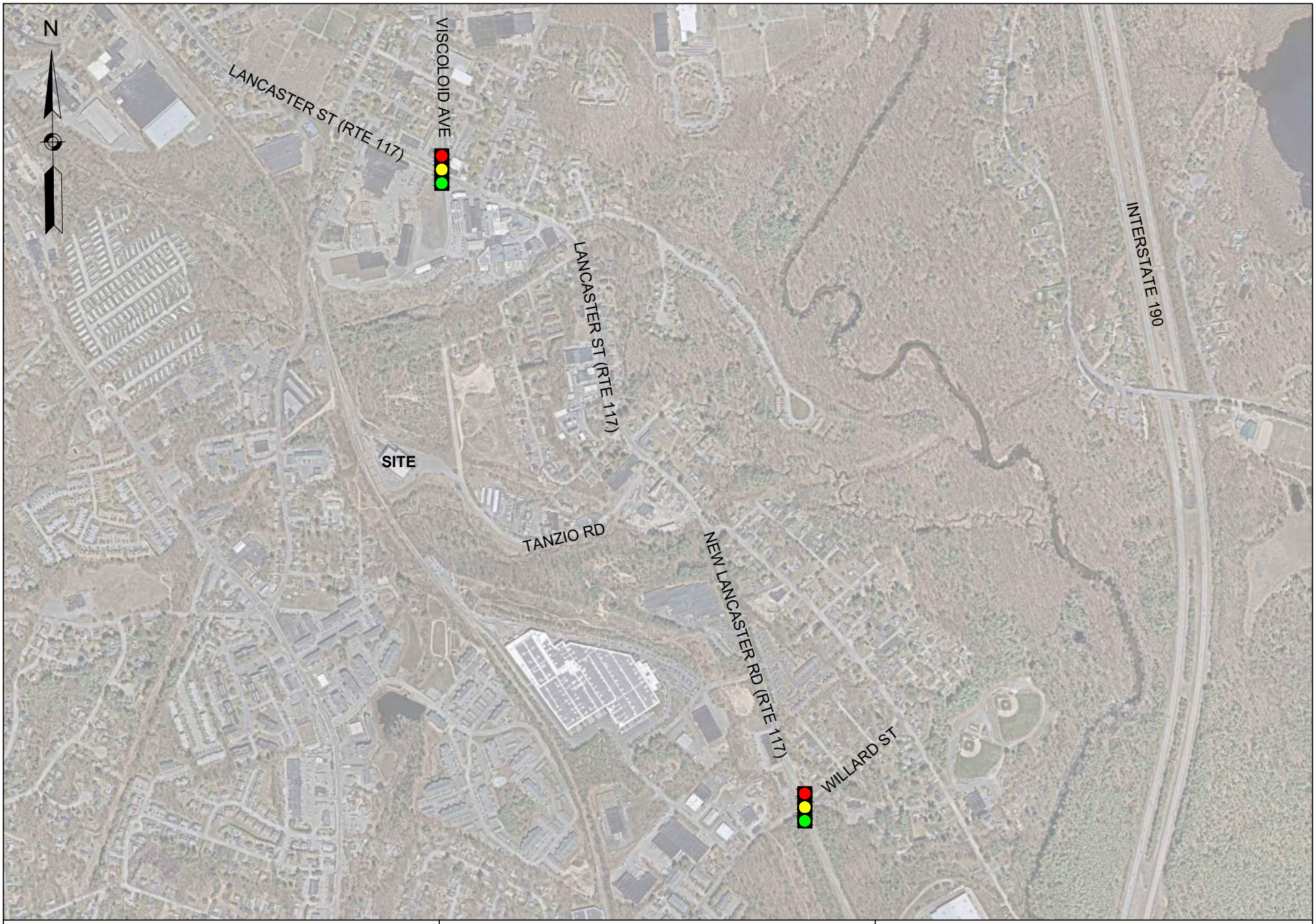


FIGURE 1 STUDY AREA	SOLID WASTE FACILITY TONNAGE EXPANSION LEOMINSTER, MA	Bowman

Study Methodology

This traffic impact study evaluates existing and projected traffic operations within the study area for the weekday morning and weekday afternoon peak hour traffic conditions, when the combination of the adjacent roadway volumes and estimated additional Project trips would be expected to be the greatest.

The study was conducted in three steps. The first step consisted of an inventory of existing traffic conditions within the Project study area. As part of this inventory, manual turning movement counts (TMCs) were conducted at the existing study area intersections to identify the weekday morning and weekday afternoon peak hours. A field visit was also completed to document intersection and roadway geometries. Crash data at the study area intersections was obtained from the Massachusetts Department of Transportation (MassDOT) to determine if there are existing traffic safety deficiencies at the study area intersections.

The second step of the study builds on the data collected in the first step to establish the basis for evaluating potential transportation impacts associated with the projected future conditions. During the second step, the projected traffic demands associated with planned future developments that could influence traffic volumes at the study area intersections were assessed. Consistent with MassDOT traffic study guidelines, 2025 Existing traffic volumes were forecasted to the future year 2032 to establish 2032 No Build (without proposed expansion) conditions and 2032 Build (with proposed expansion) conditions.

The third step of this study determined if measures were necessary to improve existing or future traffic operations and safety, minimize potential traffic impacts, and provide safe and efficient access to the Project site.

Study Area Intersections

The following study area intersections were identified for analysis:

- New Lancaster Road (Route 117) at Willard Street
- Lancaster Street (Route 117) at Tanzio Road
- Lancaster Street (Route 117) at Viscoloid Avenue
- Tanzio Road at Existing Site Driveway (200 Tanzio Road)

The traffic impact study documents existing and future traffic conditions for the study area intersections noted above.

Existing Conditions

The existing conditions assessment included in this study consists of an inventory of intersection and roadway geometries, an inventory of traffic control devices, the collection of peak period traffic volumes, and a review of recent crash data. The study area is located within an Environmental Justice (EJ) population. The existing conditions in the vicinity of the Project site are summarized below.

Roadway Network

New Lancaster Road/Lancaster Street (Route 117)

Lancaster Street/New Lancaster Road (Route 117) (herein referred to as "Route 117") generally runs in a north-south direction in the vicinity of the site, although Route 117 is signed as an east-west route. Route 117 is classified as an urban principal arterial under the City of Leominster jurisdiction. Route 117 provides access to I-190 to the south at Interchange 17 and connects to Route 12 to the north. South of its intersection with Willard Street, Route 117 is primarily a two-way roadway providing two lanes in each direction with turn lanes at major intersections, abutted by retail and commercial land uses. North of its intersection with Willard Street and Route 117 that is primarily a two-way roadway providing one lane in each direction, abutted by commercial and residential properties. Route 117 typically provides 10- to 12-foot-wide travel lanes in both directions. Route 117 has a posted speed limit of 45 mph south of Tanzio Road and 35 mph north of Tanzio Road.

Willard Street

Willard Street generally runs in an east-west direction and provides access to Route 12 to the west and Route 117 to the east. Willard Street is classified as a major collector west of Route 117 and a local roadway east of Route 117 under the City of Leominster jurisdiction. Willard Street is primarily a two-lane, two-way roadway abutted by residential and commercial land uses. Willard Street typically provides travel lanes ranging from 11 to 16 feet in width in both directions. Willard Street has a posted speed limit of 30 mph.

Tanzio Road

Tanzio Road connects to Route 117 to the southeast. Tanzio Road is classified as a local roadway under private jurisdiction. Tanzio Road is primarily abutted by industrial parcels and vacant land. Tanzio Road provides one 12-foot-wide lane and in each direction with 5-foot-wide paved shoulders. There is no posted speed along Tanzio Road; however, a 30-mph advisory speed sign is posted along Tanzio Road approximately 700 feet west of its intersection with Lancaster Street.

Viscoloid Avenue

Viscoloid Avenue generally runs in a north-south direction and provides access to Route 117 to the south. Viscoloid Avenue is classified as an urban minor arterial under the City of Leominster jurisdiction. Viscoloid Avenue is a two-lane, two-way roadway abutted by residential and commercial land uses as well as the Frances Drake Elementary School. Viscoloid Avenue typically provides 11-foot-wide travel lanes and 5-foot-wide bicycle lanes in both directions. Sidewalks, measuring approximately 6-feet-wide are provided on both sides of the roadway. Viscoloid Avenue has a posted speed limit of 30 mph.

Signalized Intersections

The following signalized intersections are included in the study area.

Route 117 at Willard Street

The intersection of Route 117 and Willard Street is a signalized four-legged intersection. The northbound Route 117 approach consists of an exclusive left turn lane and a shared through lane and right turn lane. The southbound Route 117 approach consists of an exclusive left turn lane, a through lane, and a shared through and right turn lane. The eastbound approach from Willard Street consists of an exclusive right turn lane and shared left turn and through lane. The westbound approach of Willard Street consists of a shared left turn, through and right turn lane.

The signal operates with four phases for vehicular traffic: a lead protected phase for northbound and southbound left turns with an eastbound right turn overlap, a phase for northbound and southbound though traffic with left turns prohibited, a protected phase for eastbound traffic, and a protected phase for westbound traffic.

Route 117 at Viscoloid Avenue

The intersection of Route 117 and Viscoloid Avenue is a signalized four-legged intersection. All approaches are striped with one lane, however the eastbound approach which is approximately 20-feet wide, was observed to operate as two lanes with an exclusive left-turn lane and through lane. The southern leg of the signalized intersection provides space for vehicles to make a U-turn movement, however no vehicles were observed utilizing this approach.

The signal operates with four phases for vehicular traffic, including a phase for Route 117 eastbound and westbound traffic, a phase for Viscoloid Avenue southbound traffic, and a phase for northbound traffic. Pedestrians are accommodated by a push-button activated exclusive pedestrian phase with crosswalks spanning the western and northern legs of the intersection.

Unsignalized Intersections

The following unsignalized intersection is included in the study area.

Route 117 at Tanzio Road

Route 117 forms the north and south legs of the three-way unsignalized intersection with Tanzio Road as the west leg. All approaches to the intersection consist of a single lane permitting left or right turn movements. The Tanzio Road eastbound approach operates under STOP control.

Area Transit Services

Public transportation is provided in Leominster by the Montachusett Regional Transit Authority (MART) bus service. MART Bus Route #9 provides service along Route 117 south of the Willard Street intersection and along Willard Street.

Pedestrian & Bicycle Facilities

A 5-foot-wide bituminous concrete sidewalk is provided along the west side of Route 117 south of the Willard Street intersection, and a wheelchair ramp with a detectable warning panel is provided at the southwest corner of the intersection. Approximately 6-foot-wide sidewalks and five-foot-wide dedicated bicycle lanes are provided along Viscoloid Avenue. Approximately 6-foot-wide sidewalks are provided along both sides of Route 117 in the vicinity of Viscoloid Avenue.

Existing Traffic Volumes

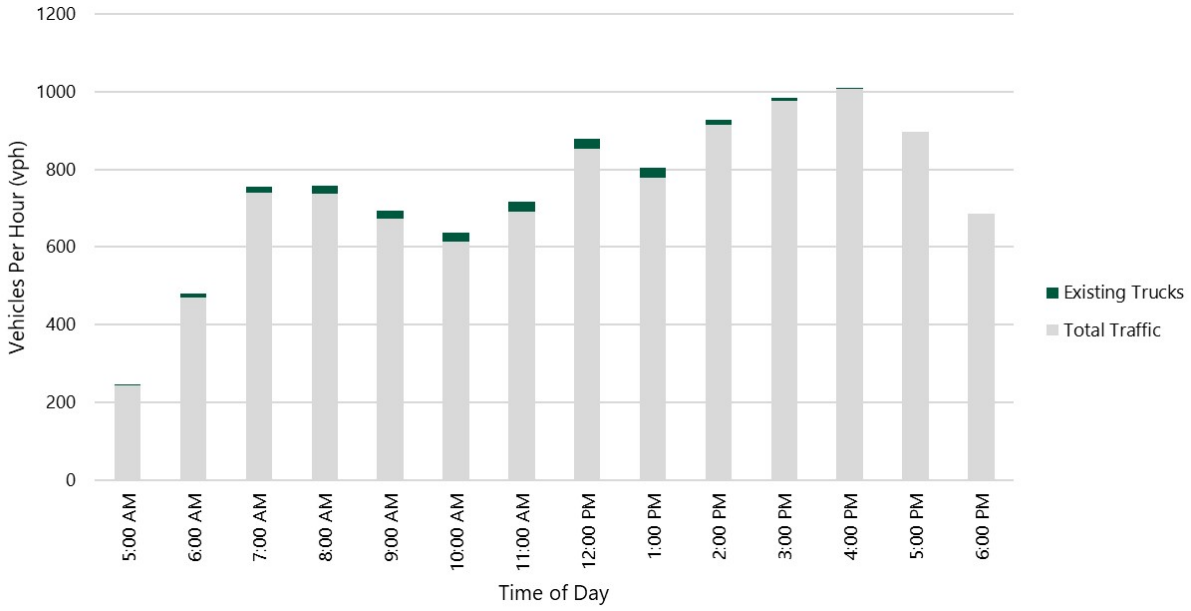
To assess peak hour traffic conditions, turning movement counts (TMCs) were conducted at the study area intersections for a 14-hour period (5:00 AM to 7:00 PM) over a five day period beginning Monday, March 17, 2025 and ending on Friday, March 21, 2025. In addition to the TMCs, 24-hour automatic traffic recorder (ATR) data was collected at the Site Driveway for the same five-day period (Monday through Friday). Ticketing data collected at the existing site was also reviewed to determine the amount of material processed each day for the five-day period, consistent with the TMCs.

The ticketing data and the turning movement count data were reviewed to identify the weekday in which the existing facility processed the most materials and had the highest volume of general-purpose traffic. Based on a review of the data, the existing site processed the most material on Monday, March 17, 2025 and the study area roadways had the highest volume of general-purpose traffic on Wednesday, March 19, 2025. To capture the peak operations of the facility while also analyzing a typical weekday (Tuesday, Wednesday, Thursday) consistent with MassDOT guidelines, the ticketing data for the facility on Monday, March 17, 2025 was used to evaluate the projected site operations, and the traffic volume data collected at the study area intersections on Wednesday, March 19, 2025 was used as a basis for the traffic analysis.

Turning Movement Count Data

The TMC data collected at the study area intersections included classification data for trucks accessing the existing site. In addition to passenger vehicle data, this included classification data for packer trucks, roll-off trucks, and tractor trailers. The results of the Wednesday TMCs are tabulated by 15-minute periods and are provided in Appendix A. The four highest consecutive 15-minute intervals during each of these count periods constitute the peak hours that are the basis of the traffic analysis provided in this report. Based on a review of the peak period traffic data, the weekday morning peak hour of the study area was identified as 7:45 AM to 8:45 AM and the weekday afternoon peak hour was identified as 3:45 PM to 4:45 PM. To understand the volume of vehicles related to the transfer station operations in comparison to the overall traffic on the adjacent roadway network, the TMC data collected at the intersection of Lancaster Street (Route 117) at Tanzio Road on Wednesday, March 19, 2025 was summarized or the 14-hour period to compare the hourly volume of packer trucks, roll-off trucks, and tractor trailers to general purpose traffic. A summary of the comparison is provided in Table 1.

Table 1: Hourly Traffic Volume Comparison
Lancaster Street (Route 117) at Tanzio Road



As shown in Table 1, the small portion of the hourly traffic is attributed to vehicles servicing the transfer station. Over the 14-hour count period, approximately 1.8% of the general traffic at the intersection of Lancaster Street (Route 117) at Tanzio Road was determined to consist of packer trucks, roll-off trucks, and tractor trailers.

Automatic Traffic Recorder Data

ATR data was obtained at the Site Driveway. The ATR counts were collected over from Monday, March 17, 2025 to Friday, March 21, 2025, consistent with the TMCs. The ATR data is provided in Appendix A. The highest day of site generated traffic was used for the analysis to be conservative when calculating the trip generation for the site. The highest day of site generated traffic was Monday, March 17, 2025.

Seasonal Variation

Based on MassDOT's 2023 Weekday Seasonal Factors, March traffic volumes are approximately four percent higher than an average month on principal arterial roadways and approximately six percent higher than during an average month on minor arterials and local roadways. Therefore, to present a conservative analysis, the March volumes were not reduced to average month conditions. The MassDOT weekday seasonal factors are provided in Appendix B.

The resulting 2025 Existing weekday morning and weekday afternoon peak hour traffic volumes are presented in the traffic projection model provided in Appendix C and are presented in Figure 2 and Figure 3, respectively.

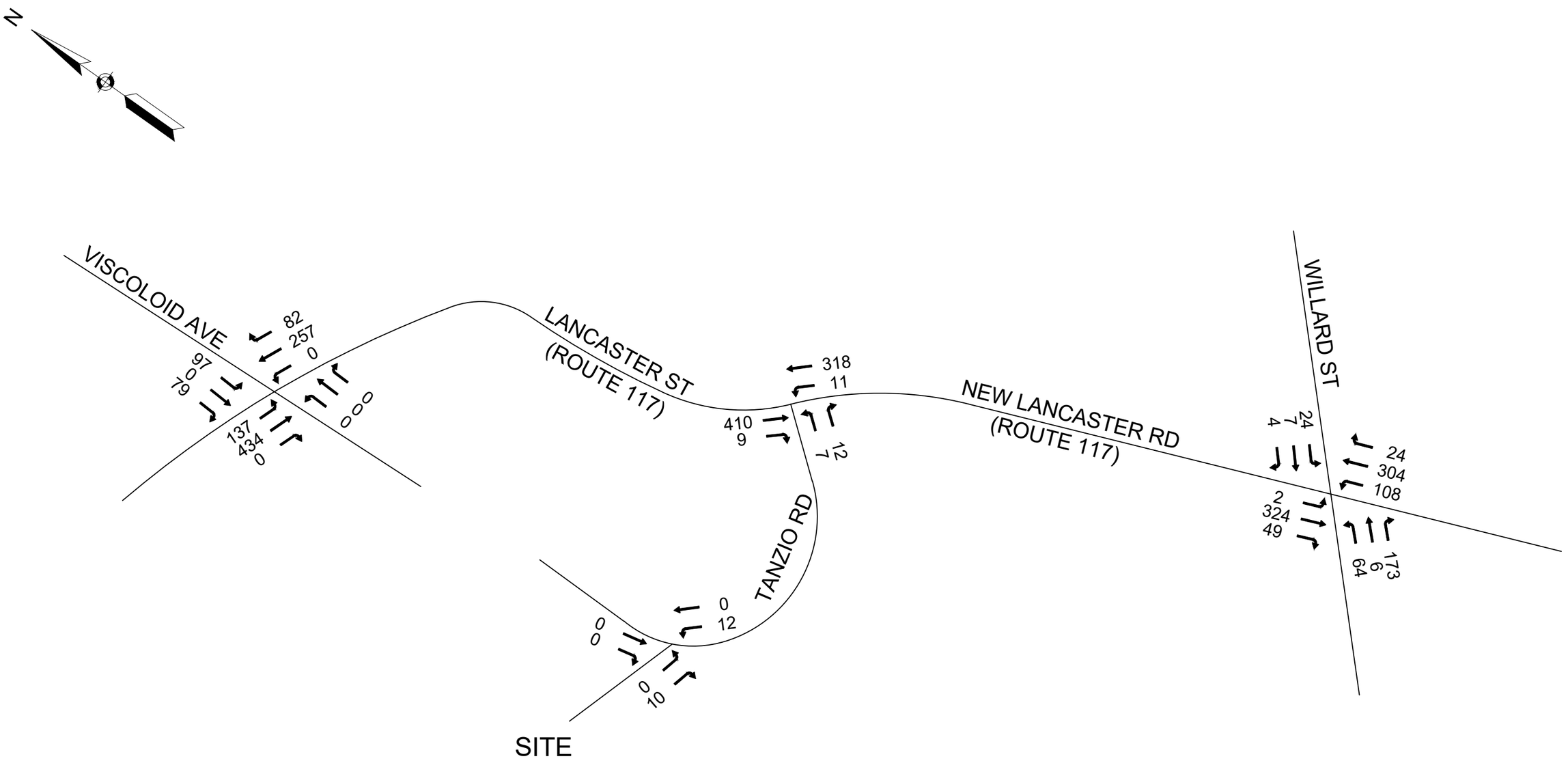


FIGURE 2 2025 EXISTING TRAFFIC VOLUMES WEEKDAY MORNING PEAK HOUR	PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION LEOMINSTER, MA	Bowman

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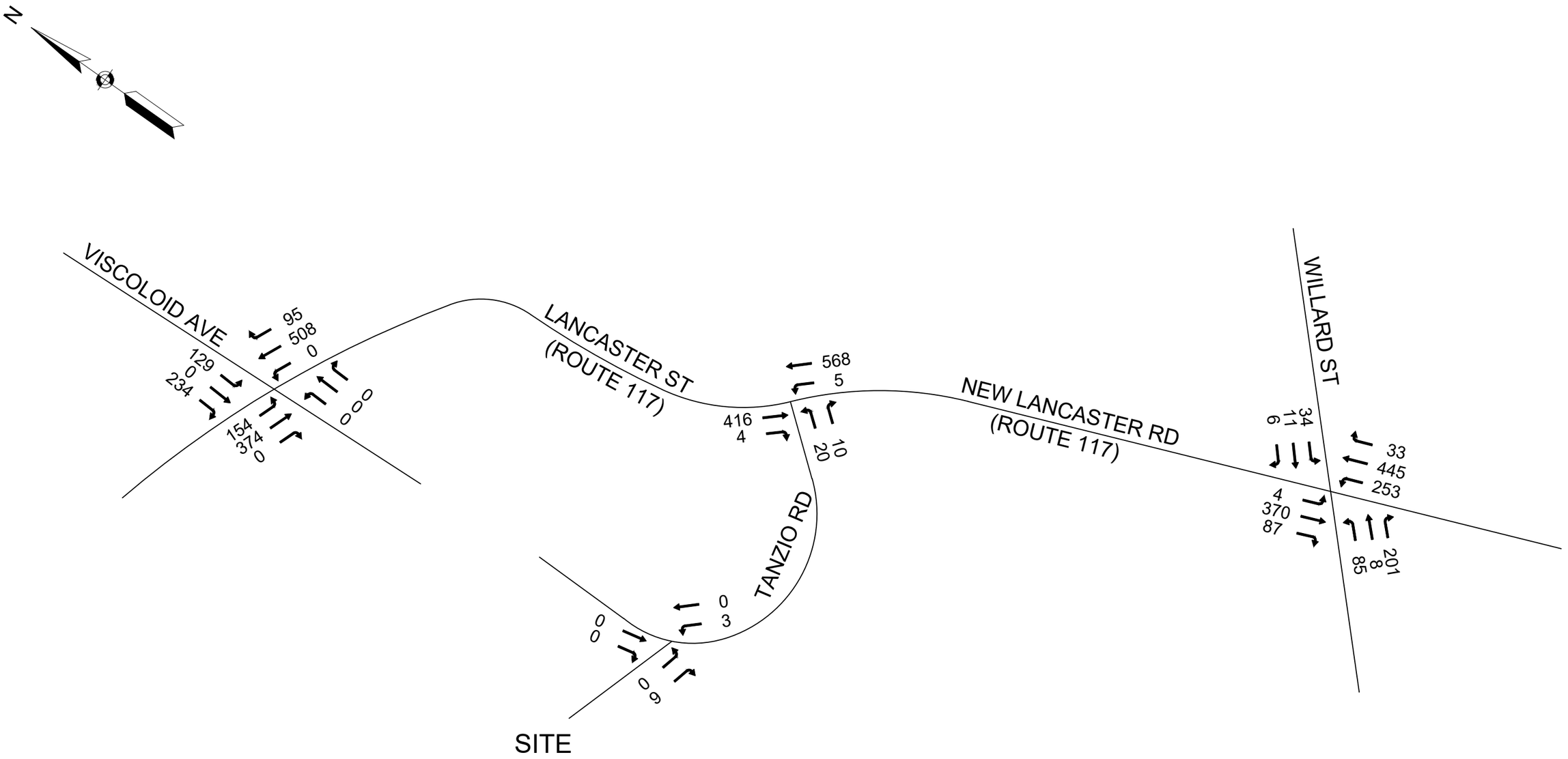

FIGURE 3
2025 EXISTING TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR

PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION
LEOMINSTER, MA

Bowman

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Crash Summary

Crash data at the study area intersections was obtained from MassDOT for the most recent five-year period available. This data includes complete yearly crash summaries for the years 2017 through 2021. A detailed summary of the crash data is provided in Appendix D.

The MassDOT Crash Rate Worksheet calculations were used to determine whether the crash frequencies at the study area intersections were unusually high given the travel demands at each location. The MassDOT Crash Rate Worksheet calculates a crash rate expressed in crashes per million entering vehicles (MEV). The calculated rate is then compared to the average rate for signalized and unsignalized intersections statewide and within MassDOT District 3. For signalized intersections, the statewide average crash rate is 0.78 crashes per MEV and the MassDOT District 3 crash rate is 0.89 crashes per MEV. For unsignalized intersections, the statewide average crash rate is 0.57 crashes per MEV and the MassDOT District 3 average crash rate is 0.61 crashes per MEV.

The signalized intersection of Route 117 at Willard Street had a total of 20 reported crashes over the five-year period analyzed, resulting in a crash rate of 0.78 crashes per MEV, which is the same as the State Average and lower than the District 3 average for a signalized intersection. Of the 20 reported crashes, nine crashes were rear-end collisions, seven crashes were angle collisions, three crashes were sideswipe collisions, and one crash was a single vehicle collision. Five crashes resulted in personal injury, with the remaining 15 crashes resulting in property damage only. No fatal crashes were reported at the intersection.

The unsignalized intersection of Route 117 at Tanzio Road had a total of one reported crash over the five-year period analyzed, resulting in a crash rate of 0.06 crashes per MEV, which is significantly lower than both the State and District averages for an unsignalized intersection. The crash was a single vehicle collision resulted in personal injury.

The signalized intersection of Lancaster Street (Route 117) at Viscoloid Avenue had a total of 15 reported crashes over the five-year period analyzed, resulting in a crash rate of 0.61 crashes per MEV, which is lower than both the State and District averages for a signalized intersection. Of the 15 reported crashes, five crashes were rear-end collisions, four crashes were angle collisions, two crashes were head-on collisions, two crashes were single vehicle collisions, one crash was a sideswipe collision, and one crash was a collision with a pedestrian. Five crashes resulted in personal injury, with the remaining 10 crashes resulting in property damage only. No fatal crashes were reported at the intersection.

No crashes were reported at the unsignalized intersection of Tanzio Road at Site Driveway during the five-year period analyzed.

Future Conditions

To determine future traffic demands on the study area roadways and intersections, the 2025 Existing traffic volumes were projected to the future-year 2032, in accordance with MassDOT guidelines. Traffic volumes on the study area roadways in 2032 are considered to include existing traffic, as well as new traffic resulting from general growth in the study area and from other planned development projects, independent of the Project. The potential background traffic growth, unrelated to the Project, was considered in the development of the 2032 No Build (without Project) peak hour traffic volumes. The estimated traffic increases associated with the Project were then added to the 2032 No Build volumes to reflect the 2032 Build (with Project) traffic conditions. A more detailed description of the development of the 2032 No Build and 2032 Build traffic volume networks is presented below.

Planned Roadway Improvements

Planned roadway improvement projects can impact travel patterns and future traffic operations. The City of Leominster was consulted, and the MassDOT Project Portal was reviewed to identify improvement projects in the vicinity of the site. Based on this review, no projects are planned that would be anticipated to affect future travel patterns in the vicinity of the Project site.

Background Traffic Growth

Traffic growth is generally a function of changes in motor vehicle use and expected land development within the area. To establish the rate at which traffic on the study area roadways can be expected to grow during the seven-year forecast period (2025 to 2032), both historical traffic growth and planned area developments were reviewed.

Historical Traffic Growth

Background traffic growth accounts for changes in traffic volumes associated with general changes in population and other developments that are not known at this time. To be consistent with regional growth rates as provided by the Montachusett Regional Planning Commission (MRPC), a compounded background growth rate of 2.0 percent per year was used for this project to grow the 2025 volumes to future year 2032.

Site-Specific Growth

The City of Leominster Planning Department was contacted to inquire about additional developments in the area. Based on these discussions, there are no additional projects that would be anticipated to impact future traffic volumes on the study area roadways.

2032 No Build Traffic Volumes

The 2025 Existing peak hour traffic volumes were increased by 2.0 percent per year, compounded annually, over the seven-year study horizon to establish the 2032 No Build volumes. The resulting 2032 No Build weekday morning and weekday afternoon peak hour traffic volumes are documented in the traffic projection model presented in Appendix C and illustrated in Figure 4 and Figure 5, respectively.

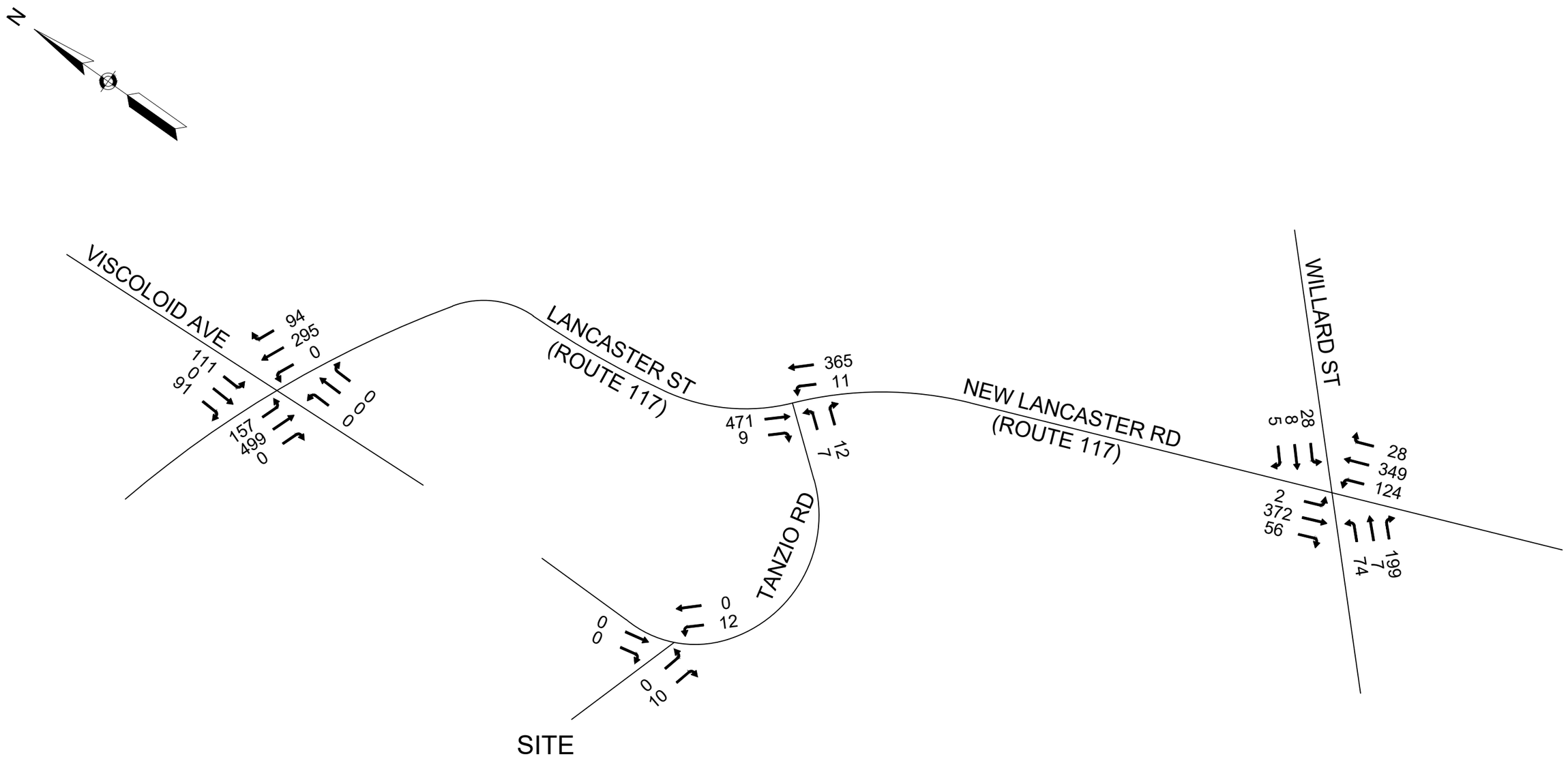

FIGURE 4 2032 NO BUILD TRAFFIC VOLUMES WEEKDAY MORNING PEAK HOUR	PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION LEOMINSTER, MA	Bowman

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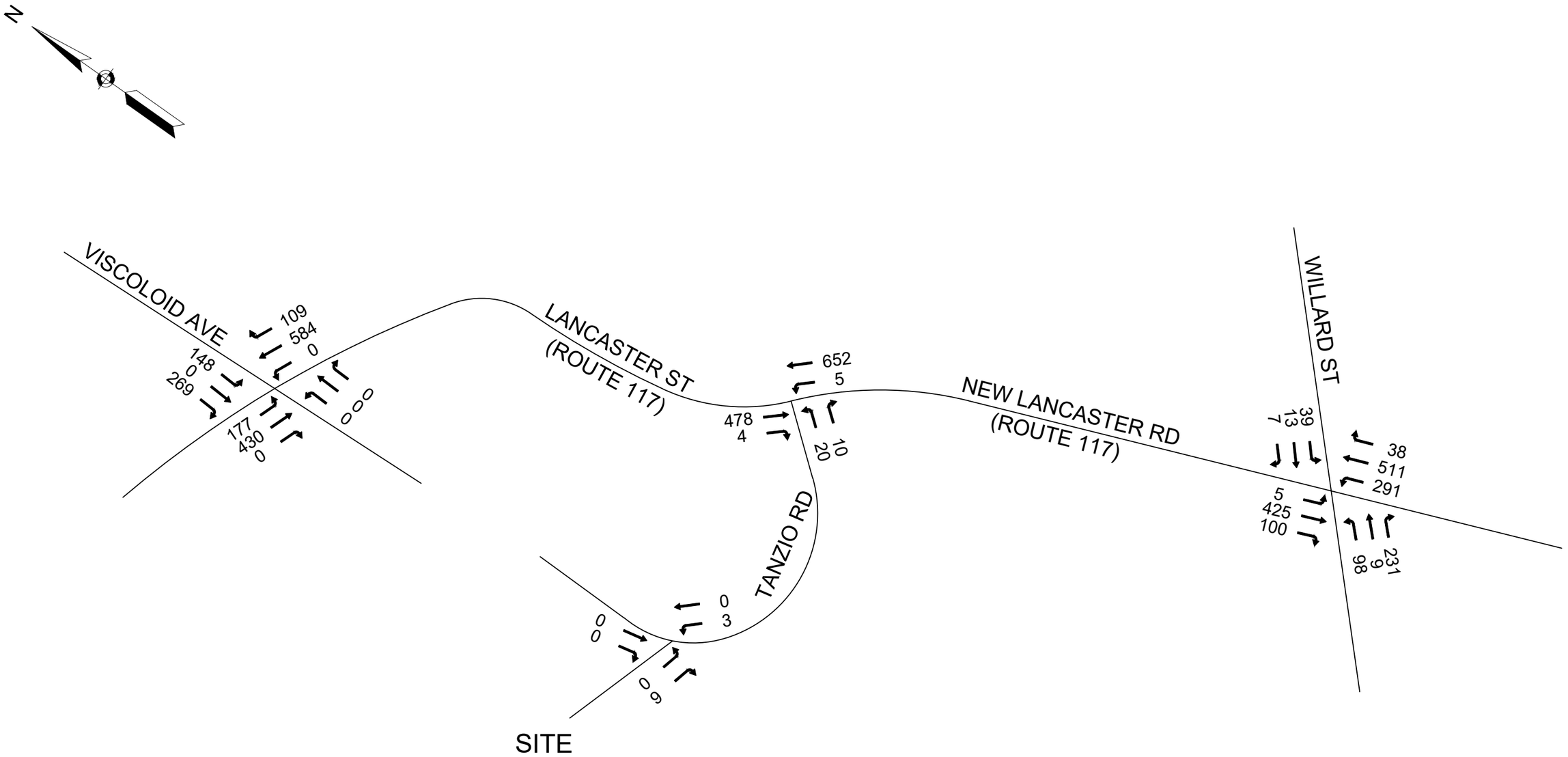

FIGURE 5
2032 NO BUILD TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR

PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION
LEOMINSTER, MA

Bowman

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Trip Generation

Site Operations

The facilities is currently permitted to operate between 6:00 AM and 7:00 PM on weekdays and between 7:00 AM and 3:00 PM on Saturdays. Posted delivery hours are from 6:30 AM to 3:30 PM on weekdays and 7:00 AM to 11:30 AM on Saturdays. As part of the proposed facility expansion, the site would accept a maximum of 1,500 tpd of solid waste (MSW and C&D) per day. The number of employees at the facility are not anticipated to be impacted as a result of the proposed expansion. To estimate the trip generation for the additional trucks associated with the expansion, the proponent provided truck ticketing data collected at the existing facility for Monday, March 17, 2025, consistent with the highest day of site generated traffic. The ticketing data includes total tons per day of inbound and outbound material processed, and total number of trucks transporting each type of material. The truck ticketing data for March 17, 2025 is provided in Appendix E.

The facility is served by rail, with a majority of outbound materials from the existing facility being transported from the site via rail, with the exception of recyclables. The use of rail for outbound materials is expected to continue under the proposed conditions, however, to present a conservative analysis, the trip generation and level-of-service analysis presented in this study assume all outbound materials associated with the proposed expansion would be transported from the site by truck.

In addition, when outbound materials are transported by truck, it is standard industry practice to use backhauls, where a truck delivering inbound materials reloads and removes material from the site rather than departing empty. To present a conservative analysis coupled with the conservative variable presented above, the estimated trip generation does not include the use of backhauls; i.e., all trucks transporting inbound materials were assumed to leave the site empty, and all trucks transporting outbound material were assumed to arrive at the site empty.

Based on the on assessment of truck ticketing data provided by the facility, inbound material is currently transported to the site at an average rate of 9.4 tons per load via packer trucks and roll-off trucks. The ticketing data for Monday, March 17, 2025 indicates that there was one tractor trailer carrying approximately 14 tons of outbound materials, which is reflective of the current use of rail to transport outbound materials. A typical tractor trailer has a capacity of 28 tons. To present a conservative analysis, the trip generation estimates associated with the proposed expansion do not take credit for the use of rail to transport outbound materials. The outbound materials associated with the expansion were considered to be transported by tractor trailer for the purpose of the analysis.

Daily Trip Generation

Under existing permit which allows for 1,000 tpd to be accepted at the facility, the site would generate a maximum of 214 one-way truck trips per day (107 entering, 107 exiting) transporting inbound materials to the site. As noted above, a majority of outbound materials are currently transported from the site by rail and do not generate additional trips on the roadway network (besides recyclables). If the rail was not in operation and assuming no backhauls, the existing facility would generate a maximum of 86 one-way truck trips per day (43 entering, 43 exiting) transporting outbound material off-site.

Under the proposed expansion to 1,500 tpd and based on the assumption that inbound material arrives at the site with an average load of 9.4 tons per truck, the facility would generate a maximum of 320 one-way truck trips (160 entering, 160 exiting) transporting inbound material. In addition, assuming no rail service or backhauls would be used as a means to reduce traffic related impacts and the assumption that outbound material would be transported from the site in tractor trailers, the site would generate a maximum of 130 additional one-way truck trips (65 entering, 65 exiting) transporting outbound material off-site. In total, the expanded facility could generate a maximum of 450 daily one-way truck trips, which would be enforced by a condition to the Site Assignment. Table 2 below summarizes the maximum daily truck trip generation and net change from existing conditions for the facility under existing and proposed conditions assuming no rail service and no use of backhauls.

Table 2: Maximum Daily Trip Generation

	Existing Operations (1,000 tpd)			Expanded Operations (1,500 tpd)			Net Change		
Description	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Inbound Material	107	107	214	160	160	320	53	53	106
Outbound Material	1	1	2	65	65	130	64	64	128
Total Trips	**108**	**108**	**216**	**225**	**225**	**450**	**117**	**117**	**234**

As shown in Table 2, the proposed facility expansion could result in a net increase of up to 234 one-way truck trips per day on the study area roadway network considering no rail service and no use of backhauls while noting that waste loads such as MSW and C&D if they were to be transported off-site by tractor trailer (exclusive of recyclables) generally average 28 tons per load, which is 100% more than what was applied in this conservative analysis.

Hourly Distribution

Truck ticking data and the ATR data collected at the site driveway was reviewed to determine the hourly distribution of trucks accessing the site. Based on the ATR data, over the five-day period (Monday through Friday) a maximum of seven trucks arrived between 6:00 AM and 6:30 AM, prior to the site opening. The site begins operations at 6:00 AM, therefore the gate located at the driveway at this time is open and employees are on site. These trucks would be able to queue internal to the site prior to the site starting operations at 6:30 PM and there would be no queueing onto Tanzio Road.

The hourly distribution of new truck trips at the site was determined using the existing arrival patterns based on truck ticketing data for March 17, 2025 obtained from the facility, consistent with the highest day of site generated traffic. The resulting hourly distribution is shown in Table 3.

Table 3: Hourly Distribution of Truck Trips

Time	Existing Hourly Distribution
6:00-7:00 AM	6%
7:00-8:00 AM	9%
8:00-9:00 AM	14%
9:00-10:00 AM	12%
10:00-11:00 AM	14%
11:00 AM-12:00 PM	11%
12:00-1:00 PM	12%
1:00-2:00 PM	9%
2:00-3:00 PM	7%
3:00-4:00 PM	5%
4:00-5:00 PM	1%
5:00-6:00 PM	0%
6:00-7:00 PM	0%
7:00-8:00 PM	0%
Total	**100%**

Table 4 summarizes the hourly distribution of truck round trips with no rail service and no use of backhauls (worst-case scenario).

Table 4: Projected Hourly Truck Volumes

Time	Hourly Distribution	Existing Operations (1,000 tpd)		Proposed Expansion (1,500 tpd)		Net Change	
		Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
6:00-7:00 AM	6%	12	0	18	8	6	8
7:00-8:00 AM	9%	20	0	30	12	10	12
8:00-9:00 AM	14%	30	0	44	18	14	18
9:00-10:00 AM	12%	26	0	38	16	12	16
10:00-11:00 AM	14%	30	2	44	18	14	16
11:00 AM-12:00 PM	11%	24	0	36	14	12	14
12:00-1:00 PM	12%	26	0	38	16	12	16
1:00-2:00 PM	9%	20	0	30	12	10	12
2:00-3:00 PM	7%	14	0	22	8	8	8
3:00-4:00 PM	5%	10	0	16	6	6	6
4:00-5:00 PM	1%	2	0	4	2	2	2
5:00-6:00 PM	0%	0	0	0	0	0	0
6:00-7:00 PM	0%	0	0	0	0	0	0
7:00-8:00 PM	0%	0	0	0	0	0	0
Total Trips	**100%**	**214**	**2**	**320**	**130**	**106**	**128**

As previously noted, the weekday morning peak hour along the street network occurs from 7:45 to 8:45 AM and the weekday afternoon peak hour along the street network occurs from 3:45 to 4:45 PM. Based on the truck ticketing data the weekday morning peak hour of the site occurs from 8:00 AM to 9:00 AM and the weekday afternoon peak hour occurs from 3:00 PM to 4:00 PM. To provide a conservative analysis, the weekday morning and weekday afternoon peak hours of the site were applied to the peak hours of adjacent street traffic. As an additional conservative measure, the trip generation considers that all trucks transporting inbound material would depart from the site empty, and all trucks transporting outbound material would arrive at the site empty, with no reduction for the use of backhauls and no rail service. The resulting peak hour trip generation estimates for the Project are summarized in Table 5 below.

Table 5: Peak Hour Truck Trip Generation

	Weekday Morning Peak Hour Trips			Weekday Afternoon Peak Hour Trips		
Description	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Existing Operations (1,000 tpd)	**15**	**15**	**30**	**5**	**5**	**10**
Inbound	*15*	*15*	*30*	*5*	*5*	*10*
Outbound	*0*	*0*	*0*	*0*	*0*	*0*
Proposed Expansion (1,500 tpd)	**31**	**31**	**62**	**11**	**11**	**22**
Inbound	*22*	*22*	*44*	*8*	*8*	*16*
Outbound	*9*	*9*	*18*	*3*	*3*	*6*
Net New Trips	**16**	**16**	**32**	**6**	**6**	**12**
Inbound	*7*	*7*	*14*	*3*	*3*	*6*
Outbound	*9*	*9*	*18*	*3*	*3*	*6*

As shown in Table 5, using the conservative trip generation methodology described in previous sections of this report, the proposed facility could accept an additional 32 truck trips (16 entering and 16 exiting) during the weekday morning peak hour and an additional 12 truck trips (6 entering and 6 exiting) during the weekday afternoon peak hour.

Trip Distribution and Assignment

The traffic estimated to be generated by the Project was distributed onto the study area roadways and intersections based on a review of the existing and anticipated travel patterns of the site related trucks. Packer trucks and roll-off trucks which collect materials from local routes are anticipated to have distribution patterns that differ from tractor trailers which typically carry outbound materials and follow regional routes. As part of the expansion, packer trucks and roll-off trucks traveling from a wider radius are also anticipated to follow regional route patterns. The classification data for packer trucks, roll-off trucks, and tractor trailer trucks were each reviewed separately to determine the existing travel routes and the patterns were adjusted based on the anticipated routes associated with the proposed expansion. Based on the classification data, there are packer trucks, roll-off trucks, and tractor trailers traveling on Route 117 as part of general traffic that are not turning onto Tanzio Road that may be servicing local businesses or residents or other nearby transfer stations. It is considered that these trucks are associated with other nearby transfer station facilities, independent of the Project site. The resulting arrival and departure patterns for

inbound trucks (packers/roll-offs) and outbound trucks (tractor trailers) are presented in Figure 6 and Figure 7, respectively and are documented in the traffic projection model located in Appendix C.

The Project-related expansion traffic was assigned to the surrounding roadway network based on the Project trip distribution patterns presented in Figure 6 and Figure 7. The new Project-related trips assume no use of rail service or backhauls, representing a conservative analysis. The resulting distributed new Project trips are shown in Figure 8 and Figure 9 for the weekday morning and weekday afternoon peak hours, respectively.

2032 Build Traffic Volumes

To establish the 2032 Build peak hour traffic volumes, the distributed Project trips shown in Figure 8 and Figure 9 were added to the 2032 No Build peak hour traffic volumes to establish the 2032 Build peak hour traffic volumes. The resulting 2032 Build weekday morning and weekday afternoon peak hour traffic volumes are documented in the traffic projection model presented in Appendix C and presented in Figure 10 and Figure 11, respectively.

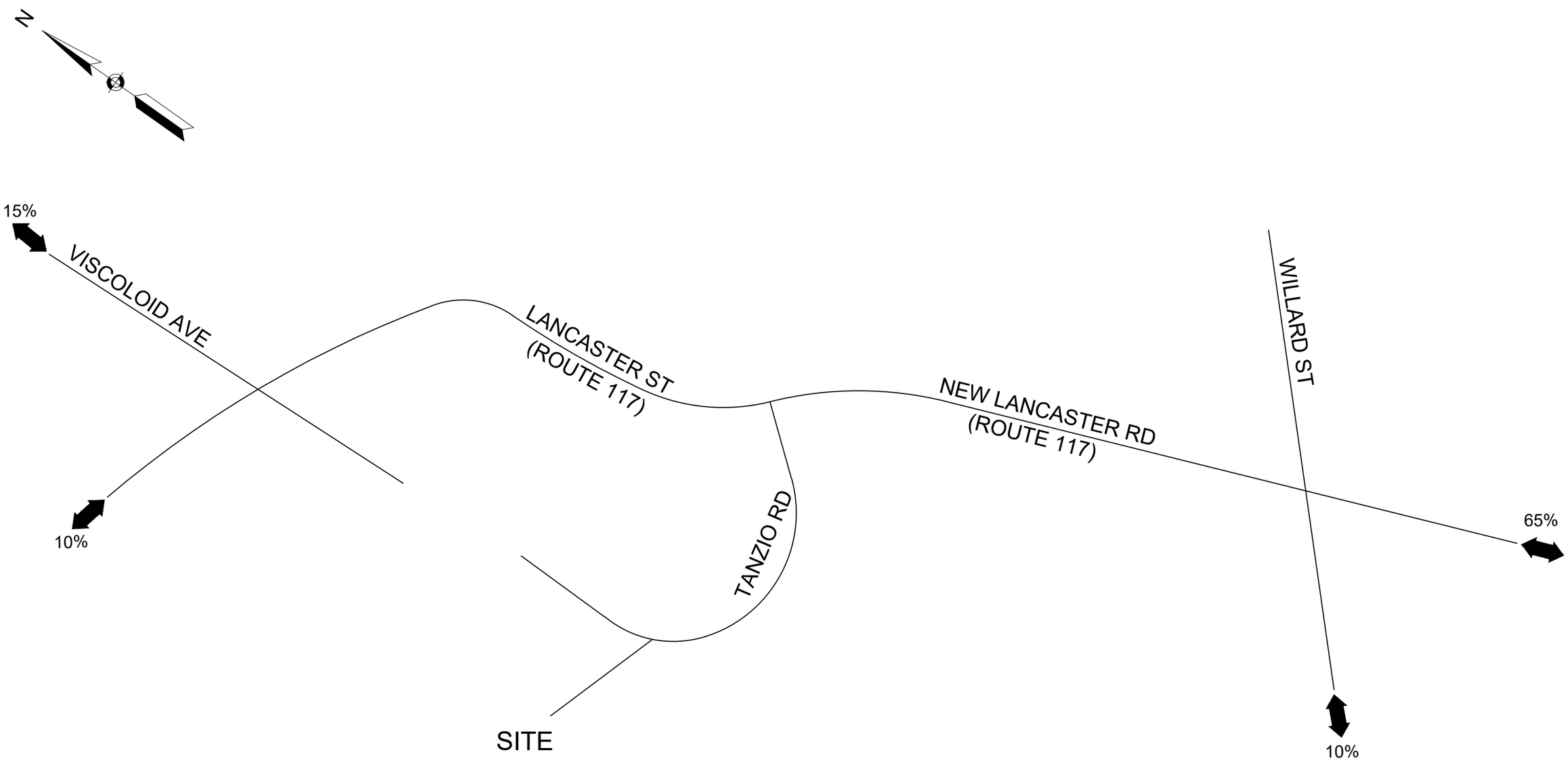

FIGURE 6
DIRECTION OF ARRIVALS AND DEPARTURES
INBOUND TRUCKS (PACKER/ROLL-OFF)

PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION
LEOMINSTER, MA

Bowman

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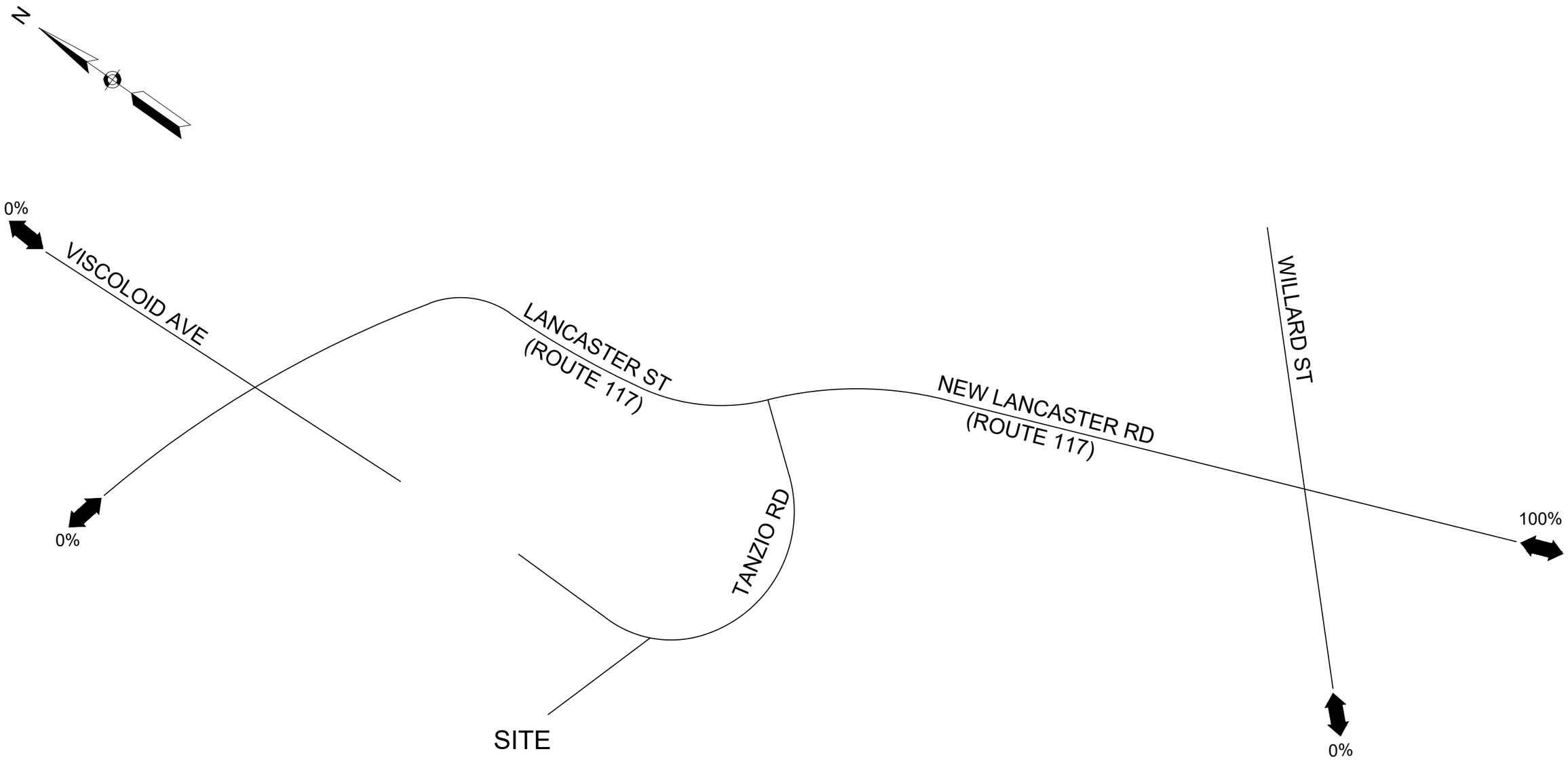

FIGURE 7
DIRECTION OF ARRIVALS AND DEPARTURES
OUTBOUND TRUCKS (TRACTOR TRAILER)

PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION
LEOMINSTER, MA

Bowman

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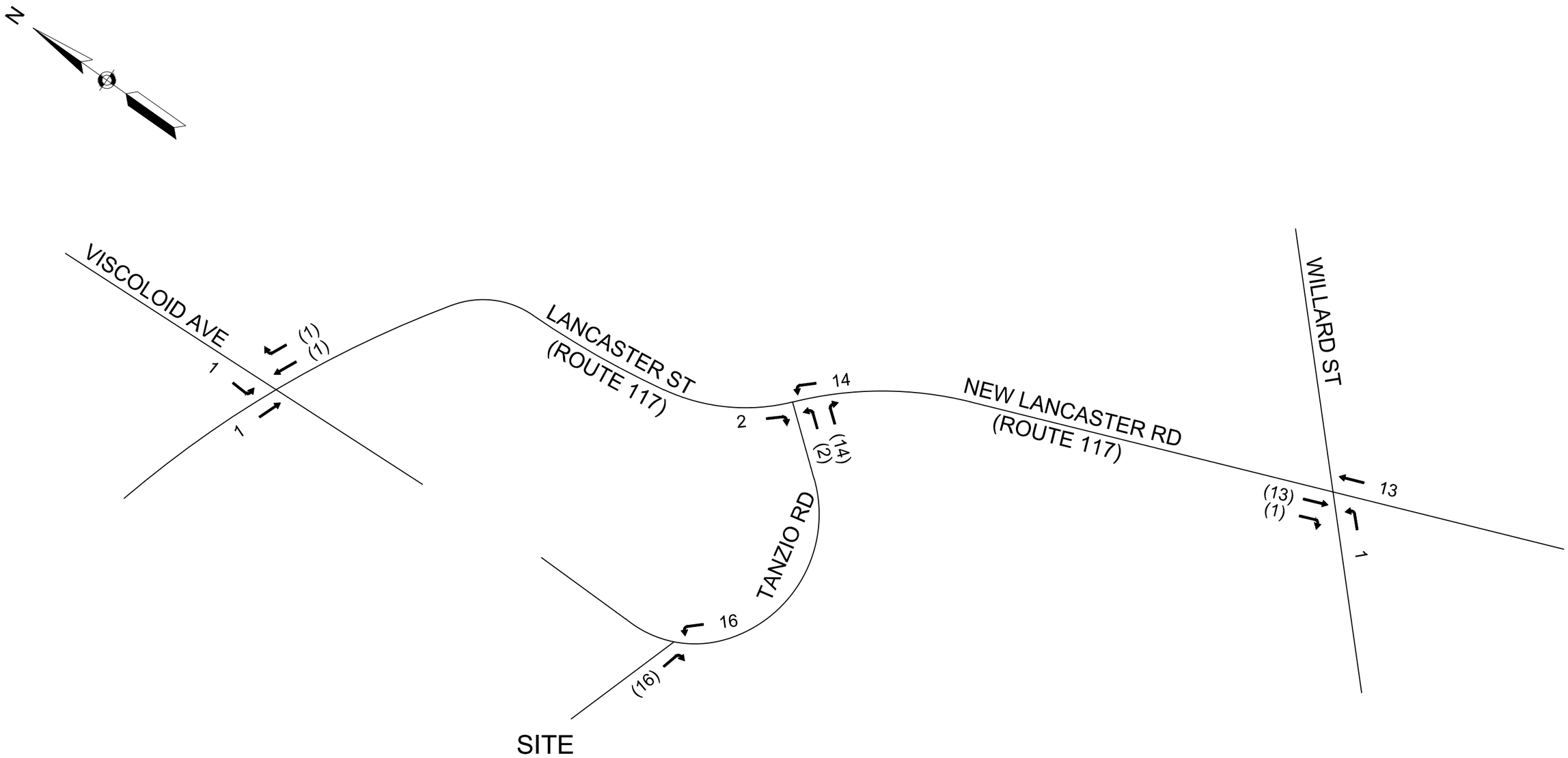

XX = ENTERING
(XX) = EXITING

NOTE: OUTBOUND TRIPS REFLECTIVE OF ALL MATERIAL TRANSPORTED BY TRACTOR TRAILER, AND NOT CONSIDERING USE OF RAIL.

FIGURE 8 NET NEW PROJECT TRIPS WEEKDAY MORNING PEAK HOUR	PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION LEOMINSTER, MA	Bowman

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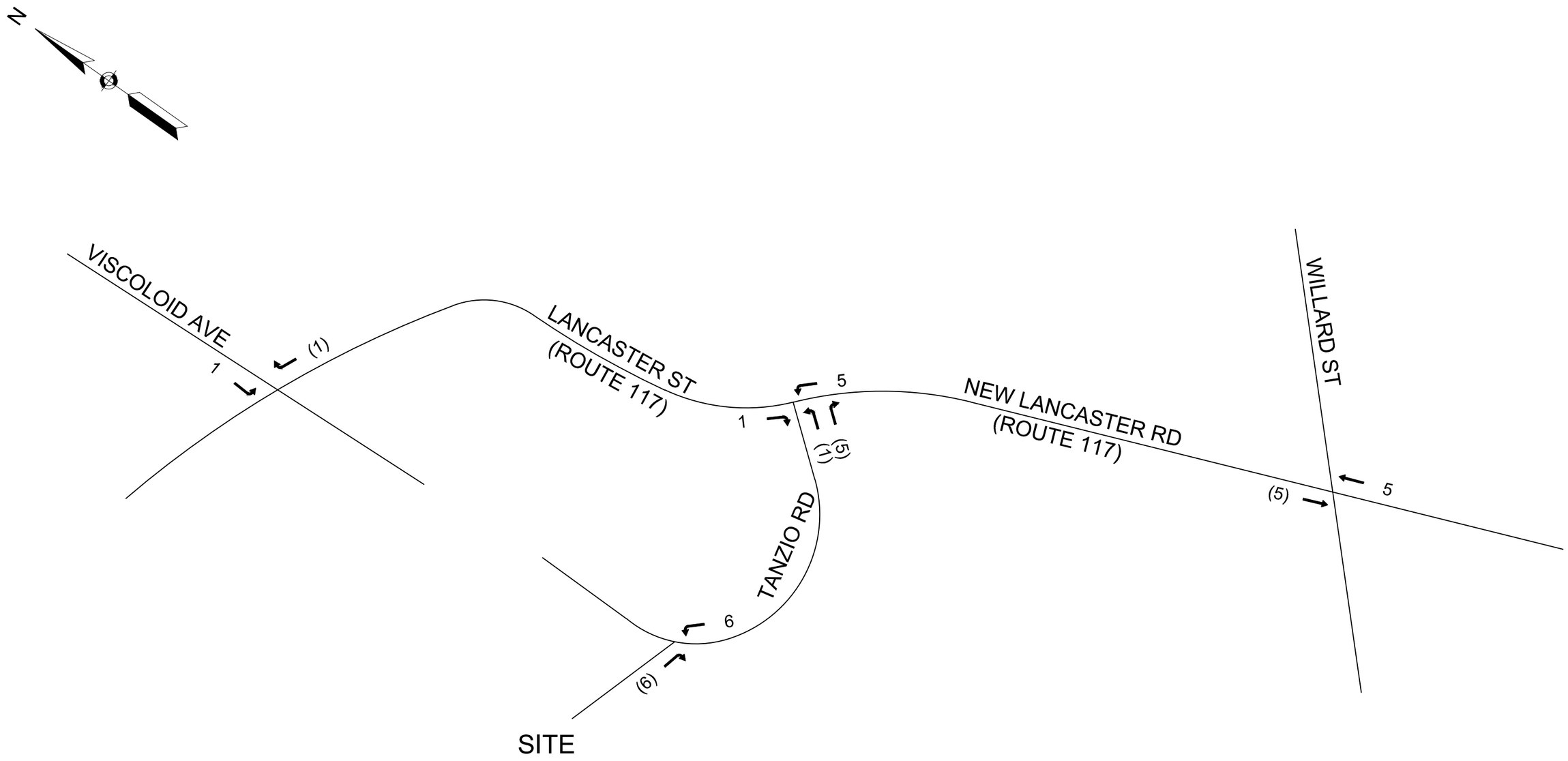

XX = ENTERING
(XX) = EXITING

NOTE: OUTBOUND TRIPS REFLECTIVE OF ALL MATERIAL TRANSPORTED BY TRACTOR TRAILER, AND NOT CONSIDERING USE OF RAIL.

FIGURE 9 NET NEW PROJECT TRIPS WEEKDAY AFTERNOON PEAK HOUR	PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION LEOMINSTER, MA	Bowman

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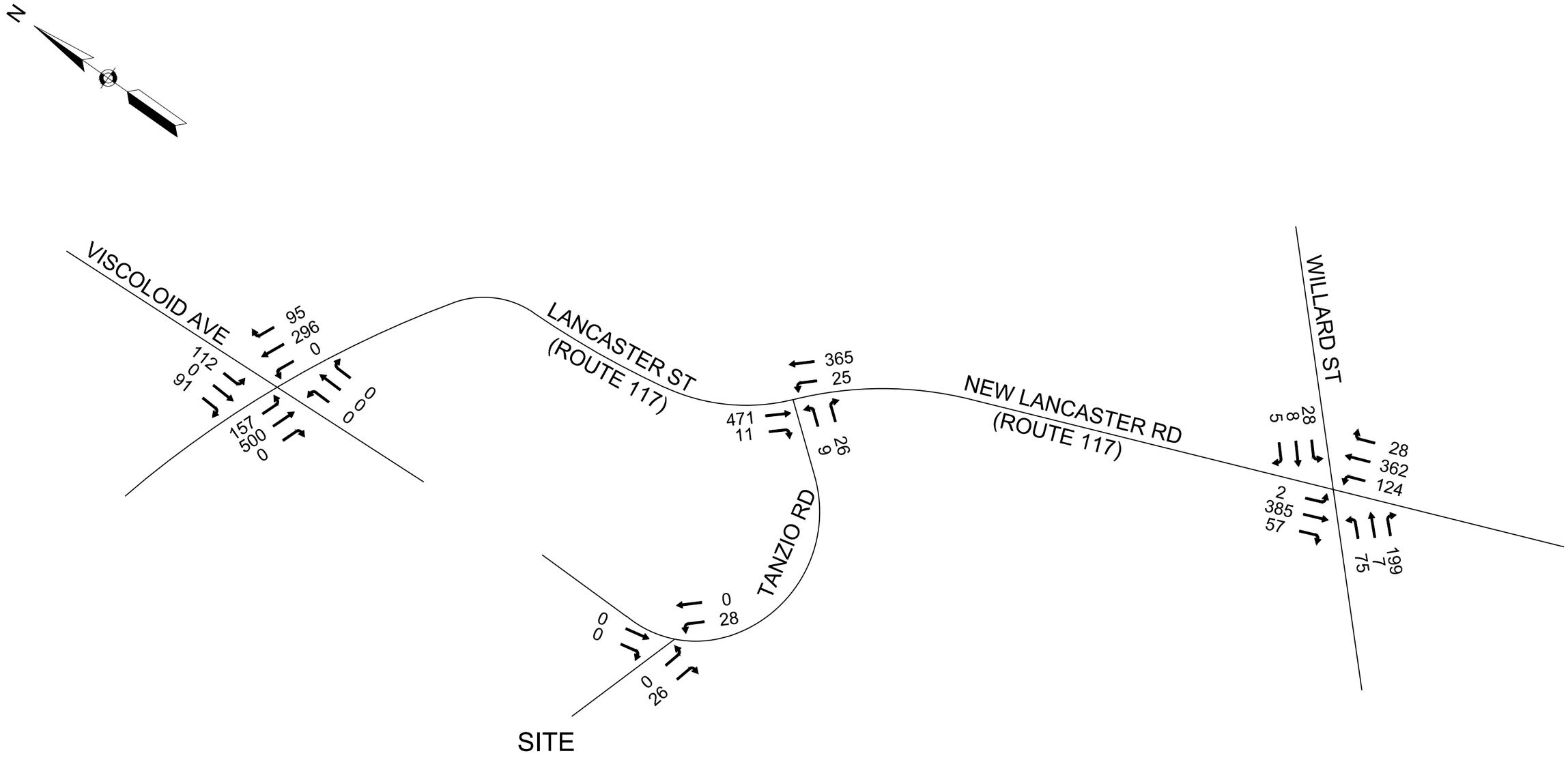

NOTE: OUTBOUND TRIPS REFLECTIVE OF ALL MATERIAL TRANSPORTED BY TRACTOR TRAILER, AND NOT CONSIDERING USE OF RAIL.

FIGURE 10
2032 BUILD TRAFFIC VOLUMES
WEEKDAY MORNING PEAK HOUR

PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION
LEOMINSTER, MA

Bowman

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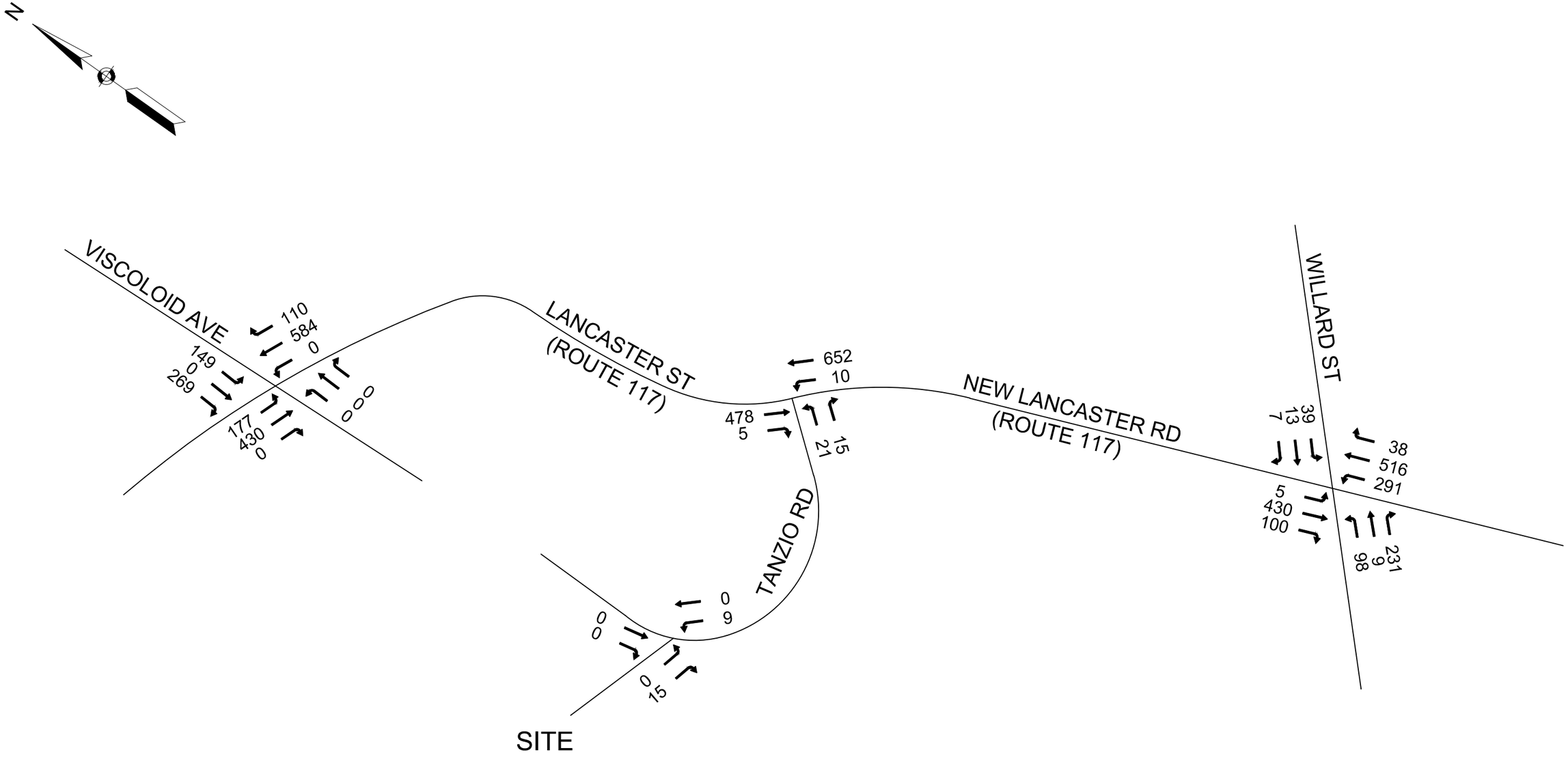

NOTE: OUTBOUND TRIPS REFLECTIVE OF ALL MATERIAL TRANSPORTED BY TRACTOR TRAILER, AND NOT CONSIDERING USE OF RAIL.

FIGURE 11
2032 BUILD TRAFFIC VOLUMES
WEEKDAY AFTERNOON PEAK HOUR

PROPOSED SOLID WASTE FACILITY TONNAGE EXPANSION
LEOMINSTER, MA

Bowman

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Traffic Operations Analysis

In previous sections of this report, the quantity of traffic at the study area intersections has been discussed. This section describes the overall quality of the traffic flow at the study area intersections during the weekday morning and weekday afternoon peak hours. To complete this assessment, intersection capacity analysis was conducted using the Synchro capacity analysis software at the study area intersections under the 2025 Existing, 2032 No Build, and 2032 Build scenarios for the two peak hour traffic conditions. The analyses performed for this Project are based on capacity analysis methodologies and procedures contained in the *Highway Capacity Manual, 6th Edition* (HCM), which are summarized in Appendix F. A discussion of the evaluation criteria and a summary of the results of the capacity analysis are presented below.

Level-of-Service Criteria

Average total vehicle delay is reported as level-of-service (LOS) on a scale of A to F. LOS A represents delays of 10 seconds or less, while LOS F represents delays in excess of 50 seconds for unsignalized intersections and greater than 80 seconds for signalized intersections. A more detailed description of the LOS criteria is provided in Appendix F.

Capacity Analysis Results

Intersection capacity analysis was conducted using the Synchro capacity analysis software for the study area intersections to evaluate the 2025 Existing, 2032 No Build, and 2032 Build traffic conditions during the weekday morning and weekday afternoon peak hours. The peak hour traffic volumes utilized as part of this analysis are provided in the traffic projection model, attached in Appendix C.

The Synchro capacity analysis results for the 2025 Existing, 2032 No Build, and 2032 Build traffic conditions are presented in Appendix G, Appendix H, and Appendix I, respectively. The capacity analysis results for the signalized and unsignalized study area intersections are presented below in Table 6 and Table 7, respectively. The results of the specific capacity analysis at the study area intersections are discussed below, with a more detailed summary of the capacity analysis for the study area intersections provided in Appendix J.

Table 6: Signalized Intersection Overall Levels-of-Service

		2025 Existing			2032 No Build			2032 Build		
Intersection	**Period**	**LOS[1]**	**Delay[2]**	**ICU[3]**	**LOS**	**Delay**	**ICU**	**LOS**	**Delay**	**ICU**
New Lancaster Rd (Rte 117) at Willard St	AM	B	18.5	0.46	B	19.4	0.49	B	19.7	0.50
	PM	C	21.6	0.55	C	23.5	0.59	C	23.6	0.59
Lancaster St (Rte 117) at Viscoloid Ave	AM	B	16.8	0.67	B	17.9	0.74	B	17.9	0.75
	PM	C	20.3	0.89	C	31.9	1.00	C	32.1	1.00

1 Level-of-Service
2 Average vehicle delay, in seconds
3 Intersection capacity utilization

As displayed above, the signalized intersection of Route 117 at Willard Street is shown to currently operate at overall LOS B during the weekday morning peak hour and at overall LOS C during the weekday afternoon peak hour. The intersection is projected to continue to operate at overall LOS B during the weekday morning peak hour and at overall LOS C during the weekday afternoon peak hour under 2032 No Build and 2032 Build conditions. The delay between No Build and Build conditions is less than one second increase and there is not anticipated to be a change in the LOS as a result of the project (as projected as worst-case scenario).

The signalized intersection of Route 117 at Viscoloid Avenue is shown to currently operate at overall LOS B during the weekday morning peak hour and at overall LOS C during the weekday afternoon peak hour. The intersection is projected to continue to operate at overall LOS B during the weekday morning peak hour and at overall LOS C during the weekday afternoon peak hour under 2032 No Build and 2032 Build conditions. The delay between No Build and Build conditions is less than one second increase and there is not anticipated to be a change in the LOS as a result of the project (as projected as worst-case scenario).

Table 7: Unsignalized Intersection Levels-of-Service

			2025 Existing			2032 No Build			2032 Build		
Intersection	**Period**	**Movement**	**LOS[1]**	**Delay[2]**	**V/C[3]**	**LOS**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**
Lancaster St (Rte 117) at Tanzio Rd	AM	EB - LR	B	14.6	0.06	C	15.6	0.06	C	16.5	0.11
	PM		C	20.2	0.14	C	24.0	0.15	C	24.3	0.17
Tanzio Rd at Site Driveway	AM	EB - LR	A	9.0	0.01	A	9.0	0.01	A	9.2	0.03
	PM		A	8.8	0.01	A	8.8	0.01	A	9.0	0.02

1 Level-of-Service
2 Average vehicle delay, in seconds
3 Volume to capacity ratio

As displayed above, the Tanzio Road eastbound approach to Route 117 is shown to currently operate at LOS B during the weekday morning peak hour and at LOS C during the weekday afternoon peak hour. Under 2032 No Build and 2032 Build conditions, the eastbound approach is projected to operate at LOS C during the weekday morning and weekday afternoon peak hours. The delay between No Build and Build conditions is an increase of

approximately one second or less and there is not anticipated to be a change in the LOS as a result of the project (as projected as worst-case scenario).

The Site Driveway eastbound approach to Tanzio Road is shown to currently operate at LOS A during the weekday morning and weekday afternoon peak hours. Under 2032 No Build and 2032 Build conditions, the eastbound approach is projected to continue to operate at LOS A during the weekday morning and weekday afternoon peak hours. The delay between No Build and Build conditions is less than one second increase.

The study area intersections are located within an EJ population. As presented in the capacity analysis results, the Project is not anticipated to result in changes to the peak hour LOS at the study areas intersections located within an EJ population between the 2032 No Build and 2032 Build conditions.

Site Access and Circulation

The site is currently accessed via one full access driveway on the west side of Tanzio Road. The site access is not proposed to change with the increase in tonnage. All existing circulation patterns internal to the site would remain with the proposed expansion in tonnage.

Sight Distance

A field review of the available sight distance was conducted at the existing Site Driveway on Tanzio Road and at the intersection of Tanzio Road at Route 117. A sight distance evaluation for heavy vehicles was also completed at these locations. The American Association of State Highway and Transportation Officials (AASHTO) publication, *A Policy on Geometric Design, 2018 Edition*, defines minimum and recommended sight distances at intersections and was used to conduct this review.

The minimum sight distance is based on the required stopping sight distance (SSD) for vehicles traveling along the main road. According to AASHTO, "If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient time to anticipate and avoid collisions." AASHTO indicates that due to the higher driver position in trucks, which allows drivers to see further along the roadway, the required SSD is the same for passenger vehicles and trucks.

The required SSD based on the posted speed limits and the corresponding field measured sight distance is reported below in Table 8.

Table 8: Stopping Sight Distance Evaluation

Site Driveway Location	Approaching	Speed Limit (mph)	SSD[1] Required	SSD Measured	Meets Required SSD?
Lancaster Street (Rte 117)	Southbound	35	250	600	Yes
at Tanzio Road	Northbound	35	250	550	Yes
Tanzio Road	Southbound	30	200	700+	Yes
at Site Driveway	Northbound	30	200	500	Yes

1 Stopping sight distance (see AASHTO equations 3-2 and 3-3) for the posted speed limits.

As shown in Table 8, the available SSD for vehicles approaching Tanzio Road and the Site Driveway from both directions exceeds the minimum SSD requirements based on the posted speed limits on Route 117 and Tanzio Road.

Conclusion

The Project consists of expanding the existing solid waste facility at 200 Tanzio Road in Leominster, Massachusetts to increase its approved maximum capacity from 1,000 tons per day (tpd) to 1,500 tpd of MSW and C&D. The site will continue to be accessed via the existing Site Driveway on Tanzio Road.

The proposed facility expansion is projected to generate 106 new daily truck trips (53 entering, 53 exiting) transporting inbound material, with the majority of outbound material being transported by rail or backhaul. However, the traffic analysis presented in this study incorporated several assumptions to present a conservative analysis, including no reduction in trips for outbound material being transported by rail or backhaul. Based on these assumptions, the proposed facility expansion could generate a total of 234 new daily truck trips (117 entering, 117 exiting), including 32 truck trips (16 entering and 16 exiting) during the weekday morning peak hour and an additional 12 truck trips (6 entering and 6 exiting) during the weekday afternoon peak hour. When added to 216 daily one-way truck trips generated by existing facility operations, the expanded facility is estimated to generate a maximum of up to 450 one-way daily truck trips. The maximum daily truck trip generation of the facility will not exceed 450 one-way trips, which the facility is amenable to having as a condition of the Site Assignment for the expanded facility.

Based on the capacity analysis results, the study area intersections operate at acceptable levels of service under 2032 Build conditions. The study area intersections are located within an EJ population. As presented in the capacity analysis results, the Project is not anticipated to result in changes to the peak hour LOS at the study areas intersections located within an EJ population between the 2032 No Build and 2032 Build conditions. Bowman concludes that mitigation measures are not necessary on the surrounding roadway network to accommodate the proposed expansion.

There are no existing pedestrian or bicycle facilities along Tanzio Road; however, Tanzio Road provides access to industrial land uses and does not provide connections to other local roadways. Therefore, it is not anticipated that Tanzio Road would be utilized as a pedestrian route.

Based on the findings and results presented in this traffic study, the Project is projected to have a minimal impact on overall traffic conditions in the study area, and it is our opinion that the traffic impacts of the proposed development of this solid waste facility located at 200 Tanzio Road do not constitute a danger to the public health, safety, or the environment with consideration to traffic congestion, pedestrian and vehicular safety, and roadway configuration in conformance with 310 CMR 16.40(4)(b).

Bowman

APPENDIX FOR TRAFFIC IMPACT STUDY SOLID WASTE TRANSFER STATION – TONNAGE EXPANSION

200 Tanzio Road

Leominster, MA

Prepared by

Bowman Consulting Group, Ltd.

350 Myles Standish Boulevard

Taunton, MA 02780

508.823.2245

Prepared for

Green Seal Environmental, LLC

Updated July 2025

Bowman

APPENDIX A

TRAFFIC COUNT DATA

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	3	3	4	0	10	4	2	2	0	8	0	1	2	0	3	3	26	4	0	33	54
5:15 AM	2	2	7	0	11	2	9	1	0	12	0	0	1	0	1	1	39	12	0	52	76
5:30 AM	8	1	5	0	14	3	11	1	0	15	3	1	1	0	5	3	65	14	0	82	116
5:45 AM	6	1	10	0	17	4	21	4	0	29	4	2	2	0	8	2	59	15	0	76	130
Total	19	7	26	0	52	13	43	8	0	64	7	4	6	0	17	9	189	45	0	243	376
6:00 AM	2	1	11	0	14	7	21	2	0	30	6	5	1	0	12	1	60	13	0	74	130
6:15 AM	10	3	6	0	19	4	27	3	0	34	0	0	0	0	0	7	65	17	0	89	142
6:30 AM	13	1	14	0	28	11	34	1	0	46	2	2	1	0	5	4	81	24	0	109	188
6:45 AM	23	3	26	0	52	12	41	1	0	54	0	1	0	0	1	2	91	27	0	120	227
Total	48	8	57	0	113	34	123	7	0	164	8	8	2	0	18	14	297	81	0	392	687
7:00 AM	16	2	14	0	32	14	43	3	0	60	1	0	4	0	5	2	88	29	0	119	216
7:15 AM	7	1	12	0	20	12	44	3	0	59	2	0	3	0	5	3	94	43	0	140	224
7:30 AM	18	0	24	0	42	13	50	2	0	65	4	0	2	0	6	1	115	36	0	152	265
7:45 AM	18	1	22	0	41	18	66	4	0	88	4	0	2	0	6	2	108	43	0	153	288
Total	59	4	72	0	135	57	203	12	0	272	11	0	11	0	22	8	405	151	0	564	993
8:00 AM	21	1	27	0	49	20	66	0	0	86	10	2	4	0	16	4	110	27	0	141	292
8:15 AM	15	2	18	0	35	18	51	5	0	74	3	1	1	0	5	5	95	30	0	130	244
8:30 AM	25	1	25	0	51	22	65	0	0	87	0	1	2	0	3	3	107	37	0	147	288
8:45 AM	43	1	30	0	74	18	64	1	0	83	1	0	0	0	1	4	86	34	0	124	282
Total	104	5	100	0	209	78	246	6	0	330	14	4	7	0	25	16	398	128	0	542	1106
9:00 AM	20	0	29	0	49	21	54	3	0	78	1	0	2	0	3	0	81	25	0	106	236
9:15 AM	27	2	20	0	49	18	79	2	0	99	2	0	1	0	3	3	58	18	0	79	230
9:30 AM	21	2	25	0	48	17	56	4	0	77	1	0	0	0	1	6	62	21	0	89	215
9:45 AM	26	1	15	0	42	21	71	3	0	95	5	0	5	0	10	0	75	26	0	101	248
Total	94	5	89	0	188	77	260	12	0	349	9	0	8	0	17	9	276	90	0	375	929
10:00 AM	19	1	24	0	44	10	56	2	0	68	1	1	4	0	6	1	64	17	0	82	200
10:15 AM	31	1	14	0	46	16	56	2	0	74	8	1	1	0	10	6	60	31	0	97	227
10:30 AM	20	1	21	0	42	13	73	3	0	89	2	1	2	0	5	2	58	30	0	90	226
10:45 AM	19	1	25	0	45	12	73	1	0	86	4	4	2	0	10	8	51	19	0	78	219
Total	89	4	84	0	177	51	258	8	0	317	15	7	9	0	31	17	233	97	0	347	872
11:00 AM	23	2	19	0	44	19	76	2	0	97	3	0	0	0	3	2	71	20	0	93	237
11:15 AM	35	0	19	0	54	18	69	2	0	89	2	1	0	0	3	1	68	30	0	99	245
11:30 AM	30	0	17	0	47	11	75	6	0	92	4	0	2	0	6	2	67	25	0	94	239
11:45 AM	23	1	18	0	42	17	78	6	0	101	2	0	2	0	4	2	58	32	0	92	239
Total	111	3	73	0	187	65	298	16	0	379	11	1	4	0	16	7	264	107	0	378	960
12:00 PM	35	0	28	0	63	21	98	2	0	121	1	0	3	0	4	3	97	26	0	126	314
12:15 PM	29	2	33	0	64	20	84	5	0	109	3	0	2	0	5	3	91	30	0	124	302
12:30 PM	36	1	19	0	56	18	66	2	0	86	4	0	1	0	5	4	79	27	0	110	257
12:45 PM	29	2	27	0	58	19	81	5	0	105	2	1	1	0	4	3	77	37	0	117	284
Total	129	5	107	0	241	78	329	14	0	421	10	1	7	0	18	13	344	120	0	477	1157
1:00 PM	33	3	31	0	67	27	103	3	0	133	2	2	4	0	8	4	64	36	0	104	312
1:15 PM	25	3	18	0	46	22	84	3	0	109	4	0	4	0	8	2	85	26	0	113	276
1:30 PM	31	1	20	0	52	15	79	8	0	102	2	1	2	0	5	1	56	23	0	80	239
1:45 PM	24	0	26	0	50	13	85	0	0	98	5	0	0	0	5	0	84	31	0	115	268
Total	113	7	95	0	215	77	351	14	0	442	13	3	10	0	26	7	289	116	0	412	1095
2:00 PM	39	1	17	0	57	23	96	2	0	121	4	0	4	0	8	2	84	38	0	124	310
2:15 PM	39	6	21	0	66	20	104	4	0	128	6	1	2	0	9	1	74	33	0	108	311
2:30 PM	43	5	34	0	82	24	120	1	0	145	6	1	3	0	10	0	91	36	0	127	364
2:45 PM	48	4	27	0	79	34	101	6	0	141	8	0	1	0	9	2	114	30	0	146	375
Total	169	16	99	0	284	101	421	13	0	535	24	2	10	0	36	5	363	137	0	505	1360
3:00 PM	36	0	40	0	76	27	113	4	0	144	5	2	1	0	8	2	66	24	0	92	320
3:15 PM	64	1	24	0	89	20	118	5	0	143	8	0	0	0	8	4	101	39	1	145	385
3:30 PM	56	0	40	0	96	22	98	2	0	122	4	3	0	0	7	5	100	23	0	128	353
3:45 PM	58	0	32	0	90	24	105	10	0	139	1	0	0	0	1	3	75	32	0	110	340
Total	214	1	136	0	351	93	434	21	0	548	18	5	1	0	24	14	342	118	1	475	1398
4:00 PM	58	0	36	0	94	23	134	4	0	161	2	0	1	0	3	9	102	35	0	146	404
4:15 PM	65	2	28	0	95	31	133	4	0	168	4	0	0	0	4	10	86	42	0	138	405
4:30 PM	53	4	27	0	84	17	134	2	0	153	7	0	1	0	8	3	86	45	0	134	379
4:45 PM	58	3	31	0	92	16	117	9	0	142	3	0	2	0	5	3	83	25	0	111	350
Total	234	9	122	0	365	87	518	19	0	624	16	0	4	0	20	25	357	147	0	529	1538
5:00 PM	60	4	34	0	98	36	104	6	0	146	4	3	1	0	8	8	90	37	0	135	387
5:15 PM	58	3	38	0	99	26	135	4	0	165	3	1	5	0	9	8	94	29	0	131	404
5:30 PM	60	4	20	0	84	27	120	4	0	151	5	2	1	0	8	4	83	43	0	130	373
5:45 PM	33	4	20	0	57	21	103	3	0	127	8	2	5	0	15	8	67	31	0	106	305
Total	211	15	112	0	338	110	462	17	0	589	20	8	12	0	40	28	334	140	0	502	1469
6:00 PM	47	3	21	0	71	18	81	1	0	100	4	3	2	0	9	6	77	29	0	112	292
6:15 PM	39	3	16	0	58	19	84	3	0	106	5	1	1	0	7	1	83	33	0	117	288
6:30 PM	40	2	16	0	58	23	99	5	0	127	7	2	4	0	13	8	61	29	0	98	296
6:45 PM	23	1	18	0	42	10	91	8	0	109	7	1	8	0	16	3	57	21	0	81	248
Total	149	9	71	0	229	70	355	17	0	442	23	7	15	0	45	18	278	112	0	408	1124
Grand Total	1743	98	1243	0	3084	991	4301	184	0	5476	199	50	106	0	355	190	4369	1589	1	6149	15064
Approach %	56.5	3.2	40.3	0.0		18.1	78.5	3.4	0.0		56.1	14.1	29.9	0.0		3.1	71.1	25.8	0.0		
Total %	11.6	0.7	8.3	0.0	20.5	6.6	28.6	1.2	0.0	36.4	1.3	0.3	0.7	0.0	2.4	1.3	29.0	10.5	0.0	40.8	
Exiting Leg Total					2630					5811					472					6151	15064
Cars	1699	96	1163	0	2958	935	4139	169	0	5243	194	49	103	0	346	184	4215	1539	1	5939	14486
% Cars	97.5	98.0	93.6	0.0	95.9	94.3	96.2	91.8	0.0	95.7	97.5	98.0	97.2	0.0	97.5	96.8	96.5	96.9	100.0	96.6	96.2
Exiting Leg Total					2523					5572					449					5942	14486

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Heavy Vehicles	44	2	80	0	126	56	162	15	0	233	5	1	3	0	9	6	154	50	0	210	578
% Heavy Vehicles	2.5	2.0	6.4	0.0	4.1	5.7	3.8	8.2	0.0	4.3	2.5	2.0	2.8	0.0	2.5	3.2	3.5	3.1	0.0	3.4	3.8
Exiting Leg Total					107					239					23					209	578

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

7:45 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	18	1	22	0	41	18	66	4	0	88	4	0	2	0	6	2	108	43	0	153	288
8:00 AM	21	1	27	0	49	20	66	0	0	86	10	2	4	0	16	4	110	27	0	141	292
8:15 AM	15	2	18	0	35	18	51	5	0	74	3	1	1	0	5	5	95	30	0	130	244
8:30 AM	25	1	25	0	51	22	65	0	0	87	0	1	2	0	3	3	107	37	0	147	288
Total Volume	79	5	92	0	176	78	248	9	0	335	17	4	9	0	30	14	420	137	0	571	1112
% Approach Total	44.9	2.8	52.3	0.0		23.3	74.0	2.7	0.0		56.7	13.3	30.0	0.0		2.5	73.6	24.0	0.0		
PHF	0.790	0.625	0.852	0.000	0.863	0.886	0.939	0.450	0.000	0.952	0.425	0.500	0.563	0.000	0.469	0.700	0.955	0.797	0.000	0.933	0.952
Cars	74	5	86	0	165	69	237	9	0	315	17	4	9	0	30	14	402	131	0	547	1057
Cars %	93.7	100.0	93.5	0.0	93.8	88.5	95.6	100.0	0.0	94.0	100.0	100.0	100.0	0.0	100.0	100.0	95.7	95.6	0.0	95.8	95.1
Heavy Vehicles	5	0	6	0	11	9	11	0	0	20	0	0	0	0	0	0	18	6	0	24	55
Heavy Vehicles %	6.3	0.0	6.5	0.0	6.3	11.5	4.4	0.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	4.4	0.0	4.2	4.9
Cars Enter Leg	74	5	86	0	165	69	237	9	0	315	17	4	9	0	30	14	402	131	0	547	1057
Heavy Enter Leg	5	0	6	0	11	9	11	0	0	20	0	0	0	0	0	0	18	6	0	24	55
Total Entering Leg	79	5	92	0	176	78	248	9	0	335	17	4	9	0	30	14	420	137	0	571	1112
Cars Exiting Leg					204					505					28					320	1057
Heavy Exiting Leg					15					24					0					16	55
Total Exiting Leg					219					529					28					336	1112

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:45 PM	24	0	26	0	50	13	85	0	0	98	5	0	0	0	5	0	84	31	0	115	268
2:00 PM	39	1	17	0	57	23	96	2	0	121	4	0	4	0	8	2	84	38	0	124	310
2:15 PM	39	6	21	0	66	20	104	4	0	128	6	1	2	0	9	1	74	33	0	108	311
2:30 PM	43	5	34	0	82	24	120	1	0	145	6	1	3	0	10	0	91	36	0	127	364
Total Volume	145	12	98	0	255	80	405	7	0	492	21	2	9	0	32	3	333	138	0	474	1253
% Approach Total	56.9	4.7	38.4	0.0		16.3	82.3	1.4	0.0		65.6	6.3	28.1	0.0		0.6	70.3	29.1	0.0		
PHF	0.843	0.500	0.721	0.000	0.777	0.833	0.844	0.438	0.000	0.848	0.875	0.500	0.563	0.000	0.800	0.375	0.915	0.908	0.000	0.933	0.861
Cars	142	11	91	0	244	73	386	5	0	464	18	2	9	0	29	2	313	132	0	447	1184
Cars %	97.9	91.7	92.9	0.0	95.7	91.3	95.3	71.4	0.0	94.3	85.7	100.0	100.0	0.0	90.6	66.7	94.0	95.7	0.0	94.3	94.5
Heavy Vehicles	3	1	7	0	11	7	19	2	0	28	3	0	0	0	3	1	20	6	0	27	69
Heavy Vehicles %	2.1	8.3	7.1	0.0	4.3	8.8	4.7	28.6	0.0	5.7	14.3	0.0	0.0	0.0	9.4	33.3	6.0	4.3	0.0	5.7	5.5
Cars Enter Leg	142	11	91	0	244	73	386	5	0	464	18	2	9	0	29	2	313	132	0	447	1184
Heavy Enter Leg	3	1	7	0	11	7	19	2	0	28	3	0	0	0	3	1	20	6	0	27	69
Total Entering Leg	145	12	98	0	255	80	405	7	0	492	21	2	9	0	32	3	333	138	0	474	1253
Cars Exiting Leg					207					422					18					537	1184
Heavy Exiting Leg					13					30					4					22	69
Total Exiting Leg					220					452					22					559	1253

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

4:00 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	58	0	36	0	94	23	134	4	0	161	2	0	1	0	3	9	102	35	0	146	404
4:15 PM	65	2	28	0	95	31	133	4	0	168	4	0	0	0	4	10	86	42	0	138	405
4:30 PM	53	4	27	0	84	17	134	2	0	153	7	0	1	0	8	3	86	45	0	134	379
4:45 PM	58	3	31	0	92	16	117	9	0	142	3	0	2	0	5	3	83	25	0	111	350
Total Volume	234	9	122	0	365	87	518	19	0	624	16	0	4	0	20	25	357	147	0	529	1538
% Approach Total	64.1	2.5	33.4	0.0		13.9	83.0	3.0	0.0		80.0	0.0	20.0	0.0		4.7	67.5	27.8	0.0		
PHF	0.900	0.563	0.847	0.000	0.961	0.702	0.966	0.528	0.000	0.929	0.571	0.000	0.500	0.000	0.625	0.625	0.875	0.817	0.000	0.906	0.949
Cars	233	9	117	0	359	87	510	19	0	616	16	0	4	0	20	24	351	144	0	519	1514
Cars %	99.6	100.0	95.9	0.0	98.4	100.0	98.5	100.0	0.0	98.7	100.0	0.0	100.0	0.0	100.0	96.0	98.3	98.0	0.0	98.1	98.4
Heavy Vehicles	1	0	5	0	6	0	8	0	0	8	0	0	0	0	0	1	6	3	0	10	24
Heavy Vehicles %	0.4	0.0	4.1	0.0	1.6	0.0	1.5	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	4.0	1.7	2.0	0.0	1.9	1.6
Cars Enter Leg	233	9	117	0	359	87	510	19	0	616	16	0	4	0	20	24	351	144	0	519	1514
Heavy Enter Leg	1	0	5	0	6	0	8	0	0	8	0	0	0	0	0	1	6	3	0	10	24
Total Entering Leg	234	9	122	0	365	87	518	19	0	624	16	0	4	0	20	25	357	147	0	529	1538
Cars Exiting Leg					231					484					52					747	1514
Heavy Exiting Leg					3					11					1					9	24
Total Exiting Leg					234					495					53					756	1538

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	3	3	4	0	10	4	2	2	0	8	0	1	2	0	3	3	26	4	0	33	54
5:15 AM	1	2	6	0	9	1	9	1	0	11	0	0	1	0	1	1	36	12	0	49	70
5:30 AM	8	1	5	0	14	3	9	1	0	13	3	1	0	0	4	3	62	12	0	77	108
5:45 AM	6	1	10	0	17	3	19	3	0	25	4	2	2	0	8	2	59	15	0	76	126
Total	18	7	25	0	50	11	39	7	0	57	7	4	5	0	16	9	183	43	0	235	358
6:00 AM	2	1	9	0	12	7	19	2	0	28	6	4	1	0	11	1	58	12	0	71	122
6:15 AM	10	3	6	0	19	3	27	3	0	33	0	0	0	0	0	6	61	15	0	82	134
6:30 AM	11	1	14	0	26	10	32	1	0	43	2	2	1	0	5	4	78	22	0	104	178
6:45 AM	22	3	23	0	48	12	40	1	0	53	0	1	0	0	1	2	88	26	0	116	218
Total	45	8	52	0	105	32	118	7	0	157	8	7	2	0	17	13	285	75	0	373	652
7:00 AM	16	2	13	0	31	12	38	3	0	53	1	0	4	0	5	1	84	29	0	114	203
7:15 AM	6	1	11	0	18	12	41	3	0	56	2	0	3	0	5	2	93	43	0	138	217
7:30 AM	16	0	20	0	36	11	44	2	0	57	4	0	2	0	6	1	111	36	0	148	247
7:45 AM	16	1	21	0	38	15	61	4	0	80	4	0	2	0	6	2	104	41	0	147	271
Total	54	4	65	0	123	50	184	12	0	246	11	0	11	0	22	6	392	149	0	547	938
8:00 AM	20	1	25	0	46	19	63	0	0	82	10	2	4	0	16	4	106	25	0	135	279
8:15 AM	15	2	17	0	34	16	50	5	0	71	3	1	1	0	5	5	90	29	0	124	234
8:30 AM	23	1	23	0	47	19	63	0	0	82	0	1	2	0	3	3	102	36	0	141	273
8:45 AM	42	1	27	0	70	16	59	1	0	76	1	0	0	0	1	4	83	31	0	118	265
Total	100	5	92	0	197	70	235	6	0	311	14	4	7	0	25	16	381	121	0	518	1051
9:00 AM	19	0	26	0	45	20	48	3	0	71	1	0	2	0	3	0	80	25	0	105	224
9:15 AM	26	2	20	0	48	15	78	2	0	95	2	0	1	0	3	3	55	18	0	76	222
9:30 AM	18	2	21	0	41	16	54	4	0	74	1	0	0	0	1	6	58	20	0	84	200
9:45 AM	24	1	13	0	38	20	68	2	0	90	4	0	5	0	9	0	72	24	0	96	233
Total	87	5	80	0	172	71	248	11	0	330	8	0	8	0	16	9	265	87	0	361	879
10:00 AM	19	1	23	0	43	8	55	2	0	65	1	1	4	0	6	1	62	17	0	80	194
10:15 AM	30	1	13	0	44	13	53	2	0	68	8	1	1	0	10	6	57	30	0	93	215
10:30 AM	20	1	21	0	42	13	67	2	0	82	2	1	2	0	5	2	55	27	0	84	213
10:45 AM	19	1	24	0	44	12	70	1	0	83	4	4	2	0	10	7	50	19	0	76	213
Total	88	4	81	0	173	46	245	7	0	298	15	7	9	0	31	16	224	93	0	333	835
11:00 AM	22	2	17	0	41	18	71	2	0	91	3	0	0	0	3	2	68	20	0	90	225
11:15 AM	34	0	17	0	51	17	69	2	0	88	2	1	0	0	3	1	67	28	0	96	238
11:30 AM	29	0	15	0	44	11	66	4	0	81	4	0	2	0	6	2	64	23	0	89	220
11:45 AM	22	1	16	0	39	16	75	6	0	97	2	0	2	0	4	2	57	30	0	89	229
Total	107	3	65	0	175	62	281	14	0	357	11	1	4	0	16	7	256	101	0	364	912
12:00 PM	34	0	25	0	59	20	92	2	0	114	1	0	3	0	4	3	89	24	0	116	293
12:15 PM	27	2	32	0	61	20	78	5	0	103	3	0	2	0	5	3	86	30	0	119	288
12:30 PM	36	1	18	0	55	18	64	2	0	84	4	0	1	0	5	4	76	27	0	107	251
12:45 PM	29	2	24	0	55	17	78	5	0	100	2	1	1	0	4	3	73	36	0	112	271
Total	126	5	99	0	230	75	312	14	0	401	10	1	7	0	18	13	324	117	0	454	1103
1:00 PM	32	3	29	0	64	24	96	2	0	122	2	2	4	0	8	4	62	33	0	99	293
1:15 PM	25	3	15	0	43	20	82	3	0	105	4	0	4	0	8	2	79	26	0	107	263
1:30 PM	31	0	18	0	49	14	71	2	0	87	2	1	2	0	5	1	51	22	0	74	215
1:45 PM	24	0	25	0	49	13	81	0	0	94	5	0	0	0	5	0	76	30	0	106	254
Total	112	6	87	0	205	71	330	7	0	408	13	3	10	0	26	7	268	111	0	386	1025
2:00 PM	38	1	14	0	53	21	90	2	0	113	3	0	4	0	7	1	77	36	0	114	287
2:15 PM	39	5	20	0	64	17	103	2	0	122	4	1	2	0	7	1	71	33	0	105	298
2:30 PM	41	5	32	0	78	22	112	1	0	135	6	1	3	0	10	0	89	33	0	122	345
2:45 PM	46	4	26	0	76	33	97	6	0	136	8	0	1	0	9	2	107	30	0	139	360
Total	164	15	92	0	271	93	402	11	0	506	21	2	10	0	33	4	344	132	0	480	1290
3:00 PM	36	0	39	0	75	27	110	4	0	141	5	2	0	0	7	2	64	24	0	90	313
3:15 PM	60	1	21	0	82	19	116	5	0	140	7	0	0	0	7	4	100	37	1	142	371
3:30 PM	56	0	37	0	93	22	94	1	0	117	4	3	0	0	7	5	98	22	0	125	342
3:45 PM	56	0	30	0	86	21	102	10	0	133	1	0	0	0	1	3	74	32	0	109	329
Total	208	1	127	0	336	89	422	20	0	531	17	5	0	0	22	14	336	115	1	466	1355
4:00 PM	58	0	33	0	91	23	132	4	0	159	2	0	1	0	3	8	100	34	0	142	395
4:15 PM	64	2	28	0	94	31	131	4	0	166	4	0	0	0	4	10	84	41	0	135	399
4:30 PM	53	4	27	0	84	17	131	2	0	150	7	0	1	0	8	3	85	45	0	133	375
4:45 PM	58	3	29	0	90	16	116	9	0	141	3	0	2	0	5	3	82	24	0	109	345
Total	233	9	117	0	359	87	510	19	0	616	16	0	4	0	20	24	351	144	0	519	1514
5:00 PM	60	4	34	0	98	35	103	6	0	144	4	3	1	0	8	8	87	37	0	132	382
5:15 PM	57	3	37	0	97	25	135	4	0	164	3	1	4	0	8	8	92	28	0	128	397
5:30 PM	60	4	20	0	84	27	120	4	0	151	5	2	1	0	8	4	83	43	0	130	373
5:45 PM	32	4	20	0	56	21	102	3	0	126	8	2	5	0	15	8	67	31	0	106	303
Total	209	15	111	0	335	108	460	17	0	585	20	8	11	0	39	28	329	139	0	496	1455
6:00 PM	47	3	21	0	71	18	81	1	0	100	4	3	2	0	9	6	76	29	0	111	291
6:15 PM	39	3	16	0	58	19	84	3	0	106	5	1	1	0	7	1	83	33	0	117	288
6:30 PM	39	2	16	0	57	23	98	5	0	126	7	2	4	0	13	8	61	29	0	98	294
6:45 PM	23	1	17	0	41	10	90	8	0	108	7	1	8	0	16	3	57	21	0	81	246
Total	148	9	70	0	227	70	353	17	0	440	23	7	15	0	45	18	277	112	0	407	1119
Grand Total	1699	96	1163	0	2958	935	4139	169	0	5243	194	49	103	0	346	184	4215	1539	1	5939	14486
Approach %	57.4	3.2	39.3	0.0		17.8	78.9	3.2	0.0		56.1	14.2	29.8	0.0		3.1	71.0	25.9	0.0		
Total %	11.7	0.7	8.0	0.0	20.4	6.5	28.6	1.2	0.0	36.2	1.3	0.3	0.7	0.0	2.4	1.3	29.1	10.6	0.0	41.0	
Exiting Leg Total					2523					5572					449					5942	14486

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

7:45 AM	Viscoloid Avenue					Lancaster Street (Route 117)					Driveway					Lancaster Street (Route 117)					

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	16	1	21	0	38	15	61	4	0	80	4	0	2	0	6	2	104	41	0	147	271
8:00 AM	20	1	25	0	46	19	63	0	0	82	10	2	4	0	16	4	106	25	0	135	279
8:15 AM	15	2	17	0	34	16	50	5	0	71	3	1	1	0	5	5	90	29	0	124	234
8:30 AM	23	1	23	0	47	19	63	0	0	82	0	1	2	0	3	3	102	36	0	141	273
Total Volume	74	5	86	0	165	69	237	9	0	315	17	4	9	0	30	14	402	131	0	547	1057
% Approach Total	44.8	3.0	52.1	0.0		21.9	75.2	2.9	0.0		56.7	13.3	30.0	0.0		2.6	73.5	23.9	0.0		
PHF	0.804	0.625	0.860	0.000	0.878	0.908	0.940	0.450	0.000	0.960	0.425	0.500	0.563	0.000	0.469	0.700	0.948	0.799	0.000	0.930	0.947
Entering Leg	74	5	86	0	165	69	237	9	0	315	17	4	9	0	30	14	402	131	0	547	1057
Exiting Leg					204					505					28					320	1057
Total					369					820					58					867	2114

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:45 PM	24	0	25	0	49	13	81	0	0	94	5	0	0	0	5	0	76	30	0	106	254
2:00 PM	38	1	14	0	53	21	90	2	0	113	3	0	4	0	7	1	77	36	0	114	287
2:15 PM	39	5	20	0	64	17	103	2	0	122	4	1	2	0	7	1	71	33	0	105	298
2:30 PM	41	5	32	0	78	22	112	1	0	135	6	1	3	0	10	0	89	33	0	122	345
Total Volume	142	11	91	0	244	73	386	5	0	464	18	2	9	0	29	2	313	132	0	447	1184
% Approach Total	58.2	4.5	37.3	0.0		15.7	83.2	1.1	0.0		62.1	6.9	31.0	0.0		0.4	70.0	29.5	0.0		
PHF	0.866	0.550	0.711	0.000	0.782	0.830	0.862	0.625	0.000	0.859	0.750	0.500	0.563	0.000	0.725	0.500	0.879	0.917	0.000	0.916	0.858
Entering Leg	142	11	91	0	244	73	386	5	0	464	18	2	9	0	29	2	313	132	0	447	1184
Exiting Leg					207					422					18					537	1184
Total					451					886					47					984	2368

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

4:00 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
4:00 PM	58	0	33	0	91	23	132	4	0	159	2	0	1	0	3	8	100	34	0	142	395
4:15 PM	64	2	28	0	94	31	131	4	0	166	4	0	0	0	4	10	84	41	0	135	399
4:30 PM	53	4	27	0	84	17	131	2	0	150	7	0	1	0	8	3	85	45	0	133	375
4:45 PM	58	3	29	0	90	16	116	9	0	141	3	0	2	0	5	3	82	24	0	109	345
Total Volume	233	9	117	0	359	87	510	19	0	616	16	0	4	0	20	24	351	144	0	519	1514
% Approach Total	64.9	2.5	32.6	0.0		14.1	82.8	3.1	0.0		80.0	0.0	20.0	0.0		4.6	67.6	27.7	0.0		
PHF	0.910	0.563	0.886	0.000	0.955	0.702	0.966	0.528	0.000	0.928	0.571	0.000	0.500	0.000	0.625	0.600	0.878	0.800	0.000	0.914	0.949
Entering Leg	233	9	117	0	359	87	510	19	0	616	16	0	4	0	20	24	351	144	0	519	1514
Exiting Leg					231					484					52					747	1514
Total					590					1100					72					1266	3028

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	6
5:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	3	2	0	5	8
5:45 AM	0	0	0	0	0	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	4
Total	1	0	1	0	2	2	4	1	0	7	0	0	1	0	1	0	6	2	0	8	18
6:00 AM	0	0	2	0	2	0	2	0	0	2	0	1	0	0	1	0	2	1	0	3	8
6:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	4	2	0	7	8
6:30 AM	2	0	0	0	2	1	2	0	0	3	0	0	0	0	0	0	3	2	0	5	10
6:45 AM	1	0	3	0	4	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	9
Total	3	0	5	0	8	2	5	0	0	7	0	1	0	0	1	1	12	6	0	19	35
7:00 AM	0	0	1	0	1	2	5	0	0	7	0	0	0	0	0	1	4	0	0	5	13
7:15 AM	1	0	1	0	2	0	3	0	0	3	0	0	0	0	0	1	1	0	0	2	7
7:30 AM	2	0	4	0	6	2	6	0	0	8	0	0	0	0	0	0	4	0	0	4	18
7:45 AM	2	0	1	0	3	3	5	0	0	8	0	0	0	0	0	0	4	2	0	6	17
Total	5	0	7	0	12	7	19	0	0	26	0	0	0	0	0	2	13	2	0	17	55
8:00 AM	1	0	2	0	3	1	3	0	0	4	0	0	0	0	0	0	4	2	0	6	13
8:15 AM	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	5	1	0	6	10
8:30 AM	2	0	2	0	4	3	2	0	0	5	0	0	0	0	0	0	5	1	0	6	15
8:45 AM	1	0	3	0	4	2	5	0	0	7	0	0	0	0	0	0	3	3	0	6	17
Total	4	0	8	0	12	8	11	0	0	19	0	0	0	0	0	0	17	7	0	24	55
9:00 AM	1	0	3	0	4	1	6	0	0	7	0	0	0	0	0	0	1	0	0	1	12
9:15 AM	1	0	0	0	1	3	1	0	0	4	0	0	0	0	0	0	3	0	0	3	8
9:30 AM	3	0	4	0	7	1	2	0	0	3	0	0	0	0	0	0	4	1	0	5	15
9:45 AM	2	0	2	0	4	1	3	1	0	5	1	0	0	0	1	0	3	2	0	5	15
Total	7	0	9	0	16	6	12	1	0	19	1	0	0	0	1	0	11	3	0	14	50
10:00 AM	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	2	0	0	2	6
10:15 AM	1	0	1	0	2	3	3	0	0	6	0	0	0	0	0	0	3	1	0	4	12
10:30 AM	0	0	0	0	0	0	6	1	0	7	0	0	0	0	0	0	3	3	0	6	13
10:45 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	1	1	0	0	2	6
Total	1	0	3	0	4	5	13	1	0	19	0	0	0	0	0	1	9	4	0	14	37
11:00 AM	1	0	2	0	3	1	5	0	0	6	0	0	0	0	0	0	3	0	0	3	12
11:15 AM	1	0	2	0	3	1	0	0	0	1	0	0	0	0	0	0	1	2	0	3	7
11:30 AM	1	0	2	0	3	0	9	2	0	11	0	0	0	0	0	0	3	2	0	5	19
11:45 AM	1	0	2	0	3	1	3	0	0	4	0	0	0	0	0	0	1	2	0	3	10
Total	4	0	8	0	12	3	17	2	0	22	0	0	0	0	0	0	8	6	0	14	48
12:00 PM	1	0	3	0	4	1	6	0	0	7	0	0	0	0	0	0	8	2	0	10	21
12:15 PM	2	0	1	0	3	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	14
12:30 PM	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	6
12:45 PM	0	0	3	0	3	2	3	0	0	5	0	0	0	0	0	0	4	1	0	5	13
Total	3	0	8	0	11	3	17	0	0	20	0	0	0	0	0	0	20	3	0	23	54
1:00 PM	1	0	2	0	3	3	7	1	0	11	0	0	0	0	0	0	2	3	0	5	19
1:15 PM	0	0	3	0	3	2	2	0	0	4	0	0	0	0	0	0	6	0	0	6	13
1:30 PM	0	1	2	0	3	1	8	6	0	15	0	0	0	0	0	0	5	1	0	6	24
1:45 PM	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	8	1	0	9	14
Total	1	1	8	0	10	6	21	7	0	34	0	0	0	0	0	0	21	5	0	26	70
2:00 PM	1	0	3	0	4	2	6	0	0	8	1	0	0	0	1	1	7	2	0	10	23
2:15 PM	0	1	1	0	2	3	1	2	0	6	2	0	0	0	2	0	3	0	0	3	13
2:30 PM	2	0	2	0	4	2	8	0	0	10	0	0	0	0	0	0	2	3	0	5	19
2:45 PM	2	0	1	0	3	1	4	0	0	5	0	0	0	0	0	0	7	0	0	7	15
Total	5	1	7	0	13	8	19	2	0	29	3	0	0	0	3	1	19	5	0	25	70
3:00 PM	0	0	1	0	1	0	3	0	0	3	0	0	1	0	1	0	2	0	0	2	7
3:15 PM	4	0	3	0	7	1	2	0	0	3	1	0	0	0	1	0	1	2	0	3	14
3:30 PM	0	0	3	0	3	0	4	1	0	5	0	0	0	0	0	0	2	1	0	3	11
3:45 PM	2	0	2	0	4	3	3	0	0	6	0	0	0	0	0	0	1	0	0	1	11
Total	6	0	9	0	15	4	12	1	0	17	1	0	1	0	2	0	6	3	0	9	43
4:00 PM	0	0	3	0	3	0	2	0	0	2	0	0	0	0	0	1	2	1	0	4	9
4:15 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	2	1	0	3	6
4:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
4:45 PM	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	5
Total	1	0	5	0	6	0	8	0	0	8	0	0	0	0	0	1	6	3	0	10	24
5:00 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	5
5:15 PM	1	0	1	0	2	1	0	0	0	1	0	0	1	0	1	0	2	1	0	3	7
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	2	0	1	0	3	2	2	0	0	4	0	0	1	0	1	0	5	1	0	6	14
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
6:45 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	5
Grand Total	44	2	80	0	126	56	162	15	0	233	5	1	3	0	9	6	154	50	0	210	578
Approach %	34.9	1.6	63.5	0.0		24.0	69.5	6.4	0.0		55.6	11.1	33.3	0.0		2.9	73.3	23.8	0.0		
Total %	7.6	0.3	13.8	0.0	21.8	9.7	28.0	2.6	0.0	40.3	0.9	0.2	0.5	0.0	1.6	1.0	26.6	8.7	0.0	36.3	
Exiting Leg Total					107					239					23					209	578
Buses	10	0	21	0	31	10	35	1	0	46	1	0	0	0	1	1	31	9	0	41	119
% Buses	22.7	0.0	26.3	0.0	24.6	17.9	21.6	6.7	0.0	19.7	20.0	0.0	0.0	0.0	11.1	16.7	20.1	18.0	0.0	19.5	20.6
Exiting Leg Total					19					53					2					45	119

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Single-Unit Trucks	30	1	54	0	85	40	108	5	0	153	2	1	3	0	6	4	100	33	0	137	381
% Single-Unit	68.2	50.0	67.5	0.0	67.5	71.4	66.7	33.3	0.0	65.7	40.0	100.0	100.0	0.0	66.7	66.7	64.9	66.0	0.0	65.2	65.9
Exiting Leg Total					74					156					10					141	381
Articulated Trucks	4	1	5	0	10	6	19	9	0	34	2	0	0	0	2	1	23	8	0	32	78
% Articulated	9.1	50.0	6.3	0.0	7.9	10.7	11.7	60.0	0.0	14.6	40.0	0.0	0.0	0.0	22.2	16.7	14.9	16.0	0.0	15.2	13.5
Exiting Leg Total					14					30					11					23	78

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

7:30 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	2	0	4	0	6	2	6	0	0	8	0	0	0	0	0	0	4	0	0	4	18
7:45 AM	2	0	1	0	3	3	5	0	0	8	0	0	0	0	0	0	4	2	0	6	17
8:00 AM	1	0	2	0	3	1	3	0	0	4	0	0	0	0	0	0	4	2	0	6	13
8:15 AM	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	5	1	0	6	10
Total Volume	5	0	8	0	13	8	15	0	0	23	0	0	0	0	0	0	17	5	0	22	58
% Approach Total	38.5	0.0	61.5	0.0		34.8	65.2	0.0	0.0		0.0	0.0	0.0	0.0		0.0	77.3	22.7	0.0		
PHF	0.625	0.000	0.500	0.000	0.542	0.667	0.625	0.000	0.000	0.719	0.000	0.000	0.000	0.000	0.000	0.000	0.850	0.625	0.000	0.917	0.806
Buses	2	0	3	0	5	1	3	0	0	4	0	0	0	0	0	0	5	2	0	7	16
Buses %	40.0	0.0	37.5	0.0	38.5	12.5	20.0	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	29.4	40.0	0.0	31.8	27.6
Single-Unit Trucks	3	0	4	0	7	5	10	0	0	15	0	0	0	0	0	0	9	3	0	12	34
Single-Unit %	60.0	0.0	50.0	0.0	53.8	62.5	66.7	0.0	0.0	65.2	0.0	0.0	0.0	0.0	0.0	0.0	52.9	60.0	0.0	54.5	58.6
Articulated Trucks	0	0	1	0	1	2	2	0	0	4	0	0	0	0	0	0	3	0	0	3	8
Articulated %	0.0	0.0	12.5	0.0	7.7	25.0	13.3	0.0	0.0	17.4	0.0	0.0	0.0	0.0	0.0	0.0	17.6	0.0	0.0	13.6	13.8
Buses	2	0	3	0	5	1	3	0	0	4	0	0	0	0	0	0	5	2	0	7	16
Single-Unit Trucks	3	0	4	0	7	5	10	0	0	15	0	0	0	0	0	0	9	3	0	12	34
Articulated Trucks	0	0	1	0	1	2	2	0	0	4	0	0	0	0	0	0	3	0	0	3	8
Total Entering Leg	5	0	8	0	13	8	15	0	0	23	0	0	0	0	0	0	17	5	0	22	58
Buses					3					8					0					5	16
Single-Unit Trucks					8					13					0					13	34
Articulated Trucks					2					4					0					2	8
Total Exiting Leg					13					25					0					20	58

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:15 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:15 PM	0	0	3	0	3	2	2	0	0	4	0	0	0	0	0	0	6	0	0	6	13
1:30 PM	0	1	2	0	3	1	8	6	0	15	0	0	0	0	0	0	5	1	0	6	24
1:45 PM	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	8	1	0	9	14
2:00 PM	1	0	3	0	4	2	6	0	0	8	1	0	0	0	1	1	7	2	0	10	23
Total Volume	1	1	9	0	11	5	20	6	0	31	1	0	0	0	1	1	26	4	0	31	74
% Approach Total	9.1	9.1	81.8	0.0		16.1	64.5	19.4	0.0		100.0	0.0	0.0	0.0		3.2	83.9	12.9	0.0		
PHF	0.250	0.250	0.750	0.000	0.688	0.625	0.625	0.250	0.000	0.517	0.250	0.000	0.000	0.000	0.250	0.250	0.813	0.500	0.000	0.775	0.771
Buses	0	0	2	0	2	2	4	0	0	6	0	0	0	0	0	0	2	1	0	3	11
Buses %	0.0	0.0	22.2	0.0	18.2	40.0	20.0	0.0	0.0	19.4	0.0	0.0	0.0	0.0	0.0	0.0	7.7	25.0	0.0	9.7	14.9
Single-Unit Trucks	1	1	6	0	8	3	16	3	0	22	0	0	0	0	0	0	21	3	0	24	54
Single-Unit %	100.0	100.0	66.7	0.0	72.7	60.0	80.0	50.0	0.0	71.0	0.0	0.0	0.0	0.0	0.0	0.0	80.8	75.0	0.0	77.4	73.0
Articulated Trucks	0	0	1	0	1	0	0	3	0	3	1	0	0	0	1	1	3	0	0	4	9
Articulated %	0.0	0.0	11.1	0.0	9.1	0.0	0.0	50.0	0.0	9.7	100.0	0.0	0.0	0.0	100.0	100.0	11.5	0.0	0.0	12.9	12.2
Buses	0	0	2	0	2	2	4	0	0	6	0	0	0	0	0	0	2	1	0	3	11
Single-Unit Trucks	1	1	6	0	8	3	16	3	0	22	0	0	0	0	0	0	21	3	0	24	54
Articulated Trucks	0	0	1	0	1	0	0	3	0	3	1	0	0	0	1	1	3	0	0	4	9
Total Entering Leg	1	1	9	0	11	5	20	6	0	31	1	0	0	0	1	1	26	4	0	31	74
Buses					3					4					0					4	11
Single-Unit Trucks					6					27					4					17	54
Articulated Trucks					0					5					4					0	9
Total Exiting Leg					9					36					8					21	74

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	1	0	3	0	4	2	6	0	0	8	1	0	0	0	1	1	7	2	0	10	23
2:15 PM	0	1	1	0	2	3	1	2	0	6	2	0	0	0	2	0	3	0	0	3	13
2:30 PM	2	0	2	0	4	2	8	0	0	10	0	0	0	0	0	0	2	3	0	5	19
2:45 PM	2	0	1	0	3	1	4	0	0	5	0	0	0	0	0	0	7	0	0	7	15
Total Volume	5	1	7	0	13	8	19	2	0	29	3	0	0	0	3	1	19	5	0	25	70
% Approach Total	38.5	7.7	53.8	0.0		27.6	65.5	6.9	0.0		100.0	0.0	0.0	0.0		4.0	76.0	20.0	0.0		
PHF	0.625	0.250	0.583	0.000	0.813	0.667	0.594	0.250	0.000	0.725	0.375	0.000	0.000	0.000	0.375	0.250	0.679	0.417	0.000	0.625	0.761
Buses	2	0	3	0	5	2	5	0	0	7	0	0	0	0	0	0	3	1	0	4	16
Buses %	40.0	0.0	42.9	0.0	38.5	25.0	26.3	0.0	0.0	24.1	0.0	0.0	0.0	0.0	0.0	0.0	15.8	20.0	0.0	16.0	22.9
Single-Unit Trucks	3	0	4	0	7	6	12	0	0	18	1	0	0	0	1	0	14	2	0	16	42
Single-Unit %	60.0	0.0	57.1	0.0	53.8	75.0	63.2	0.0	0.0	62.1	33.3	0.0	0.0	0.0	33.3	0.0	73.7	40.0	0.0	64.0	60.0
Articulated Trucks	0	1	0	0	1	0	2	2	0	4	2	0	0	0	2	1	2	2	0	5	12
Articulated %	0.0	100.0	0.0	0.0	7.7	0.0	10.5	100.0	0.0	13.8	66.7	0.0	0.0	0.0	66.7	100.0	10.5	40.0	0.0	20.0	17.1
Buses	2	0	3	0	5	2	5	0	0	7	0	0	0	0	0	0	3	1	0	4	16
Single-Unit Trucks	3	0	4	0	7	6	12	0	0	18	1	0	0	0	1	0	14	2	0	16	42
Articulated Trucks	0	1	0	0	1	0	2	2	0	4	2	0	0	0	2	1	2	2	0	5	12
Total Entering Leg	5	1	7	0	13	8	19	2	0	29	3	0	0	0	3	1	19	5	0	25	70

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Buses					3					6					0					7	16
Single-Unit Trucks					8					19					0					15	42
Articulated Trucks					2					4					4					2	12
Total Exiting Leg					13					29					4					24	70

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
6:30 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	4
6:45 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4
Total	1	0	2	0	3	0	2	0	0	2	0	0	0	0	0	0	5	1	0	6	11
7:00 AM	0	0	0	0	0	2	4	0	0	6	0	0	0	0	0	0	3	0	0	3	9
7:15 AM	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	5
7:30 AM	1	0	3	0	4	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	8
7:45 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	3
Total	3	0	4	0	7	2	9	0	0	11	0	0	0	0	0	1	5	1	0	7	25
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
8:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	3
8:30 AM	2	0	1	0	3	1	2	0	0	3	0	0	0	0	0	0	3	0	0	3	9
8:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	2	0	3	4
Total	2	0	1	0	3	3	2	0	0	5	0	0	0	0	0	0	7	3	0	10	18
9:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3
12:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	6
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
1:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	4
1:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	2	0	2	1	2	0	0	3	0	0	0	0	0	0	4	0	0	4	9
2:00 PM	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	1	0	1	4
2:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
2:30 PM	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	4
2:45 PM	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	5
Total	2	0	3	0	5	2	5	0	0	7	0	0	0	0	0	0	3	1	0	4	16
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
3:15 PM	1	0	1	0	2	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	5
3:30 PM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	1	1	0	2	4
3:45 PM	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	5
Total	2	0	3	0	5	0	4	1	0	5	1	0	0	0	1	0	3	1	0	4	15
4:00 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
4:45 PM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	3	0	3	0	2	0	0	2	0	0	0	0	0	0	3	2	0	5	10
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	10	0	21	0	31	10	35	1	0	46	1	0	0	0	1	1	31	9	0	41	119
Approach %	32.3	0.0	67.7	0.0		21.7	76.1	2.2	0.0		100.0	0.0	0.0	0.0		2.4	75.6	22.0	0.0		
Total %	8.4	0.0	17.6	0.0	26.1	8.4	29.4	0.8	0.0	38.7	0.8	0.0	0.0	0.0	0.8	0.8	26.1	7.6	0.0	34.5	
Exiting Leg Total					19					53					2					45	119

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
6:45 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
6:45 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4
7:00 AM	0	0	0	0	0	2	4	0	0	6	0	0	0	0	0	0	3	0	0	3	9
7:15 AM	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	5
7:30 AM	1	0	3	0	4	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	8
Total Volume	2	0	6	0	8	2	8	0	0	10	0	0	0	0	0	1	7	0	0	8	26
% Approach Total	25.0	0.0	75.0	0.0		20.0	80.0	0.0	0.0		0.0	0.0	0.0	0.0		12.5	87.5	0.0	0.0		
PHF	0.500	0.000	0.500	0.000	0.500	0.250	0.500	0.000	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.250	0.583	0.000	0.000	0.667	0.722
Entering Leg	2	0	6	0	8	2	8	0	0	10	0	0	0	0	0	1	7	0	0	8	26
Exiting Leg					2					13					1					10	26
Total					10					23					1					18	52

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
1:30 PM	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:30 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	4
1:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00 PM	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	1	0	1	4
2:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
Total Volume	0	0	2	0	2	2	4	0	0	6	0	0	0	0	0	0	3	1	0	4	12
% Approach Total	0.0	0.0	100.0	0.0		33.3	66.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	75.0	25.0	0.0		
PHF	0.000	0.000	0.500	0.000	0.500	0.500	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.250	0.000	0.500	0.750
Entering Leg	0	0	2	0	2	2	4	0	0	6	0	0	0	0	0	0	3	1	0	4	12
Exiting Leg					3					5					0					4	12
Total					5					11					0					8	24

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
3:15 PM	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
3:15 PM	1	0	1	0	2	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	5
3:30 PM	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	1	1	0	2	4
3:45 PM	1	0	1	0	2	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	5
4:00 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	5
Total Volume	2	0	4	0	6	0	5	1	0	6	1	0	0	0	1	0	4	2	0	6	19
% Approach Total	33.3	0.0	66.7	0.0		0.0	83.3	16.7	0.0		100.0	0.0	0.0	0.0		0.0	66.7	33.3	0.0		
PHF	0.500	0.000	1.000	0.000	0.750	0.000	0.625	0.250	0.000	0.750	0.250	0.000	0.000	0.000	0.250	0.000	0.500	0.500	0.000	0.500	0.950
Entering Leg	2	0	4	0	6	0	5	1	0	6	1	0	0	0	1	0	4	2	0	6	19
Exiting Leg					2					9					1					7	19
Total					8					15					2					13	38

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	4
5:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	3	1	0	4	7
5:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	1	3	0	0	4	0	0	1	0	1	0	5	1	0	6	12
6:00 AM	0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	0	1	1	0	2	5
6:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	2	2	0	5	6
6:30 AM	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	0	2	1	0	3	6
6:45 AM	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	5
Total	2	0	3	0	5	2	2	0	0	4	0	1	0	0	1	1	6	5	0	12	22
7:00 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	4
7:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
7:30 AM	1	0	1	0	2	1	4	0	0	5	0	0	0	0	0	0	2	0	0	2	9
7:45 AM	1	0	1	0	2	2	3	0	0	5	0	0	0	0	0	0	4	1	0	5	12
Total	2	0	3	0	5	3	9	0	0	12	0	0	0	0	0	1	8	1	0	10	27
8:00 AM	1	0	1	0	2	1	2	0	0	3	0	0	0	0	0	0	2	1	0	3	8
8:15 AM	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	0	1	1	0	2	5
8:30 AM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	3
8:45 AM	1	0	3	0	4	1	5	0	0	6	0	0	0	0	0	0	1	1	0	2	12
Total	2	0	6	0	8	4	8	0	0	12	0	0	0	0	0	0	5	3	0	8	28
9:00 AM	0	0	3	0	3	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1	8
9:15 AM	1	0	0	0	1	3	1	0	0	4	0	0	0	0	0	0	3	0	0	3	8
9:30 AM	1	0	4	0	5	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	12
9:45 AM	2	0	1	0	3	0	3	1	0	4	1	0	0	0	1	0	2	2	0	4	12
Total	4	0	8	0	12	4	9	1	0	14	1	0	0	0	1	0	10	3	0	13	40
10:00 AM	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	4
10:15 AM	1	0	1	0	2	3	3	0	0	6	0	0	0	0	0	0	2	0	0	2	10
10:30 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	3	2	0	5	11
10:45 AM	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	1	1	0	0	2	5
Total	1	0	3	0	4	4	12	0	0	16	0	0	0	0	0	1	7	2	0	10	30
11:00 AM	0	0	2	0	2	1	4	0	0	5	0	0	0	0	0	0	1	0	0	1	8
11:15 AM	1	0	2	0	3	1	0	0	0	1	0	0	0	0	0	0	1	2	0	3	7
11:30 AM	1	0	1	0	2	0	6	1	0	7	0	0	0	0	0	0	2	2	0	4	13
11:45 AM	1	0	2	0	3	1	1	0	0	2	0	0	0	0	0	0	1	2	0	3	8
Total	3	0	7	0	10	3	11	1	0	15	0	0	0	0	0	0	5	6	0	11	36
12:00 PM	1	0	3	0	4	1	2	0	0	3	0	0	0	0	0	0	8	2	0	10	17
12:15 PM	2	0	1	0	3	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	11
12:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
12:45 PM	0	0	2	0	2	2	2	0	0	4	0	0	0	0	0	0	4	1	0	5	11
Total	3	0	6	0	9	3	11	0	0	14	0	0	0	0	0	0	16	3	0	19	42
1:00 PM	1	0	2	0	3	2	6	0	0	8	0	0	0	0	0	0	0	2	0	2	13
1:15 PM	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	4	0	0	4	8
1:30 PM	0	1	2	0	3	0	7	3	0	10	0	0	0	0	0	0	2	1	0	3	16
1:45 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	8	1	0	9	13
Total	1	1	5	0	7	4	18	3	0	25	0	0	0	0	0	0	14	4	0	18	50
2:00 PM	1	0	3	0	4	1	4	0	0	5	0	0	0	0	0	0	7	1	0	8	17
2:15 PM	0	0	0	0	0	3	0	0	0	3	1	0	0	0	1	0	2	0	0	2	6
2:30 PM	1	0	1	0	2	1	6	0	0	7	0	0	0	0	0	0	1	1	0	2	11
2:45 PM	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	0	4	0	0	4	8
Total	3	0	4	0	7	6	12	0	0	18	1	0	0	0	1	0	14	2	0	16	42
3:00 PM	0	0	1	0	1	0	2	0	0	2	0	0	1	0	1	0	1	0	0	1	5
3:15 PM	3	0	2	0	5	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	8
3:30 PM	0	0	2	0	2	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	7
3:45 PM	1	0	0	0	1	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0	5
Total	4	0	5	0	9	4	7	0	0	11	0	0	1	0	1	0	3	1	0	4	25
4:00 PM	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	4
4:15 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	4
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	2
Total	1	0	2	0	3	0	4	0	0	4	0	0	0	0	0	1	1	1	0	3	10
5:00 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	5
5:15 PM	1	0	1	0	2	1	0	0	0	1	0	0	1	0	1	0	2	1	0	3	7
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	2	0	1	0	3	2	1	0	0	3	0	0	1	0	1	0	5	1	0	6	13
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
6:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	4
Grand Total	30	1	54	0	85	40	108	5	0	153	2	1	3	0	6	4	100	33	0	137	381
Approach %	35.3	1.2	63.5	0.0		26.1	70.6	3.3	0.0		33.3	16.7	50.0	0.0		2.9	73.0	24.1	0.0		
Total %	7.9	0.3	14.2	0.0	22.3	10.5	28.3	1.3	0.0	40.2	0.5	0.3	0.8	0.0	1.6	1.0	26.2	8.7	0.0	36.0	
Exiting Leg Total					74					156					10					141	381

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
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PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:45 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:45 AM	1	0	3	0	4	1	5	0	0	6	0	0	0	0	0	0	1	1	0	2	12
9:00 AM	0	0	3	0	3	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1	8
9:15 AM	1	0	0	0	1	3	1	0	0	4	0	0	0	0	0	0	3	0	0	3	8
9:30 AM	1	0	4	0	5	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	12
Total Volume	3	0	10	0	13	5	11	0	0	16	0	0	0	0	0	0	9	2	0	11	40
% Approach Total	23.1	0.0	76.9	0.0		31.3	68.8	0.0	0.0		0.0	0.0	0.0	0.0		0.0	81.8	18.2	0.0		
PHF	0.750	0.000	0.625	0.000	0.650	0.417	0.550	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.000	0.563	0.500	0.000	0.550	0.833
Entering Leg	3	0	10	0	13	5	11	0	0	16	0	0	0	0	0	0	9	2	0	11	40
Exiting Leg					7					19					0					14	40
Total					20					35					0					25	80

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:15 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:15 PM	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	4	0	0	4	8
1:30 PM	0	1	2	0	3	0	7	3	0	10	0	0	0	0	0	0	2	1	0	3	16
1:45 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	8	1	0	9	13
2:00 PM	1	0	3	0	4	1	4	0	0	5	0	0	0	0	0	0	7	1	0	8	17
Total Volume	1	1	6	0	8	3	16	3	0	22	0	0	0	0	0	0	21	3	0	24	54
% Approach Total	12.5	12.5	75.0	0.0		13.6	72.7	13.6	0.0		0.0	0.0	0.0	0.0		0.0	87.5	12.5	0.0		
PHF	0.250	0.250	0.500	0.000	0.500	0.375	0.571	0.250	0.000	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.656	0.750	0.000	0.667	0.794
Entering Leg	1	1	6	0	8	3	16	3	0	22	0	0	0	0	0	0	21	3	0	24	54
Exiting Leg					6					27					4					17	54
Total					14					49					4					41	108

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	1	0	3	0	4	1	4	0	0	5	0	0	0	0	0	0	7	1	0	8	17
2:15 PM	0	0	0	0	0	3	0	0	0	3	1	0	0	0	1	0	2	0	0	2	6
2:30 PM	1	0	1	0	2	1	6	0	0	7	0	0	0	0	0	0	1	1	0	2	11
2:45 PM	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	0	4	0	0	4	8
Total Volume	3	0	4	0	7	6	12	0	0	18	1	0	0	0	1	0	14	2	0	16	42
% Approach Total	42.9	0.0	57.1	0.0		33.3	66.7	0.0	0.0		100.0	0.0	0.0	0.0		0.0	87.5	12.5	0.0		
PHF	0.750	0.000	0.333	0.000	0.438	0.500	0.500	0.000	0.000	0.643	0.250	0.000	0.000	0.000	0.250	0.000	0.500	0.500	0.000	0.500	0.618
Entering Leg	3	0	4	0	7	6	12	0	0	18	1	0	0	0	1	0	14	2	0	16	42
Exiting Leg					8					19					0					15	42
Total					15					37					1					31	84

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	0	2	3
6:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
8:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	0	5	1	0	6	9
9:00 AM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	3	0	0	0	3	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	7
10:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
10:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	2
10:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	0	2	2	0	4	7
11:00 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	4
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	1	0	0	1	5
11:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	5	1	0	6	0	0	0	0	0	0	3	0	0	3	10
12:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
12:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3
12:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	6
1:00 PM	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	0	0	1	0	1	4
1:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3
1:30 PM	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	1	0	0	1	4
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	1	1	4	0	6	0	0	0	0	0	0	3	1	0	4	11
2:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	2
2:15 PM	0	1	0	0	1	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	4
2:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	2	4
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	1	0	0	1	0	2	2	0	4	2	0	0	0	2	1	2	2	0	5	12
3:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	4	1	5	0	10	6	19	9	0	34	2	0	0	0	2	1	23	8	0	32	78
Approach %	40.0	10.0	50.0	0.0		17.6	55.9	26.5	0.0		100.0	0.0	0.0	0.0		3.1	71.9	25.0	0.0		
Total %	5.1	1.3	6.4	0.0	12.8	7.7	24.4	11.5	0.0	43.6	2.6	0.0	0.0	0.0	2.6	1.3	29.5	10.3	0.0	41.0	
Exiting Leg Total					14					30					11					23	78

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:45 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
8:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	3
Total Volume	0	0	1	0	1	2	2	0	0	4	0	0	0	0	0	0	4	1	0	5	10
% Approach Total	0.0	0.0	100.0	0.0		50.0	50.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	80.0	20.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.500	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.625	0.833
Entering Leg	0	0	1	0	1	2	2	0	0	4	0	0	0	0	0	0	4	1	0	5	10
Exiting Leg					3					5					0					2	10
Total					4					9					0					7	20

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

12:45 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	0	0	1	0	1	4
1:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3
1:30 PM	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	1	0	0	1	4
Total Volume	0	0	2	0	2	1	1	4	0	6	0	0	0	0	0	0	3	1	0	4	12
% Approach Total	0.0	0.0	100.0	0.0		16.7	16.7	66.7	0.0		0.0	0.0	0.0	0.0		0.0	75.0	25.0	0.0		
PHF	0.000	0.000	0.500	0.000	0.500	0.250	0.250	0.333	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.250	0.000	0.500	0.750
Entering Leg	0	0	2	0	2	1	1	4	0	6	0	0	0	0	0	0	3	1	0	4	12
Exiting Leg					2					5					4					1	12
Total					4					11					4					5	24

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	2
2:15 PM	0	1	0	0	1	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	4
2:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	2	0	2	4
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total Volume	0	1	0	0	1	0	2	2	0	4	2	0	0	0	2	1	2	2	0	5	12
% Approach Total	0.0	100.0	0.0	0.0		0.0	50.0	50.0	0.0		100.0	0.0	0.0	0.0		20.0	40.0	40.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.500	0.500	0.000	0.000	0.000	0.500	0.250	0.250	0.250	0.000	0.625	0.750
Entering Leg	0	1	0	0	1	0	2	2	0	4	2	0	0	0	2	1	2	2	0	5	12
Exiting Leg					2					4					4					2	12
Total					3					8					6					7	24

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Packer

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	3
6:00 AM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	3
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	1	0	0	0	1	0	1	0	0	1	0	0	1	0	1	4
7:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	0	2	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
9:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
10:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
10:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
11:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	0	0	1	0	1	4
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
12:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	5
1:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
2:00 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
2:15 PM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	2	3	0	0	0	3	0	0	0	0	0	0	0	1	0	1	6
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	7	0	8	6	11	0	0	17	0	1	0	0	1	0	6	4	0	10	36
Approach %	12.5	0.0	87.5	0.0		35.3	64.7	0.0	0.0		0.0	100.0	0.0	0.0		0.0	60.0	40.0	0.0		
Total %	2.8	0.0	19.4	0.0	22.2	16.7	30.6	0.0	0.0	47.2	0.0	2.8	0.0	0.0	2.8	0.0	16.7	11.1	0.0	27.8	
Exiting Leg Total					11					13					0					12	36

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Packer

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:15 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00 AM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	3
Total Volume	0	0	1	0	1	1	1	0	0	2	0	1	0	0	1	0	1	1	0	2	6
% Approach Total	0.0	0.0	100.0	0.0		50.0	50.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	50.0	50.0	0.0		
PHF	0.000	0.000	0.250	0.000	0.250	0.250	0.250	0.000	0.000	0.500	0.000	0.250	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.500	0.500
Entering Leg	0	0	1	0	1	1	1	0	0	2	0	1	0	0	1	0	1	1	0	2	6
Exiting Leg					3					2					0					1	6
Total					4					4					1					3	12

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:30 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
2:15 PM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Total Volume	1	0	1	0	2	3	0	0	0	3	0	0	0	0	0	0	0	2	0	2	7
% Approach Total	50.0	0.0	50.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		
PHF	0.250	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.583
Entering Leg	1	0	1	0	2	3	0	0	0	3	0	0	0	0	0	0	0	2	0	2	7
Exiting Leg					5					1					0					1	7
Total					7					4					0					3	14

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
2:15 PM	0	0	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	2	3	0	0	0	3	0	0	0	0	0	0	0	1	0	1	6
% Approach Total	50.0	0.0	50.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		
PHF	0.250	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.500
Entering Leg	1	0	1	0	2	3	0	0	0	3	0	0	0	0	0	0	0	1	0	1	6
Exiting Leg					4					1					0					1	6
Total					6					4					0					2	12

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Roll Off

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:00 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	4
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	1	0	0	1	5
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
12:00 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	3	0	3	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	6
1:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
2:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	2	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
4:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	14	0	14	6	7	0	0	13	0	0	0	0	0	0	2	1	0	3	30
Approach %	0.0	0.0	100.0	0.0		46.2	53.8	0.0	0.0		0.0	0.0	0.0	0.0		0.0	66.7	33.3	0.0		
Total %	0.0	0.0	46.7	0.0	46.7	20.0	23.3	0.0	0.0	43.3	0.0	0.0	0.0	0.0	0.0	0.0	6.7	3.3	0.0	10.0	
Exiting Leg Total					7					16					0					7	30

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class: **Roll Off**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
9:30 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
9:30 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	1	0	1	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	4
Total Volume	0	0	2	0	2	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	6
% Approach Total	0.0	0.0	100.0	0.0		50.0	50.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.500	0.000	0.500	0.250	0.500	0.000	0.000	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	0	2	0	2	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	6
Exiting Leg					2					2					0					2	6
Total					4					6					0					2	12

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

11:30 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
12:00 PM	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:15 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	2	0	2	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	6
% Approach Total	0.0	0.0	100.0	0.0		33.3	66.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.500	0.000	0.500	0.250	0.500	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.750
Entering Leg	0	0	2	0	2	1	2	0	0	3	0	0	0	0	0	0	1	0	0	1	6
Exiting Leg					1					3					0					2	6
Total					3					6					0					3	12

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

3:15 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
3:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
4:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	3	0	3	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
% Approach Total	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.750	0.000	0.750	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625
Entering Leg	0	0	3	0	3	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
Exiting Leg					2					3					0					0	5
Total					5					5					0					0	10

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Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Tractor Trailer

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	
Exiting Leg Total					0					1					0					0	1

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
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Client: **Bowman/E. Buck**
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Class: **Tractor Trailer**

	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg					0					0					0					0	0
Total					0					0					0					0	0

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

11:45 AM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Exiting Leg					0					1					0					0	1
Total					0					1					1					0	2

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Viscoloid Avenue from North					Lancaster Street (Route 117) from East					Driveway from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg					0					0					0					0	0
Total					0					0					0					0	0

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Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Viscoloid Avenue from North							Lancaster Street (Route 117) from East							Driveway from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	2	0	0	0	0	0	2	1	0	0	0	0	0	1	0	0	0	0	1	0	1	0	5	0	0	0	0	5	9
Approach %	100.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
Total %	22.2	0.0	0.0	0.0	0.0	0.0	22.2	11.1	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.0	0.0	0.0	11.1	0.0	11.1	0.0	55.6	0.0	0.0	0.0	0.0	55.6	
Exiting Leg Total							1							5							1							2	9

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Viscoloid Avenue from North							Lancaster Street (Route 117) from East							Driveway from South							Lancaster Street (Route 117) from West							
5:00 AM	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Viscoloid Avenue from North							Lancaster Street (Route 117) from East							Driveway from South							Lancaster Street (Route 117) from West							
11:00 AM	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Exiting Leg							0							1							0							0	1
Total							0							1							0							1	2

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

	Viscoloid Avenue from North							Lancaster Street (Route 117) from East							Driveway from South							Lancaster Street (Route 117) from West							
4:15 PM	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	2	3
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.375
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	2	3
Exiting Leg							0							2							1							0	3
Total							0							2							2							2	6

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Viscoloid Avenue from North							Lancaster Street (Route 117) from East							Driveway from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	0	0	0	2	3	5	0	0	0	0	1	0	1	0	0	0	0	2	3	5	0	0	0	0	2	0	2	13
Approach %	0	0	0	0	40	60		0	0	0	0	100	0		0	0	0	0	40	60		0	0	0	0	100	0		
Total %	0	0	0	0	15.4	23.1	38.5	0	0	0	0	7.69	0	7.69	0	0	0	0	15.4	23.1	38.5	0	0	0	0	15.4	0	15.4	
Exiting Leg Total							5							1							5							2	13

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

PDI File #: **250427 A**
Location: **N: Viscoloid Avenue S: Driveway**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Viscoloid Avenue from North							Lancaster Street (Route 117) from East							Driveway from South							Lancaster Street (Route 117) from West							
5:45 AM	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg							1							0							0							0	1
Total							2							0							0							0	2

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

	Viscoloid Avenue from North							Lancaster Street (Route 117) from East							Driveway from South							Lancaster Street (Route 117) from West							
12:15 PM	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	3
% Approach Total	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	50.0	50.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	3
Exiting Leg							1							0							2							0	3
Total							2							0							4							0	6

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

	Viscoloid Avenue from North							Lancaster Street (Route 117) from East							Driveway from South							Lancaster Street (Route 117) from West							
3:30 PM	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
3:30 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	3
Total Volume	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	4
% Approach Total	0.0	0.0	0.0	0.0	0.0	100.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	33.3	66.7		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333
Entering Leg	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	0	0	0	4
Exiting Leg							1							0							3							0	4
Total							2							0							6							0	8

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	20	0	0	20	26
5:15 AM	0	0	0	0	0	0	13	1	0	14	0	0	0	0	0	0	34	0	0	34	48
5:30 AM	0	0	0	0	0	0	16	1	0	17	0	0	1	0	1	1	58	0	0	59	77
5:45 AM	0	0	0	0	0	0	29	4	0	33	1	0	0	0	1	0	59	0	0	59	93
Total	0	0	0	0	0	0	64	6	0	70	1	0	1	0	2	1	171	0	0	172	244
6:00 AM	0	0	0	0	0	0	30	7	0	37	2	0	2	0	4	1	56	0	0	57	98
6:15 AM	0	0	0	0	0	0	33	0	0	33	1	0	1	0	2	1	53	0	0	54	89
6:30 AM	0	0	0	0	0	0	48	4	0	52	1	0	3	0	4	3	67	0	0	70	126
6:45 AM	0	0	0	0	0	0	57	2	0	59	2	0	2	0	4	5	88	0	0	93	156
Total	0	0	0	0	0	0	168	13	0	181	6	0	8	0	14	10	264	0	0	274	469
7:00 AM	0	0	0	0	0	0	82	9	0	91	4	0	2	0	6	6	79	0	0	85	182
7:15 AM	0	0	0	0	0	0	68	2	0	70	1	0	1	0	2	1	88	0	0	89	161
7:30 AM	0	0	0	0	0	0	70	1	0	71	2	0	4	0	6	2	104	0	0	106	183
7:45 AM	0	0	0	0	0	0	90	2	0	92	4	0	3	0	7	1	115	0	0	116	215
Total	0	0	0	0	0	0	310	14	0	324	11	0	10	0	21	10	386	0	0	396	741
8:00 AM	0	0	0	0	0	0	79	3	0	82	3	0	1	0	4	2	108	0	0	110	196
8:15 AM	0	0	0	0	0	0	73	3	0	76	2	0	2	0	4	4	90	0	0	94	174
8:30 AM	0	0	0	0	0	0	76	3	0	79	3	0	1	0	4	2	97	0	0	99	182
8:45 AM	0	0	0	0	0	0	74	5	0	79	2	0	2	0	4	1	102	0	0	103	186
Total	0	0	0	0	0	0	302	14	0	316	10	0	6	0	16	9	397	0	0	406	738
9:00 AM	0	0	0	0	0	0	84	1	0	85	5	0	1	0	6	4	90	0	0	94	185
9:15 AM	0	0	0	0	0	0	84	7	0	91	2	0	3	0	5	4	73	0	0	77	173
9:30 AM	0	0	0	0	0	0	57	3	0	60	2	0	0	0	2	2	67	0	0	69	131
9:45 AM	0	0	0	0	0	0	96	4	0	100	4	0	1	0	5	1	77	0	0	78	183
Total	0	0	0	0	0	0	321	15	0	336	13	0	5	0	18	11	307	0	0	318	672
10:00 AM	0	0	0	0	0	0	65	3	0	68	3	0	3	0	6	3	84	0	0	87	161
10:15 AM	0	0	0	0	0	0	63	2	0	65	2	0	5	0	7	7	63	0	0	70	142
10:30 AM	0	0	0	0	0	0	70	3	0	73	4	0	3	0	7	3	72	0	0	75	155
10:45 AM	0	0	0	0	0	0	84	3	0	87	2	0	1	0	3	0	66	0	0	66	156
Total	0	0	0	0	0	0	282	11	0	293	11	0	12	0	23	13	285	0	0	298	614
11:00 AM	0	0	0	0	0	0	98	0	0	98	4	0	2	0	6	2	83	0	0	85	189
11:15 AM	0	0	0	0	0	0	84	2	0	86	1	0	1	0	2	2	61	0	0	63	151
11:30 AM	0	0	0	0	0	0	86	4	0	90	3	0	3	0	6	3	81	0	0	84	180
11:45 AM	0	0	0	0	0	0	97	2	0	99	2	0	3	0	5	4	64	0	0	68	172
Total	0	0	0	0	0	0	365	8	0	373	10	0	9	0	19	11	289	0	0	300	692
12:00 PM	0	0	0	0	0	0	118	2	0	120	6	0	2	0	8	2	100	0	0	102	230
12:15 PM	0	0	0	0	0	0	101	1	0	102	3	0	5	0	8	0	106	0	0	106	216
12:30 PM	0	0	0	0	0	0	97	1	0	98	4	0	1	0	5	3	89	0	0	92	195
12:45 PM	0	0	0	0	0	0	100	3	0	103	3	0	3	0	6	3	100	0	0	103	212
Total	0	0	0	0	0	0	416	7	0	423	16	0	11	0	27	8	395	0	0	403	853
1:00 PM	0	0	0	0	0	0	133	3	0	136	3	0	3	0	6	1	85	0	0	86	228
1:15 PM	0	0	0	0	0	0	96	1	0	97	2	0	1	0	3	3	92	0	0	95	195
1:30 PM	0	0	0	0	0	0	92	2	0	94	3	0	1	0	4	4	79	0	0	83	181
1:45 PM	0	0	0	0	0	0	71	3	0	74	2	0	4	0	6	5	89	0	0	94	174
Total	0	0	0	0	0	0	392	9	0	401	10	0	9	0	19	13	345	0	0	358	778
2:00 PM	0	0	0	0	0	0	108	1	0	109	4	0	3	0	7	4	79	0	0	83	199
2:15 PM	0	0	0	0	0	0	113	3	0	116	0	0	6	0	6	0	80	0	0	80	202
2:30 PM	0	0	0	0	0	0	145	2	0	147	1	0	2	0	3	0	119	0	0	119	269
2:45 PM	0	0	0	0	0	0	131	2	0	133	1	0	4	0	5	1	107	0	0	108	246
Total	0	0	0	0	0	0	497	8	0	505	6	0	15	0	21	5	385	0	0	390	916
3:00 PM	0	0	0	0	0	0	148	1	0	149	2	0	8	0	10	4	86	0	0	90	249
3:15 PM	0	0	0	0	0	0	121	0	0	121	1	0	3	0	4	5	104	0	0	109	234
3:30 PM	0	0	0	0	0	0	129	1	0	130	3	0	5	0	8	5	105	0	0	110	248
3:45 PM	0	0	0	0	0	0	136	2	0	138	5	0	9	0	14	1	93	0	0	94	246
Total	0	0	0	0	0	0	534	4	0	538	11	0	25	0	36	15	388	0	0	403	977
4:00 PM	0	0	0	0	0	0	151	1	0	152	1	0	4	0	5	2	115	0	0	117	274
4:15 PM	0	0	0	0	0	0	134	2	0	136	4	0	5	0	9	1	97	0	0	98	243
4:30 PM	0	0	0	0	0	0	147	0	0	147	0	0	2	0	2	0	111	0	0	111	260
4:45 PM	0	0	0	0	0	0	142	1	0	143	1	0	0	0	1	0	86	0	0	86	230
Total	0	0	0	0	0	0	574	4	0	578	6	0	11	0	17	3	409	0	0	412	1007
5:00 PM	0	0	0	0	0	0	138	1	0	139	1	0	4	0	5	1	105	0	0	106	250
5:15 PM	0	0	0	0	0	0	159	0	0	159	0	0	1	0	1	0	91	0	0	91	251
5:30 PM	0	0	0	0	0	0	131	1	0	132	1	0	4	0	5	0	83	0	0	83	220
5:45 PM	0	0	0	0	0	0	111	0	0	111	0	0	0	0	0	0	66	0	0	66	177
Total	0	0	0	0	0	0	539	2	0	541	2	0	9	0	11	1	345	0	0	346	898
6:00 PM	0	0	0	0	0	0	99	1	0	100	0	0	0	0	0	0	78	0	0	78	178
6:15 PM	0	0	0	0	0	0	90	1	0	91	3	0	1	0	4	0	78	0	0	78	173
6:30 PM	0	0	0	0	0	0	107	0	0	107	0	0	0	0	0	1	76	0	0	77	184
6:45 PM	0	0	0	0	0	0	89	1	0	90	0	0	1	0	1	0	59	0	0	59	150
Total	0	0	0	0	0	0	385	3	0	388	3	0	2	0	5	1	291	0	0	292	685
Grand Total	0	0	0	0	0	0	5149	118	0	5267	116	0	133	0	249	111	4657	0	0	4768	10284
Approach %	0.0	0.0	0.0	0.0		0.0	97.8	2.2	0.0		46.6	0.0	53.4	0.0		2.3	97.7	0.0	0.0		

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class:

Cars and Heavy Vehicles (Combined)

	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Total %	0.0	0.0	0.0	0.0	0.0	0.0	50.1	1.1	0.0	51.2	1.1	0.0	1.3	0.0	2.4	1.1	45.3	0.0	0.0	46.4	
Exiting Leg Total					0					4773					229					5282	10284
Cars	0	0	0	0	0	0	4950	68	0	5018	58	0	87	0	145	63	4472	0	0	4535	9698
% Cars	0.0	0.0	0.0	0.0	0.0	0.0	96.1	57.6	0.0	95.3	50.0	0.0	65.4	0.0	58.2	56.8	96.0	0.0	0.0	95.1	94.3
Exiting Leg Total					0					4530					131					5037	9698
Heavy Vehicles	0	0	0	0	0	0	199	50	0	249	58	0	46	0	104	48	185	0	0	233	586
% Heavy Vehicles	0.0	0.0	0.0	0.0	0.0	0.0	3.9	42.4	0.0	4.7	50.0	0.0	34.6	0.0	41.8	43.2	4.0	0.0	0.0	4.9	5.7
Exiting Leg Total					0					243					98					245	586

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

7:30 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	0	70	1	0	71	2	0	4	0	6	2	104	0	0	106	183
7:45 AM	0	0	0	0	0	0	90	2	0	92	4	0	3	0	7	1	115	0	0	116	215
8:00 AM	0	0	0	0	0	0	79	3	0	82	3	0	1	0	4	2	108	0	0	110	196
8:15 AM	0	0	0	0	0	0	73	3	0	76	2	0	2	0	4	4	90	0	0	94	174
Total Volume	0	0	0	0	0	0	312	9	0	321	11	0	10	0	21	9	417	0	0	426	768
% Approach Total	0.0	0.0	0.0	0.0		0.0	97.2	2.8	0.0		52.4	0.0	47.6	0.0		2.1	97.9	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.867	0.750	0.000	0.872	0.688	0.000	0.625	0.000	0.750	0.563	0.907	0.000	0.000	0.918	0.893
Cars	0	0	0	0	0	0	293	4	0	297	2	0	7	0	9	4	400	0	0	404	710
Cars %	0.0	0.0	0.0	0.0	0.0	0.0	93.9	44.4	0.0	92.5	18.2	0.0	70.0	0.0	42.9	44.4	95.9	0.0	0.0	94.8	92.4
Heavy Vehicles	0	0	0	0	0	0	19	5	0	24	9	0	3	0	12	5	17	0	0	22	58
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	6.1	55.6	0.0	7.5	81.8	0.0	30.0	0.0	57.1	55.6	4.1	0.0	0.0	5.2	7.6
Cars Enter Leg	0	0	0	0	0	0	293	4	0	297	2	0	7	0	9	4	400	0	0	404	710
Heavy Enter Leg	0	0	0	0	0	0	19	5	0	24	9	0	3	0	12	5	17	0	0	22	58
Total Entering Leg	0	0	0	0	0	0	312	9	0	321	11	0	10	0	21	9	417	0	0	426	768
Cars Exiting Leg					0					402					8					300	710
Heavy Exiting Leg					0					26					10					22	58
Total Exiting Leg					0					428					18					322	768

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

12:00 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:00 PM	0	0	0	0	0	0	118	2	0	120	6	0	2	0	8	2	100	0	0	102	230
12:15 PM	0	0	0	0	0	0	101	1	0	102	3	0	5	0	8	0	106	0	0	106	216
12:30 PM	0	0	0	0	0	0	97	1	0	98	4	0	1	0	5	3	89	0	0	92	195
12:45 PM	0	0	0	0	0	0	100	3	0	103	3	0	3	0	6	3	100	0	0	103	212
Total Volume	0	0	0	0	0	0	416	7	0	423	16	0	11	0	27	8	395	0	0	403	853
% Approach Total	0.0	0.0	0.0	0.0		0.0	98.3	1.7	0.0		59.3	0.0	40.7	0.0		2.0	98.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.881	0.583	0.000	0.881	0.667	0.000	0.550	0.000	0.844	0.667	0.932	0.000	0.000	0.950	0.927
Cars	0	0	0	0	0	0	401	2	0	403	6	0	5	0	11	4	375	0	0	379	793
Cars %	0.0	0.0	0.0	0.0	0.0	0.0	96.4	28.6	0.0	95.3	37.5	0.0	45.5	0.0	40.7	50.0	94.9	0.0	0.0	94.0	93.0
Heavy Vehicles	0	0	0	0	0	0	15	5	0	20	10	0	6	0	16	4	20	0	0	24	60
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	3.6	71.4	0.0	4.7	62.5	0.0	54.5	0.0	59.3	50.0	5.1	0.0	0.0	6.0	7.0
Cars Enter Leg	0	0	0	0	0	0	401	2	0	403	6	0	5	0	11	4	375	0	0	379	793
Heavy Enter Leg	0	0	0	0	0	0	15	5	0	20	10	0	6	0	16	4	20	0	0	24	60
Total Entering Leg	0	0	0	0	0	0	416	7	0	423	16	0	11	0	27	8	395	0	0	403	853
Cars Exiting Leg					0					381					6					406	793
Heavy Exiting Leg					0					30					9					21	60
Total Exiting Leg					0					411					15					427	853

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

3:45 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
3:45 PM	0	0	0	0	0	0	136	2	0	138	5	0	9	0	14	1	93	0	0	94	246
4:00 PM	0	0	0	0	0	0	151	1	0	152	1	0	4	0	5	2	115	0	0	117	274
4:15 PM	0	0	0	0	0	0	134	2	0	136	4	0	5	0	9	1	97	0	0	98	243
4:30 PM	0	0	0	0	0	0	147	0	0	147	0	0	2	0	2	0	111	0	0	111	260
Total Volume	0	0	0	0	0	0	568	5	0	573	10	0	20	0	30	4	416	0	0	420	1023
% Approach Total	0.0	0.0	0.0	0.0		0.0	99.1	0.9	0.0		33.3	0.0	66.7	0.0		1.0	99.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.940	0.625	0.000	0.942	0.500	0.000	0.556	0.000	0.536	0.500	0.904	0.000	0.000	0.897	0.933
Cars	0	0	0	0	0	0	559	5	0	564	9	0	15	0	24	2	410	0	0	412	1000
Cars %	0.0	0.0	0.0	0.0	0.0	0.0	98.4	100.0	0.0	98.4	90.0	0.0	75.0	0.0	80.0	50.0	98.6	0.0	0.0	98.1	97.8
Heavy Vehicles	0	0	0	0	0	0	9	0	0	9	1	0	5	0	6	2	6	0	0	8	23
Heavy Vehicles %	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.6	10.0	0.0	25.0	0.0	20.0	50.0	1.4	0.0	0.0	1.9	2.2
Cars Enter Leg	0	0	0	0	0	0	559	5	0	564	9	0	15	0	24	2	410	0	0	412	1000
Heavy Enter Leg	0	0	0	0	0	0	9	0	0	9	1	0	5	0	6	2	6	0	0	8	23
Total Entering Leg	0	0	0	0	0	0	568	5	0	573	10	0	20	0	30	4	416	0	0	420	1023
Cars Exiting Leg					0					419					7					574	1000
Heavy Exiting Leg					0					7					2					14	23
Total Exiting Leg					0					426					9					588	1023

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	20	0	0	20	26
5:15 AM	0	0	0	0	0	0	12	1	0	13	0	0	0	0	0	0	30	0	0	30	43
5:30 AM	0	0	0	0	0	0	13	1	0	14	0	0	1	0	1	1	55	0	0	56	71
5:45 AM	0	0	0	0	0	0	25	4	0	29	1	0	0	0	1	0	59	0	0	59	89
Total	0	0	0	0	0	0	56	6	0	62	1	0	1	0	2	1	164	0	0	165	229
6:00 AM	0	0	0	0	0	0	30	2	0	32	2	0	2	0	4	0	54	0	0	54	90
6:15 AM	0	0	0	0	0	0	33	0	0	33	1	0	1	0	2	1	49	0	0	50	85
6:30 AM	0	0	0	0	0	0	45	4	0	49	0	0	2	0	2	3	64	0	0	67	118
6:45 AM	0	0	0	0	0	0	54	2	0	56	1	0	1	0	2	5	82	0	0	87	145
Total	0	0	0	0	0	0	162	8	0	170	4	0	6	0	10	9	249	0	0	258	438
7:00 AM	0	0	0	0	0	0	77	7	0	84	3	0	2	0	5	4	77	0	0	81	170
7:15 AM	0	0	0	0	0	0	59	0	0	59	1	0	1	0	2	1	85	0	0	86	147
7:30 AM	0	0	0	0	0	0	66	0	0	66	1	0	2	0	3	1	100	0	0	101	170
7:45 AM	0	0	0	0	0	0	83	1	0	84	0	0	3	0	3	1	109	0	0	110	197
Total	0	0	0	0	0	0	285	8	0	293	5	0	8	0	13	7	371	0	0	378	684
8:00 AM	0	0	0	0	0	0	75	2	0	77	0	0	1	0	1	1	103	0	0	104	182
8:15 AM	0	0	0	0	0	0	69	1	0	70	1	0	1	0	2	1	88	0	0	89	161
8:30 AM	0	0	0	0	0	0	70	2	0	72	2	0	1	0	3	0	94	0	0	94	169
8:45 AM	0	0	0	0	0	0	69	2	0	71	1	0	0	0	1	0	93	0	0	93	165
Total	0	0	0	0	0	0	283	7	0	290	4	0	3	0	7	2	378	0	0	380	677
9:00 AM	0	0	0	0	0	0	79	0	0	79	1	0	0	0	1	1	88	0	0	89	169
9:15 AM	0	0	0	0	0	0	82	5	0	87	1	0	1	0	2	3	69	0	0	72	161
9:30 AM	0	0	0	0	0	0	53	2	0	55	2	0	0	0	2	0	63	0	0	63	120
9:45 AM	0	0	0	0	0	0	94	2	0	96	2	0	0	0	2	1	70	0	0	71	169
Total	0	0	0	0	0	0	308	9	0	317	6	0	1	0	7	5	290	0	0	295	619
10:00 AM	0	0	0	0	0	0	59	1	0	60	2	0	1	0	3	2	83	0	0	85	148
10:15 AM	0	0	0	0	0	0	58	0	0	58	1	0	1	0	2	5	62	0	0	67	127
10:30 AM	0	0	0	0	0	0	64	1	0	65	2	0	3	0	5	0	71	0	0	71	141
10:45 AM	0	0	0	0	0	0	83	1	0	84	0	0	0	0	0	0	63	0	0	63	147
Total	0	0	0	0	0	0	264	3	0	267	5	0	5	0	10	7	279	0	0	286	563
11:00 AM	0	0	0	0	0	0	90	0	0	90	0	0	2	0	2	0	79	0	0	79	171
11:15 AM	0	0	0	0	0	0	82	1	0	83	0	0	1	0	1	0	59	0	0	59	143
11:30 AM	0	0	0	0	0	0	78	0	0	78	0	0	1	0	1	1	75	0	0	76	155
11:45 AM	0	0	0	0	0	0	94	1	0	95	1	0	1	0	2	1	59	0	0	60	157
Total	0	0	0	0	0	0	344	2	0	346	1	0	5	0	6	2	272	0	0	274	626
12:00 PM	0	0	0	0	0	0	109	0	0	109	2	0	2	0	4	0	94	0	0	94	207
12:15 PM	0	0	0	0	0	0	99	0	0	99	1	0	2	0	3	0	103	0	0	103	205
12:30 PM	0	0	0	0	0	0	96	1	0	97	2	0	0	0	2	2	83	0	0	85	184
12:45 PM	0	0	0	0	0	0	97	1	0	98	1	0	1	0	2	2	95	0	0	97	197
Total	0	0	0	0	0	0	401	2	0	403	6	0	5	0	11	4	375	0	0	379	793
1:00 PM	0	0	0	0	0	0	125	0	0	125	1	0	1	0	2	0	80	0	0	80	207
1:15 PM	0	0	0	0	0	0	93	1	0	94	0	0	0	0	0	3	85	0	0	88	182
1:30 PM	0	0	0	0	0	0	81	1	0	82	1	0	0	0	1	2	74	0	0	76	159
1:45 PM	0	0	0	0	0	0	68	3	0	71	0	0	4	0	4	5	82	0	0	87	162
Total	0	0	0	0	0	0	367	5	0	372	2	0	5	0	7	10	321	0	0	331	710
2:00 PM	0	0	0	0	0	0	102	0	0	102	3	0	3	0	6	0	75	0	0	75	183
2:15 PM	0	0	0	0	0	0	107	3	0	110	0	0	3	0	3	0	76	0	0	76	189
2:30 PM	0	0	0	0	0	0	136	1	0	137	1	0	1	0	2	0	114	0	0	114	253
2:45 PM	0	0	0	0	0	0	127	2	0	129	0	0	3	0	3	1	100	0	0	101	233
Total	0	0	0	0	0	0	472	6	0	478	4	0	10	0	14	1	365	0	0	366	858
3:00 PM	0	0	0	0	0	0	147	0	0	147	2	0	7	0	9	3	84	0	0	87	243
3:15 PM	0	0	0	0	0	0	118	0	0	118	1	0	2	0	3	3	100	0	0	103	224
3:30 PM	0	0	0	0	0	0	124	1	0	125	2	0	4	0	6	5	100	0	0	105	236
3:45 PM	0	0	0	0	0	0	133	2	0	135	4	0	6	0	10	0	92	0	0	92	237
Total	0	0	0	0	0	0	522	3	0	525	9	0	19	0	28	11	376	0	0	387	940
4:00 PM	0	0	0	0	0	0	148	1	0	149	1	0	4	0	5	1	110	0	0	111	265
4:15 PM	0	0	0	0	0	0	134	2	0	136	4	0	3	0	7	1	97	0	0	98	241
4:30 PM	0	0	0	0	0	0	144	0	0	144	0	0	2	0	2	0	111	0	0	111	257
4:45 PM	0	0	0	0	0	0	141	1	0	142	1	0	0	0	1	0	82	0	0	82	225
Total	0	0	0	0	0	0	567	4	0	571	6	0	9	0	15	2	400	0	0	402	988
5:00 PM	0	0	0	0	0	0	136	1	0	137	1	0	4	0	5	1	104	0	0	105	247
5:15 PM	0	0	0	0	0	0	158	0	0	158	0	0	1	0	1	0	91	0	0	91	250
5:30 PM	0	0	0	0	0	0	131	1	0	132	1	0	4	0	5	0	83	0	0	83	220
5:45 PM	0	0	0	0	0	0	110	0	0	110	0	0	0	0	0	0	66	0	0	66	176
Total	0	0	0	0	0	0	535	2	0	537	2	0	9	0	11	1	344	0	0	345	893
6:00 PM	0	0	0	0	0	0	99	1	0	100	0	0	0	0	0	0	77	0	0	77	177
6:15 PM	0	0	0	0	0	0	90	1	0	91	3	0	0	0	3	0	77	0	0	77	171
6:30 PM	0	0	0	0	0	0	106	0	0	106	0	0	0	0	0	1	76	0	0	77	183
6:45 PM	0	0	0	0	0	0	89	1	0	90	0	0	1	0	1	0	58	0	0	58	149
Total	0	0	0	0	0	0	384	3	0	387	3	0	1	0	4	1	288	0	0	289	680
Grand Total	0	0	0	0	0	0	4950	68	0	5018	58	0	87	0	145	63	4472	0	0	4535	9698

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	0.0	0.0	0.0	0.0		0.0	98.6	1.4	0.0		40.0	0.0	60.0	0.0		1.4	98.6	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	51.0	0.7	0.0	51.7	0.6	0.0	0.9	0.0	1.5	0.6	46.1	0.0	0.0	46.8	
Exiting Leg Total					0					4530					131					5037	9698

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

7:30 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	0	66	0	0	66	1	0	2	0	3	1	100	0	0	101	170
7:45 AM	0	0	0	0	0	0	83	1	0	84	0	0	3	0	3	1	109	0	0	110	197
8:00 AM	0	0	0	0	0	0	75	2	0	77	0	0	1	0	1	1	103	0	0	104	182
8:15 AM	0	0	0	0	0	0	69	1	0	70	1	0	1	0	2	1	88	0	0	89	161
Total Volume	0	0	0	0	0	0	293	4	0	297	2	0	7	0	9	4	400	0	0	404	710
% Approach Total	0.0	0.0	0.0	0.0		0.0	98.7	1.3	0.0		22.2	0.0	77.8	0.0		1.0	99.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.883	0.500	0.000	0.884	0.500	0.000	0.583	0.000	0.750	1.000	0.917	0.000	0.000	0.918	0.901
Entering Leg	0	0	0	0	0	0	293	4	0	297	2	0	7	0	9	4	400	0	0	404	710
Exiting Leg					0					402					8					300	710
Total					0					699					17					704	1420

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

12:00 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:00 PM	0	0	0	0	0	0	109	0	0	109	2	0	2	0	4	0	94	0	0	94	207
12:15 PM	0	0	0	0	0	0	99	0	0	99	1	0	2	0	3	0	103	0	0	103	205
12:30 PM	0	0	0	0	0	0	96	1	0	97	2	0	0	0	2	2	83	0	0	85	184
12:45 PM	0	0	0	0	0	0	97	1	0	98	1	0	1	0	2	2	95	0	0	97	197
Total Volume	0	0	0	0	0	0	401	2	0	403	6	0	5	0	11	4	375	0	0	379	793
% Approach Total	0.0	0.0	0.0	0.0		0.0	99.5	0.5	0.0		54.5	0.0	45.5	0.0		1.1	98.9	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.920	0.500	0.000	0.924	0.750	0.000	0.625	0.000	0.688	0.500	0.910	0.000	0.000	0.920	0.958
Entering Leg	0	0	0	0	0	0	401	2	0	403	6	0	5	0	11	4	375	0	0	379	793
Exiting Leg					0					381					6					406	793
Total					0					784					17					785	1586

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

3:45 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
3:45 PM	0	0	0	0	0	0	133	2	0	135	4	0	6	0	10	0	92	0	0	92	237
4:00 PM	0	0	0	0	0	0	148	1	0	149	1	0	4	0	5	1	110	0	0	111	265
4:15 PM	0	0	0	0	0	0	134	2	0	136	4	0	3	0	7	1	97	0	0	98	241
4:30 PM	0	0	0	0	0	0	144	0	0	144	0	0	2	0	2	0	111	0	0	111	257
Total Volume	0	0	0	0	0	0	559	5	0	564	9	0	15	0	24	2	410	0	0	412	1000
% Approach Total	0.0	0.0	0.0	0.0		0.0	99.1	0.9	0.0		37.5	0.0	62.5	0.0		0.5	99.5	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.944	0.625	0.000	0.946	0.563	0.000	0.625	0.000	0.600	0.500	0.923	0.000	0.000	0.928	0.943
Entering Leg	0	0	0	0	0	0	559	5	0	564	9	0	15	0	24	2	410	0	0	412	1000
Exiting Leg					0					419					7					574	1000
Total					0					983					31					986	2000

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	5
5:30 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	6
5:45 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Total	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	7	0	0	7	15
6:00 AM	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	1	2	0	0	3	8
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
6:30 AM	0	0	0	0	0	0	3	0	0	3	1	0	1	0	2	0	3	0	0	3	8
6:45 AM	0	0	0	0	0	0	3	0	0	3	1	0	1	0	2	0	6	0	0	6	11
Total	0	0	0	0	0	0	6	5	0	11	2	0	2	0	4	1	15	0	0	16	31
7:00 AM	0	0	0	0	0	0	5	2	0	7	1	0	0	0	1	2	2	0	0	4	12
7:15 AM	0	0	0	0	0	0	9	2	0	11	0	0	0	0	0	0	3	0	0	3	14
7:30 AM	0	0	0	0	0	0	4	1	0	5	1	0	2	0	3	1	4	0	0	5	13
7:45 AM	0	0	0	0	0	0	7	1	0	8	4	0	0	0	4	0	6	0	0	6	18
Total	0	0	0	0	0	0	25	6	0	31	6	0	2	0	8	3	15	0	0	18	57
8:00 AM	0	0	0	0	0	0	4	1	0	5	3	0	0	0	3	1	5	0	0	6	14
8:15 AM	0	0	0	0	0	0	4	2	0	6	1	0	1	0	2	3	2	0	0	5	13
8:30 AM	0	0	0	0	0	0	6	1	0	7	1	0	0	0	1	2	3	0	0	5	13
8:45 AM	0	0	0	0	0	0	5	3	0	8	1	0	2	0	3	1	9	0	0	10	21
Total	0	0	0	0	0	0	19	7	0	26	6	0	3	0	9	7	19	0	0	26	61
9:00 AM	0	0	0	0	0	0	5	1	0	6	4	0	1	0	5	3	2	0	0	5	16
9:15 AM	0	0	0	0	0	0	2	2	0	4	1	0	2	0	3	1	4	0	0	5	12
9:30 AM	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	2	4	0	0	6	11
9:45 AM	0	0	0	0	0	0	2	2	0	4	2	0	1	0	3	0	7	0	0	7	14
Total	0	0	0	0	0	0	13	6	0	19	7	0	4	0	11	6	17	0	0	23	53
10:00 AM	0	0	0	0	0	0	6	2	0	8	1	0	2	0	3	1	1	0	0	2	13
10:15 AM	0	0	0	0	0	0	5	2	0	7	1	0	4	0	5	2	1	0	0	3	15
10:30 AM	0	0	0	0	0	0	6	2	0	8	2	0	0	0	2	3	1	0	0	4	14
10:45 AM	0	0	0	0	0	0	1	2	0	3	2	0	1	0	3	0	3	0	0	3	9
Total	0	0	0	0	0	0	18	8	0	26	6	0	7	0	13	6	6	0	0	12	51
11:00 AM	0	0	0	0	0	0	8	0	0	8	4	0	0	0	4	2	4	0	0	6	18
11:15 AM	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	2	2	0	0	4	8
11:30 AM	0	0	0	0	0	0	8	4	0	12	3	0	2	0	5	2	6	0	0	8	25
11:45 AM	0	0	0	0	0	0	3	1	0	4	1	0	2	0	3	3	5	0	0	8	15
Total	0	0	0	0	0	0	21	6	0	27	9	0	4	0	13	9	17	0	0	26	66
12:00 PM	0	0	0	0	0	0	9	2	0	11	4	0	0	0	4	2	6	0	0	8	23
12:15 PM	0	0	0	0	0	0	2	1	0	3	2	0	3	0	5	0	3	0	0	3	11
12:30 PM	0	0	0	0	0	0	1	0	0	1	2	0	1	0	3	1	6	0	0	7	11
12:45 PM	0	0	0	0	0	0	3	2	0	5	2	0	2	0	4	1	5	0	0	6	15
Total	0	0	0	0	0	0	15	5	0	20	10	0	6	0	16	4	20	0	0	24	60
1:00 PM	0	0	0	0	0	0	8	3	0	11	2	0	2	0	4	1	5	0	0	6	21
1:15 PM	0	0	0	0	0	0	3	0	0	3	2	0	1	0	3	0	7	0	0	7	13
1:30 PM	0	0	0	0	0	0	11	1	0	12	2	0	1	0	3	2	5	0	0	7	22
1:45 PM	0	0	0	0	0	0	3	0	0	3	2	0	0	0	2	0	7	0	0	7	12
Total	0	0	0	0	0	0	25	4	0	29	8	0	4	0	12	3	24	0	0	27	68
2:00 PM	0	0	0	0	0	0	6	1	0	7	1	0	0	0	1	4	4	0	0	8	16
2:15 PM	0	0	0	0	0	0	6	0	0	6	0	0	3	0	3	0	4	0	0	4	13
2:30 PM	0	0	0	0	0	0	9	1	0	10	0	0	1	0	1	0	5	0	0	5	16
2:45 PM	0	0	0	0	0	0	4	0	0	4	1	0	1	0	2	0	7	0	0	7	13
Total	0	0	0	0	0	0	25	2	0	27	2	0	5	0	7	4	20	0	0	24	58
3:00 PM	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	1	2	0	0	3	6
3:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	2	4	0	0	6	10
3:30 PM	0	0	0	0	0	0	5	0	0	5	1	0	1	0	2	0	5	0	0	5	12
3:45 PM	0	0	0	0	0	0	3	0	0	3	1	0	3	0	4	1	1	0	0	2	9
Total	0	0	0	0	0	0	12	1	0	13	2	0	6	0	8	4	12	0	0	16	37
4:00 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	1	5	0	0	6	9
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	5
Total	0	0	0	0	0	0	7	0	0	7	0	0	2	0	2	1	9	0	0	10	19
5:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
5:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	5
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	2
6:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	3	0	0	3	5
Grand Total	0	0	0	0	0	0	199	50	0	249	58	0	46	0	104	48	185	0	0	233	586
Approach %	0.0	0.0	0.0	0.0		0.0	79.9	20.1	0.0		55.8	0.0	44.2	0.0		20.6	79.4	0.0	0.0		

PDI File #: **250427 BBB**
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Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Total %	0.0	0.0	0.0	0.0	0.0	0.0	34.0	8.5	0.0	42.5	9.9	0.0	7.8	0.0	17.7	8.2	31.6	0.0	0.0	39.8	
Exiting Leg Total					0					243					98					245	586
Buses	0	0	0	0	0	0	46	0	0	46	0	0	0	0	0	0	42	0	0	42	88
% Buses	0.0	0.0	0.0	0.0	0.0	0.0	23.1	0.0	0.0	18.5	0.0	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0	18.0	15.0
Exiting Leg Total					0					42					0					46	88
Single-Unit Trucks	0	0	0	0	0	0	121	30	0	151	36	0	44	0	80	46	115	0	0	161	392
% Single-Unit	0.0	0.0	0.0	0.0	0.0	0.0	60.8	60.0	0.0	60.6	62.1	0.0	95.7	0.0	76.9	95.8	62.2	0.0	0.0	69.1	66.9
Exiting Leg Total					0					151					76					165	392
Articulated Trucks	0	0	0	0	0	0	32	20	0	52	22	0	2	0	24	2	28	0	0	30	106
% Articulated	0.0	0.0	0.0	0.0	0.0	0.0	16.1	40.0	0.0	20.9	37.9	0.0	4.3	0.0	23.1	4.2	15.1	0.0	0.0	12.9	18.1
Exiting Leg Total					0					50					22					34	106

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

8:15 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:15 AM	0	0	0	0	0	0	4	2	0	6	1	0	1	0	2	3	2	0	0	5	13
8:30 AM	0	0	0	0	0	0	6	1	0	7	1	0	0	0	1	2	3	0	0	5	13
8:45 AM	0	0	0	0	0	0	5	3	0	8	1	0	2	0	3	1	9	0	0	10	21
9:00 AM	0	0	0	0	0	0	5	1	0	6	4	0	1	0	5	3	2	0	0	5	16
Total Volume	0	0	0	0	0	0	20	7	0	27	7	0	4	0	11	9	16	0	0	25	63
% Approach Total	0.0	0.0	0.0	0.0		0.0	74.1	25.9	0.0		63.6	0.0	36.4	0.0		36.0	64.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.833	0.583	0.000	0.844	0.438	0.000	0.500	0.000	0.550	0.750	0.444	0.000	0.000	0.625	0.750
Buses	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	10
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0	0.0	0.0	31.3	0.0	0.0	20.0	15.9
Single-Unit Trucks	0	0	0	0	0	0	12	4	0	16	6	0	3	0	9	8	7	0	0	15	40
Single-Unit %	0.0	0.0	0.0	0.0	0.0	0.0	60.0	57.1	0.0	59.3	85.7	0.0	75.0	0.0	81.8	88.9	43.8	0.0	0.0	60.0	63.5
Articulated Trucks	0	0	0	0	0	0	3	3	0	6	1	0	1	0	2	1	4	0	0	5	13
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	15.0	42.9	0.0	22.2	14.3	0.0	25.0	0.0	18.2	11.1	25.0	0.0	0.0	20.0	20.6
Buses	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	10
Single-Unit Trucks	0	0	0	0	0	0	12	4	0	16	6	0	3	0	9	8	7	0	0	15	40
Articulated Trucks	0	0	0	0	0	0	3	3	0	6	1	0	1	0	2	1	4	0	0	5	13
Total Entering Leg	0	0	0	0	0	0	20	7	0	27	7	0	4	0	11	9	16	0	0	25	63
Buses					0					5					0					5	10
Single-Unit Trucks					0					13					12					15	40
Articulated Trucks					0					5					4					4	13
Total Exiting Leg					0					23					16					24	63

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

11:30 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:30 AM	0	0	0	0	0	0	8	4	0	12	3	0	2	0	5	2	6	0	0	8	25
11:45 AM	0	0	0	0	0	0	3	1	0	4	1	0	2	0	3	3	5	0	0	8	15
12:00 PM	0	0	0	0	0	0	9	2	0	11	4	0	0	0	4	2	6	0	0	8	23
12:15 PM	0	0	0	0	0	0	2	1	0	3	2	0	3	0	5	0	3	0	0	3	11
Total Volume	0	0	0	0	0	0	22	8	0	30	10	0	7	0	17	7	20	0	0	27	74
% Approach Total	0.0	0.0	0.0	0.0		0.0	73.3	26.7	0.0		58.8	0.0	41.2	0.0		25.9	74.1	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.611	0.500	0.000	0.625	0.625	0.000	0.583	0.000	0.850	0.583	0.833	0.000	0.000	0.844	0.740
Buses	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	7
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	0.0	7.4	9.5
Single-Unit Trucks	0	0	0	0	0	0	11	7	0	18	4	0	6	0	10	7	16	0	0	23	51
Single-Unit %	0.0	0.0	0.0	0.0	0.0	0.0	50.0	87.5	0.0	60.0	40.0	0.0	85.7	0.0	58.8	100.0	80.0	0.0	0.0	85.2	68.9
Articulated Trucks	0	0	0	0	0	0	6	1	0	7	6	0	1	0	7	0	2	0	0	2	16
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	27.3	12.5	0.0	23.3	60.0	0.0	14.3	0.0	41.2	0.0	10.0	0.0	0.0	7.4	21.6
Buses	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	7
Single-Unit Trucks	0	0	0	0	0	0	11	7	0	18	4	0	6	0	10	7	16	0	0	23	51
Articulated Trucks	0	0	0	0	0	0	6	1	0	7	6	0	1	0	7	0	2	0	0	2	16
Total Entering Leg	0	0	0	0	0	0	22	8	0	30	10	0	7	0	17	7	20	0	0	27	74
Buses					0					2					0					5	7
Single-Unit Trucks					0					20					14					17	51
Articulated Trucks					0					8					1					7	16
Total Exiting Leg					0					30					15					29	74

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	0	0	0	0	0	6	1	0	7	1	0	0	0	1	4	4	0	0	8	16
2:15 PM	0	0	0	0	0	0	6	0	0	6	0	0	3	0	3	0	4	0	0	4	13
2:30 PM	0	0	0	0	0	0	9	1	0	10	0	0	1	0	1	0	5	0	0	5	16
2:45 PM	0	0	0	0	0	0	4	0	0	4	1	0	1	0	2	0	7	0	0	7	13
Total Volume	0	0	0	0	0	0	25	2	0	27	2	0	5	0	7	4	20	0	0	24	58
% Approach Total	0.0	0.0	0.0	0.0		0.0	92.6	7.4	0.0		28.6	0.0	71.4	0.0		16.7	83.3	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.694	0.500	0.000	0.675	0.500	0.000	0.417	0.000	0.583	0.250	0.714	0.000	0.000	0.750	0.906

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Buses	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	11
Buses %	0.0	0.0	0.0	0.0	0.0	0.0	24.0	0.0	0.0	22.2	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	20.8	19.0
Single-Unit Trucks	0	0	0	0	0	0	14	2	0	16	2	0	5	0	7	4	11	0	0	15	38
Single-Unit %	0.0	0.0	0.0	0.0	0.0	0.0	56.0	100.0	0.0	59.3	100.0	0.0	100.0	0.0	100.0	100.0	55.0	0.0	0.0	62.5	65.5
Articulated Trucks	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	9
Articulated %	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	18.5	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	16.7	15.5
Buses	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	11
Single-Unit Trucks	0	0	0	0	0	0	14	2	0	16	2	0	5	0	7	4	11	0	0	15	38
Articulated Trucks	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	9
Total Entering Leg	0	0	0	0	0	0	25	2	0	27	2	0	5	0	7	4	20	0	0	24	58
Buses					0					5					0					6	11
Single-Unit Trucks					0					13					6					19	38
Articulated Trucks					0					4					0					5	9
Total Exiting Leg					0					22					6					30	58

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
5:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
6:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
6:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	8
7:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	6
7:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
7:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	5
7:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	7	0	0	7	15
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
8:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
8:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
8:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6	0	0	6	10
9:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
10:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3
11:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
11:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
12:00 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	5
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
12:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	7
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	7
2:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
2:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4
2:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
Total	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	11
3:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
3:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
3:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	7
4:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	5
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	9
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Grand Total	0	0	0	0	0	0	46	0	0	46	0	0	0	0	0	0	42	0	0	42	88

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	52.3	0.0	0.0	52.3	0.0	0.0	0.0	0.0	0.0	0.0	47.7	0.0	0.0	47.7	
Exiting Leg Total					0					42					0					46	88

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

6:45 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
6:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
7:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	6
7:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
7:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	5
Total Volume	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	7	0	0	7	16
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.563	0.000	0.000	0.563	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.000	0.000	0.583	0.667
Entering Leg	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	7	0	0	7	16
Exiting Leg					0					7					0					9	16
Total					0					16					0					16	32

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:30 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
2:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total Volume	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	9
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.563
Entering Leg	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	9
Exiting Leg					0					4					0					5	9
Total					0					9					0					9	18

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
2:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4
2:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
Total Volume	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	11
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.000	0.000	0.417	0.688
Entering Leg	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	11
Exiting Leg					0					5					0					6	11
Total					0					11					0					11	22

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
5:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4
5:45 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	9
6:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	2	0	0	3	4
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
6:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	3
6:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	4	0	0	4	6
Total	0	0	0	0	0	0	2	1	0	3	0	0	2	0	2	1	9	0	0	10	15
7:00 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2	0	0	0	2	4
7:15 AM	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	2	0	0	2	10
7:30 AM	0	0	0	0	0	0	1	1	0	2	0	0	2	0	2	1	1	0	0	2	6
7:45 AM	0	0	0	0	0	0	4	1	0	5	2	0	0	0	2	0	4	0	0	4	11
Total	0	0	0	0	0	0	13	4	0	17	2	0	2	0	4	3	7	0	0	10	31
8:00 AM	0	0	0	0	0	0	4	1	0	5	2	0	0	0	2	1	3	0	0	4	11
8:15 AM	0	0	0	0	0	0	3	0	0	3	1	0	1	0	2	2	0	0	0	2	7
8:30 AM	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	2	1	0	0	3	7
8:45 AM	0	0	0	0	0	0	4	2	0	6	0	0	2	0	2	1	4	0	0	5	13
Total	0	0	0	0	0	0	13	4	0	17	4	0	3	0	7	6	8	0	0	14	38
9:00 AM	0	0	0	0	0	0	3	1	0	4	4	0	0	0	4	3	2	0	0	5	13
9:15 AM	0	0	0	0	0	0	2	0	0	2	1	0	2	0	3	1	3	0	0	4	9
9:30 AM	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	2	4	0	0	6	10
9:45 AM	0	0	0	0	0	0	2	0	0	2	1	0	1	0	2	0	5	0	0	5	9
Total	0	0	0	0	0	0	10	2	0	12	6	0	3	0	9	6	14	0	0	20	41
10:00 AM	0	0	0	0	0	0	5	1	0	6	0	0	2	0	2	1	1	0	0	2	10
10:15 AM	0	0	0	0	0	0	3	2	0	5	0	0	4	0	4	2	0	0	0	2	11
10:30 AM	0	0	0	0	0	0	5	1	0	6	2	0	0	0	2	3	1	0	0	4	12
10:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3	0	3	0	0	3	6
Total	0	0	0	0	0	0	13	4	0	17	4	0	7	0	11	6	5	0	0	11	39
11:00 AM	0	0	0	0	0	0	4	0	0	4	3	0	0	0	3	2	4	0	0	6	13
11:15 AM	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	2	2	0	0	4	7
11:30 AM	0	0	0	0	0	0	5	3	0	8	0	0	1	0	1	2	4	0	0	6	15
11:45 AM	0	0	0	0	0	0	1	1	0	2	1	0	2	0	3	3	5	0	0	8	13
Total	0	0	0	0	0	0	12	4	0	16	5	0	3	0	8	9	15	0	0	24	48
12:00 PM	0	0	0	0	0	0	3	2	0	5	2	0	0	0	2	2	5	0	0	7	14
12:15 PM	0	0	0	0	0	0	2	1	0	3	1	0	3	0	4	0	2	0	0	2	9
12:30 PM	0	0	0	0	0	0	1	0	0	1	2	0	1	0	3	1	1	0	0	2	6
12:45 PM	0	0	0	0	0	0	2	2	0	4	1	0	2	0	3	1	4	0	0	5	12
Total	0	0	0	0	0	0	8	5	0	13	6	0	6	0	12	4	12	0	0	16	41
1:00 PM	0	0	0	0	0	0	6	2	0	8	2	0	2	0	4	1	3	0	0	4	16
1:15 PM	0	0	0	0	0	0	3	0	0	3	2	0	1	0	3	0	5	0	0	5	11
1:30 PM	0	0	0	0	0	0	6	1	0	7	1	0	1	0	2	2	2	0	0	4	13
1:45 PM	0	0	0	0	0	0	3	0	0	3	2	0	0	0	2	0	6	0	0	6	11
Total	0	0	0	0	0	0	18	3	0	21	7	0	4	0	11	3	16	0	0	19	51
2:00 PM	0	0	0	0	0	0	4	1	0	5	1	0	0	0	1	4	4	0	0	8	14
2:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	3	0	3	0	1	0	0	1	7
2:30 PM	0	0	0	0	0	0	6	1	0	7	0	0	1	0	1	0	2	0	0	2	10
2:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	4	0	0	4	7
Total	0	0	0	0	0	0	14	2	0	16	2	0	5	0	7	4	11	0	0	15	38
3:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	1	2	0	0	3	5
3:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	1	2	0	0	3	7
3:30 PM	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	0	4	0	0	4	9
3:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	3	0	3	1	0	0	0	1	6
Total	0	0	0	0	0	0	9	1	0	10	0	0	6	0	6	3	8	0	0	11	27
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	1	1	0	0	2	7
5:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	2
6:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	4
Grand Total	0	0	0	0	0	0	121	30	0	151	36	0	44	0	80	46	115	0	0	161	392

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
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City, State: **Leominster, MA**
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Single-Unit Trucks

	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	0.0	0.0	0.0	0.0		0.0	80.1	19.9	0.0		45.0	0.0	55.0	0.0		28.6	71.4	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	30.9	7.7	0.0	38.5	9.2	0.0	11.2	0.0	20.4	11.7	29.3	0.0	0.0	41.1	
Exiting Leg Total					0					151					76					165	392

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

8:45 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:45 AM	0	0	0	0	0	0	4	2	0	6	0	0	2	0	2	1	4	0	0	5	13
9:00 AM	0	0	0	0	0	0	3	1	0	4	4	0	0	0	4	3	2	0	0	5	13
9:15 AM	0	0	0	0	0	0	2	0	0	2	1	0	2	0	3	1	3	0	0	4	9
9:30 AM	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	2	4	0	0	6	10
Total Volume	0	0	0	0	0	0	12	4	0	16	5	0	4	0	9	7	13	0	0	20	45
% Approach Total	0.0	0.0	0.0	0.0		0.0	75.0	25.0	0.0		55.6	0.0	44.4	0.0		35.0	65.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.500	0.000	0.667	0.313	0.000	0.500	0.000	0.563	0.583	0.813	0.000	0.000	0.833	0.865
Entering Leg	0	0	0	0	0	0	12	4	0	16	5	0	4	0	9	7	13	0	0	20	45
Exiting Leg					0					18					11					16	45
Total					0					34					20					36	90

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

12:45 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:45 PM	0	0	0	0	0	0	2	2	0	4	1	0	2	0	3	1	4	0	0	5	12
1:00 PM	0	0	0	0	0	0	6	2	0	8	2	0	2	0	4	1	3	0	0	4	16
1:15 PM	0	0	0	0	0	0	3	0	0	3	2	0	1	0	3	0	5	0	0	5	11
1:30 PM	0	0	0	0	0	0	6	1	0	7	1	0	1	0	2	2	2	0	0	4	13
Total Volume	0	0	0	0	0	0	17	5	0	22	6	0	6	0	12	4	14	0	0	18	52
% Approach Total	0.0	0.0	0.0	0.0		0.0	77.3	22.7	0.0		50.0	0.0	50.0	0.0		22.2	77.8	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.708	0.625	0.000	0.688	0.750	0.000	0.750	0.000	0.750	0.500	0.700	0.000	0.000	0.900	0.813
Entering Leg	0	0	0	0	0	0	17	5	0	22	6	0	6	0	12	4	14	0	0	18	52
Exiting Leg					0					20					9					23	52
Total					0					42					21					41	104

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	0	0	0	0	0	4	1	0	5	1	0	0	0	1	4	4	0	0	8	14
2:15 PM	0	0	0	0	0	0	3	0	0	3	0	0	3	0	3	0	1	0	0	1	7
2:30 PM	0	0	0	0	0	0	6	1	0	7	0	0	1	0	1	0	2	0	0	2	10
2:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	4	0	0	4	7
Total Volume	0	0	0	0	0	0	14	2	0	16	2	0	5	0	7	4	11	0	0	15	38
% Approach Total	0.0	0.0	0.0	0.0		0.0	87.5	12.5	0.0		28.6	0.0	71.4	0.0		26.7	73.3	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.500	0.000	0.571	0.500	0.000	0.417	0.000	0.583	0.250	0.688	0.000	0.000	0.469	0.679
Entering Leg	0	0	0	0	0	0	14	2	0	16	2	0	5	0	7	4	11	0	0	15	38
Exiting Leg					0					13					6					19	38
Total					0					29					13					34	76

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
6:00 AM	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	4
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
Total	0	0	0	0	0	0	0	4	0	4	2	0	0	0	2	0	2	0	0	2	8
7:00 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	0	1	0	0	1	5
Total	0	0	0	0	0	0	4	2	0	6	4	0	0	0	4	0	1	0	0	1	11
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
8:15 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	1	1	0	0	2	4
8:30 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	3	0	0	3	5
Total	0	0	0	0	0	0	2	3	0	5	2	0	0	0	2	1	5	0	0	6	13
9:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
9:15 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	3
9:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	0	1	0	0	1	4
Total	0	0	0	0	0	0	2	4	0	6	1	0	1	0	2	0	2	0	0	2	10
10:00 AM	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	0	0	0	0	0	3
10:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
10:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	2	4	0	6	2	0	0	0	2	0	1	0	0	1	9
11:00 AM	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	3
11:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	3	1	0	4	3	0	1	0	4	0	1	0	0	1	9
11:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	6	2	0	8	4	0	1	0	5	0	1	0	0	1	14
12:00 PM	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	0	0	0	0	0	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
Total	0	0	0	0	0	0	2	0	0	2	4	0	0	0	4	0	6	0	0	6	12
1:00 PM	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
1:30 PM	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	0	1	0	0	1	5
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	5	1	0	6	1	0	0	0	1	0	3	0	0	3	10
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
2:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
Total	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	9
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	0	0	0	1	3
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	32	20	0	52	22	0	2	0	24	2	28	0	0	30	106

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	0.0	0.0	0.0	0.0		0.0	61.5	38.5	0.0		91.7	0.0	8.3	0.0		6.7	93.3	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	30.2	18.9	0.0	49.1	20.8	0.0	1.9	0.0	22.6	1.9	26.4	0.0	0.0	28.3	
Exiting Leg Total					0					50					22					34	106

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

7:30 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	0	1	0	0	1	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
8:15 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	1	1	0	0	2	4
Total Volume	0	0	0	0	0	0	3	2	0	5	4	0	0	0	4	1	3	0	0	4	13
% Approach Total	0.0	0.0	0.0	0.0		0.0	60.0	40.0	0.0		100.0	0.0	0.0	0.0		25.0	75.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.250	0.000	0.625	0.500	0.000	0.000	0.000	0.500	0.250	0.750	0.000	0.000	0.500	0.650
Entering Leg	0	0	0	0	0	0	3	2	0	5	4	0	0	0	4	1	3	0	0	4	13
Exiting Leg					0					7					3					3	13
Total					0					12					7					7	26

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

10:45 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
10:45 AM	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	3
11:00 AM	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	0	0	0	0	3
11:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	3	1	0	4	3	0	1	0	4	0	1	0	0	1	9
Total Volume	0	0	0	0	0	0	6	4	0	10	4	0	1	0	5	0	1	0	0	1	16
% Approach Total	0.0	0.0	0.0	0.0		0.0	60.0	40.0	0.0		80.0	0.0	20.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.625	0.333	0.000	0.250	0.000	0.313	0.000	0.250	0.000	0.000	0.250	0.444
Entering Leg	0	0	0	0	0	0	6	4	0	10	4	0	1	0	5	0	1	0	0	1	16
Exiting Leg					0					5					4					7	16
Total					0					15					9					8	32

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
2:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
Total Volume	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	9
% Approach Total	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.500	0.563
Entering Leg	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	9
Exiting Leg					0					4					0					5	9
Total					0					9					0					9	18

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Packer

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	3
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	1	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	2
Total	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	3	0	0	0	3	5
9:00 AM	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	3
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
9:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	1	0	0	0	1	5
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	2
Total	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1	3
11:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
11:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2	1	0	0	0	1	4
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	3
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	1	1	0	0	2	6
1:00 PM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	0	0	0	0	0	3
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	1	0	0	0	1	4
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	6	5	0	11	7	0	10	0	17	9	3	0	0	12	40

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Packer

	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	0.0	0.0	0.0	0.0		0.0	54.5	45.5	0.0		41.2	0.0	58.8	0.0		75.0	25.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	15.0	12.5	0.0	27.5	17.5	0.0	25.0	0.0	42.5	22.5	7.5	0.0	0.0	30.0	
Exiting Leg Total					0					10					14					16	40

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

8:15 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	2
9:00 AM	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0	3
Total Volume	0	0	0	0	0	0	1	1	0	2	2	0	1	0	3	2	0	0	0	2	7
% Approach Total	0.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0		66.7	0.0	33.3	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.500	0.250	0.000	0.250	0.000	0.375	0.500	0.000	0.000	0.000	0.500	0.583
Entering Leg	0	0	0	0	0	0	1	1	0	2	2	0	1	0	3	2	0	0	0	2	7
Exiting Leg					0					2					3					2	7
Total					0					4					6					4	14

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

11:15 AM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
11:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	3
Total Volume	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2	2	1	0	0	3	6
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		50.0	0.0	50.0	0.0		66.7	33.3	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.250	0.000	0.500	0.500	0.250	0.000	0.000	0.375	0.500
Entering Leg	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2	2	1	0	0	3	6
Exiting Leg					0					2					3					1	6
Total					0					3					5					4	12

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Driveway from North					Lancaster Street (Route 117) from East					Tanzio Road from South					Lancaster Street (Route 117) from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	1	0	0	0	1	4
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.333
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	1	0	0	0	1	4
Exiting Leg					0					0					1					3	4
Total					0					0					4					4	8

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Roll Off

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
7:00 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
7:45 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	3	0	3	1	0	1	0	2	1	0	0	0	1	6
8:00 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	1	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	1	3	0	3	0	6	1	0	0	0	1	8
9:00 AM	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	2	0	0	0	2	5
9:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3	0	0	0	0	0	3
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	1	1	0	2	3	0	3	0	6	4	0	0	0	4	12
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
10:15 AM	0	0	0	0	0	0	0	2	0	2	0	0	3	0	3	1	0	0	0	1	6
10:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	0	0	0	3	4
10:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	2	0	2	3	0	4	0	7	4	0	0	0	4	13
11:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	1	3
11:30 AM	0	0	0	0	0	0	0	2	0	2	0	0	2	0	2	2	0	0	0	2	6
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	3	0	0	0	3	5
Total	0	0	0	0	0	0	0	2	0	2	3	0	4	0	7	6	0	0	0	6	15
12:00 PM	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	1	0	0	0	1	4
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3	1	0	0	0	1	4
12:45 PM	0	0	0	0	0	0	0	1	0	1	1	0	2	0	3	1	0	0	0	1	5
Total	0	0	0	0	0	0	0	3	0	3	4	0	5	0	9	3	0	0	0	3	15
1:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	1	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	3	0	0	3	5
1:30 PM	0	0	0	0	0	0	1	1	0	2	1	0	1	0	2	2	0	0	0	2	6
1:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	2	0	0	2	4
Total	0	0	0	0	0	0	1	1	0	2	6	0	2	0	8	3	5	0	0	8	18
2:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	2
2:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	0	0	0	0	0	3
2:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	2	2	0	4	1	0	1	0	2	1	0	0	0	1	7
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	3
Total	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3	0	0	0	3	6
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	4	15	0	19	24	0	26	0	50	27	7	0	0	34	103

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
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Office: 508-875-0100 Fax: 508-875-0118

Roll Off

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	0.0	0.0	0.0	0.0		0.0	21.1	78.9	0.0		48.0	0.0	52.0	0.0		79.4	20.6	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	3.9	14.6	0.0	18.4	23.3	0.0	25.2	0.0	48.5	26.2	6.8	0.0	0.0	33.0	
Exiting Leg Total					0					31					42					30	103

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

9:45 AM	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
9:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	2
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
10:15 AM	0	0	0	0	0	0	0	2	0	2	0	0	3	0	3	1	0	0	0	1	6
10:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	0	0	0	3	4
Total Volume	0	0	0	0	0	0	0	2	0	2	2	0	5	0	7	4	0	0	0	4	13
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		28.6	0.0	71.4	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.500	0.000	0.417	0.000	0.583	0.333	0.000	0.000	0.000	0.333	0.542
Entering Leg	0	0	0	0	0	0	0	2	0	2	2	0	5	0	7	4	0	0	0	4	13
Exiting Leg					0					2					6					5	13
Total					0					4					13					9	26

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

12:45 PM	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:45 PM	0	0	0	0	0	0	0	1	0	1	1	0	2	0	3	1	0	0	0	1	5
1:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	1	3
1:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	3	0	0	3	5
1:30 PM	0	0	0	0	0	0	1	1	0	2	1	0	1	0	2	2	0	0	0	2	6
Total Volume	0	0	0	0	0	0	1	2	0	3	5	0	4	0	9	4	3	0	0	7	19
% Approach Total	0.0	0.0	0.0	0.0		0.0	33.3	66.7	0.0		55.6	0.0	44.4	0.0		57.1	42.9	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.375	0.625	0.000	0.500	0.000	0.750	0.500	0.250	0.000	0.000	0.583	0.792
Entering Leg	0	0	0	0	0	0	1	2	0	3	5	0	4	0	9	4	3	0	0	7	19
Exiting Leg					0					8					6					5	19
Total					0					11					15					12	38

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	2
2:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	0	0	0	0	0	3
2:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	2	2	0	4	1	0	1	0	2	1	0	0	0	1	7
% Approach Total	0.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0		50.0	0.0	50.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.500	0.250	0.000	0.250	0.000	0.500	0.250	0.000	0.000	0.000	0.250	0.583
Entering Leg	0	0	0	0	0	0	2	2	0	4	1	0	1	0	2	1	0	0	0	1	7
Exiting Leg					0					1					3					3	7
Total					0					5					5					4	14

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Tractor Trailer

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	5
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	5	0	5	2	0	0	0	2	0	0	0	0	0	7
7:00 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	2	0	2	4	0	0	0	4	0	0	0	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	2	0	2	1	0	1	0	2	2	0	0	0	2	6
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
9:15 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	4	0	4	1	0	0	0	1	1	0	0	0	1	6
10:00 AM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2
10:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
10:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	4	0	4	2	0	0	0	2	0	0	0	0	0	6
11:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	0	0	0	0	0	4
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	0	2	4	0	0	0	4	0	0	0	0	0	6
12:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	4
1:00 PM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	0	2	1	0	1	0	2	0	0	0	0	0	4
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	21	0	21	20	0	2	0	22	3	0	0	0	3	46

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Tractor Trailer

	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		90.9	0.0	9.1	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.7	0.0	45.7	43.5	0.0	4.3	0.0	47.8	6.5	0.0	0.0	0.0	6.5	
Exiting Leg Total					0					20					24					2	46

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

6:00 AM	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
6:00 AM	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	5
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	5	0	5	2	0	0	0	2	0	0	0	0	0	7
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.350
Entering Leg	0	0	0	0	0	0	0	5	0	5	2	0	0	0	2	0	0	0	0	0	7
Exiting Leg					0					2					5					0	7
Total					0					7					7					0	14

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

10:45 AM	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
10:45 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
11:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	0	0	0	0	0	4
Total Volume	0	0	0	0	0	0	0	4	0	4	4	0	0	0	4	0	0	0	0	0	8
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.333	0.000	0.000	0.000	0.333	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	0	0	0	4	0	4	4	0	0	0	4	0	0	0	0	0	8
Exiting Leg					0					4					4					0	8
Total					0					8					8					0	16

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:45 PM	Driveway					Lancaster Street (Route 117)					Tanzio Road					Lancaster Street (Route 117)					
	from North					from East					from South					from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Exiting Leg					0					1					0					0	1
Total					0					1					1					0	2

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Driveway							Lancaster Street (Route 117)							Tanzio Road							Lancaster Street (Route 117)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	2	3
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	0	0	0	2	0	4	0	0	0	0	4	8

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	Driveway from North							Lancaster Street (Route 117) from East							Tanzio Road from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
Approach %	0.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0	
Exiting Leg Total							0							6							0							2	8

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

5:00 AM	Driveway from North							Lancaster Street (Route 117) from East							Tanzio Road from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:15 PM	Driveway from North							Lancaster Street (Route 117) from East							Tanzio Road from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	2	3
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.500	0.750
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	2	3
Exiting Leg							0							3							0							0	3
Total							0							3							1							2	6

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	Driveway from North							Lancaster Street (Route 117) from East							Tanzio Road from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	2	3
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.375
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	0	0	0	0	2	3
Exiting Leg							0							3							0							0	3
Total							0							3							1							2	6

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Driveway							Lancaster Street (Route 117)							Tanzio Road							Lancaster Street (Route 117)							
	from North							from East							from South							from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	5

PDI File #: **250427 BBB**
Location: **N: Driveway S: Tanzio Road**
Location: **E: Lancaster Street (Route 117) W: Lancaster Street (Route 117)**
City, State: **Leominster, MA**
Client: **Bowman/ E. Buck**
Site Code: **TBA**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	Driveway from North							Lancaster Street (Route 117) from East							Tanzio Road from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
Approach %	0	0	0	0	100	0		0	0	0	0	0	0		0	0	0	0	100	0		0	0	0	0	0	0		
Total %	0	0	0	0	60	0	60	0	0	0	0	0	0	0	0	0	0	0	40	0	40	0	0	0	0	0	0	0	
Exiting Leg Total							3							0							2							0	5

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

5:00 AM	Driveway from North							Lancaster Street (Route 117) from East							Tanzio Road from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	Driveway from North							Lancaster Street (Route 117) from East							Tanzio Road from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
1:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
% Approach Total	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
Exiting Leg							1							0							1							0	2
Total							2							0							2							0	4

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:15 PM	Driveway from North							Lancaster Street (Route 117) from East							Tanzio Road from South							Lancaster Street (Route 117) from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
Total Volume	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	3
% Approach Total	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	3
Exiting Leg							1							0							2							0	3
Total							2							0							4							0	6

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	2	11	0	0	13	0	0	1	0	1	0	17	9	0	26	20	0	3	0	23	63
5:15 AM	1	18	0	0	19	1	0	2	0	3	0	16	12	0	28	39	0	4	0	43	93
5:30 AM	1	32	0	0	33	0	1	4	0	5	1	35	23	0	59	41	0	5	0	46	143
5:45 AM	6	32	0	0	38	0	0	1	0	1	0	86	18	0	104	40	1	4	0	45	188
Total	10	93	0	0	103	1	1	8	0	10	1	154	62	0	217	140	1	16	0	157	487
6:00 AM	3	46	0	0	49	0	2	3	0	5	1	34	18	0	53	42	1	8	0	51	158
6:15 AM	3	47	0	0	50	0	1	5	0	6	2	33	21	0	56	48	3	8	0	59	171
6:30 AM	4	41	0	0	45	0	1	1	0	2	7	47	22	0	76	45	1	9	0	55	178
6:45 AM	5	69	1	0	75	0	3	3	0	6	5	52	33	0	90	40	2	17	0	59	230
Total	15	203	1	0	219	0	7	12	0	19	15	166	94	0	275	175	7	42	0	224	737
7:00 AM	5	71	1	0	77	1	1	5	0	7	6	56	34	0	96	61	1	28	0	90	270
7:15 AM	15	74	0	0	89	5	1	7	0	13	3	50	20	0	73	50	3	19	0	72	247
7:30 AM	11	94	0	0	105	4	1	7	0	12	6	61	20	0	87	50	2	26	0	78	282
7:45 AM	18	83	1	0	102	1	4	5	0	10	5	78	27	0	110	40	1	22	0	63	285
Total	49	322	2	0	373	11	7	24	0	42	20	245	101	0	366	201	7	95	0	303	1084
8:00 AM	9	86	0	0	95	0	2	2	0	4	3	79	26	0	108	49	1	17	0	67	274
8:15 AM	8	74	0	0	82	3	0	10	0	13	6	74	25	0	105	47	2	14	0	63	263
8:30 AM	14	81	1	0	96	0	1	7	0	8	10	73	30	0	113	37	2	11	0	50	267
8:45 AM	7	85	2	0	94	1	1	7	0	9	9	61	25	0	95	69	5	18	0	92	290
Total	38	326	3	0	367	4	4	26	0	34	28	287	106	0	421	202	10	60	0	272	1094
9:00 AM	13	63	0	0	76	2	7	10	0	19	8	76	28	0	112	44	4	5	0	53	260
9:15 AM	10	57	0	0	67	1	2	10	0	13	5	72	34	0	111	34	0	13	0	47	238
9:30 AM	7	62	1	0	70	0	1	7	0	8	4	60	30	0	94	32	0	9	0	41	213
9:45 AM	7	67	0	0	74	2	0	8	0	10	2	73	26	0	101	40	1	24	0	65	250
Total	37	249	1	0	287	5	10	35	0	50	19	281	118	0	418	150	5	51	0	206	961
10:00 AM	11	66	0	0	77	0	1	1	0	2	8	55	30	0	93	43	2	9	0	54	226
10:15 AM	3	65	0	0	68	0	1	3	0	4	5	55	26	0	86	32	1	7	0	40	198
10:30 AM	10	70	0	0	80	0	0	4	0	4	6	62	34	0	102	46	0	11	0	57	243
10:45 AM	11	53	0	0	64	0	0	3	0	3	7	66	45	0	118	30	1	15	0	46	231
Total	35	254	0	0	289	0	2	11	0	13	26	238	135	0	399	151	4	42	0	197	898
11:00 AM	15	71	0	0	86	1	1	0	0	2	4	71	36	0	111	52	3	13	0	68	267
11:15 AM	6	62	1	0	69	3	2	5	0	10	1	73	39	0	113	40	1	16	0	57	249
11:30 AM	19	73	0	0	92	0	2	3	0	5	3	77	48	0	128	40	3	9	0	52	277
11:45 AM	16	47	0	0	63	0	1	3	0	4	4	86	46	0	136	53	1	16	0	70	273
Total	56	253	1	0	310	4	6	11	0	21	12	307	169	0	488	185	8	54	0	247	1066
12:00 PM	11	82	4	0	97	1	0	4	0	5	5	86	44	0	135	71	4	17	0	92	329
12:15 PM	20	65	2	0	87	1	4	2	0	7	11	89	36	0	136	37	2	15	0	54	284
12:30 PM	10	75	2	0	87	0	2	4	0	6	4	78	35	0	117	34	2	18	0	54	264
12:45 PM	11	73	3	0	87	1	1	5	0	7	14	80	43	0	137	32	4	12	0	48	279
Total	52	295	11	0	358	3	7	15	0	25	34	333	158	0	525	174	12	62	0	248	1156
1:00 PM	14	61	0	0	75	0	4	10	0	14	5	90	38	0	133	40	1	16	0	57	279
1:15 PM	11	72	2	0	85	2	0	5	0	7	4	80	45	0	129	49	2	7	0	58	279
1:30 PM	9	64	0	0	73	0	0	4	0	4	4	79	37	0	120	46	1	10	0	57	254
1:45 PM	11	77	2	0	90	2	2	3	0	7	8	61	43	0	112	35	1	11	0	47	256
Total	45	274	4	0	323	4	6	22	0	32	21	310	163	0	494	170	5	44	0	219	1068
2:00 PM	10	74	0	0	84	2	0	13	0	15	4	81	34	0	119	49	0	9	0	58	276
2:15 PM	8	59	1	0	68	3	5	7	0	15	6	97	47	0	150	47	1	17	0	65	298
2:30 PM	22	136	3	0	161	1	1	3	0	5	10	103	51	0	164	74	1	20	0	95	425
2:45 PM	14	87	1	0	102	2	3	12	0	17	7	115	57	0	179	57	3	23	0	83	381
Total	54	356	5	0	415	8	9	35	0	52	27	396	189	0	612	227	5	69	0	301	1380
3:00 PM	21	78	1	0	100	5	5	6	0	16	7	112	58	0	177	74	6	14	0	94	387
3:15 PM	13	86	2	0	101	3	1	9	0	13	9	101	43	0	153	44	3	11	0	58	325
3:30 PM	20	88	0	0	108	1	3	12	0	16	11	107	54	0	172	50	2	19	0	71	367
3:45 PM	24	72	1	0	97	1	4	10	0	15	7	111	69	0	187	55	1	20	0	76	375
Total	78	324	4	0	406	10	13	37	0	60	34	431	224	0	689	223	12	64	0	299	1454
4:00 PM	25	97	2	0	124	1	2	5	0	8	6	116	73	0	195	54	2	23	0	79	406
4:15 PM	18	102	0	0	120	2	4	11	1	18	11	101	49	0	161	37	4	23	0	64	363
4:30 PM	20	99	1	0	120	2	1	7	0	10	9	117	62	0	188	55	1	19	0	75	393
4:45 PM	18	77	0	0	95	0	1	4	0	5	9	109	58	0	176	50	1	21	0	72	348
Total	81	375	3	0	459	5	8	27	1	41	35	443	242	0	720	196	8	86	0	290	1510
5:00 PM	13	92	0	0	105	0	4	6	0	10	10	104	51	0	165	49	2	25	0	76	356
5:15 PM	21	86	0	0	107	0	3	5	0	8	5	136	70	0	211	37	0	16	0	53	379
5:30 PM	33	58	0	0	91	0	1	3	0	4	4	93	65	0	162	40	1	20	0	61	318
5:45 PM	12	69	1	0	82	0	2	1	0	3	6	95	56	0	157	34	3	14	0	51	293
Total	79	305	1	0	385	0	10	15	0	25	25	428	242	0	695	160	6	75	0	241	1346
6:00 PM	18	46	0	0	64	2	1	3	0	6	5	79	45	0	129	31	1	12	0	44	243
6:15 PM	18	68	0	0	86	1	0	0	0	1	5	76	58	0	139	25	0	14	0	39	265
6:30 PM	19	59	1	0	79	1	4	3	0	8	3	77	52	0	132	36	2	12	0	50	269
6:45 PM	15	45	0	0	60	0	1	1	0	2	6	65	40	0	111	32	0	10	0	42	215
Total	70	218	1	0	289	4	6	7	0	17	19	297	195	0	511	124	3	48	0	175	992
Grand Total	699	3847	37	0	4583	59	96	285	1	441	316	4316	2198	0	6830	2478	93	808	0	3379	15233
Approach %	15.3	83.9	0.8	0.0		13.4	21.8	64.6	0.2		4.6	63.2	32.2	0.0		73.3	2.8	23.9	0.0		

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars and Heavy Vehicles (Combined)

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Total %	4.6	25.3	0.2	0.0	30.1	0.4	0.6	1.9	0.0	2.9	2.1	28.3	14.4	0.0	44.8	16.3	0.6	5.3	0.0	22.2	
Exiting Leg Total					5183					447					6610					2993	15233
Cars	649	3594	32	0	4275	51	91	274	1	417	306	4061	2077	0	6444	2343	86	763	0	3192	14328
% Cars	92.8	93.4	86.5	0.0	93.3	86.4	94.8	96.1	100.0	94.6	96.8	94.1	94.5	0.0	94.3	94.6	92.5	94.4	0.0	94.5	94.1
Exiting Leg Total					4875					425					6211					2817	14328
Heavy Vehicles	50	253	5	0	308	8	5	11	0	24	10	255	121	0	386	135	7	45	0	187	905
% Heavy Vehicles	7.2	6.6	13.5	0.0	6.7	13.6	5.2	3.9	0.0	5.4	3.2	5.9	5.5	0.0	5.7	5.4	7.5	5.6	0.0	5.5	5.9
Exiting Leg Total					308					22					399					176	905

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

7:30 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	11	94	0	0	105	4	1	7	0	12	6	61	20	0	87	50	2	26	0	78	282
7:45 AM	18	83	1	0	102	1	4	5	0	10	5	78	27	0	110	40	1	22	0	63	285
8:00 AM	9	86	0	0	95	0	2	2	0	4	3	79	26	0	108	49	1	17	0	67	274
8:15 AM	8	74	0	0	82	3	0	10	0	13	6	74	25	0	105	47	2	14	0	63	263
Total Volume	46	337	1	0	384	8	7	24	0	39	20	292	98	0	410	186	6	79	0	271	1104
% Approach Total	12.0	87.8	0.3	0.0		20.5	17.9	61.5	0.0		4.9	71.2	23.9	0.0		68.6	2.2	29.2	0.0		
PHF	0.639	0.896	0.250	0.000	0.914	0.500	0.438	0.600	0.000	0.750	0.833	0.924	0.907	0.000	0.932	0.930	0.750	0.760	0.000	0.869	0.968
Cars	45	302	1	0	348	7	6	22	0	35	20	261	94	0	375	182	6	76	0	264	1022
Cars %	97.8	89.6	100.0	0.0	90.6	87.5	85.7	91.7	0.0	89.7	100.0	89.4	95.9	0.0	91.5	97.8	100.0	96.2	0.0	97.4	92.6
Heavy Vehicles	1	35	0	0	36	1	1	2	0	4	0	31	4	0	35	4	0	3	0	7	82
Heavy Vehicles %	2.2	10.4	0.0	0.0	9.4	12.5	14.3	8.3	0.0	10.3	0.0	10.6	4.1	0.0	8.5	2.2	0.0	3.8	0.0	2.6	7.4
Cars Enter Leg	45	302	1	0	348	7	6	22	0	35	20	261	94	0	375	182	6	76	0	264	1022
Heavy Enter Leg	1	35	0	0	36	1	1	2	0	4	0	31	4	0	35	4	0	3	0	7	82
Total Entering Leg	46	337	1	0	384	8	7	24	0	39	20	292	98	0	410	186	6	79	0	271	1104
Cars Exiting Leg					344					27					506					145	1022
Heavy Exiting Leg					35					0					41					6	82
Total Exiting Leg					379					27					547					151	1104

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:45 PM	11	77	2	0	90	2	2	3	0	7	8	61	43	0	112	35	1	11	0	47	256
2:00 PM	10	74	0	0	84	2	0	13	0	15	4	81	34	0	119	49	0	9	0	58	276
2:15 PM	8	59	1	0	68	3	5	7	0	15	6	97	47	0	150	47	1	17	0	65	298
2:30 PM	22	136	3	0	161	1	1	3	0	5	10	103	51	0	164	74	1	20	0	95	425
Total Volume	51	346	6	0	403	8	8	26	0	42	28	342	175	0	545	205	3	57	0	265	1255
% Approach Total	12.7	85.9	1.5	0.0		19.0	19.0	61.9	0.0		5.1	62.8	32.1	0.0		77.4	1.1	21.5	0.0		
PHF	0.580	0.636	0.500	0.000	0.626	0.667	0.400	0.500	0.000	0.700	0.700	0.830	0.858	0.000	0.831	0.693	0.750	0.713	0.000	0.697	0.738
Cars	46	329	6	0	381	7	7	26	0	40	26	319	160	0	505	197	3	48	0	248	1174
Cars %	90.2	95.1	100.0	0.0	94.5	87.5	87.5	100.0	0.0	95.2	92.9	93.3	91.4	0.0	92.7	96.1	100.0	84.2	0.0	93.6	93.5
Heavy Vehicles	5	17	0	0	22	1	1	0	0	2	2	23	15	0	40	8	0	9	0	17	81
Heavy Vehicles %	9.8	4.9	0.0	0.0	5.5	12.5	12.5	0.0	0.0	4.8	7.1	6.7	8.6	0.0	7.3	3.9	0.0	15.8	0.0	6.4	6.5
Cars Enter Leg	46	329	6	0	381	7	7	26	0	40	26	319	160	0	505	197	3	48	0	248	1174
Heavy Enter Leg	5	17	0	0	22	1	1	0	0	2	2	23	15	0	40	8	0	9	0	17	81
Total Entering Leg	51	346	6	0	403	8	8	26	0	42	28	342	175	0	545	205	3	57	0	265	1255
Cars Exiting Leg					374					35					552					213	1174
Heavy Exiting Leg					33					2					25					21	81
Total Exiting Leg					407					37					577					234	1255

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

3:45 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
3:45 PM	24	72	1	0	97	1	4	10	0	15	7	111	69	0	187	55	1	20	0	76	375
4:00 PM	25	97	2	0	124	1	2	5	0	8	6	116	73	0	195	54	2	23	0	79	406
4:15 PM	18	102	0	0	120	2	4	11	1	18	11	101	49	0	161	37	4	23	0	64	363
4:30 PM	20	99	1	0	120	2	1	7	0	10	9	117	62	0	188	55	1	19	0	75	393
Total Volume	87	370	4	0	461	6	11	33	1	51	33	445	253	0	731	201	8	85	0	294	1537
% Approach Total	18.9	80.3	0.9	0.0		11.8	21.6	64.7	2.0		4.5	60.9	34.6	0.0		68.4	2.7	28.9	0.0		
PHF	0.870	0.907	0.500	0.000	0.929	0.750	0.688	0.750	0.250	0.708	0.750	0.951	0.866	0.000	0.937	0.914	0.500	0.924	0.000	0.930	0.946
Cars	83	363	4	0	450	4	9	33	1	47	32	435	243	0	710	188	7	83	0	278	1485
Cars %	95.4	98.1	100.0	0.0	97.6	66.7	81.8	100.0	100.0	92.2	97.0	97.8	96.0	0.0	97.1	93.5	87.5	97.6	0.0	94.6	96.6
Heavy Vehicles	4	7	0	0	11	2	2	0	0	4	1	10	10	0	21	13	1	2	0	16	52
Heavy Vehicles %	4.6	1.9	0.0	0.0	2.4	33.3	18.2	0.0	0.0	7.8	3.0	2.2	4.0	0.0	2.9	6.5	12.5	2.4	0.0	5.4	3.4
Cars Enter Leg	83	363	4	0	450	4	9	33	1	47	32	435	243	0	710	188	7	83	0	278	1485
Heavy Enter Leg	4	7	0	0	11	2	2	0	0	4	1	10	10	0	21	13	1	2	0	16	52
Total Entering Leg	87	370	4	0	461	6	11	33	1	51	33	445	253	0	731	201	8	85	0	294	1537
Cars Exiting Leg					522					44					584					335	1485
Heavy Exiting Leg					14					2					20					16	52
Total Exiting Leg					536					46					604					351	1537

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	2	10	0	0	12	0	0	1	0	1	0	16	9	0	25	18	0	3	0	21	59
5:15 AM	1	17	0	0	18	1	0	2	0	3	0	16	12	0	28	33	0	3	0	36	85
5:30 AM	1	32	0	0	33	0	1	4	0	5	1	35	21	0	57	37	0	4	0	41	136
5:45 AM	6	30	0	0	36	0	0	1	0	1	0	82	18	0	100	38	1	4	0	43	180
Total	10	89	0	0	99	1	1	8	0	10	1	149	60	0	210	126	1	14	0	141	460
6:00 AM	3	45	0	0	48	0	2	3	0	5	1	28	14	0	43	37	1	7	0	45	141
6:15 AM	3	42	0	0	45	0	1	5	0	6	2	30	21	0	53	37	3	8	0	48	152
6:30 AM	3	39	0	0	42	0	1	1	0	2	5	42	20	0	67	39	1	9	0	49	160
6:45 AM	5	61	1	0	67	0	3	3	0	6	4	46	31	0	81	37	1	16	0	54	208
Total	14	187	1	0	202	0	7	12	0	19	12	146	86	0	244	150	6	40	0	196	661
7:00 AM	5	65	0	0	70	0	1	3	0	4	4	51	32	0	87	59	0	25	0	84	245
7:15 AM	14	69	0	0	83	4	1	7	0	12	3	45	19	0	67	49	3	18	0	70	232
7:30 AM	11	83	0	0	94	4	1	6	0	11	6	53	18	0	77	50	2	25	0	77	259
7:45 AM	18	71	1	0	90	1	3	5	0	9	5	72	25	0	102	40	1	21	0	62	263
Total	48	288	1	0	337	9	6	21	0	36	18	221	94	0	333	198	6	89	0	293	999
8:00 AM	9	76	0	0	85	0	2	2	0	4	3	72	26	0	101	47	1	17	0	65	255
8:15 AM	7	72	0	0	79	2	0	9	0	11	6	64	25	0	95	45	2	13	0	60	245
8:30 AM	11	76	1	0	88	0	1	7	0	8	9	67	26	0	102	33	2	11	0	46	244
8:45 AM	6	73	1	0	80	1	1	7	0	9	9	52	24	0	85	67	5	17	0	89	263
Total	33	297	2	0	332	3	4	25	0	32	27	255	101	0	383	192	10	58	0	260	1007
9:00 AM	12	59	0	0	71	2	7	10	0	19	8	69	27	0	104	41	4	5	0	50	244
9:15 AM	10	50	0	0	60	1	2	10	0	13	5	66	29	0	100	34	0	12	0	46	219
9:30 AM	6	55	0	0	61	0	1	6	0	7	4	57	28	0	89	30	0	8	0	38	195
9:45 AM	4	60	0	0	64	1	0	7	0	8	2	65	23	0	90	36	1	23	0	60	222
Total	32	224	0	0	256	4	10	33	0	47	19	257	107	0	383	141	5	48	0	194	880
10:00 AM	11	58	0	0	69	0	1	1	0	2	8	50	27	0	85	39	1	6	0	46	202
10:15 AM	3	60	0	0	63	0	1	3	0	4	5	52	23	0	80	31	0	4	0	35	182
10:30 AM	9	67	0	0	76	0	0	1	0	1	6	53	33	0	92	44	0	11	0	55	224
10:45 AM	10	45	0	0	55	0	0	3	0	3	7	63	41	0	111	25	1	15	0	41	210
Total	33	230	0	0	263	0	2	8	0	10	26	218	124	0	368	139	2	36	0	177	818
11:00 AM	14	64	0	0	78	1	1	0	0	2	4	62	34	0	100	51	3	10	0	64	244
11:15 AM	6	54	1	0	61	3	2	5	0	10	1	71	36	0	108	38	0	15	0	53	232
11:30 AM	14	63	0	0	77	0	2	3	0	5	3	68	47	0	118	40	3	8	0	51	251
11:45 AM	12	42	0	0	54	0	1	3	0	4	4	82	45	0	131	50	1	16	0	67	256
Total	46	223	1	0	270	4	6	11	0	21	12	283	162	0	457	179	7	49	0	235	983
12:00 PM	9	75	2	0	86	1	0	4	0	5	5	79	40	0	124	69	4	14	0	87	302
12:15 PM	18	58	2	0	78	1	4	2	0	7	11	85	34	0	130	35	2	15	0	52	267
12:30 PM	8	70	2	0	80	0	2	4	0	6	4	76	33	0	113	28	2	18	0	48	247
12:45 PM	10	65	3	0	78	0	1	5	0	6	14	74	38	0	126	30	4	10	0	44	254
Total	45	268	9	0	322	2	7	15	0	24	34	314	145	0	493	162	12	57	0	231	1070
1:00 PM	11	59	0	0	70	0	4	10	0	14	5	79	35	0	119	38	1	16	0	55	258
1:15 PM	10	67	2	0	79	2	0	5	0	7	4	77	42	0	123	45	2	7	0	54	263
1:30 PM	8	59	0	0	67	0	0	3	0	3	4	69	36	0	109	43	1	10	0	54	233
1:45 PM	10	70	2	0	82	2	2	3	0	7	7	57	43	0	107	35	1	11	0	47	243
Total	39	255	4	0	298	4	6	21	0	31	20	282	156	0	458	161	5	44	0	210	997
2:00 PM	9	69	0	0	78	1	0	13	0	14	3	75	30	0	108	46	0	8	0	54	254
2:15 PM	7	56	1	0	64	3	5	7	0	15	6	90	43	0	139	44	1	15	0	60	278
2:30 PM	20	134	3	0	157	1	0	3	0	4	10	97	44	0	151	72	1	14	0	87	399
2:45 PM	13	79	1	0	93	2	3	11	0	16	7	112	55	0	174	54	3	22	0	79	362
Total	49	338	5	0	392	7	8	34	0	49	26	374	172	0	572	216	5	59	0	280	1293
3:00 PM	19	75	1	0	95	5	5	6	0	16	6	109	53	0	168	71	6	13	0	90	369
3:15 PM	13	83	2	0	98	3	0	9	0	12	9	94	40	0	143	44	2	10	0	56	309
3:30 PM	20	84	0	0	104	1	3	12	0	16	11	102	51	0	164	50	2	19	0	71	355
3:45 PM	23	71	1	0	95	0	3	10	0	13	6	105	66	0	177	52	1	20	0	73	358
Total	75	313	4	0	392	9	11	37	0	57	32	410	210	0	652	217	11	62	0	290	1391
4:00 PM	23	94	2	0	119	1	2	5	0	8	6	114	71	0	191	51	2	22	0	75	393
4:15 PM	18	100	0	0	118	2	4	11	1	18	11	100	46	0	157	36	3	22	0	61	354
4:30 PM	19	98	1	0	118	1	0	7	0	8	9	116	60	0	185	49	1	19	0	69	380
4:45 PM	17	74	0	0	91	0	1	4	0	5	9	107	56	0	172	47	1	21	0	69	337
Total	77	366	3	0	446	4	7	27	1	39	35	437	233	0	705	183	7	84	0	274	1464
5:00 PM	13	90	0	0	103	0	4	6	0	10	10	102	50	0	162	49	2	25	0	76	351
5:15 PM	21	84	0	0	105	0	3	5	0	8	5	133	67	0	205	36	0	16	0	52	370
5:30 PM	33	58	0	0	91	0	1	3	0	4	4	93	62	0	159	40	1	20	0	61	315
5:45 PM	12	68	1	0	81	0	2	1	0	3	6	94	56	0	156	33	3	14	0	50	290
Total	79	300	1	0	380	0	10	15	0	25	25	422	235	0	682	158	6	75	0	239	1326
6:00 PM	18	46	0	0	64	2	1	3	0	6	5	79	44	0	128	31	1	12	0	44	242
6:15 PM	17	67	0	0	84	1	0	0	0	1	5	76	57	0	138	24	0	14	0	38	261
6:30 PM	19	59	1	0	79	1	4	3	0	8	3	74	51	0	128	35	2	12	0	49	264
6:45 PM	15	44	0	0	59	0	1	1	0	2	6	64	40	0	110	31	0	10	0	41	212
Total	69	216	1	0	286	4	6	7	0	17	19	293	192	0	504	121	3	48	0	172	979
Grand Total	649	3594	32	0	4275	51	91	274	1	417	306	4061	2077	0	6444	2343	86	763	0	3192	14328

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Cars

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	15.2	84.1	0.7	0.0		12.2	21.8	65.7	0.2		4.7	63.0	32.2	0.0		73.4	2.7	23.9	0.0		
Total %	4.5	25.1	0.2	0.0	29.8	0.4	0.6	1.9	0.0	2.9	2.1	28.3	14.5	0.0	45.0	16.4	0.6	5.3	0.0	22.3	
Exiting Leg Total					4875					425					6211					2817	14328

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

7:30 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
7:30 AM	11	83	0	0	94	4	1	6	0	11	6	53	18	0	77	50	2	25	0	77	259
7:45 AM	18	71	1	0	90	1	3	5	0	9	5	72	25	0	102	40	1	21	0	62	263
8:00 AM	9	76	0	0	85	0	2	2	0	4	3	72	26	0	101	47	1	17	0	65	255
8:15 AM	7	72	0	0	79	2	0	9	0	11	6	64	25	0	95	45	2	13	0	60	245
Total Volume	45	302	1	0	348	7	6	22	0	35	20	261	94	0	375	182	6	76	0	264	1022
% Approach Total	12.9	86.8	0.3	0.0		20.0	17.1	62.9	0.0		5.3	69.6	25.1	0.0		68.9	2.3	28.8	0.0		
PHF	0.625	0.910	0.250	0.000	0.926	0.438	0.500	0.611	0.000	0.795	0.833	0.906	0.904	0.000	0.919	0.910	0.750	0.760	0.000	0.857	0.971
Entering Leg	45	302	1	0	348	7	6	22	0	35	20	261	94	0	375	182	6	76	0	264	1022
Exiting Leg					344					27					506					145	1022
Total					692					62					881					409	2044

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:45 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:45 PM	10	70	2	0	82	2	2	3	0	7	7	57	43	0	107	35	1	11	0	47	243
2:00 PM	9	69	0	0	78	1	0	13	0	14	3	75	30	0	108	46	0	8	0	54	254
2:15 PM	7	56	1	0	64	3	5	7	0	15	6	90	43	0	139	44	1	15	0	60	278
2:30 PM	20	134	3	0	157	1	0	3	0	4	10	97	44	0	151	72	1	14	0	87	399
Total Volume	46	329	6	0	381	7	7	26	0	40	26	319	160	0	505	197	3	48	0	248	1174
% Approach Total	12.1	86.4	1.6	0.0		17.5	17.5	65.0	0.0		5.1	63.2	31.7	0.0		79.4	1.2	19.4	0.0		
PHF	0.575	0.614	0.500	0.000	0.607	0.583	0.350	0.500	0.000	0.667	0.650	0.822	0.909	0.000	0.836	0.684	0.750	0.800	0.000	0.713	0.736
Entering Leg	46	329	6	0	381	7	7	26	0	40	26	319	160	0	505	197	3	48	0	248	1174
Exiting Leg					374					35					552					213	1174
Total					755					75					1057					461	2348

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

3:45 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
3:45 PM	23	71	1	0	95	0	3	10	0	13	6	105	66	0	177	52	1	20	0	73	358
4:00 PM	23	94	2	0	119	1	2	5	0	8	6	114	71	0	191	51	2	22	0	75	393
4:15 PM	18	100	0	0	118	2	4	11	1	18	11	100	46	0	157	36	3	22	0	61	354
4:30 PM	19	98	1	0	118	1	0	7	0	8	9	116	60	0	185	49	1	19	0	69	380
Total Volume	83	363	4	0	450	4	9	33	1	47	32	435	243	0	710	188	7	83	0	278	1485
% Approach Total	18.4	80.7	0.9	0.0		8.5	19.1	70.2	2.1		4.5	61.3	34.2	0.0		67.6	2.5	29.9	0.0		
PHF	0.902	0.908	0.500	0.000	0.945	0.500	0.563	0.750	0.250	0.653	0.727	0.938	0.856	0.000	0.929	0.904	0.583	0.943	0.000	0.927	0.945
Entering Leg	83	363	4	0	450	4	9	33	1	47	32	435	243	0	710	188	7	83	0	278	1485
Exiting Leg					522					44					584					335	1485
Total					972					91					1294					613	2970

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	4
5:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	6	0	1	0	7	8
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	4	0	1	0	5	7
5:45 AM	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	8
Total	0	4	0	0	4	0	0	0	0	0	0	5	2	0	7	14	0	2	0	16	27
6:00 AM	0	1	0	0	1	0	0	0	0	0	0	6	4	0	10	5	0	1	0	6	17
6:15 AM	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	11	0	0	0	11	19
6:30 AM	1	2	0	0	3	0	0	0	0	0	2	5	2	0	9	6	0	0	0	6	18
6:45 AM	0	8	0	0	8	0	0	0	0	0	1	6	2	0	9	3	1	1	0	5	22
Total	1	16	0	0	17	0	0	0	0	0	3	20	8	0	31	25	1	2	0	28	76
7:00 AM	0	6	1	0	7	1	0	2	0	3	2	5	2	0	9	2	1	3	0	6	25
7:15 AM	1	5	0	0	6	1	0	0	0	1	0	5	1	0	6	1	0	1	0	2	15
7:30 AM	0	11	0	0	11	0	0	1	0	1	0	8	2	0	10	0	0	1	0	1	23
7:45 AM	0	12	0	0	12	0	1	0	0	1	0	6	2	0	8	0	0	1	0	1	22
Total	1	34	1	0	36	2	1	3	0	6	2	24	7	0	33	3	1	6	0	10	85
8:00 AM	0	10	0	0	10	0	0	0	0	0	0	7	0	0	7	2	0	0	0	2	19
8:15 AM	1	2	0	0	3	1	0	1	0	2	0	10	0	0	10	2	0	1	0	3	18
8:30 AM	3	5	0	0	8	0	0	0	0	0	1	6	4	0	11	4	0	0	0	4	23
8:45 AM	1	12	1	0	14	0	0	0	0	0	0	9	1	0	10	2	0	1	0	3	27
Total	5	29	1	0	35	1	0	1	0	2	1	32	5	0	38	10	0	2	0	12	87
9:00 AM	1	4	0	0	5	0	0	0	0	0	0	7	1	0	8	3	0	0	0	3	16
9:15 AM	0	7	0	0	7	0	0	0	0	0	0	6	5	0	11	0	0	1	0	1	19
9:30 AM	1	7	1	0	9	0	0	1	0	1	0	3	2	0	5	2	0	1	0	3	18
9:45 AM	3	7	0	0	10	1	0	1	0	2	0	8	3	0	11	4	0	1	0	5	28
Total	5	25	1	0	31	1	0	2	0	3	0	24	11	0	35	9	0	3	0	12	81
10:00 AM	0	8	0	0	8	0	0	0	0	0	0	5	3	0	8	4	1	3	0	8	24
10:15 AM	0	5	0	0	5	0	0	0	0	0	0	3	3	0	6	1	1	3	0	5	16
10:30 AM	1	3	0	0	4	0	0	3	0	3	0	9	1	0	10	2	0	0	0	2	19
10:45 AM	1	8	0	0	9	0	0	0	0	0	0	3	4	0	7	5	0	0	0	5	21
Total	2	24	0	0	26	0	0	3	0	3	0	20	11	0	31	12	2	6	0	20	80
11:00 AM	1	7	0	0	8	0	0	0	0	0	0	9	2	0	11	1	0	3	0	4	23
11:15 AM	0	8	0	0	8	0	0	0	0	0	0	2	3	0	5	2	1	1	0	4	17
11:30 AM	5	10	0	0	15	0	0	0	0	0	0	9	1	0	10	0	0	1	0	1	26
11:45 AM	4	5	0	0	9	0	0	0	0	0	0	4	1	0	5	3	0	0	0	3	17
Total	10	30	0	0	40	0	0	0	0	0	0	24	7	0	31	6	1	5	0	12	83
12:00 PM	2	7	2	0	11	0	0	0	0	0	0	7	4	0	11	2	0	3	0	5	27
12:15 PM	2	7	0	0	9	0	0	0	0	0	0	4	2	0	6	2	0	0	0	2	17
12:30 PM	2	5	0	0	7	0	0	0	0	0	0	2	2	0	4	6	0	0	0	6	17
12:45 PM	1	8	0	0	9	1	0	0	0	1	0	6	5	0	11	2	0	2	0	4	25
Total	7	27	2	0	36	1	0	0	0	1	0	19	13	0	32	12	0	5	0	17	86
1:00 PM	3	2	0	0	5	0	0	0	0	0	0	11	3	0	14	2	0	0	0	2	21
1:15 PM	1	5	0	0	6	0	0	0	0	0	0	3	3	0	6	4	0	0	0	4	16
1:30 PM	1	5	0	0	6	0	0	1	0	1	0	10	1	0	11	3	0	0	0	3	21
1:45 PM	1	7	0	0	8	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	13
Total	6	19	0	0	25	0	0	1	0	1	1	28	7	0	36	9	0	0	0	9	71
2:00 PM	1	5	0	0	6	1	0	0	0	1	1	6	4	0	11	3	0	1	0	4	22
2:15 PM	1	3	0	0	4	0	0	0	0	0	0	7	4	0	11	3	0	2	0	5	20
2:30 PM	2	2	0	0	4	0	1	0	0	1	0	6	7	0	13	2	0	6	0	8	26
2:45 PM	1	8	0	0	9	0	0	1	0	1	0	3	2	0	5	3	0	1	0	4	19
Total	5	18	0	0	23	1	1	1	0	3	1	22	17	0	40	11	0	10	0	21	87
3:00 PM	2	3	0	0	5	0	0	0	0	0	1	3	5	0	9	3	0	1	0	4	18
3:15 PM	0	3	0	0	3	0	1	0	0	1	0	7	3	0	10	0	1	1	0	2	16
3:30 PM	0	4	0	0	4	0	0	0	0	0	0	5	3	0	8	0	0	0	0	0	12
3:45 PM	1	1	0	0	2	1	1	0	0	2	1	6	3	0	10	3	0	0	0	3	17
Total	3	11	0	0	14	1	2	0	0	3	2	21	14	0	37	6	1	2	0	9	63
4:00 PM	2	3	0	0	5	0	0	0	0	0	0	2	2	0	4	3	0	1	0	4	13
4:15 PM	0	2	0	0	2	0	0	0	0	0	0	1	3	0	4	1	1	1	0	3	9
4:30 PM	1	1	0	0	2	1	1	0	0	2	0	1	2	0	3	6	0	0	0	6	13
4:45 PM	1	3	0	0	4	0	0	0	0	0	0	2	2	0	4	3	0	0	0	3	11
Total	4	9	0	0	13	1	1	0	0	2	0	6	9	0	15	13	1	2	0	16	46
5:00 PM	0	2	0	0	2	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	5
5:15 PM	0	2	0	0	2	0	0	0	0	0	0	3	3	0	6	1	0	0	0	1	9
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
Total	0	5	0	0	5	0	0	0	0	0	0	6	7	0	13	2	0	0	0	2	20
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
6:15 PM	1	1	0	0	2	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	4
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	5
6:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
Total	1	2	0	0	3	0	0	0	0	0	0	4	3	0	7	3	0	0	0	3	13
Grand Total	50	253	5	0	308	8	5	11	0	24	10	255	121	0	386	135	7	45	0	187	905
Approach %	16.2	82.1	1.6	0.0		33.3	20.8	45.8	0.0		2.6	66.1	31.3	0.0		72.2	3.7	24.1	0.0		

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Total %	5.5	28.0	0.6	0.0	34.0	0.9	0.6	1.2	0.0	2.7	1.1	28.2	13.4	0.0	42.7	14.9	0.8	5.0	0.0	20.7	
Exiting Leg Total					308					22					399					176	905
Buses	6	19	2	0	27	3	5	2	0	10	4	25	24	0	53	30	4	10	0	44	134
% Buses	12.0	7.5	40.0	0.0	8.8	37.5	100.0	18.2	0.0	41.7	40.0	9.8	19.8	0.0	13.7	22.2	57.1	22.2	0.0	23.5	14.8
Exiting Leg Total					38					10					51					35	134
Single-Unit Trucks	39	145	3	0	187	5	0	9	0	14	6	143	73	0	222	74	2	25	0	101	524
% Single-Unit	78.0	57.3	60.0	0.0	60.7	62.5	0.0	81.8	0.0	58.3	60.0	56.1	60.3	0.0	57.5	54.8	28.6	55.6	0.0	54.0	57.9
Exiting Leg Total					173					11					228					112	524
Articulated Trucks	5	89	0	0	94	0	0	0	0	0	0	87	24	0	111	31	1	10	0	42	247
% Articulated	10.0	35.2	0.0	0.0	30.5	0.0	0.0	0.0	0.0	0.0	0.0	34.1	19.8	0.0	28.8	23.0	14.3	22.2	0.0	22.5	27.3
Exiting Leg Total					97					1					120					29	247

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

9:15 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
9:15 AM	0	7	0	0	7	0	0	0	0	0	0	6	5	0	11	0	0	1	0	1	19
9:30 AM	1	7	1	0	9	0	0	1	0	1	0	3	2	0	5	2	0	1	0	3	18
9:45 AM	3	7	0	0	10	1	0	1	0	2	0	8	3	0	11	4	0	1	0	5	28
10:00 AM	0	8	0	0	8	0	0	0	0	0	0	5	3	0	8	4	1	3	0	8	24
Total Volume	4	29	1	0	34	1	0	2	0	3	0	22	13	0	35	10	1	6	0	17	89
% Approach Total	11.8	85.3	2.9	0.0		33.3	0.0	66.7	0.0		0.0	62.9	37.1	0.0		58.8	5.9	35.3	0.0		
PHF	0.333	0.906	0.250	0.000	0.850	0.250	0.000	0.500	0.000	0.375	0.000	0.688	0.650	0.000	0.795	0.625	0.250	0.500	0.000	0.531	0.795
Buses	0	1	0	0	1	0	0	0	0	0	0	0	3	0	3	2	0	0	0	2	6
Buses %	0.0	3.4	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.1	0.0	8.6	20.0	0.0	0.0	0.0	11.8	6.7
Single-Unit Trucks	4	22	1	0	27	1	0	2	0	3	0	12	5	0	17	6	0	3	0	9	56
Single-Unit %	100.0	75.9	100.0	0.0	79.4	100.0	0.0	100.0	0.0	100.0	0.0	54.5	38.5	0.0	48.6	60.0	0.0	50.0	0.0	52.9	62.9
Articulated Trucks	0	6	0	0	6	0	0	0	0	0	0	10	5	0	15	2	1	3	0	6	27
Articulated %	0.0	20.7	0.0	0.0	17.6	0.0	0.0	0.0	0.0	0.0	0.0	45.5	38.5	0.0	42.9	20.0	100.0	50.0	0.0	35.3	30.3
Buses	0	1	0	0	1	0	0	0	0	0	0	0	3	0	3	2	0	0	0	2	6
Single-Unit Trucks	4	22	1	0	27	1	0	2	0	3	0	12	5	0	17	6	0	3	0	9	56
Articulated Trucks	0	6	0	0	6	0	0	0	0	0	0	10	5	0	15	2	1	3	0	6	27
Total Entering Leg	4	29	1	0	34	1	0	2	0	3	0	22	13	0	35	10	1	6	0	17	89
Buses					0					0					3					3	6
Single-Unit Trucks					16					1					30					9	56
Articulated Trucks					13					1					8					5	27
Total Exiting Leg					29					2					41					17	89

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

10:45 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
10:45 AM	1	8	0	0	9	0	0	0	0	0	0	3	4	0	7	5	0	0	0	5	21
11:00 AM	1	7	0	0	8	0	0	0	0	0	0	9	2	0	11	1	0	3	0	4	23
11:15 AM	0	8	0	0	8	0	0	0	0	0	0	2	3	0	5	2	1	1	0	4	17
11:30 AM	5	10	0	0	15	0	0	0	0	0	0	9	1	0	10	0	0	1	0	1	26
Total Volume	7	33	0	0	40	0	0	0	0	0	0	23	10	0	33	8	1	5	0	14	87
% Approach Total	17.5	82.5	0.0	0.0		0.0	0.0	0.0	0.0		0.0	69.7	30.3	0.0		57.1	7.1	35.7	0.0		
PHF	0.350	0.825	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.000	0.639	0.625	0.000	0.750	0.400	0.250	0.417	0.000	0.700	0.837
Buses	0	2	0	0	2	0	0	0	0	0	0	0	2	0	2	2	0	1	0	3	7
Buses %	0.0	6.1	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	6.1	25.0	0.0	20.0	0.0	21.4	8.0
Single-Unit Trucks	5	20	0	0	25	0	0	0	0	0	0	11	7	0	18	5	1	4	0	10	53
Single-Unit %	71.4	60.6	0.0	0.0	62.5	0.0	0.0	0.0	0.0	0.0	0.0	47.8	70.0	0.0	54.5	62.5	100.0	80.0	0.0	71.4	60.9
Articulated Trucks	2	11	0	0	13	0	0	0	0	0	0	12	1	0	13	1	0	0	0	1	27
Articulated %	28.6	33.3	0.0	0.0	32.5	0.0	0.0	0.0	0.0	0.0	0.0	52.2	10.0	0.0	39.4	12.5	0.0	0.0	0.0	7.1	31.0
Buses	0	2	0	0	2	0	0	0	0	0	0	0	2	0	2	2	0	1	0	3	7
Single-Unit Trucks	5	20	0	0	25	0	0	0	0	0	0	11	7	0	18	5	1	4	0	10	53
Articulated Trucks	2	11	0	0	13	0	0	0	0	0	0	12	1	0	13	1	0	0	0	1	27
Total Entering Leg	7	33	0	0	40	0	0	0	0	0	0	23	10	0	33	8	1	5	0	14	87
Buses					1					0					4					2	7
Single-Unit Trucks					15					1					25					12	53
Articulated Trucks					12					0					12					3	27
Total Exiting Leg					28					1					41					17	87

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	1	5	0	0	6	1	0	0	0	1	1	6	4	0	11	3	0	1	0	4	22
2:15 PM	1	3	0	0	4	0	0	0	0	0	0	7	4	0	11	3	0	2	0	5	20
2:30 PM	2	2	0	0	4	0	1	0	0	1	0	6	7	0	13	2	0	6	0	8	26
2:45 PM	1	8	0	0	9	0	0	1	0	1	0	3	2	0	5	3	0	1	0	4	19
Total Volume	5	18	0	0	23	1	1	1	0	3	1	22	17	0	40	11	0	10	0	21	87
% Approach Total	21.7	78.3	0.0	0.0		33.3	33.3	33.3	0.0		2.5	55.0	42.5	0.0		52.4	0.0	47.6	0.0		
PHF	0.625	0.563	0.000	0.000	0.639	0.250	0.250	0.250	0.000	0.750	0.250	0.786	0.607	0.000	0.769	0.917	0.000	0.417	0.000	0.656	0.837

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Heavy Vehicles-Combined (Buses, Single-Unit Trucks, Articulated Trucks)**

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Buses	0	1	0	0	1	0	1	0	0	1	1	4	3	0	8	3	0	0	0	3	13
Buses %	0.0	5.6	0.0	0.0	4.3	0.0	100.0	0.0	0.0	33.3	100.0	18.2	17.6	0.0	20.0	27.3	0.0	0.0	0.0	14.3	14.9
Single-Unit Trucks	4	10	0	0	14	1	0	1	0	2	0	14	11	0	25	5	0	5	0	10	51
Single-Unit %	80.0	55.6	0.0	0.0	60.9	100.0	0.0	100.0	0.0	66.7	0.0	63.6	64.7	0.0	62.5	45.5	0.0	50.0	0.0	47.6	58.6
Articulated Trucks	1	7	0	0	8	0	0	0	0	0	0	4	3	0	7	3	0	5	0	8	23
Articulated %	20.0	38.9	0.0	0.0	34.8	0.0	0.0	0.0	0.0	0.0	0.0	18.2	17.6	0.0	17.5	27.3	0.0	50.0	0.0	38.1	26.4
Buses	0	1	0	0	1	0	1	0	0	1	1	4	3	0	8	3	0	0	0	3	13
Single-Unit Trucks	4	10	0	0	14	1	0	1	0	2	0	14	11	0	25	5	0	5	0	10	51
Articulated Trucks	1	7	0	0	8	0	0	0	0	0	0	4	3	0	7	3	0	5	0	8	23
Total Entering Leg	5	18	0	0	23	1	1	1	0	3	1	22	17	0	40	11	0	10	0	21	87
Buses					4					1					4					4	13
Single-Unit Trucks					20					0					16					15	51
Articulated Trucks					9					0					10					4	23
Total Exiting Leg					33					1					30					23	87

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
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Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	2
5:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	1	0	1	0	2	6
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	3
6:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
6:30 AM	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	5
6:45 AM	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	4
Total	1	2	0	0	3	0	0	0	0	0	1	4	2	0	7	4	1	0	0	5	15
7:00 AM	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	1	1	2	0	4	8
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	5
7:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	0	0	4	0	1	1	0	2	0	3	0	0	3	1	1	3	0	5	14
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	1	0	1	0	2	4
8:30 AM	1	0	0	0	1	0	0	0	0	0	0	1	3	0	4	0	0	0	0	0	5
8:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Total	1	0	1	0	2	1	0	1	0	2	0	1	3	0	4	1	0	2	0	3	11
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
Total	0	1	0	0	1	0	0	0	0	0	0	0	3	0	3	3	0	0	0	3	7
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	3
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	3	2	0	5	1	0	0	0	1	6
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2	3
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
11:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	2	0	0	2	0	0	0	0	0	0	1	2	0	3	2	0	1	0	3	8
12:00 PM	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	1	1	0	2	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	6
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	1	1	0	0	2	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	5
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	1	2	0	0	3	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	7
2:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1	0	0	0	1	3
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	4
2:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	2
2:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	4
Total	0	1	0	0	1	0	1	0	0	1	1	4	3	0	8	3	0	0	0	3	13
3:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	2	0	1	0	3	5
3:15 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	3
3:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
3:45 PM	0	0	0	0	0	1	1	0	0	2	1	0	1	0	2	1	0	0	0	1	5
Total	0	1	0	0	1	1	2	0	0	3	2	2	2	0	6	3	1	1	0	5	15
4:00 PM	2	1	0	0	3	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
4:30 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3	0	0	0	3	5
4:45 PM	1	2	0	0	3	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	5
Total	3	3	0	0	6	1	1	0	0	2	0	1	1	0	2	5	1	2	0	8	18
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	4
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
6:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	4
Grand Total	6	19	2	0	27	3	5	2	0	10	4	25	24	0	53	30	4	10	0	44	134

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Buses

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	22.2	70.4	7.4	0.0		30.0	50.0	20.0	0.0		7.5	47.2	45.3	0.0		68.2	9.1	22.7	0.0		
Total %	4.5	14.2	1.5	0.0	20.1	2.2	3.7	1.5	0.0	7.5	3.0	18.7	17.9	0.0	39.6	22.4	3.0	7.5	0.0	32.8	
Exiting Leg Total					38					10					51					35	134

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

6:15 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
6:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
6:30 AM	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	5
6:45 AM	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	4
7:00 AM	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	1	1	2	0	4	8
Total Volume	1	3	0	0	4	0	0	1	0	1	1	6	0	0	7	4	2	2	0	8	20
% Approach Total	25.0	75.0	0.0	0.0		0.0	0.0	100.0	0.0		14.3	85.7	0.0	0.0		50.0	25.0	25.0	0.0		
PHF	0.250	0.750	0.000	0.000	1.000	0.000	0.000	0.250	0.000	0.250	0.250	0.500	0.000	0.000	0.583	0.500	0.500	0.250	0.000	0.500	0.625
Entering Leg	1	3	0	0	4	0	0	1	0	1	1	6	0	0	7	4	2	2	0	8	20
Exiting Leg					8					3					8					1	20
Total					12					4					15					9	40

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:30 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
1:30 PM	1	1	0	0	2	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	5
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
2:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1	0	0	0	1	3
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	4
Total Volume	1	1	0	0	2	0	0	0	0	0	1	5	2	0	8	3	0	0	0	3	13
% Approach Total	50.0	50.0	0.0	0.0		0.0	0.0	0.0	0.0		12.5	62.5	25.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.625	0.500	0.000	0.667	0.750	0.000	0.000	0.000	0.750	0.650
Entering Leg	1	1	0	0	2	0	0	0	0	0	1	5	2	0	8	3	0	0	0	3	13
Exiting Leg					5					1					4					3	13
Total					7					1					12					6	26

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

3:45 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
3:45 PM	0	0	0	0	0	1	1	0	0	2	1	0	1	0	2	1	0	0	0	1	5
4:00 PM	2	1	0	0	3	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
4:30 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	3	0	0	0	3	5
Total Volume	2	1	0	0	3	2	2	0	0	4	1	1	1	0	3	5	1	2	0	8	18
% Approach Total	66.7	33.3	0.0	0.0		50.0	50.0	0.0	0.0		33.3	33.3	33.3	0.0		62.5	12.5	25.0	0.0		
PHF	0.250	0.250	0.000	0.000	0.250	0.500	0.500	0.000	0.000	0.500	0.250	0.250	0.250	0.000	0.375	0.417	0.250	0.500	0.000	0.667	0.750
Entering Leg	2	1	0	0	3	2	2	0	0	4	1	1	1	0	3	5	1	2	0	8	18
Exiting Leg					5					2					6					5	18
Total					8					6					9					13	36

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Single-Unit Trucks

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	5	0	1	0	6	7
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	0	3	4
5:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	4
Total	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	11	0	1	0	12	16
6:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	1	0	1	0	2	5
6:15 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	5	0	0	0	5	8
6:30 AM	0	1	0	0	1	0	0	0	0	0	2	1	1	0	4	4	0	0	0	4	9
6:45 AM	0	5	0	0	5	0	0	0	0	0	0	2	2	0	4	3	0	0	0	3	12
Total	0	9	0	0	9	0	0	0	0	0	2	4	5	0	11	13	0	1	0	14	34
7:00 AM	0	1	1	0	2	1	0	1	0	2	2	2	2	0	6	1	0	1	0	2	12
7:15 AM	1	4	0	0	5	1	0	0	0	1	0	3	0	0	3	1	0	1	0	2	11
7:30 AM	0	2	0	0	2	0	0	1	0	1	0	5	1	0	6	0	0	0	0	0	9
7:45 AM	0	9	0	0	9	0	0	0	0	0	0	3	1	0	4	0	0	1	0	1	14
Total	1	16	1	0	18	2	0	2	0	4	2	13	4	0	19	2	0	3	0	5	46
8:00 AM	0	6	0	0	6	0	0	0	0	0	0	5	0	0	5	2	0	0	0	2	13
8:15 AM	1	2	0	0	3	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	10
8:30 AM	2	2	0	0	4	0	0	0	0	0	1	4	1	0	6	2	0	0	0	2	12
8:45 AM	1	8	0	0	9	0	0	0	0	0	0	8	1	0	9	2	0	0	0	2	20
Total	4	18	0	0	22	0	0	0	0	0	1	23	2	0	26	7	0	0	0	7	55
9:00 AM	1	3	0	0	4	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	10
9:15 AM	0	7	0	0	7	0	0	0	0	0	0	5	3	0	8	0	0	1	0	1	16
9:30 AM	1	5	1	0	7	0	0	1	0	1	0	2	1	0	3	1	0	0	0	1	12
9:45 AM	3	5	0	0	8	1	0	1	0	2	0	2	0	0	2	2	0	1	0	3	15
Total	5	20	1	0	26	1	0	2	0	3	0	13	4	0	17	5	0	2	0	7	53
10:00 AM	0	5	0	0	5	0	0	0	0	0	0	3	1	0	4	3	0	1	0	4	13
10:15 AM	0	3	0	0	3	0	0	0	0	0	0	1	3	0	4	0	1	3	0	4	11
10:30 AM	1	2	0	0	3	0	0	3	0	3	0	5	0	0	5	2	0	0	0	2	13
10:45 AM	0	8	0	0	8	0	0	0	0	0	0	0	3	0	3	4	0	0	0	4	15
Total	1	18	0	0	19	0	0	3	0	3	0	9	7	0	16	9	1	4	0	14	52
11:00 AM	1	5	0	0	6	0	0	0	0	0	0	6	1	0	7	0	0	2	0	2	15
11:15 AM	0	4	0	0	4	0	0	0	0	0	0	0	2	0	2	1	1	1	0	3	9
11:30 AM	4	3	0	0	7	0	0	0	0	0	0	5	1	0	6	0	0	1	0	1	14
11:45 AM	4	4	0	0	8	0	0	0	0	0	0	2	1	0	3	3	0	0	0	3	14
Total	9	16	0	0	25	0	0	0	0	0	0	13	5	0	18	4	1	4	0	9	52
12:00 PM	2	5	1	0	8	0	0	0	0	0	0	5	3	0	8	1	0	2	0	3	19
12:15 PM	1	5	0	0	6	0	0	0	0	0	0	2	1	0	3	2	0	0	0	2	11
12:30 PM	1	1	0	0	2	0	0	0	0	0	0	2	2	0	4	1	0	0	0	1	7
12:45 PM	1	5	0	0	6	1	0	0	0	1	0	5	1	0	6	0	0	2	0	2	15
Total	5	16	1	0	22	1	0	0	0	1	0	14	7	0	21	4	0	4	0	8	52
1:00 PM	3	2	0	0	5	0	0	0	0	0	0	6	2	0	8	1	0	0	0	1	14
1:15 PM	1	3	0	0	4	0	0	0	0	0	0	2	2	0	4	2	0	0	0	2	10
1:30 PM	0	1	0	0	1	0	0	1	0	1	0	5	0	0	5	2	0	0	0	2	9
1:45 PM	1	4	0	0	5	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	9
Total	5	10	0	0	15	0	0	1	0	1	1	16	4	0	21	5	0	0	0	5	42
2:00 PM	1	3	0	0	4	1	0	0	0	1	0	5	4	0	9	2	0	1	0	3	17
2:15 PM	1	2	0	0	3	0	0	0	0	0	0	3	3	0	6	1	0	0	0	1	10
2:30 PM	2	0	0	0	2	0	0	0	0	0	0	5	4	0	9	0	0	3	0	3	14
2:45 PM	0	5	0	0	5	0	0	1	0	1	0	1	0	0	1	2	0	1	0	3	10
Total	4	10	0	0	14	1	0	1	0	2	0	14	11	0	25	5	0	5	0	10	51
3:00 PM	2	2	0	0	4	0	0	0	0	0	0	3	2	0	5	0	0	0	0	0	9
3:15 PM	0	3	0	0	3	0	0	0	0	0	0	5	2	0	7	0	0	1	0	1	11
3:30 PM	0	2	0	0	2	0	0	0	0	0	0	1	3	0	4	0	0	0	0	0	6
3:45 PM	1	0	0	0	1	0	0	0	0	0	0	5	2	0	7	1	0	0	0	1	9
Total	3	7	0	0	10	0	0	0	0	0	0	14	9	0	23	1	0	1	0	2	35
4:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	2	0	3	2	0	0	0	2	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	3
4:30 PM	1	0	0	0	1	0	0	0	0	0	0	1	2	0	3	2	0	0	0	2	6
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	4
Total	1	1	0	0	2	0	0	0	0	0	0	4	7	0	11	6	0	0	0	6	19
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	3
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	1	6	0	7	0	0	0	0	0	9
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	4
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
Total	1	0	0	0	1	0	0	0	0	0	0	4	1	0	5	2	0	0	0	2	8
Grand Total	39	145	3	0	187	5	0	9	0	14	6	143	73	0	222	74	2	25	0	101	524

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Class: **Single-Unit Trucks**

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	20.9	77.5	1.6	0.0		35.7	0.0	64.3	0.0		2.7	64.4	32.9	0.0		73.3	2.0	24.8	0.0		
Total %	7.4	27.7	0.6	0.0	35.7	1.0	0.0	1.7	0.0	2.7	1.1	27.3	13.9	0.0	42.4	14.1	0.4	4.8	0.0	19.3	
Exiting Leg Total					173					11					228					112	524

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

8:30 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:30 AM	2	2	0	0	4	0	0	0	0	0	1	4	1	0	6	2	0	0	0	2	12
8:45 AM	1	8	0	0	9	0	0	0	0	0	0	8	1	0	9	2	0	0	0	2	20
9:00 AM	1	3	0	0	4	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	10
9:15 AM	0	7	0	0	7	0	0	0	0	0	0	5	3	0	8	0	0	1	0	1	16
Total Volume	4	20	0	0	24	0	0	0	0	0	1	21	5	0	27	6	0	1	0	7	58
% Approach Total	16.7	83.3	0.0	0.0		0.0	0.0	0.0	0.0		3.7	77.8	18.5	0.0		85.7	0.0	14.3	0.0		
PHF	0.500	0.625	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.250	0.656	0.417	0.000	0.750	0.750	0.000	0.250	0.000	0.875	0.725
Entering Leg	4	20	0	0	24	0	0	0	0	0	1	21	5	0	27	6	0	1	0	7	58
Exiting Leg					22					1					26					9	58
Total					46					1					53					16	116

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

11:30 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:30 AM	4	3	0	0	7	0	0	0	0	0	0	5	1	0	6	0	0	1	0	1	14
11:45 AM	4	4	0	0	8	0	0	0	0	0	0	2	1	0	3	3	0	0	0	3	14
12:00 PM	2	5	1	0	8	0	0	0	0	0	0	5	3	0	8	1	0	2	0	3	19
12:15 PM	1	5	0	0	6	0	0	0	0	0	0	2	1	0	3	2	0	0	0	2	11
Total Volume	11	17	1	0	29	0	0	0	0	0	0	14	6	0	20	6	0	3	0	9	58
% Approach Total	37.9	58.6	3.4	0.0		0.0	0.0	0.0	0.0		0.0	70.0	30.0	0.0		66.7	0.0	33.3	0.0		
PHF	0.688	0.850	0.250	0.000	0.906	0.000	0.000	0.000	0.000	0.000	0.000	0.700	0.500	0.000	0.625	0.500	0.000	0.375	0.000	0.750	0.763
Entering Leg	11	17	1	0	29	0	0	0	0	0	0	14	6	0	20	6	0	3	0	9	58
Exiting Leg					17					1					23					17	58
Total					46					1					43					26	116

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	1	3	0	0	4	1	0	0	0	1	0	5	4	0	9	2	0	1	0	3	17
2:15 PM	1	2	0	0	3	0	0	0	0	0	0	3	3	0	6	1	0	0	0	1	10
2:30 PM	2	0	0	0	2	0	0	0	0	0	0	5	4	0	9	0	0	3	0	3	14
2:45 PM	0	5	0	0	5	0	0	1	0	1	0	1	0	0	1	2	0	1	0	3	10
Total Volume	4	10	0	0	14	1	0	1	0	2	0	14	11	0	25	5	0	5	0	10	51
% Approach Total	28.6	71.4	0.0	0.0		50.0	0.0	50.0	0.0		0.0	56.0	44.0	0.0		50.0	0.0	50.0	0.0		
PHF	0.500	0.500	0.000	0.000	0.700	0.250	0.000	0.250	0.000	0.500	0.000	0.700	0.688	0.000	0.694	0.625	0.000	0.417	0.000	0.833	0.750
Entering Leg	4	10	0	0	14	1	0	1	0	2	0	14	11	0	25	5	0	5	0	10	51
Exiting Leg					20					0					16					15	51
Total					34					2					41					25	102

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Total	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	5
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	3	0	0	0	3	9
6:15 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4	0	0	0	4	8
6:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	4
6:45 AM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	6
Total	0	5	0	0	5	0	0	0	0	0	0	12	1	0	13	8	0	1	0	9	27
7:00 AM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
7:30 AM	0	6	0	0	6	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	9
7:45 AM	0	3	0	0	3	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	7
Total	0	14	0	0	14	0	0	0	0	0	0	8	3	0	11	0	0	0	0	0	25
8:00 AM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	4
8:30 AM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	6
8:45 AM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5
Total	0	11	0	0	11	0	0	0	0	0	0	8	0	0	8	2	0	0	0	2	21
9:00 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
9:30 AM	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	1	0	1	0	2	6
9:45 AM	0	1	0	0	1	0	0	0	0	0	0	6	3	0	9	0	0	0	0	0	10
Total	0	4	0	0	4	0	0	0	0	0	0	11	4	0	15	1	0	1	0	2	21
10:00 AM	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	1	1	2	0	4	10
10:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10:30 AM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
10:45 AM	1	0	0	0	1	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	6
Total	1	6	0	0	7	0	0	0	0	0	0	8	2	0	10	2	1	2	0	5	22
11:00 AM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
11:15 AM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
11:30 AM	1	5	0	0	6	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	10
11:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	1	12	0	0	13	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	23
12:00 PM	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	5
12:15 PM	1	2	0	0	3	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	6
12:30 PM	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	8
12:45 PM	0	3	0	0	3	0	0	0	0	0	0	1	3	0	4	2	0	0	0	2	9
Total	2	10	0	0	12	0	0	0	0	0	0	4	5	0	9	6	0	1	0	7	28
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	1	0	6	1	0	0	0	1	7
1:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	5
1:30 PM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
1:45 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	7	0	0	7	0	0	0	0	0	0	10	2	0	12	3	0	0	0	3	22
2:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
2:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	1	0	2	0	3	6
2:30 PM	0	2	0	0	2	0	0	0	0	0	0	1	2	0	3	2	0	3	0	5	10
2:45 PM	1	2	0	0	3	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	5
Total	1	7	0	0	8	0	0	0	0	0	0	4	3	0	7	3	0	5	0	8	23
3:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	4
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2
3:30 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	4
3:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
Total	0	3	0	0	3	0	0	0	0	0	0	5	3	0	8	2	0	0	0	2	13
4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	4
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	5	0	0	5	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	9
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	5	89	0	0	94	0	0	0	0	0	0	87	24	0	111	31	1	10	0	42	247

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Articulated Trucks

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	5.3	94.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	78.4	21.6	0.0		73.8	2.4	23.8	0.0		
Total %	2.0	36.0	0.0	0.0	38.1	0.0	0.0	0.0	0.0	0.0	0.0	35.2	9.7	0.0	44.9	12.6	0.4	4.0	0.0	17.0	
Exiting Leg Total					97					1					120					29	247

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

9:30 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
9:30 AM	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	1	0	1	0	2	6
9:45 AM	0	1	0	0	1	0	0	0	0	0	0	6	3	0	9	0	0	0	0	0	10
10:00 AM	0	3	0	0	3	0	0	0	0	0	0	2	1	0	3	1	1	2	0	4	10
10:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	8	0	0	8	0	0	0	0	0	0	9	5	0	14	2	1	3	0	6	28
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	64.3	35.7	0.0		33.3	16.7	50.0	0.0		
PHF	0.000	0.667	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.417	0.000	0.389	0.500	0.250	0.375	0.000	0.375	0.700
Entering Leg	0	8	0	0	8	0	0	0	0	0	0	9	5	0	14	2	1	3	0	6	28
Exiting Leg					12					1					10					5	28
Total					20					1					24					11	56

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

12:15 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:15 PM	1	2	0	0	3	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	6
12:30 PM	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	8
12:45 PM	0	3	0	0	3	0	0	0	0	0	0	1	3	0	4	2	0	0	0	2	9
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	1	0	6	1	0	0	0	1	7
Total Volume	2	8	0	0	10	0	0	0	0	0	0	8	5	0	13	7	0	0	0	7	30
% Approach Total	20.0	80.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	61.5	38.5	0.0		100.0	0.0	0.0	0.0		
PHF	0.500	0.667	0.000	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.417	0.000	0.542	0.438	0.000	0.000	0.000	0.438	0.833
Entering Leg	2	8	0	0	10	0	0	0	0	0	0	8	5	0	13	7	0	0	0	7	30
Exiting Leg					8					0					15					7	30
Total					18					0					28					14	60

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:15 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:15 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	1	0	2	0	3	6
2:30 PM	0	2	0	0	2	0	0	0	0	0	0	1	2	0	3	2	0	3	0	5	10
2:45 PM	1	2	0	0	3	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	5
3:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	4
Total Volume	1	6	0	0	7	0	0	0	0	0	0	4	5	0	9	4	0	5	0	9	25
% Approach Total	14.3	85.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	44.4	55.6	0.0		44.4	0.0	55.6	0.0		
PHF	0.250	0.750	0.000	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.625	0.000	0.750	0.500	0.000	0.417	0.000	0.450	0.625
Entering Leg	1	6	0	0	7	0	0	0	0	0	0	4	5	0	9	4	0	5	0	9	25
Exiting Leg					9					0					10					6	25
Total					16					0					19					15	50

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Packer

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
5:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
Total	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	3	0	1	0	4	7
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	3
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5	0	0	0	5	6
7:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	1	0	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	4
11:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
12:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	4	0	0	4	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	6
1:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
1:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
2:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2	12	1	0	15	1	0	1	0	2	0	5	7	0	12	9	0	4	0	13	42

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Packer

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	13.3	80.0	6.7	0.0		50.0	0.0	50.0	0.0		0.0	41.7	58.3	0.0		69.2	0.0	30.8	0.0		
Total %	4.8	28.6	2.4	0.0	35.7	2.4	0.0	2.4	0.0	4.8	0.0	11.9	16.7	0.0	28.6	21.4	0.0	9.5	0.0	31.0	
Exiting Leg Total					10					1					22					9	42

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

5:30 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	3
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
Total Volume	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	7	0	0	0	7	10
% Approach Total	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	33.3	66.7	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.500	0.000	0.750	0.583	0.000	0.000	0.000	0.583	0.833
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	7	0	0	0	7	10
Exiting Leg					1					0					7					2	10
Total					1					0					10					9	20

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

12:15 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
12:15 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
1:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total Volume	1	3	0	0	4	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	7
% Approach Total	25.0	75.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	50.0	50.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.250	0.250	0.000	0.000	0.333	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.500	0.250	0.000	0.000	0.000	0.250	0.583
Entering Leg	1	3	0	0	4	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	7
Exiting Leg					1					0					4					2	7
Total					5					0					6					3	14

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
2:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Exiting Leg					0					0					1					1	2
Total					1					0					2					1	4

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Roll Off

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	3
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
6:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	4
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Total	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
8:15 AM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
8:45 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Total	1	3	0	0	4	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	9
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
9:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	5
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
10:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	2	0	2	7
11:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
11:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
11:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
12:00 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	5
12:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	1	3	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	9
1:00 PM	1	1	0	0	2	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	5
1:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	2	6	0	0	8	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	11
2:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	5
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	5	27	0	0	32	0	0	0	0	0	0	20	4	0	24	8	0	5	0	13	69

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
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PRECISION DATA INDUSTRIES, LLC
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Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Roll Off

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	15.6	84.4	0.0	0.0		0.0	0.0	0.0	0.0		0.0	83.3	16.7	0.0		61.5	0.0	38.5	0.0		
Total %	7.2	39.1	0.0	0.0	46.4	0.0	0.0	0.0	0.0	0.0	0.0	29.0	5.8	0.0	34.8	11.6	0.0	7.2	0.0	18.8	
Exiting Leg Total					25					0					35					9	69

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

8:15 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
8:15 AM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
8:45 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Total Volume	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	10
% Approach Total	25.0	75.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.250	0.375	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.625	0.250	0.000	0.000	0.000	0.250	0.833
Entering Leg	1	3	0	0	4	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	10
Exiting Leg					5					0					4					1	10
Total					9					0					9					2	20

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

11:15 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
11:15 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
11:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	5
Total Volume	0	6	0	0	6	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	11
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		
PHF	0.000	0.750	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.375	0.000	0.000	0.250	0.000	0.250	0.550
Entering Leg	0	6	0	0	6	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	11
Exiting Leg					5					0					6					0	11
Total					11					0					9					2	22

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:00 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	5
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	66.7	33.3	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.750	0.250	0.000	0.000	0.000	0.250	0.625
Entering Leg	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	1	0	0	0	1	5
Exiting Leg					2					0					2					1	5
Total					3					0					5					2	10

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Tractor Trailer

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	5
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
6:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
6:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	10
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
7:30 AM	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	7	0	0	7	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	10
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
8:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	1	4	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	6
9:00 AM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
9:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
9:45 AM	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4
Total	0	3	0	0	3	0	0	0	0	0	0	5	2	0	7	0	0	0	0	0	10
10:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
10:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	3
Total	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	1	0	0	0	1	8
11:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
11:30 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
12:00 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
12:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
12:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Total	0	4	0	0	4	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	7
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	28	0	0	29	0	0	0	0	0	0	27	4	0	31	2	0	0	0	2	62

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Tractor Trailer

	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
Approach %	3.4	96.6	0.0	0.0		0.0	0.0	0.0	0.0		0.0	87.1	12.9	0.0		100.0	0.0	0.0	0.0		
Total %	1.6	45.2	0.0	0.0	46.8	0.0	0.0	0.0	0.0	0.0	0.0	43.5	6.5	0.0	50.0	3.2	0.0	0.0	0.0	3.2	
Exiting Leg Total					27					0					30					5	62

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

5:45 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
5:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	5
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
6:30 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total Volume	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	10
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.400	0.000	0.000	0.400	0.000	0.000	0.000	0.000	0.000	0.500
Entering Leg	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	10
Exiting Leg					8					0					2					0	10
Total					10					0					10					0	20

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

10:00 AM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
10:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	3
10:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	3
Total Volume	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	1	0	0	0	1	8
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	80.0	20.0	0.0		100.0	0.0	0.0	0.0		
PHF	0.000	0.500	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.417	0.250	0.000	0.000	0.000	0.250	0.667
Entering Leg	0	2	0	0	2	0	0	0	0	0	0	4	1	0	5	1	0	0	0	1	8
Exiting Leg					4					0					3					1	8
Total					6					0					8					2	16

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:45 PM	New Lancaster Road (Route 117) from North					Willard Street from East					New Lancaster Road (Route 117) from South					Willard Street from West					
	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Right	Thru	Left	U-Turn	Total	Total
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Approach Total	0.0	100.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		
PHF	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250
Entering Leg	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Exiting Leg					0					0					1					0	1
Total					1					0					1					0	2

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
3:00 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Bicycles (on Roadway and Crosswalks)

	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
Approach %	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
Total %	33.3	0.0	0.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	66.7	
Exiting Leg Total							0							0							0							3	3

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

5:00 AM	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

1:15 PM	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Exiting Leg							0							0							0							1	1
Total							0							0							0							2	2

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

2:15 PM	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Total Volume	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
% Approach Total	100.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
PHF	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.250
Entering Leg	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Exiting Leg							0							0							0							2	2
Total							1							0							0							3	4

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
Total	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	0	0	6
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	0	0	6
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	1	0	1	4
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	1	1	2	0	0	0	0	0	1	1	0	0	0	0	8	2	10	0	0	0	0	1	1	2	15

PDI File #: **250427 CCC**
Location: **N: New Lancaster Road (Route 117) S: New Lancaster Road (Route 117)**
Location: **E: Willard Street W: Willard Street**
City, State: **Leominster, MA**
Client: **Bowman/E. Buck**
Site Code: **TBD**
Count Date: **Wednesday, March 19, 2025**
Start Time: **5:00 AM**
End Time: **7:00 PM**
Class:

PRECISION DATA INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

Pedestrians

	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
Approach %	0	0	0	0	50	50		0	0	0	0	0	100		0	0	0	0	80	20		0	0	0	0	50	50		
Total %	0	0	0	0	6.67	6.67	13.3	0	0	0	0	0	6.67	6.67	0	0	0	0	53.3	13.3	66.7	0	0	0	0	6.67	6.67	13.3	
Exiting Leg Total							2							1							10							2	15

AM Peak Hour Analysis from 05:00 AM to 10:00 AM begins at:

5:00 AM	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exiting Leg							0							0							0							0	0
Total							0							0							0							0	0

MidDay Peak Hour Analysis from 10:00 AM to 2:00 PM begins at:

12:30 PM	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	3
% Approach Total	0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		
PHF	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
Entering Leg	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	3
Exiting Leg							1							0							2							0	3
Total							2							0							4							0	6

PM Peak Hour Analysis from 2:00 PM to 07:00 PM begins at:

3:15 PM	New Lancaster Road (Route 117) from North							Willard Street from East							New Lancaster Road (Route 117) from South							Willard Street from West							
	Right	Thru	Left	U-Turn	CW-EB	CW-WB	Total	Right	Thru	Left	U-Turn	CW-SB	CW-NB	Total	Right	Thru	Left	U-Turn	CW-WB	CW-EB	Total	Right	Thru	Left	U-Turn	CW-NB	CW-SB	Total	Total
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	0	0	6
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	1	1	7
% Approach Total	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	100.0	0.0		0.0	0.0	0.0	0.0	0.0	100.0		
PHF	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.292
Entering Leg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	1	1	7
Exiting Leg							0							0							6							1	7
Total							0							0							12							2	14

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Monday, March 17, 2025
Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	2	2
6:45 AM	0	0	1	0	1	0	2
7:00 AM	0	0	0	0	2	1	3
7:15 AM	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	3	0	3
7:45 AM	0	0	0	0	1	2	3
8:00 AM	0	0	0	0	2	0	2
8:15 AM	0	0	0	0	2	1	3
8:30 AM	0	0	0	0	3	0	3
8:45 AM	0	0	1	0	1	1	3
9:00 AM	0	0	0	0	3	1	4
9:15 AM	0	0	0	0	4	0	4
9:30 AM	0	0	1	0	1	1	3
9:45 AM	0	0	1	0	3	0	4
10:00 AM	0	0	0	0	1	3	4
10:15 AM	0	0	1	0	3	1	5
10:30 AM	0	0	1	0	2	0	3
10:45 AM	0	0	0	0	3	0	3
11:00 AM	0	0	0	0	3	1	4
11:15 AM	0	0	0	0	2	1	3
11:30 AM	0	0	0	0	3	0	3
11:45 AM	0	0	1	0	4	1	6
AM Total	**0**	**0**	**7**	**0**	**47**	**17**	**71**
Percentage	**0.00%**	**0.00%**	**9.86%**	**0.00%**	**66.20%**	**23.94%**	
AM Peak	**12:00 AM**	**12:00 AM**	**9:30 AM**	**12:00 AM**	**11:00 AM**	**9:30 AM**	**9:30 AM**
Volume	**0**	**0**	**3**	**0**	**12**	**5**	**16**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	0	0	0	0	0
12:15 PM	0	0	1	0	1	1	3
12:30 PM	0	0	1	0	2	1	4
12:45 PM	0	0	0	0	4	1	5
1:00 PM	0	0	0	0	2	1	3
1:15 PM	0	0	2	0	1	1	4
1:30 PM	0	0	0	0	4	1	5
1:45 PM	0	0	3	0	3	0	6
2:00 PM	0	0	4	0	4	0	8
2:15 PM	0	0	0	0	2	0	2
2:30 PM	0	0	0	0	1	0	1
2:45 PM	0	0	3	0	1	0	4
3:00 PM	0	0	0	0	2	0	2
3:15 PM	0	0	1	0	1	1	3
3:30 PM	0	0	1	0	6	0	7
3:45 PM	0	0	0	0	0	1	1
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	0	2	0	0	0	2
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	2
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**20**	**0**	**34**	**9**	**63**
Percentage	**0.00%**	**0.00%**	**31.75%**	**0.00%**	**53.97%**	**14.29%**	
PM Peak	**12:00 PM**	**12:00 PM**	**1:15 PM**	**12:00 PM**	**1:30 PM**	**12:15 PM**	**1:15 PM**
Volume	**0**	**0**	**9**	**0**	**13**	**4**	**23**
Day Total	**0**	**0**	**27**	**0**	**81**	**26**	**134**
Percentage	**0.00%**	**0.00%**	**20.15%**	**0.00%**	**60.45%**	**19.40%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Tuesday, March 18, 2025
Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	1	1
6:45 AM	0	0	0	0	1	0	1
7:00 AM	0	0	0	0	4	1	5
7:15 AM	0	0	0	0	2	0	2
7:30 AM	0	0	0	0	2	1	3
7:45 AM	0	0	0	0	1	1	2
8:00 AM	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	4	1	5
8:30 AM	0	0	0	0	3	1	4
8:45 AM	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	1	1
9:15 AM	0	0	0	0	4	0	4
9:30 AM	0	0	0	0	3	1	4
9:45 AM	0	0	1	0	3	0	4
10:00 AM	0	0	0	0	2	1	3
10:15 AM	0	0	0	0	4	1	5
10:30 AM	0	0	0	0	2	0	2
10:45 AM	0	0	0	0	1	2	3
11:00 AM	0	0	0	0	2	0	2
11:15 AM	0	0	1	0	4	0	5
11:30 AM	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	3	0	3
AM Total	**0**	**0**	**2**	**0**	**47**	**12**	**61**
Percentage	**0.00%**	**0.00%**	**3.28%**	**0.00%**	**77.05%**	**19.67%**	
AM Peak	**12:00 AM**	**12:00 AM**	**9:00 AM**	**12:00 AM**	**9:15 AM**	**10:00 AM**	**9:30 AM**
Volume	**0**	**0**	**1**	**0**	**12**	**4**	**16**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	2	0	4	0	6
12:15 PM	0	0	0	0	3	1	4
12:30 PM	0	0	1	0	2	1	4
12:45 PM	0	0	0	0	0	1	1
1:00 PM	0	0	0	0	0	1	1
1:15 PM	0	0	0	0	2	0	2
1:30 PM	0	0	1	0	3	1	5
1:45 PM	0	0	0	0	4	1	5
2:00 PM	0	0	3	0	2	1	6
2:15 PM	0	0	0	0	2	0	2
2:30 PM	0	0	1	0	2	0	3
2:45 PM	0	0	3	0	1	0	4
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	2	0	0	0	2
3:45 PM	0	0	0	0	0	1	1
4:00 PM	0	0	1	0	0	0	1
4:15 PM	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	1
5:00 PM	0	0	3	0	0	0	3
5:15 PM	0	0	1	0	0	0	1
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**19**	**0**	**25**	**8**	**52**
Percentage	**0.00%**	**0.00%**	**36.54%**	**0.00%**	**48.08%**	**15.38%**	
PM Peak	**12:00 PM**	**12:00 PM**	**2:00 PM**	**12:00 PM**	**1:15 PM**	**12:15 PM**	**1:15 PM**
Volume	**0**	**0**	**7**	**0**	**11**	**4**	**18**
Day Total	**0**	**0**	**21**	**0**	**72**	**20**	**113**
Percentage	**0.00%**	**0.00%**	**18.58%**	**0.00%**	**63.72%**	**17.70%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Wednesday, March 19, 2025
Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	1	1	2
6:45 AM	0	0	1	0	1	1	3
7:00 AM	0	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	2	1	3
7:45 AM	0	0	1	0	3	1	5
8:00 AM	0	0	0	0	1	0	1
8:15 AM	0	0	1	0	2	0	3
8:30 AM	0	0	1	0	0	0	1
8:45 AM	0	0	0	0	2	1	3
9:00 AM	0	0	0	0	4	0	4
9:15 AM	0	0	0	0	3	0	3
9:30 AM	0	0	0	0	0	0	0
9:45 AM	0	0	4	0	3	1	8
10:00 AM	0	0	0	0	2	1	3
10:15 AM	0	0	1	0	2	1	4
10:30 AM	0	0	3	0	2	1	6
10:45 AM	0	0	1	0	3	0	4
11:00 AM	0	0	1	0	2	2	5
11:15 AM	0	0	0	0	1	1	2
11:30 AM	0	0	0	0	3	2	5
11:45 AM	0	0	0	0	2	0	2
AM Total	**0**	**0**	**14**	**0**	**39**	**16**	**69**
Percentage	**0.00%**	**0.00%**	**20.29%**	**0.00%**	**56.52%**	**23.19%**	
AM Peak	**12:00 AM**	**12:00 AM**	**9:45 AM**	**12:00 AM**	**9:00 AM**	**10:45 AM**	**9:45 AM**
Volume	**0**	**0**	**8**	**0**	**10**	**5**	**21**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	0	0	2	2	4
12:15 PM	0	0	1	0	3	1	5
12:30 PM	0	0	0	0	3	1	4
12:45 PM	0	0	1	0	3	0	4
1:00 PM	0	0	1	0	4	0	5
1:15 PM	0	0	0	0	2	0	2
1:30 PM	0	0	0	0	1	1	2
1:45 PM	0	0	0	0	2	0	2
2:00 PM	0	0	3	0	2	0	5
2:15 PM	0	0	2	0	3	0	5
2:30 PM	0	0	1	0	0	0	1
2:45 PM	0	0	1	0	1	0	2
3:00 PM	0	0	1	0	1	0	2
3:15 PM	0	0	0	0	1	1	2
3:30 PM	0	0	1	0	0	0	1
3:45 PM	0	0	3	0	2	0	5
4:00 PM	0	0	1	0	0	0	1
4:15 PM	0	0	0	0	2	0	2
4:30 PM	0	0	1	0	0	0	1
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	0	5	0	0	0	5
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**22**	**0**	**32**	**6**	**60**
Percentage	**0.00%**	**0.00%**	**36.67%**	**0.00%**	**53.33%**	**10.00%**	
PM Peak	**12:00 PM**	**12:00 PM**	**2:00 PM**	**12:00 PM**	**12:15 PM**	**12:00 PM**	**12:15 PM**
Volume	**0**	**0**	**7**	**0**	**13**	**4**	**18**
Day Total	**0**	**0**	**36**	**0**	**71**	**22**	**129**
Percentage	**0.00%**	**0.00%**	**27.91%**	**0.00%**	**55.04%**	**17.05%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Thursday, March 20, 2025
Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	1	1	2
6:45 AM	0	0	0	0	3	1	4
7:00 AM	0	0	0	0	2	0	2
7:15 AM	0	0	0	0	2	1	3
7:30 AM	0	0	0	0	3	0	3
7:45 AM	0	0	1	0	3	0	4
8:00 AM	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	2	0	2
8:30 AM	0	0	1	0	2	1	4
8:45 AM	0	0	0	0	2	0	2
9:00 AM	0	0	1	0	1	0	2
9:15 AM	0	0	0	0	3	0	3
9:30 AM	0	0	1	0	1	1	3
9:45 AM	0	0	0	0	1	0	1
10:00 AM	0	0	0	0	2	1	3
10:15 AM	0	0	0	0	3	1	4
10:30 AM	0	0	0	0	2	0	2
10:45 AM	0	0	0	0	1	0	1
11:00 AM	0	0	0	0	2	1	3
11:15 AM	0	0	2	0	2	1	5
11:30 AM	0	0	0	0	2	1	3
11:45 AM	0	0	0	0	3	1	4
AM Total	**0**	**0**	**6**	**0**	**44**	**11**	**61**
Percentage	**0.00%**	**0.00%**	**9.84%**	**0.00%**	**72.13%**	**18.03%**	
AM Peak	**12:00 AM**	**12:00 AM**	**7:45 AM**	**12:00 AM**	**6:45 AM**	**11:00 AM**	**11:00 AM**
Volume	**0**	**0**	**2**	**0**	**10**	**4**	**15**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	1	0	2	0	3
12:15 PM	0	0	0	0	2	0	2
12:30 PM	0	0	1	0	1	1	3
12:45 PM	0	0	0	0	0	2	2
1:00 PM	0	0	1	0	0	1	2
1:15 PM	0	0	0	0	1	0	1
1:30 PM	0	0	1	0	5	0	6
1:45 PM	0	0	1	0	0	0	1
2:00 PM	0	0	3	0	2	0	5
2:15 PM	0	0	0	0	5	1	6
2:30 PM	0	0	2	0	2	0	4
2:45 PM	0	0	1	0	1	0	2
3:00 PM	0	0	0	0	1	2	3
3:15 PM	0	0	1	0	2	0	3
3:30 PM	0	0	2	0	0	1	3
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	2	0	1	1	4
4:15 PM	0	0	1	0	2	0	3
4:30 PM	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	0	0	0
5:15 PM	0	0	4	0	0	0	4
5:30 PM	0	0	2	0	0	0	2
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**23**	**0**	**30**	**9**	**62**
Percentage	**0.00%**	**0.00%**	**37.10%**	**0.00%**	**48.39%**	**14.52%**	
PM Peak	**12:00 PM**	**12:00 PM**	**1:45 PM**	**12:00 PM**	**1:30 PM**	**12:15 PM**	**1:30 PM**
Volume	**0**	**0**	**6**	**0**	**12**	**4**	**18**
Day Total	**0**	**0**	**29**	**0**	**74**	**20**	**123**
Percentage	**0.00%**	**0.00%**	**23.58%**	**0.00%**	**60.16%**	**16.26%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Friday, March 21, 2025
Direction: EB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	1	1
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	1	1	2
6:45 AM	0	0	0	0	1	1	2
7:00 AM	0	0	1	0	1	0	2
7:15 AM	0	0	0	0	2	1	3
7:30 AM	0	0	0	0	2	0	2
7:45 AM	0	0	1	0	1	0	2
8:00 AM	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	1
8:30 AM	0	0	0	0	2	1	3
8:45 AM	0	0	0	0	2	1	3
9:00 AM	0	0	0	0	2	0	2
9:15 AM	0	0	0	0	2	0	2
9:30 AM	0	0	0	0	1	1	2
9:45 AM	0	0	0	0	0	1	1
10:00 AM	0	0	0	0	4	1	5
10:15 AM	0	0	0	0	2	0	2
10:30 AM	0	0	1	0	2	0	3
10:45 AM	0	0	1	0	1	1	3
11:00 AM	0	0	0	0	2	1	3
11:15 AM	0	0	0	0	2	1	3
11:30 AM	0	0	1	0	2	0	3
11:45 AM	0	0	1	0	2	0	3
AM Total	**0**	**0**	**6**	**0**	**35**	**12**	**53**
Percentage	**0.00%**	**0.00%**	**11.32%**	**0.00%**	**66.04%**	**22.64%**	
AM Peak	**12:00 AM**	**12:00 AM**	**7:00 AM**	**12:00 AM**	**10:00 AM**	**6:00 AM**	**10:00 AM**
Volume	**0**	**0**	**2**	**0**	**9**	**3**	**13**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	2	0	1	2	5
12:15 PM	0	0	1	0	4	0	5
12:30 PM	0	0	1	0	1	1	3
12:45 PM	0	0	0	0	1	1	2
1:00 PM	0	0	1	0	2	0	3
1:15 PM	0	0	1	0	1	1	3
1:30 PM	0	0	0	0	0	1	1
1:45 PM	0	0	3	0	1	0	4
2:00 PM	0	0	2	0	1	0	3
2:15 PM	0	0	0	0	2	0	2
2:30 PM	0	0	0	0	1	1	2
2:45 PM	0	0	1	0	0	0	1
3:00 PM	0	0	1	0	2	1	4
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	1	0	0	1	2
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	1	1	2
4:15 PM	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	0	5	0	0	0	5
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**19**	**0**	**18**	**11**	**48**
Percentage	**0.00%**	**0.00%**	**39.58%**	**0.00%**	**37.50%**	**22.92%**	
PM Peak	**12:00 PM**	**12:00 PM**	**1:15 PM**	**12:00 PM**	**12:15 PM**	**12:00 PM**	**12:00 PM**
Volume	**0**	**0**	**6**	**0**	**8**	**4**	**15**
Day Total	**0**	**0**	**25**	**0**	**53**	**23**	**101**
Percentage	**0.00%**	**0.00%**	**24.75%**	**0.00%**	**52.48%**	**22.77%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Monday, March 17, 2025
Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	1	0	0	0	1
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	2	0	0	0	2
4:00 AM	0	0	1	0	0	0	1
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	2	0	0	0	2
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	3	3
6:15 AM	0	0	2	0	1	1	4
6:30 AM	0	0	2	0	0	0	2
6:45 AM	0	0	0	0	2	0	2
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	3	0	3
7:30 AM	0	0	0	0	3	1	4
7:45 AM	0	0	0	0	1	1	2
8:00 AM	0	0	1	0	4	1	6
8:15 AM	0	0	0	0	4	0	4
8:30 AM	0	0	0	0	3	1	4
8:45 AM	0	0	1	0	2	2	5
9:00 AM	0	0	1	0	2	0	3
9:15 AM	0	0	0	0	4	1	5
9:30 AM	0	0	0	0	2	0	2
9:45 AM	0	0	0	0	2	0	2
10:00 AM	0	0	0	0	0	5	5
10:15 AM	0	0	1	0	5	0	6
10:30 AM	0	0	0	0	1	1	2
10:45 AM	0	0	1	0	3	1	5
11:00 AM	0	0	0	0	1	1	2
11:15 AM	0	0	1	0	5	0	6
11:30 AM	0	0	2	0	0	0	2
11:45 AM	0	0	0	0	2	1	3
AM Total	**0**	**0**	**18**	**0**	**50**	**20**	**88**
Percentage	**0.00%**	**0.00%**	**20.45%**	**0.00%**	**56.82%**	**22.73%**	
AM Peak	**12:00 AM**	**12:00 AM**	**5:45 AM**	**12:00 AM**	**8:00 AM**	**10:00 AM**	**8:00 AM**
Volume	**0**	**0**	**4**	**0**	**13**	**7**	**19**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	0	0	1	2	3
12:15 PM	0	0	2	0	3	1	6
12:30 PM	0	0	0	0	3	0	3
12:45 PM	0	0	0	0	1	1	2
1:00 PM	0	0	2	0	2	0	4
1:15 PM	0	0	0	0	1	1	2
1:30 PM	0	0	0	0	2	0	2
1:45 PM	0	0	1	0	2	0	3
2:00 PM	0	0	1	0	2	0	3
2:15 PM	0	0	0	0	2	0	2
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	3	0	3	1	7
3:00 PM	0	0	0	0	1	1	2
3:15 PM	0	0	0	0	5	0	5
3:30 PM	0	0	1	0	0	0	1
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**10**	**0**	**28**	**8**	**46**
Percentage	**0.00%**	**0.00%**	**21.74%**	**0.00%**	**60.87%**	**17.39%**	
PM Peak	**12:00 PM**	**12:00 PM**	**12:15 PM**	**12:00 PM**	**12:15 PM**	**12:00 PM**	**12:15 PM**
Volume	**0**	**0**	**4**	**0**	**9**	**4**	**15**
Day Total	**0**	**0**	**28**	**0**	**78**	**28**	**134**
Percentage	**0.00%**	**0.00%**	**20.90%**	**0.00%**	**58.21%**	**20.90%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Tuesday, March 18, 2025
Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	1	0	0	0	1
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	3	0	0	0	3
4:00 AM	0	0	1	0	0	0	1
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	2	0	0	0	2
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	1	0	0	1	2
6:15 AM	0	0	3	0	2	4	9
6:30 AM	0	0	0	0	1	1	2
6:45 AM	0	0	0	0	2	0	2
7:00 AM	0	0	0	0	3	1	4
7:15 AM	0	0	1	0	1	0	2
7:30 AM	0	0	0	0	1	0	1
7:45 AM	0	0	0	0	2	1	3
8:00 AM	0	0	0	0	4	0	4
8:15 AM	0	0	0	0	2	0	2
8:30 AM	0	0	0	0	1	1	2
8:45 AM	0	0	0	0	2	0	2
9:00 AM	0	0	0	0	2	1	3
9:15 AM	0	0	0	0	4	0	4
9:30 AM	0	0	0	0	3	0	3
9:45 AM	0	0	0	0	3	0	3
10:00 AM	0	0	0	0	2	1	3
10:15 AM	0	0	2	0	3	0	5
10:30 AM	0	0	0	0	0	1	1
10:45 AM	0	0	1	0	7	0	8
11:00 AM	0	0	0	0	2	0	2
11:15 AM	0	0	1	0	4	0	5
11:30 AM	0	0	0	0	1	0	1
11:45 AM	0	0	0	0	1	2	3
AM Total	**0**	**0**	**16**	**0**	**53**	**14**	**83**
Percentage	**0.00%**	**0.00%**	**19.28%**	**0.00%**	**63.86%**	**16.87%**	
AM Peak	**12:00 AM**	**12:00 AM**	**3:00 AM**	**12:00 AM**	**10:45 AM**	**5:45 AM**	**6:15 AM**
Volume	**0**	**0**	**4**	**0**	**14**	**6**	**17**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	1	0	3	1	5
12:15 PM	0	0	0	0	2	0	2
12:30 PM	0	0	1	0	1	1	3
12:45 PM	0	0	1	0	1	2	4
1:00 PM	0	0	0	0	1	0	1
1:15 PM	0	0	0	0	3	0	3
1:30 PM	0	0	0	0	3	0	3
1:45 PM	0	0	1	0	2	0	3
2:00 PM	0	0	0	0	3	0	3
2:15 PM	0	0	1	0	1	0	2
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	1	1
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**5**	**0**	**20**	**5**	**30**
Percentage	**0.00%**	**0.00%**	**16.67%**	**0.00%**	**66.67%**	**16.67%**	
PM Peak	**12:00 PM**	**12:00 PM**	**12:00 PM**	**12:00 PM**	**1:15 PM**	**12:00 PM**	**12:00 PM**
Volume	**0**	**0**	**3**	**0**	**11**	**4**	**14**
Day Total	**0**	**0**	**21**	**0**	**73**	**19**	**113**
Percentage	**0.00%**	**0.00%**	**18.58%**	**0.00%**	**64.60%**	**16.81%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Wednesday, March 19, 2025
Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	1	0	0	0	1
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	1	0	0	0	1
4:15 AM	0	0	1	0	0	0	1
4:30 AM	0	0	1	0	0	0	1
4:45 AM	0	0	1	0	0	0	1
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	1	0	1	3	5
6:15 AM	0	0	1	0	1	1	3
6:30 AM	0	0	3	0	0	0	3
6:45 AM	0	0	0	0	0	0	0
7:00 AM	0	0	1	0	2	1	4
7:15 AM	0	0	0	0	1	1	2
7:30 AM	0	0	0	0	2	0	2
7:45 AM	0	0	0	0	1	0	1
8:00 AM	0	0	1	0	2	0	3
8:15 AM	0	0	0	0	3	2	5
8:30 AM	0	0	1	0	2	0	3
8:45 AM	0	0	1	0	4	1	6
9:00 AM	0	0	0	0	4	0	4
9:15 AM	0	0	3	0	0	2	5
9:30 AM	0	0	0	0	4	0	4
9:45 AM	0	0	3	0	0	2	5
10:00 AM	0	0	0	0	2	1	3
10:15 AM	0	0	2	0	4	0	6
10:30 AM	0	0	0	0	3	0	3
10:45 AM	0	0	0	0	1	2	3
11:00 AM	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	1	1	3
11:30 AM	0	0	1	0	6	1	8
11:45 AM	0	0	0	0	4	0	4
AM Total	**0**	**0**	**25**	**0**	**48**	**18**	**91**
Percentage	**0.00%**	**0.00%**	**27.47%**	**0.00%**	**52.75%**	**19.78%**	
AM Peak	**12:00 AM**	**12:00 AM**	**9:00 AM**	**12:00 AM**	**8:15 AM**	**9:15 AM**	**8:45 AM**
Volume	**0**	**0**	**6**	**0**	**13**	**5**	**19**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	0	0	4	0	4
12:15 PM	0	0	0	0	0	0	0
12:30 PM	0	0	1	0	1	0	2
12:45 PM	0	0	1	0	3	0	4
1:00 PM	0	0	0	0	2	1	3
1:15 PM	0	0	1	0	0	0	1
1:30 PM	0	0	0	0	3	0	3
1:45 PM	0	0	2	0	0	0	2
2:00 PM	0	0	0	0	5	0	5
2:15 PM	0	0	0	0	0	0	0
2:30 PM	0	0	1	0	0	0	1
2:45 PM	0	0	0	0	1	0	1
3:00 PM	0	0	0	0	1	0	1
3:15 PM	0	0	0	0	2	0	2
3:30 PM	0	0	1	0	0	0	1
3:45 PM	0	0	0	0	1	0	1
4:00 PM	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**7**	**0**	**25**	**1**	**33**
Percentage	**0.00%**	**0.00%**	**21.21%**	**0.00%**	**75.76%**	**3.03%**	
PM Peak	**12:00 PM**	**12:00 PM**	**12:30 PM**	**12:00 PM**	**12:00 PM**	**12:15 PM**	**12:45 PM**
Volume	**0**	**0**	**3**	**0**	**8**	**1**	**11**
Day Total	**0**	**0**	**32**	**0**	**73**	**19**	**124**
Percentage	**0.00%**	**0.00%**	**25.81%**	**0.00%**	**58.87%**	**15.32%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Thursday, March 20, 2025
Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	1	0	0	0	1
3:45 AM	0	0	1	0	0	0	1
4:00 AM	0	0	1	0	0	0	1
4:15 AM	0	0	2	0	0	0	2
4:30 AM	0	0	1	0	0	0	1
4:45 AM	0	0	1	0	0	0	1
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	1	3	4
6:15 AM	0	0	2	0	3	0	5
6:30 AM	0	0	1	0	1	0	2
6:45 AM	0	0	0	0	0	0	0
7:00 AM	0	0	1	0	3	0	4
7:15 AM	0	0	0	0	1	0	1
7:30 AM	0	0	1	0	4	1	6
7:45 AM	0	0	0	0	4	1	5
8:00 AM	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	1	0	2
8:30 AM	0	0	0	0	3	0	3
8:45 AM	0	0	1	0	5	0	6
9:00 AM	0	0	0	0	1	1	2
9:15 AM	0	0	0	0	2	1	3
9:30 AM	0	0	0	0	2	1	3
9:45 AM	0	0	0	0	4	1	5
10:00 AM	0	0	0	0	1	0	1
10:15 AM	0	0	0	0	2	2	4
10:30 AM	0	0	1	0	0	0	1
10:45 AM	0	0	0	0	2	1	3
11:00 AM	0	0	2	0	0	1	3
11:15 AM	0	0	0	0	3	0	3
11:30 AM	0	0	1	0	3	0	4
11:45 AM	0	0	0	0	3	0	3
AM Total	**0**	**0**	**19**	**0**	**49**	**13**	**81**
Percentage	**0.00%**	**0.00%**	**23.46%**	**0.00%**	**60.49%**	**16.05%**	
AM Peak	**12:00 AM**	**12:00 AM**	**3:30 AM**	**12:00 AM**	**7:00 AM**	**9:00 AM**	**7:00 AM**
Volume	**0**	**0**	**5**	**0**	**12**	**4**	**16**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	0	0	0	2	2
12:15 PM	0	0	0	0	0	0	0
12:30 PM	0	0	1	0	1	0	2
12:45 PM	0	0	0	0	2	0	2
1:00 PM	0	0	1	0	2	0	3
1:15 PM	0	0	1	0	3	0	4
1:30 PM	0	0	1	0	2	2	5
1:45 PM	0	0	0	0	3	0	3
2:00 PM	0	0	0	0	3	0	3
2:15 PM	0	0	0	0	0	0	0
2:30 PM	0	0	2	0	1	0	3
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	1	0	2	2	5
3:15 PM	0	0	0	0	0	1	1
3:30 PM	0	0	2	0	0	0	2
3:45 PM	0	0	0	0	3	0	3
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	2	0	2
4:30 PM	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**9**	**0**	**26**	**7**	**42**
Percentage	**0.00%**	**0.00%**	**21.43%**	**0.00%**	**61.90%**	**16.67%**	
PM Peak	**12:00 PM**	**12:00 PM**	**12:30 PM**	**12:00 PM**	**1:15 PM**	**2:30 PM**	**1:00 PM**
Volume	**0**	**0**	**3**	**0**	**11**	**3**	**15**
Day Total	**0**	**0**	**28**	**0**	**75**	**20**	**123**
Percentage	**0.00%**	**0.00%**	**22.76%**	**0.00%**	**60.98%**	**16.26%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File #: 250427 ATR-A

Count Date: Friday, March 21, 2025
Direction: WB

AM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	1	0	0	0	1
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	2	0	0	0	2
4:00 AM	0	0	1	0	0	0	1
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	1	0	0	0	1
4:45 AM	0	0	1	0	0	0	1
5:00 AM	0	0	1	0	0	0	1
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	1	1
6:00 AM	0	0	1	0	1	2	4
6:15 AM	0	0	2	0	1	0	3
6:30 AM	0	0	1	0	0	0	1
6:45 AM	0	0	0	0	2	0	2
7:00 AM	0	0	0	0	1	1	2
7:15 AM	0	0	2	0	3	1	6
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	1
8:00 AM	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	3	1	4
8:30 AM	0	0	0	0	2	0	2
8:45 AM	0	0	0	0	1	0	1
9:00 AM	0	0	0	0	3	1	4
9:15 AM	0	0	0	0	1	1	2
9:30 AM	0	0	0	0	5	0	5
9:45 AM	0	0	0	0	2	1	3
10:00 AM	0	0	1	0	0	1	2
10:15 AM	0	0	0	0	2	0	2
10:30 AM	0	0	0	0	2	0	2
10:45 AM	0	0	0	0	0	2	2
11:00 AM	0	0	0	0	3	0	3
11:15 AM	0	0	1	0	2	0	3
11:30 AM	0	0	2	0	4	0	6
11:45 AM	0	0	0	0	1	1	2
AM Total	**0**	**0**	**17**	**0**	**40**	**14**	**71**
Percentage	**0.00%**	**0.00%**	**23.94%**	**0.00%**	**56.34%**	**19.72%**	
AM Peak	**12:00 AM**	**12:00 AM**	**3:45 AM**	**12:00 AM**	**9:00 AM**	**5:15 AM**	**9:00 AM**
Volume	**0**	**0**	**4**	**0**	**11**	**3**	**14**

PM	Bicycles	Motorcycle	Cars & Light Goods	Buses	Single Unit Heavy	Multi Unit Heavy	Total
12:00 PM	0	0	0	0	1	1	2
12:15 PM	0	0	3	0	1	1	5
12:30 PM	0	0	1	0	0	1	2
12:45 PM	0	0	0	0	2	0	2
1:00 PM	0	0	0	0	1	1	2
1:15 PM	0	0	0	0	1	0	1
1:30 PM	0	0	2	0	1	0	3
1:45 PM	0	0	0	0	2	0	2
2:00 PM	0	0	1	0	1	2	4
2:15 PM	0	0	0	0	1	0	1
2:30 PM	0	0	0	0	0	1	1
2:45 PM	0	0	0	0	2	0	2
3:00 PM	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	1	1	2
3:45 PM	0	0	0	0	0	1	1
4:00 PM	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
PM Total	**0**	**0**	**7**	**0**	**14**	**9**	**30**
Percentage	**0.00%**	**0.00%**	**23.33%**	**0.00%**	**46.67%**	**30.00%**	
PM Peak	**12:00 PM**	**12:00 PM**	**12:00 PM**	**12:00 PM**	**12:45 PM**	**12:00 PM**	**12:00 PM**
Volume	**0**	**0**	**4**	**0**	**5**	**3**	**11**
Day Total	**0**	**0**	**24**	**0**	**54**	**23**	**101**
Percentage	**0.00%**	**0.00%**	**23.76%**	**0.00%**	**53.47%**	**22.77%**	

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File # **250427 ATR-A**

Direction: **EB**

Weekly Report

Day	Monday		Tuesday		Wednesday		Thursday		Friday						Week	
Date	03/17/25		03/18/25		03/19/25		03/20/25		03/21/25						Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	0	0	6	0	4	0	3	0	5	0	0	0	0	0	4
12:15	0	3	0	4	0	5	0	2	0	5	0	0	0	0	0	4
12:30	0	4	0	4	0	4	0	3	0	3	0	0	0	0	0	4
12:45	0	5	0	1	0	4	0	2	0	2	0	0	0	0	0	3
1:00	0	3	0	1	0	5	0	2	0	3	0	0	0	0	0	3
1:15	0	4	0	2	0	2	0	1	0	3	0	0	0	0	0	2
1:30	0	5	0	5	0	2	0	6	0	1	0	0	0	0	0	4
1:45	0	6	0	5	0	2	0	1	0	4	0	0	0	0	0	4
2:00	0	8	0	6	0	5	0	5	0	3	0	0	0	0	0	5
2:15	0	2	0	2	0	5	0	6	0	2	0	0	0	0	0	3
2:30	0	1	0	3	0	1	0	4	0	2	0	0	0	0	0	2
2:45	0	4	0	4	0	2	0	2	0	1	0	0	0	0	0	3
3:00	0	2	0	0	0	2	0	3	0	4	0	0	0	0	0	2
3:15	0	3	0	0	0	2	0	3	0	0	0	0	0	0	0	2
3:30	0	7	0	2	0	1	0	3	0	2	0	0	0	0	0	3
3:45	0	1	0	1	0	5	0	0	0	0	0	0	0	0	0	1
4:00	0	0	0	1	0	1	0	4	0	2	0	0	0	0	0	2
4:15	0	1	0	0	0	2	0	3	0	1	0	0	0	0	0	1
4:30	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
4:45	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1
5:00	0	2	0	3	0	5	0	0	0	5	0	0	0	0	0	3
5:15	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	1
5:30	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	1
5:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
6:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30	2	0	1	0	2	0	2	0	2	0	0	0	0	0	2	0
6:45	2	0	1	0	3	0	4	0	2	0	0	0	0	0	2	0
7:00	3	0	5	0	1	0	2	0	2	0	0	0	0	0	3	0
7:15	1	0	2	0	1	0	3	0	3	0	0	0	0	0	2	0
7:30	3	0	3	0	3	0	3	0	2	0	0	0	0	0	3	0
7:45	3	0	2	0	5	0	4	0	2	0	0	0	0	0	3	0
8:00	2	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0
8:15	3	0	5	0	3	0	2	0	1	0	0	0	0	0	3	0
8:30	3	0	4	0	1	0	4	0	3	0	0	0	0	0	3	0
8:45	3	0	0	0	3	0	2	0	3	0	0	0	0	0	2	0
9:00	4	0	1	0	4	0	2	0	2	0	0	0	0	0	3	0
9:15	4	0	4	0	3	0	3	0	2	0	0	0	0	0	3	0
9:30	3	0	4	0	0	0	3	0	2	0	0	0	0	0	2	0
9:45	4	0	4	0	8	0	1	0	1	0	0	0	0	0	4	0
10:00	4	0	3	0	3	0	3	0	5	0	0	0	0	0	4	0
10:15	5	0	5	0	4	0	4	0	2	0	0	0	0	0	4	0
10:30	3	0	2	0	6	0	2	0	3	0	0	0	0	0	3	0
10:45	3	0	3	0	4	0	1	0	3	0	0	0	0	0	3	0
11:00	4	0	2	0	5	0	3	0	3	0	0	0	0	0	3	0
11:15	3	0	5	0	2	0	5	0	3	0	0	0	0	0	4	0
11:30	3	0	1	0	5	0	3	0	3	0	0	0	0	0	3	0
11:45	6	0	3	0	2	0	4	0	3	0	0	0	0	0	4	0
Total	**71**	**63**	**61**	**52**	**69**	**60**	**61**	**62**	**53**	**48**	**0**	**0**	**0**	**0**	**63**	**57**
Day Total	**134**		**113**		**129**		**123**		**101**		**0**		**0**		**120**	
Peak HR	**9:30 AM**	**1:15 PM**	**9:30 AM**	**1:15 PM**	**9:45 AM**	**12:15 PM**	**11:00 AM**	**1:30 PM**	**10:00 AM**	**12:00 PM**					**9:45 AM**	**1:30 PM**
Volume	**16**	**23**	**16**	**18**	**21**	**18**	**15**	**18**	**13**	**15**					**14**	**16**

200 Tanzio Road Driveway
west of Tanzio Road
City, State: Leominster, MA
Client: Bowman/ E. Buck
Site Code: TBA

PRECISION
D A T A
INDUSTRIES, LLC
157 Washington Street, Suite 2
Hudson, MA 01749
Office: 508-875-0100 Fax: 508-875-0118

PDI File # **250427 ATR-A**

Direction: **WB**

Weekly Report

Day	Monday		Tuesday		Wednesday		Thursday		Friday						Week	
Date	03/17/25		03/18/25		03/19/25		03/20/25		03/21/25						Ave	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
12:00	0	3	0	5	0	4	0	2	0	2	0	0	0	0	0	3
12:15	0	6	0	2	0	0	0	0	0	5	0	0	0	0	0	3
12:30	0	3	0	3	0	2	0	2	0	2	0	0	0	0	0	2
12:45	0	2	0	4	0	4	0	2	0	2	0	0	0	0	0	3
1:00	0	4	0	1	0	3	0	3	0	2	0	0	0	0	0	3
1:15	0	2	0	3	0	1	0	4	0	1	0	0	0	0	0	2
1:30	0	2	0	3	0	3	0	5	0	3	0	0	0	0	0	3
1:45	0	3	0	3	0	2	0	3	0	2	0	0	0	0	0	3
2:00	0	3	0	3	0	5	0	3	0	4	0	0	0	0	0	4
2:15	0	2	0	2	0	0	0	0	0	1	0	0	0	0	0	1
2:30	0	0	0	0	0	1	0	3	0	1	0	0	0	0	0	1
2:45	0	7	0	0	0	1	1	0	1	2	0	0	0	0	0	2
3:00	1	2	1	0	1	1	0	5	0	0	0	0	0	0	1	2
3:15	0	5	0	0	0	2	0	1	0	0	0	0	0	0	0	2
3:30	0	1	0	1	0	1	1	2	0	2	0	0	0	0	0	1
3:45	2	0	3	0	1	1	1	3	2	1	0	0	0	0	2	1
4:00	1	1	1	0	1	2	1	0	1	0	0	0	0	0	1	1
4:15	0	0	0	0	1	0	2	2	0	0	0	0	0	0	1	0
4:30	0	0	0	0	1	0	1	1	1	0	0	0	0	0	1	0
4:45	2	0	2	0	1	0	1	1	1	0	0	0	0	0	1	0
5:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
5:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
6:00	3	0	2	0	5	0	4	0	4	0	0	0	0	0	4	0
6:15	4	0	9	0	3	0	5	0	3	0	0	0	0	0	5	0
6:30	2	0	2	0	3	0	2	0	1	0	0	0	0	0	2	0
6:45	2	0	2	0	0	0	0	0	2	0	0	0	0	0	1	0
7:00	0	0	4	0	4	0	4	0	2	0	0	0	0	0	3	0
7:15	3	0	2	0	2	0	1	0	6	0	0	0	0	0	3	0
7:30	4	0	1	0	2	0	6	0	0	0	0	0	0	0	3	0
7:45	2	0	3	0	1	0	5	0	1	0	0	0	0	0	2	0
8:00	6	0	4	0	3	0	0	0	1	0	0	0	0	0	3	0
8:15	4	0	2	0	5	0	2	0	4	0	0	0	0	0	3	0
8:30	4	0	2	0	3	0	3	0	2	0	0	0	0	0	3	0
8:45	5	0	2	0	6	0	6	0	1	0	0	0	0	0	4	0
9:00	3	0	3	0	4	0	2	0	4	0	0	0	0	0	3	0
9:15	5	0	4	0	5	0	3	0	2	0	0	0	0	0	4	0
9:30	2	0	3	0	4	0	3	0	5	0	0	0	0	0	3	0
9:45	2	0	3	0	5	0	5	0	3	0	0	0	0	0	4	0
10:00	5	0	3	0	3	0	1	0	2	0	0	0	0	0	3	0
10:15	6	0	5	0	6	0	4	0	2	0	0	0	0	0	5	0
10:30	2	0	1	0	3	0	1	0	2	0	0	0	0	0	2	0
10:45	5	0	8	0	3	0	3	0	2	0	0	0	0	0	4	0
11:00	2	0	2	0	0	0	3	0	3	0	0	0	0	0	2	0
11:15	6	0	5	0	3	0	3	0	3	0	0	0	0	0	4	0
11:30	2	0	1	0	8	0	4	0	6	0	0	0	0	0	4	0
11:45	3	0	3	0	4	0	3	0	2	0	0	0	0	0	3	0
Total	**88**	**46**	**83**	**30**	**91**	**33**	**81**	**42**	**71**	**30**	**0**	**0**	**0**	**0**	**83**	**36**
Day Total	**134**		**113**		**124**		**123**		**101**		**0**		**0**		**119**	
Peak HR	**8:00 AM**	**12:15 PM**	**6:15 AM**	**12:00 PM**	**8:45 AM**	**12:45 PM**	**7:00 AM**	**1:00 PM**	**9:00 AM**	**12:00 PM**					**8:45 AM**	**1:15 PM**
Volume	**19**	**15**	**17**	**14**	**19**	**11**	**16**	**15**	**14**	**11**					**14**	**12**

Bowman

APPENDIX B

SEASONAL ADJUSTMENT DATA

Massachusetts Highway Department
Statewide Traffic Data Collection
2023 Weekday Seasonal Factors

Factor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Axle Factor
R1	1.23	1.14	1.11	1.06	1.01	0.96	0.93	0.91	1.00	0.97	1.04	1.08	0.77
R3	1.11	1.07	1.02	0.95	0.90	0.89	0.87	0.87	0.92	0.89	0.95	0.99	0.98
R4-R7	1.19	1.16	1.10	1.00	0.92	0.91	0.87	0.88	0.93	0.93	1.01	1.06	0.98
U1-Boston	1.07	1.05	1.00	0.95	0.93	0.92	0.92	0.92	0.94	0.93	0.96	0.99	0.94
U1-Essex	1.14	1.11	1.06	1.00	0.95	0.91	0.87	0.87	0.94	0.95	1.00	1.03	0.96
U1-Southeast	1.12	1.09	1.04	0.96	0.91	0.87	0.84	0.86	0.92	0.94	0.98	1.03	0.96
U1-West	1.05	1.02	0.98	0.96	0.94	0.93	0.94	0.94	0.95	0.92	0.96	0.98	0.81
U1-Worcester	1.06	1.04	0.97	0.93	0.92	0.90	0.92	0.92	0.93	0.92	0.94	0.97	0.88
U3	1.05	1.02	0.96	0.92	0.89	0.89	0.91	0.92	0.91	0.90	0.94	0.96	0.98
U4-U7	1.02	1.00	0.94	0.89	0.86	0.88	0.91	0.92	0.89	0.88	0.91	0.91	0.99
UR2	1.05	1.01	0.97	0.92	0.90	0.90	0.91	0.91	0.91	0.90	0.94	0.97	0.98
Rec - East	1.17	1.16	1.09	1.04	0.92	0.84	0.76	0.80	0.93	1.00	1.03	1.06	0.98
Rec - West	1.46	1.38	1.32	1.06	0.94	0.79	0.59	0.69	0.97	0.99	1.18	1.28	0.98

Round off:
0-999 = 10
>1000 = 100

U = Urban
R = Rural

1 - Interstate
2 - Freeway and Expressway
3 - Other Principal Arterial
4 - Minor Arterial
5 - Major Collector
6 - Minor Collector
7 - Local Road and Street

UR2 Group - Combination of Urban Freeways and Expressways and Rural Freeways and Expressways.

Recreational - East Group - Cape Cod (all towns) including the town of Plymouth south of Route 3A (stations 7014,7079,7080,7090,7091,7092,7093,7094,7095,7096,7097,7108 and 7178), Martha's Vineyard and Nantucket.

Recreational - West Group - Continuous Stations 2 and 189 including stations 1066,1067,1083,1084,1085,1086,1087,1088,1089,1090,1091,1092,1093,1094,1095,1096,1097,1098,1099,1100,1101,1102,1103,1104,1105,1106,1107,1108,1113, 1114,1116,2196,2197 and 2198.

Bowman

APPENDIX C

TRAFFIC PROJECTION MODEL

TRAFFIC PROJECTION MODEL

Solid Waste Facility - Tonnage Expansion
Weekday Morning Peak Hour
Leominster, MA

Intersection	Dir.	Turn	2025 Counted Volumes	2025 Existing Volumes	Background Growth 7 yrs (at 2.0 % per year)	2032 No Build Volumes	New Inbound Project PERCENT ENTER	New Inbound Project Trips ENTER	New Inbound Project PERCENT EXIT	New Inbound Project Trips EXIT	New Outbound Project PERCENT ENTER	New Outbound Project Trips ENTER	New Outbound Project PERCENT EXIT	New Outbound Project Trips EXIT	New Project Trips TOTAL	2032 Build Volumes
New Lancaster Road (Route 117)	EB	L	64	64	10	74	10%	1							1	75
at Willard Street		T	6	6	1	7									0	7
		R	173	173	26	199									0	199
	WB	L	24	24	4	28									0	28
		T	7	7	1	8									0	8
		R	4	4	1	5									0	5
	NB	L	108	108	16	124									0	124
		T	304	304	45	349	65%	4			100%	9			13	362
		R	24	24	4	28									0	28
	SB	L	2	2	0	2									0	2
		T	324	324	48	372			65%	4			100%	9	13	385
		R	49	49	7	56			10%	1					1	57
Lancaster Street (Route 117)	EB	L	7	7		7			25%	2					2	9
at Tanzio Road		R	12	12		12			75%	5			100%	9	14	26
	NB	L	11	11		11	75%	5			100%	9			14	25
		T	318	318	47	365									0	365
	SB	T	410	410	61	471									0	471
		R	9	9		9	25%	2							2	11
Lancaster Street (Route 117)	EB	L	137	137	20	157									0	157
at Viscoloid Avenue		T	434	434	65	499	10%	1							1	500
		R	0	0	0	0									0	0
	WB	L	0	0	0	0									0	0
		T	257	257	38	295			10%	1					1	296
		R	82	82	12	94			15%	1					1	95
	NB	L	0	0	0	0									0	0
		T	0	0	0	0									0	0
		R	0	0	0	0									0	0
	SB	L	97	97	14	111	15%	1							1	112
		T	0	0	0	0									0	0
		R	79	79	12	91									0	91
Tanzio Road at	EB	L	0	0		0									0	0
Site Driveway		R	10	10		10			100%	7			100%	9	16	26
	NB	L	12	12		12	100%	7			100%	9			16	28
		T	0	0		0									0	0
	SB	T	0	0		0									0	0
		R	0	0		0									0	0

Peak Hour: 7:45 AM - 8:45 AM

TRAFFIC PROJECTION MODEL

Solid Waste Facility - Tonnage Expansion
Weekday Afternoon Peak Hour
Leominster, MA

Intersection	Dir.	Turn	2025 Counted Volumes	2025 Existing Volumes	Background Growth 7 yrs (at 2.0 % per year)	2032 No Build Volumes	New Inbound Project PERCENT ENTER	New Inbound Project Trips ENTER	New Inbound Project PERCENT EXIT	New Inbound Project Trips EXIT	New Outbound Project PERCENT ENTER	New Outbound Project Trips ENTER	New Outbound Project PERCENT EXIT	New Outbound Project Trips EXIT	New Project Trips TOTAL	2032 Build Volumes
New Lancaster Road (Route 117)	EB	L	85	85	13	98	10%	0							0	98
at Willard Street		T	8	8	1	9									0	9
		R	201	201	30	231									0	231
	WB	L	34	34	5	39									0	39
		T	11	11	2	13									0	13
		R	6	6	1	7									0	7
	NB	L	253	253	38	291									0	291
		T	445	445	66	511	65%	2			100%	3			5	516
		R	33	33	5	38									0	38
	SB	L	4	4	1	5									0	5
		T	370	370	55	425			65%	2			100%	3	5	430
		R	87	87	13	100			10%	0					0	100
Lancaster Street (Route 117)	EB	L	20	20		20			25%	1					1	21
at Tanzio Road		R	10	10		10			75%	2			100%	3	5	15
	NB	L	5	5		5	75%	2			100%	3			5	10
		T	568	568	84	652									0	652
	SB	T	416	416	62	478									0	478
		R	4	4		4	25%	1							1	5
Lancaster Street (Route 117)	EB	L	154	154	23	177									0	177
at Viscoloid Avenue		T	374	374	56	430	10%	0							0	430
		R	0	0	0	0									0	0
	WB	L	0	0	0	0									0	0
		T	508	508	76	584			10%	0					0	584
		R	95	95	14	109			15%	1					1	110
	NB	L	0	0	0	0									0	0
		T	0	0	0	0									0	0
		R	0	0	0	0									0	0
	SB	L	129	129	19	148	15%	1							1	149
		T	0	0	0	0									0	0
		R	234	234	35	269									0	269
Tanzio Road at	EB	L	0	0		0									0	0
Site Driveway		R	9	9		9			100%	3			100%	3	6	15
	NB	L	3	3		3	100%	3			100%	3			6	9
		T	0	0		0									0	0
	SB	T	0	0		0									0	0
		R	0	0		0									0	0

Peak Hour: 3:45 PM - 4:45 PM

Bowman

APPENDIX D

CRASH SUMMARY

CRASH SUMMARY

Solid Waste Facility - Tonnage Expansion
Leominster, MA

	New Lancaster Road (Route 117) at Willard Street	Lancaster Street (Route 117) at Tanzio Road	Lancaster Street (Route 117) at Viscoloid Avenue	Tanzio Road at Site Driveway
Year				
2017	2	1	3	0
2018	4	0	4	0
2019	3	0	3	0
2020	6	0	3	0
2021	5	0	2	0
Type				
Angle	7	0	4	0
Rear-end	9	0	5	0
Sideswipe	3	0	1	0
Head-on	0	0	2	0
Pedestrian	0	0	1	0
Single Vehicle	1	1	2	0
Severity				
Property Damage	15	0	10	0
Personal Injury	5	1	5	0
Fatality	0	0	0	0
Weather				
Clear	15	1	12	0
Cloudy	2	0	1	0
Rain	1	0	2	0
Snow	1	0	0	0
Sleet	1	0	0	0
Road Surface				
Dry	*15*	*1*	*13*	0
Wet	*3*	*0*	*2*	0
Ice	*1*	*0*	*0*	0
Snow	*1*	*0*	*0*	0
Time				
7:00 AM to 9:00 AM	3	0	2	0
9:00 AM to 4:00 PM	9	0	7	0
4:00 PM to 6:00 PM	5	0	2	0
6:00 PM to 7:00 AM	3	1	4	0
Total	**20**	**1**	**15**	**0**
Crash Rate	0.78	0.06	0.61	0.00
State Average	0.78	0.57	0.78	0.57
District 3 Average	0.89	0.61	0.89	0.61

Source: MassDOT IMPACT Portal

Bowman

APPENDIX E

TICKETING DATA

UMML

Summary of Trucks on March 17, 2025 to correlate to traffic study

Ticket	Date	Inbound/ Outbound	In Time	Out	QTY (tons)	Description	Remarks
1	3/17/2025	Inbound	6:29	7:18	35.16	Residuals	1399 - North Andover Waste Systems
2	3/17/2025	Inbound	6:30	6:51	10.26	MSW	1202 - MD Recycling
3	3/17/2025	Inbound	6:35	6:35	24.15	Residuals and Car Tires	1306 - WIN - Millbury TS
4	3/17/2025	Inbound	6:41	6:41	24.31	Residuals	1306 - WIN - Millbury TS
5	3/17/2025	Inbound	6:53	7:03	6.28	C&D	1130 - Guido's Services Inc
6	3/17/2025	Inbound	6:57	7:12	4.24	C&D	1273 - Route 12 Dumpsters
7	3/17/2025	Inbound	7:02	7:02	28.19	Residuals	1306 - WIN - Millbury TS
8	3/17/2025	Inbound	7:16	7:31	4.41	C&D	1269 - Rocky Hill Transport And Service Corp
9	3/17/2025	Inbound	7:23	7:42	1.87	C&D	1202 - MD Recycling
10	3/17/2025	Inbound	7:29	7:41	7.43	MSW	1202 - MD Recycling
11	3/17/2025	Inbound	7:35	7:40	14.78	MSW and Car Tires	1259 - WIN - Worcester Collections
12	3/17/2025	Inbound	7:40	7:58	26.79	Residuals	1399 - North Andover Waste Systems
13	3/17/2025	Inbound	7:44	7:54	2.00	C&D	1059 - Cash Customers Leominster
14	3/17/2025	Inbound	7:46	8:07	1.51	C&D	1046 - Busy Bee
15	3/17/2025	Inbound	7:56	8:06	12.27	MSW AND Mattresses	1259 - WIN - Worcester Collections
16	3/17/2025	Inbound	8:06	8:54	30.61	Residuals	1399 - North Andover Waste Systems
17	3/17/2025	Inbound	8:06	8:14	1.05	C&D	1328 - Trentos Disposal
18	3/17/2025	Inbound	8:10	8:19	1.05	C&D	1005 - D&D Waste Removal
19	3/17/2025	Inbound	8:13	8:30	5.66	MSW Cleanout	1005 - D&D Waste Removal
20	3/17/2025	Inbound	8:14	8:43	3.97	C&D	1130 - Guido's Services Inc
21	3/17/2025	Inbound	8:22	8:51	3.11	C&D	2124 - Mass Green Disposal Services
22	3/17/2025	Inbound	8:23	8:23	24.64	Residuals	1306 - WIN - Millbury TS
23	3/17/2025	Inbound	8:29	8:58	0.30	MSW Cleanout	1130 - Guido's Services Inc

UMML

Summary of Trucks on March 17, 2025 to correlate to traffic study

Ticket	Date	Inbound/ Outbound	In Time	Out	QTY (tons)	Description	Remarks
24	3/17/2025	Inbound	8:30	9:08	5.45	C&D	1202 - MD Recycling
25	3/17/2025	Inbound	8:33	9:10	22.75	Residuals	1474 - Casella Waste Services
26	3/17/2025	Inbound	8:44	9:15	9.15	C&D	2373 - Kazanjian's Garage Inc.
27	3/17/2025	Inbound	8:46	9:27	4.94	C&D	1130 - Guido's Services Inc
28	3/17/2025	Inbound	8:56	9:38	27.75	Residuals	1399 - North Andover Waste Systems
29	3/17/2025	Inbound	8:58	9:13	14.91	MSW	1259 - WIN - Worcester Collections
30	3/17/2025	Inbound	8:58	9:23	3.37	C&D	1005 - D&D Waste Removal
31	3/17/2025	Inbound	9:08	9:33	0.66	C&D	1059 - Cash Customers Leominster
32	3/17/2025	Inbound	9:11	10:13	1.86	C&D	1202 - MD Recycling
33	3/17/2025	Inbound	9:12	9:42	1.27	C&D	1130 - Guido's Services Inc
34	3/17/2025	Inbound	9:17	9:52	3.13	C&D	1024 - All State Waste
35	3/17/2025	Inbound	9:21	9:49	1.45	MSW Cleanout	2436 - T Slocum Inc.
36	3/17/2025	Inbound	9:22	9:36	2.70	MSW	1259 - WIN - Worcester Collections
37	3/17/2025	Inbound	9:27	10:05	2.55	C&D	2349 - Trash It
38	3/17/2025	Inbound	9:38	10:03	1.87	C&D	1244 - Red Carpet Disposal
39	3/17/2025	Inbound	9:39	10:20	14.57	MSW	1202 - MD Recycling
40	3/17/2025	Inbound	9:48	10:24	0.90	MSW Cleanout	1005 - D&D Waste Removal
41	3/17/2025	Inbound	9:53	10:33	1.53	MSW Cleanout	1130 - Guido's Services Inc
42	3/17/2025	Inbound	9:58	9:58	26.12	Residuals	1306 - WIN - Millbury TS
43	3/17/2025	Inbound	10:01	10:10	15.96	MSW	1259 - WIN - Worcester Collections
44	3/17/2025	Inbound	10:02	10:34	3.09	C&D and Car Tires	1262 - Waste Management
45	3/17/2025	Inbound	10:09	10:44	3.92	MSW	1371 - EOMS Recycling
46	3/17/2025	Inbound	10:10	10:42	2.98	C&D	1202 - MD Recycling
47	3/17/2025	Inbound	10:18	10:55	3.49	C&D and TV Monitors	1186 - Lawrence Waste

UMML

Summary of Trucks on March 17, 2025 to correlate to traffic study

Ticket	Date	Inbound/ Outbound	In Time	Out	QTY (tons)	Description	Remarks
48	3/17/2025	Inbound	10:23	10:50	2.33	C&D	1005 - D&D Waste Removal
49	3/17/2025	Inbound	10:23	10:23	22.23	Residuals	1306 - WIN - Millbury TS
50	3/17/2025	Inbound	10:28	11:08	4.44	C&D	1024 - All State Waste
51	3/17/2025	Inbound	10:29	11:05	2.18	C&D	1244 - Red Carpet Disposal
52	3/17/2025	Inbound	10:36	11:17	3.45	C&D	2373 - Kazanjian's Garage Inc.
53	3/17/2025	Inbound	10:37	11:02	25.65	Residuals and Mattresses	1399 - North Andover Waste Systems
54	3/17/2025	Inbound	10:41	10:41	31.50	Residuals	1306 - WIN - Millbury TS
55	3/17/2025	Outbound	10:41	12:20	13.98	Wood Clean	1358 - WIN - UMM of Millbury
56	3/17/2025	Inbound	10:46	11:25	3.58	C&D	1024 - All State Waste
57	3/17/2025	Inbound	10:51	11:24	3.73	C&D	1007 - Dandini Disposal
58	3/17/2025	Inbound	11:00	11:47	0.73	C&D	1186 - Lawrence Waste
59	3/17/2025	Inbound	11:00	11:45	3.59	C&D	1046 - Busy Bee
60	3/17/2025	Inbound	11:05	11:48	26.53	Residuals	1399 - North Andover Waste Systems
61	3/17/2025	Inbound	11:12	11:57	4.86	C&D	1130 - Guido's Services Inc
62	3/17/2025	Inbound	11:21	11:56	2.31	MSW	1152 - Star Waste Systems
63	3/17/2025	Inbound	11:25	12:23	0.30	C&D	1259 - WIN - Worcester Collections
64	3/17/2025	Inbound	11:27	11:27	26.74	Residuals	1306 - WIN - Millbury TS
65	3/17/2025	Inbound	11:29	11:34	12.78	MSW	1259 - WIN - Worcester Collections
66	3/17/2025	Inbound	11:31	12:33	1.69	C&D	1244 - Red Carpet Disposal
67	3/17/2025	Inbound	11:47	12:36	1.10	MSW Cleanout	1046 - Busy Bee
68	3/17/2025	Inbound	11:55	12:32	26.58	Residuals	1399 - North Andover Waste Systems
69	3/17/2025	Inbound	12:00	12:49	12.03	MSW	1202 - MD Recycling
70	3/17/2025	Inbound	12:01	1:06	22.91	C&D	1113 - G Mello Trailers
71	3/17/2025	Inbound	12:11	12:29	11.35	MSW	1259 - WIN - Worcester Collections

UMML

Summary of Trucks on March 17, 2025 to correlate to traffic study

Ticket	Date	Inbound/ Outbound	In Time	Out	QTY (tons)	Description	Remarks
72	3/17/2025	Inbound	12:27	12:53	2.45	MSW Cleanout	1130 - Guido's Services Inc
73	3/17/2025	Inbound	12:28	12:58	2.17	MSW Cleanout	1007 - Dandini Disposal
74	3/17/2025	Inbound	12;30	1:25	8.22	MSW	1259 - WIN - Worcester Collections
75	3/17/2025	Inbound	12:40	1:21	28.06	Residuals	1399 - North Andover Waste Systems
76	3/17/2025	Inbound	12:41	1:10	13.69	MSW	2369 - City of Leominster - Health Dept.
77	3/17/2025	Inbound	12:43	1:28	0.81	MSW Cleanout	1291 - Junk King
78	3/17/2025	Inbound	12:44	1:35	2.97	MSW Cleanout	1259 - WIN - Worcester Collections
79	3/17/2025	Inbound	12:47	1:37	3.69	MSW Cleanout	1202 - MD Recycling
80	3/17/2025	Inbound	12:54	1:40	20.45	C&D	1113 - G Mello Trailers
81	3/17/2025	Inbound	12:56	12:56	27.33	Residuals	1306 - WIN - Millbury TS
82	3/17/2025	Inbound	1:07	1:43	2.30	MSW Cleanout	1024 - All State Waste
83	3/17/2025	Inbound	1:10	1:45	1.18	MSW Cleanout	1059 - Cash Customers Leominster
84	3/17/2025	Inbound	1:20	1:27	7.11	MSW	1259 - WIN - Worcester Collections
85	3/17/2025	Inbound	1:24	1:55	1.89	MSW Cleanout	1059 - Cash Customers Leominster
86	3/17/2025	Inbound	8:43	8:43	1.40	C&D and White Goods	1291 - Junk King
87	3/17/2025	Inbound	1:39	1:48	13.75	MSW	2369 - City of Leominster - Health Dept.
88	3/17/2025	Inbound	1:41	1:53	0.64	MSW Cleanout	1005 - D&D Waste Removal
89	3/17/2025	Inbound	1:46	2:00	13.75	MSW	2369 - City of Leominster - Health Dept.
90	3/17/2025	Inbound	1:54	2:13	2.79	C&D	1130 - Guido's Services Inc
91	3/17/2025	Inbound	2:01	2:08	0.72	MSW Cleanout	1130 - Guido's Services Inc

UMML

Summary of Trucks on March 17, 2025 to correlate to traffic study

Ticket	Date	Inbound/ Outbound	In Time	Out	QTY (tons)	Description	Remarks
92	3/17/2025	Inbound	2:03	2:21	3.08	C&D	2431 - Loredo Construction Group
93	3/17/2025	Inbound	2:16	2:25	0.77	MSW Cleanout	1244 - Red Carpet Disposal
94	3/17/2025	Inbound	2:19	2:40	1.44	MSW Cleanout and Mattresses	1059 - Cash Customers Leominster
95	3/17/2025	Inbound	2:47	2:56	4.51	MSW Cleanout	1202 - MD Recycling
96	3/17/2025	Inbound	2:51	2:58	2.80	MSW Cleanout	1244 - Red Carpet Disposal
97	3/17/2025	Inbound	3:00	3:11	1.13	MSW Cleanout	2381 - GM Demolition and General Cleaning Service
98	3/17/2025	Inbound	3:01	3:08	1.22	MSW Cleanout	1328 - Trentos Disposal
99	3/17/2025	Inbound	3:10	3:25	2.52	C&D	1046 - Busy Bee
100	3/17/2025	Inbound	2:57	3:16	26.94	Residuals	1399 - North Andover Waste Systems
101	3/17/2025	Inbound	3:25	3:35	2.67	MSW Cleanout	1130 - Guido's Services Inc
102	3/17/2025	Inbound	3:46	3:46	29.33	Residuals	1306 - WIN - Millbury TS
103	3/17/2025	Inbound	4:23	4:23	29.30	Residuals	1306 - WIN - Millbury TS

	Total Inbound Tonnage:	964.08
Inbound	Total Outbound tonnage:	13.98
Outbound	Total trucks:	103

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85972	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	STAR WASTE

DECAL #	TRUCK	TYPE	CONTAINER
27698	STAR WASTE 324	TRANSFER TRAILER	

1399 - North Andover Waste Systems
PO Box 227
East Greenwich, RI 02818

REPRINT
INVOICE
INBOUND

GROSS 113,740 lbs 3/17/25 6:29 am Scale
TARE 43,420 lbs 3/17/25 7:18 am Scale
NET 70,320 lbs
QTY 35.16tons

PROFILE/ORDER #: LEO1
REMARKS: TT - STAR 324 (161080)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	35.16tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85968	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
101034	MD'S #6	REAR END LOADER	

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

GROSS 45,520 lbs 3/17/25 6:30 am Scale
TARE 25,000 lbs 3/17/25 6:51 am Scale
NET 20,520 lbs
QTY 10.26tons

PROFILE/ORDER #: LEO1
REMARKS: PAC6
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW Environmental Fee FUEL CHARGE		NH	10.26tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85962	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	KGD

DECAL #	TRUCK	TYPE	CONTAINER
43190	KGD #25	TRANSFER TRAILER	

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

GROSS 91,400 lbs 3/17/25 6:35 am Manual
TARE 43,100 lbs 3/17/25 6:35 am Manual
NET 48,300 lbs
QTY 24.15tons

PROFILE/ORDER #: LEO1
REMARKS: TT - KGD 25
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	24.15tn			
TIRE(S) CAR			1.00ea			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85963	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	SERVICE PLUS

DECAL #	TRUCK	TYPE	CONTAINER
31050	SERVICE 19	TRANSFER TRAILER	

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

GROSS 91,920 lbs 3/17/25 6:41 am Manual
TARE 43,300 lbs 3/17/25 6:41 am Manual
NET 48,620 lbs
QTY 24.31tons

PROFILE/ORDER #: LEO1
REMARKS: TT - SERVICE 19
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	24.31tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85970	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43927	GUIDO'S SERVICES INC#1	ROLL OFF	

GROSS 46,540 lbs 3/17/25 6:53 am Scale
TARE 33,980 lbs 3/17/25 7:03 am Scale
NET 12,560 lbs
QTY 6.28tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 19
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	6.28tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85971	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1273 - ROUTE 12 DUMPSTERS
106 CARTER ST STE 17
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43103	ROUTE 12 DUMPSTERS #2	ROLL OFF	

GROSS 35,840 lbs 3/17/25 6:57 am Scale
TARE 27,360 lbs 3/17/25 7:12 am Scale
NET 8,480 lbs
QTY 4.24tons

PROFILE/ORDER #: LEO1
REMARKS: ROO
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	4.24tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85969	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	RECORE

DECAL #	TRUCK	TYPE	CONTAINER
44042	RECORE 53	TRANSFER TRAILER	

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

GROSS 95,380 lbs 3/17/25 7:02 am Manual
TARE 39,000 lbs 3/17/25 7:02 am Manual
NET 56,380 lbs
QTY 28.19tons

PROFILE/ORDER #: LEO1
REMARKS: TT - RECORE 53
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	28.19tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85973	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	EZ DISPOSAL TRAILER

DECAL #	TRUCK	TYPE	CONTAINER
43733	ROCKY HILL TRAILERS	TRANSFER TRAILER	

1269 - ROCKY HILL TRANSPORT AND SERVICE CORP
34 BUTTERFIELD ROAD
SAUGUS, MA 01906

REPRINT
INVOICE
INBOUND

GROSS 52,060 lbs 3/17/25 7:16 am Scale
TARE 43,240 lbs 3/17/25 7:31 am Scale
NET 8,820 lbs
QTY 4.41tons

PROFILE/ORDER #: LEO1
REMARKS: TT - ROCKY HILL
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	4.41tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85976	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43229	MD RECYCLING # 18	ROLL OFF	

GROSS 35,780 lbs 3/17/25 7:23 am Scale
TARE 32,040 lbs 3/17/25 7:42 am Scale
NET 3,740 lbs
QTY 1.87tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 18
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		NH	1.87tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85975	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
101054	MD'S #10	REAR END LOADER	

GROSS 50,840 lbs 3/17/25 7:29 am Scale
TARE 35,980 lbs 3/17/25 7:41 am Scale
NET 14,860 lbs
QTY 7.43tons

PROFILE/ORDER #: LEO1
REMARKS: PAC 10
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW Environmental Fee FUEL CHARGE		NH	7.43tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85974	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
101018	WIN WASTE FEL239475	FRONT END LOADER	

GROSS 71,300 lbs 3/17/25 7:35 am Scale
TARE 41,740 lbs 3/17/25 7:40 am Scale
NET 29,560 lbs
QTY 14.78tons

PROFILE/ORDER #: LEO1
REMARKS: PAC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	14.78tn			
TIRE(S) CAR			1.00ea			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85978	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	STAR WASTE

1399 - North Andover Waste Systems
PO Box 227
East Greenwich, RI 02818

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
44296	STAR WASTE 331	TRANSFER TRAILER	

GROSS 93,720 lbs 3/17/25 7:40 am Scale
TARE 40,140 lbs 3/17/25 7:58 am Scale
NET 53,580 lbs
QTY 26.79tons

PROFILE/ORDER #: LEO1
REMARKS: TT - STAR 331 (161110)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	26.79tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85977	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
CASH LEO	LEOMINSTER CASH CUSTOMER	OTHER	

1059 - CASH CUSTOMERS LEOMINSTER (C
OD)
200 TANZIO ROAD
LEOMINSTER, MA 01453

REPRINT
CASH
INBOUND

GROSS 20,360 lbs 3/17/25 7:44 am Scale
TARE 16,360 lbs 3/17/25 7:54 am Scale
NET 4,000 lbs
QTY 2.00tons

PROFILE/ORDER #: LEO1
REMARKS: ROO ROMERO
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D ADMIN FEE Environmental Fee FUEL CHARGE		MA	2.00tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
$0.00
PAYMENT TYPE
Visa

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85980	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43146	ROO 14 BUSY BEE	ROLL OFF	

1046 - BUSY BEE
399 FERRY ST. UNIT B
EVERETT, MA 02149

REPRINT
CASH
INBOUND

GROSS 20,220 lbs 3/17/25 7:46 am Scale
TARE 17,200 lbs 3/17/25 8:07 am Scale
NET 3,020 lbs
QTY 1.51tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 14
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	1.51tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
$0.00
PAYMENT TYPE
merican Expres

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85979	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	WIN WASTE

DECAL #	TRUCK	TYPE	CONTAINER
101105	WIN FRONT LOADER 241199	FRONT END LOADER	

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

GROSS 65,500 lbs 3/17/25 7:56 am Scale
TARE 40,960 lbs 3/17/25 8:06 am Scale
NET 24,540 lbs
QTY 12.27tons

PROFILE/ORDER #: LEO1
REMARKS: PAC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	12.27tn			
MATTRESS(ES)			1.00ea			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85993	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	STAR WASTE

DECAL #	TRUCK	TYPE	CONTAINER
43635	STAR WASTE 328	TRANSFER TRAILER	

1399 - North Andover Waste Systems
PO Box 227
East Greenwich, RI 02818

REPRINT
INVOICE
INBOUND

GROSS 106,320 lbs 3/17/25 8:06 am Scale
TARE 45,100 lbs 3/17/25 8:54 am Scale
NET 61,220 lbs
QTY 30.61tons

PROFILE/ORDER #: LEO1
REMARKS: TT - STAR 328 (161114)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	30.61tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85981	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	TRENTOS DISPOSAL

DECAL #	TRUCK	TYPE	CONTAINER
43720	TRENTOS	ROLL OFF	

1328 - TRENTOS DISPOSAL
68 SYCAMORE ROAD
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

GROSS 19,820 lbs 3/17/25 8:06 am Scale
TARE 17,720 lbs 3/17/25 8:14 am Scale
NET 2,100 lbs
QTY 1.05tons

PROFILE/ORDER #: LEO1
REMARKS: ROO
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	1.05tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85982	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43633	D & D 3	ROLL OFF	

1005 - D & D WASTE REMOVAL
72 JACKSON AVENUE
FITCHBURG, MA 01420

REPRINT
INVOICE
INBOUND

GROSS 22,120 lbs 3/17/25 8:10 am Scale
TARE 20,020 lbs 3/17/25 8:19 am Scale
NET 2,100 lbs
QTY 1.05tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 3
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	1.05tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85984	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1005 - D & D WASTE REMOVAL
72 JACKSON AVENUE
FITCHBURG, MA 01420

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43165	D&D WASTE ROO 23	ROLL OFF	

GROSS 45,700 lbs 3/17/25 8:13 am Scale
TARE 34,380 lbs 3/17/25 8:30 am Scale
NET 11,320 lbs
QTY 5.66tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 23
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	5.66tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85989	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43927	GUIDO'S SERVICES INC#1	ROLL OFF	

GROSS 41,000 lbs 3/17/25 8:14 am Scale
TARE 33,060 lbs 3/17/25 8:43 am Scale
NET 7,940 lbs
QTY 3.97tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 19
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	3.97tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85992	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
102305	MASS GREEN DISPOSAL TRK 5	ROLL OFF	

2124 - Mass Green Disposal Servies LLC
PO Box 525
Accord, MA 02018-0525

REPRINT
INVOICE
INBOUND

GROSS 25,160 lbs 9/17/25 8:22 am Scale
TARE 18,940 lbs 9/17/25 8:51 am Scale
NET 6,220 lbs
QTY 3.11tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 1
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	3.11tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85983	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	KGD

DECAL #	TRUCK	TYPE	CONTAINER
42800	KGD 08	TRANSFER TRAILER	

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

GROSS 92,280 lbs 9/17/25 8:23 am Manual
TARE 43,000 lbs 9/17/25 8:23 am Manual
NET 49,280 lbs
QTY 24.64tons

PROFILE/ORDER #: LEO1
REMARKS: TT - KGD 8
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	24.64tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85994	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
44150	GUIDO'S SERVICES INC #	ROLL OFF	

GROSS 18,060 lbs 3/17/25 8:29 am Scale
TARE 17,460 lbs 3/17/25 8:58 am Scale
NET 600 lbs
QTY 0.30tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 20
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	0.30tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85996	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43213	MD RECYCLING # 77	ROLL OFF	

GROSS 45,120 lbs 3/17/25 8:30 am Scale
TARE 34,220 lbs 3/17/25 9:08 am Scale
NET 10,900 lbs
QTY 5.45tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 77
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		NH	5.45tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85997	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	UMM MILLBURY

DECAL #	TRUCK	TYPE	CONTAINER
43925	WIN 206394	TRANSFER TRAILER	

1474 - Casella Waste Services
15 Hardscrabble Rd
Auburn, MA 01501-1003

REPRINT
INVOICE
INBOUND

GROSS 89,800 lbs 3/17/25 8:33 am Scale
TARE 44,300 lbs 3/17/25 9:10 am Scale
NET 45,500 lbs
QTY 22.75tons

PROFILE/ORDER #: LEO1
REMARKS: TT - WIN (589662)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	22.75tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85999	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43100	KAZANJIAN'S 31	ROLL OFF	

2373 - KAZANJIAN'S GARAGE INC
615 DUTTON ST
LOWELL, MA 01854

REPRINT
INVOICE
INBOUND

GROSS 55,840 lbs 3/17/25 8:44 am Scale
TARE 37,540 lbs 3/17/25 9:15 am Scale
NET 18,300 lbs
QTY 9.15tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 33
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	9.15tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86001	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43621	GUIDO'S #16	ROLL OFF	

GROSS 46,300 lbs 3/17/25 8:46 am Scale
TARE 36,420 lbs 3/17/25 9:27 am Scale
NET 9,880 lbs
QTY 4.94tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 16
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	4.94tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86004	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	STAR WASTE

1399 - North Andover Waste Systems
PO Box 227
East Greenwich, RI 02818

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
26853	STAR WASTE 321	TRANSFER TRAILER	

GROSS 98,240 lbs 3/17/25 8:56 am Scale
TARE 42,740 lbs 3/17/25 9:38 am Scale
NET 55,500 lbs
QTY 27.75tons

PROFILE/ORDER #: LEO1
REMARKS: TT - STAR 321 (161133)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	27.75tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	85998	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
101109	WIN WASTE FEL241692	FRONT END LOADER	

GROSS 71,520 lbs 3/17/25 8:58 am Scale
TARE 41,700 lbs 3/17/25 9:13 am Scale
NET 29,820 lbs
QTY 14.91tons

PROFILE/ORDER #: LEO1
REMARKS: PAC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	14.91tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86000	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1005 - D & D WASTE REMOVAL
72 JACKSON AVENUE
FITCHBURG, MA 01420

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43633	D & D 3	ROLL OFF	

GROSS 27,040 lbs 3/17/25 8:58 am Scale
TARE 20,300 lbs 3/17/25 9:23 am Scale
NET 6,740 lbs
QTY 3.37tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 3
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	3.37tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86002	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
CASH LEO	LEOMINSTER CASH CUSTOMER	OTHER	

1059 - CASH CUSTOMERS LEOMINSTER (C
OD)
200 TANZIO ROAD
LEOMINSTER, MA 01453

REPRINT
CASH
INBOUND

GROSS 11,040 lbs 3/17/25 9:08 am Scale
TARE 9,720 lbs 3/17/25 9:33 am Scale
NET 1,320 lbs
QTY 0.66tons

PROFILE/ORDER #: LEO1
REMARKS: ROO THE BEST SOLUTIONS
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D ADMIN FEE Environmental Fee FUEL CHARGE		MA	0.66tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86012	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
101035	MD RECYCLING # 16	ROLL OFF	

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

GROSS 22,020 lbs 3/17/25 9:11 am Scale
TARE 18,300 lbs 3/17/25 10:13 am Scale
NET 3,720 lbs
QTY 1.86tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 16
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		NH	1.86tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86005	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43779	GUIDO'S SERVICES INC #	ROLL OFF	

GROSS 20,440 lbs 3/17/25 9:12 am Scale
TARE 17,900 lbs 3/17/25 9:42 am Scale
NET 2,540 lbs
QTY 1.27tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 21
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	1.27tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86007	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	ALL STATE WASTE

1024 - ALL STATE WASTE
528 BEDFORD STREE
BRIDGEWATER, MA 02324

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
44058	ALL 224	ROLL OFF	

GROSS 42,000 lbs 3/17/25 9:17 am Scale
TARE 35,740 lbs 3/17/25 9:52 am Scale
NET 6,260 lbs
QTY 3.13tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 224
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	3.13tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86006	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

2436 - T SLOCUM, INC.
10 SUNSET ISLE DR
ASHBURNHAM, MA 01430

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43159	T SLOCUM #T-7	OTHER	

GROSS 14,240 lbs 3/17/25 9:21 am Scale
TARE 11,340 lbs 3/17/25 9:49 am Scale
NET 2,900 lbs
QTY 1.45tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 7
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	1.45tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86003	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	United Hauling

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
27768	United Hauling 44	REAR END LOADER	

GROSS 29,980 lbs 3/17/25 9:22 am Scale
TARE 24,580 lbs 3/17/25 9:36 am Scale
NET 5,400 lbs
QTY 2.70tons

PROFILE/ORDER #: LEO1
REMARKS: PAC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	2.70tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86010	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

2349 - TRASH IT
68 SCHOOL STREET
DUNSTABLE, MA 01827

REPRINT
CASH
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
101059	TRASH IT WHITE CAB HOOK TRUCK	ROLL OFF	

GROSS 17,840 lbs 3/17/25 9:27 am Scale
TARE 12,740 lbs 3/17/25 10:05 am Scale
NET 5,100 lbs
QTY 2.55tons

PROFILE/ORDER #: LEO1
REMARKS: ROO
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	2.55tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86009	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	RED CARPET DISPOSAL

1244 - RED CARPET DISPOSAL
1 OLD COUNTY ROAD
WESTMINSTER, MA 01462

REPRINT
CASH
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43746	RED CARPET #2	ROLL OFF	

GROSS 21,560 lbs 3/17/25 9:38 am Scale
TARE 17,820 lbs 3/17/25 10:03 am Scale
NET 3,740 lbs
QTY 1.87tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 2
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	1.87tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86014	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
101024	MD'S #13	REAR END LOADER	

GROSS 70,160 lbs 3/17/25 9:39 am Scale
TARE 41,020 lbs 3/17/25 10:20 am Scale
NET 29,140 lbs
QTY 14.57tons

PROFILE/ORDER #: LEO1
REMARKS: PAC 13
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		NH	14.57tn			
Environmental Fee						
FUEL CHARGE						

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86016	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1005 - D & D WASTE REMOVAL
72 JACKSON AVENUE
FITCHBURG, MA 01420

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43633	D & D 3	ROLL OFF	

GROSS 22,900 lbs 3/17/25 9:48 am Scale
TARE 21,100 lbs 3/17/25 10:24 am Scale
NET 1,800 lbs
QTY 0.90tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 3
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT		MA	0.90tn			
Environmental Fee						
FUEL CHARGE						

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86017	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43927	GUIDO'S SERVICES INC#1	ROLL OFF	

GROSS 36,100 lbs 3/17/25 9:53 am Scale
TARE 33,040 lbs 3/17/25 10:33 am Scale
NET 3,060 lbs
QTY 1.53tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 19
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	1.53tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86008	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	KGD

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43190	KGD #25	TRANSFER TRAILER	

GROSS 96,360 lbs 3/17/25 9:58 am Manual
TARE 44,120 lbs 3/17/25 9:58 am Manual
NET 52,240 lbs
QTY 26.12tons

PROFILE/ORDER #: LEO1
REMARKS: TT - KGD 25
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	26.12tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86011	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	WIN-WASTE

DECAL #	TRUCK	TYPE	CONTAINER
43277	WIN WASTE FRONT LOAD	FRONT END LOADER	

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

GROSS 72,860 lbs 3/17/25 10:01 am Scale
TARE 40,940 lbs 3/17/25 10:10 am Scale
NET 31,920 lbs
QTY 15.96tons

PROFILE/ORDER #: LEO1
REMARKS: PAC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	15.96tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86018	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	WASTE MANAGEMENT

DECAL #	TRUCK	TYPE	CONTAINER
27632	WAS 416799	ROLL OFF	

1262 - WASTE MANAGEMENT
PO BOX #6700
C/O DCASSIDY@WM.COM
PORTLAND, OR 97228

REPRINT
INVOICE
INBOUND

GROSS 42,680 lbs 3/17/25 10:02 am Scale
TARE 36,500 lbs 3/17/25 10:34 am Scale
NET 6,180 lbs
QTY 3.09tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 416799
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D		MA	3.09tn			
TIRE(S) CAR			2.00ea			
Environmental Fee						
FUEL CHARGE						

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86021	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1371 - EOMS RECYCLING
PO BOX 3608
BROCKTON, MA 02304

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43156	EOMS #52	ROLL OFF	

GROSS 49,980 lbs 3/17/25 10:09 am Scale
TARE 42,140 lbs 3/17/25 10:44 am Scale
NET 7,840 lbs
QTY 3.92tons

PROFILE/ORDER #: LEO1
REMARKS: ROC 52
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW Environmental Fee FUEL CHARGE		MA	3.92tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86020	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43229	MD RECYCLING # 18	ROLL OFF	

GROSS 37,340 lbs 3/17/25 10:10 am Scale
TARE 31,380 lbs 3/17/25 10:42 am Scale
NET 5,960 lbs
QTY 2.98tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 18
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		NH	2.98tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86023	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	LAWRENCE WASTE

DECAL #	TRUCK	TYPE	CONTAINER
27005	LAW 18	ROLL OFF	

1186 - LAWRENCE WASTE
49 ALDER STREET
MEDWAY, MA 02053

REPRINT
INVOICE
INBOUND

GROSS 42,780 lbs 3/17/25 10:18 am Scale
TARE 35,800 lbs 3/17/25 10:55 am Scale
NET 6,980 lbs
QTY 3.49tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 18
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D		MA	3.49tn			
TV/MONITOR(S)			1.00ea			
Environmental Fee						
FUEL CHARGE						

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86022	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43261	D & D WASTE REMOVAL #12	ROLL OFF	

1005 - D & D WASTE REMOVAL
72 JACKSON AVENUE
FITCHBURG, MA 01420

REPRINT
INVOICE
INBOUND

GROSS 25,320 lbs 3/17/25 10:23 am Scale
TARE 20,660 lbs 3/17/25 10:50 am Scale
NET 4,660 lbs
QTY 2.33tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 12
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D		MA	2.33tn			
Environmental Fee						
FUEL CHARGE						

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86015	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	SERVICE PLUS

DECAL #	TRUCK	TYPE	CONTAINER
31050	SERVICE 19	TRANSFER TRAILER	

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

GROSS 88,280 lbs 3/17/25 10:23 am Manual
TARE 43,820 lbs 3/17/25 10:23 am Manual
NET 44,460 lbs
QTY 22.23tons

PROFILE/ORDER #: LEO1
REMARKS: TT - SERVICE 19
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	22.23tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86028	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	ALL STATE WASTE

DECAL #	TRUCK	TYPE	CONTAINER
44412	ALL 210	ROLL OFF	

1024 - ALL STATE WASTE
528 BEDFORD STREE
BRIDGEWATER, MA 02324

REPRINT
INVOICE
INBOUND

GROSS 44,520 lbs 3/17/25 10:28 am Scale
TARE 35,640 lbs 3/17/25 11:08 am Scale
NET 8,880 lbs
QTY 4.44tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 210
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	4.44tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86027	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	RED CARPET DISPOSAL

DECAL #	TRUCK	TYPE	CONTAINER
43746	RED CARPET #2	ROLL OFF	

1244 - RED CARPET DISPOSAL
1 OLD COUNTY ROAD
WESTMINSTER, MA 01462

REPRINT
CASH
INBOUND

GROSS 22,300 lbs 3/17/25 10:29 am Scale
TARE 17,940 lbs 3/17/25 11:05 am Scale
NET 4,360 lbs
QTY 2.18tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 2
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	2.18tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86029	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43102	KAZANJIAN'S #3 3	ROLL OFF	

2373 - KAZANJIAN'S GARAGE INC
615 DUTTON ST
LOWELL, MA 01854

REPRINT
INVOICE
INBOUND

GROSS 45,100 lbs 3/17/25 10:36 am Scale
TARE 38,200 lbs 3/17/25 11:17 am Scale
NET 6,900 lbs
QTY 3.45tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 33
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	3.45tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

1399 - North Andover Waste Systems
PO Box 227
East Greenwich, RI 02818

REPRINT
INVOICE
INBOUND

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86024	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	STAR WASTE

DECAL #	TRUCK	TYPE	CONTAINER
27076	STAR WASTE 333	TRANSFER TRAILER	

GROSS 87,400 lbs 3/17/25 10:37 am Scale
TARE 36,100 lbs 3/17/25 11:02 am Scale
NET 51,300 lbs
QTY 25.65tons

PROFILE/ORDER #: LEO1
REMARKS: TT - STAR 333 (161180)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS MATTRESS(ES)		MA	25.65tn 1.00ea			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86019	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	RECORE

DECAL #	TRUCK	TYPE	CONTAINER
44042	RECORE 53	TRANSFER TRAILER	

GROSS 101,900 lbs 3/17/25 10:41 am Manual
TARE 38,900 lbs 3/17/25 10:41 am Manual
NET 63,000 lbs
QTY 31.50tons

PROFILE/ORDER #: LEO1
REMARKS: TT - RECORE 53
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	31.50tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86032	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	ALL STATE WASTE

DECAL #	TRUCK	TYPE	CONTAINER
44336	ALL 217	ROLL OFF	

1024 - ALL STATE WASTE
528 BEDFORD STREE
BRIDGEWATER, MA 02324

REPRINT
INVOICE
INBOUND

GROSS 42,740 lbs 3/17/25 10:46 am Scale
TARE 35,580 lbs 3/17/25 11:25 am Scale
NET 7,160 lbs
QTY 3.58tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 217
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	3.58tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86031	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43206	DANDINI DISPOSAL #41	OTHER	

1007 - DANDINI DISPOSAL
PO BOX 187
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

GROSS 25,660 lbs 3/17/25 10:51 am Scale
TARE 18,200 lbs 3/17/25 11:24 am Scale
NET 7,460 lbs
QTY 3.73tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 41
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	3.73tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86038	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	LAWRENCE WASTE

DECAL #	TRUCK	TYPE	CONTAINER
25230	LAW 2	ROLL OFF	

1186 - LAWRENCE WASTE
49 ALDER STREET
MEDWAY, MA 02053

REPRINT
INVOICE
INBOUND

GROSS 38,000 lbs 3/17/25 11:00 am Scale
TARE 36,540 lbs 3/17/25 11:47 am Scale
NET 1,460 lbs
QTY 0.73tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 2
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	0.73tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86037	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43149	BUSY BEE #12	ROLL OFF	

1046 - BUSY BEE
399 FERRY ST. UNIT B
EVERETT, MA 02149

REPRINT
CASH
INBOUND

GROSS 21,320 lbs 3/17/25 11:00 am Scale
TARE 14,140 lbs 3/17/25 11:45 am Scale
NET 7,180 lbs
QTY 3.59tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 12
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	3.59tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86039	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	STAR WASTE

DECAL #	TRUCK	TYPE	CONTAINER
27698	STAR WASTE 324	TRANSFER TRAILER	

1399 - North Andover Waste Systems
PO Box 227
East Greenwich, RI 02818

REPRINT
INVOICE
INBOUND

GROSS 96,400 lbs 3/17/25 11:05 am Scale
TARE 43,340 lbs 3/17/25 11:48 am Scale
NET 53,060 lbs
QTY 26.53tons

PROFILE/ORDER #: LEO1
REMARKS: TT - STAR 324 (161191)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	26.53tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86041	IN - Aliyah Oswald OUT - Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43621	GUIDO'S #16	ROLL OFF	

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

GROSS 46,480 lbs 3/17/25 11:12 am Scale
TARE 36,760 lbs 3/17/25 11:57 am Scale
NET 9,720 lbs
QTY 4.86tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 16
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	4.86tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86040	IN - Aliyah Oswald OUT - Cheryl B	03/17/2025

GENERATOR	HAULER
	JAW WASTE SERVICE

DECAL #	TRUCK	TYPE	CONTAINER
102324	BAR15	ROLL OFF	

1152 - STAR WASTE SYSTEMS, LLC - DIRECT
PO BOX 227
EAST GREENWICH, RI 02818

REPRINT
INVOICE
INBOUND

GROSS 40,540 lbs 3/17/25 11:21 am Scale
TARE 35,920 lbs 3/17/25 11:56 am Scale
NET 4,620 lbs
QTY 2.31tons

PROFILE/ORDER #: LEO1
REMARKS: ROC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	2.31tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86043	IN - Aliyah Oswald OUT - Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
44122	WIN 216182	ROLL OFF	

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

GROSS 38,020 lbs 3/17/25 11:25 am Scale
TARE 37,420 lbs 3/17/25 12:23 pm Scale
NET 600 lbs
QTY 0.30tons

PROFILE/ORDER #: LEO1
REMARKS: ROO NO WORK ORDER
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D		MA	0.30tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86035	Aliyah Oswald	03/17/2025

GENERATOR	HAULER
	KGD

DECAL #	TRUCK	TYPE	CONTAINER
27708	KGD 22	TRANSFER TRAILER	

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

GROSS 99,560 lbs 3/17/25 11:27 am Manual
TARE 46,080 lbs 3/17/25 11:27 am Manual
NET 53,480 lbs
QTY 26.74tons

PROFILE/ORDER #: LEO1
REMARKS: TT - KGD 22
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	26.74tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86036	Aliyah Oswald	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
101018	WIN WASTE FEL239475	FRONT END LOADER	

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

GROSS 67,060 lbs 3/17/25 11:29 am Scale
TARE 41,500 lbs 3/17/25 11:34 am Scale
NET 25,560 lbs
QTY 12.78tons

PROFILE/ORDER #: LEO1
REMARKS: PAC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	12.78tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

1244 - RED CARPET DISPOSAL
1 OLD COUNTY ROAD
WESTMINSTER, MA 01462

REPRINT
CASH
INBOUND

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86046	IN - Aliyah Oswald OUT - Cheryl B	03/17/2025

GENERATOR	HAULER
	RED CARPET DISPOSAL

DECAL #	TRUCK	TYPE	CONTAINER
43745	RED CARPET TRUCK # 1	OTHER	

GROSS 21,840 lbs 3/17/25 11:31 am Scale
TARE 18,460 lbs 3/17/25 12:33 pm Scale
NET 3,380 lbs
QTY 1.69tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 1
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	1.69tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

1046 - BUSY BEE
399 FERRY ST. UNIT B
EVERETT, MA 02149

REPRINT
CASH
INBOUND

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86047	IN - Aliyah Oswald OUT - Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43146	ROO 14 BUSY BEE	ROLL OFF	

GROSS 18,680 lbs 3/17/25 11:47 am Scale
TARE 16,480 lbs 3/17/25 12:36 pm Scale
NET 2,200 lbs
QTY 1.10tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 14
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	1.10tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
$0.00
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86045	Cheryl B	03/17/2025

GENERATOR	HAULER
	STAR WASTE

DECAL #	TRUCK	TYPE	CONTAINER
44296	STAR WASTE 331	TRANSFER TRAILER	

1399 - North Andover Waste Systems
PO Box 227
East Greenwich, RI 02818

REPRINT
INVOICE
INBOUND

GROSS 93,180 lbs 3/17/25 11:55 am Scale
TARE 40,020 lbs 3/17/25 12:32 pm Scale
NET 53,160 lbs
QTY 26.58tons

PROFILE/ORDER #: LEO1
REMARKS: TT STAR WASTE 331 (161218)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	26.58tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86048	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
101012	MD'S #11	REAR END LOADER	

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

GROSS 60,500 lbs 3/17/25 12:00 pm Scale
TARE 36,440 lbs 3/17/25 12:49 pm Scale
NET 24,060 lbs
QTY 12.03tons

PROFILE/ORDER #: LEO1
REMARKS: PAC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW Environmental Fee FUEL CHARGE		NH	12.03tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86052	Cheryl B	03/17/2025

GENERATOR	HAULER

1113 - G MELLO TRAILERS
95 TENNEY STREET
GEORGETOWN, MA 01833

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
22413	CWT 2446	TRANSFER TRAILER	

GROSS 91,520 lbs 3/17/25 12:01 pm Scale
TARE 45,700 lbs 3/17/25 1:06 pm Scale
NET 45,820 lbs
QTY 22.91tons

PROFILE/ORDER #: LEO1
REMARKS: TT - CWT 2446
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	22.91tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86044	Cheryl B	03/17/2025

GENERATOR	HAULER
	WIN WASTE

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
101105	WIN FRONT LOADER 241199	FRONT END LOADER	

GROSS 63,580 lbs 3/17/25 12:11 pm Scale
TARE 40,880 lbs 3/17/25 12:29 pm Scale
NET 22,700 lbs
QTY 11.35tons

PROFILE/ORDER #: LEO1
REMARKS: PAC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	11.35tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86049	Cheryl B	03/17/2025

GENERATOR	HAULER

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
44150	GUIDO'S SERVICES INC #	ROLL OFF	

GROSS 22,620 lbs 3/17/25 12:27 pm Scale
TARE 17,720 lbs 3/17/25 12:53 pm Scale
NET 4,900 lbs
QTY 2.45tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 20
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	2.45tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86051	Cheryl B	03/17/2025

GENERATOR	HAULER

1007 - DANDINI DISPOSAL
PO BOX 187
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43206	DANDINI DISPOSAL #41	OTHER	

GROSS 22,860 lbs 3/17/25 12:28 pm Scale
TARE 18,520 lbs 3/17/25 12:58 pm Scale
NET 4,340 lbs
QTY 2.17tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 41
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	2.17tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86055	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
44676	WIN WASTE RO239207	ROLL OFF	

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

GROSS 58,140 lbs 3/17/25 12:30 pm Scale
TARE 41,700 lbs 3/17/25 1:25 pm Scale
NET 16,440 lbs
QTY 8.22tons

PROFILE/ORDER #: LEO1
REMARKS: ROC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	8.22tn			

MANIFEST/BOL:
DETAILS/CELL:
ROUTE/SEQ # : 1115 0.04
WORK ORDER #: 346581

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86054	Cheryl B	03/17/2025

GENERATOR	HAULER
	STAR WASTE

DECAL #	TRUCK	TYPE	CONTAINER
43635	STAR WASTE 328	TRANSFER TRAILER	

1399 - North Andover Waste Systems
PO Box 227
East Greenwich, RI 02818

REPRINT
INVOICE
INBOUND

GROSS 101,180 lbs 3/17/25 12:40 pm Scale
TARE 45,060 lbs 3/17/25 1:21 pm Scale
NET 56,120 lbs
QTY 28.06tons

PROFILE/ORDER #: LEO1
REMARKS: TT - STAR 328 (161234)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	28.06tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86053	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43164	GW SHAW #201	SIDE LOADER	

2369 - CITY OF LEOMINSTER - HEALTH DEPT
25 WEST ST STE 11
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

GROSS 66,320 lbs 3/17/25 12:41 pm Scale
TARE 38,940 lbs 3/17/25 1:10 pm Scale
NET 27,380 lbs
QTY 13.69tons

PROFILE/ORDER #: LEO1-MSW
REMARKS: PAC 102 (CURBSIDE)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	13.69tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86057	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43784	JUNK KING #3A	ROLL OFF	

1291 - JUNK KING
245 CRAWFORD ST
FITCHBURG, MA 01420

REPRINT
INVOICE
INBOUND

GROSS 13,800 lbs 3/17/25 12:43 pm Scale
TARE 12,180 lbs 3/17/25 1:28 pm Scale
NET 1,620 lbs
QTY 0.81tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 3A
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	0.81tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86059	Cheryl B	03/17/2025

GENERATOR	HAULER

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
42900	WIN WASTE ROLL -OFF #415	ROLL OFF	

GROSS 44,020 lbs 3/17/25 12:44 pm Scale
TARE 38,080 lbs 3/17/25 1:35 pm Scale
NET 5,940 lbs
QTY 2.97tons

PROFILE/ORDER #: LEO1
REMARKS: ROO
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT		MA	2.97tn			

MANIFEST/BOL:
DETAILS/CELL:
ROUTE/SEQ # : 1116 0.02
WORK ORDER #: 346432

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86060	Cheryl B	03/17/2025

GENERATOR	HAULER

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
101035	MD RECYCLING # 16	ROLL OFF	

GROSS 25,820 lbs 3/17/25 12:47 pm Scale
TARE 18,440 lbs 3/17/25 1:37 pm Scale
NET 7,380 lbs
QTY 3.69tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 16
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		NH	3.69tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86061	Cheryl B	03/17/2025

GENERATOR	HAULER

1113 - G MELLO TRAILERS
95 TENNEY STREET
GEORGETOWN, MA 01833

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
22583	CWT 2550	TRANSFER TRAILER	

GROSS 85,000 lbs 3/17/25 12:54 pm Scale
TARE 44,100 lbs 3/17/25 1:40 pm Scale
NET 40,900 lbs
QTY 20.45tons

PROFILE/ORDER #: LEO1
REMARKS: TT CWT 2550
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	20.45tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86050	Cheryl B	03/17/2025

GENERATOR	HAULER
	KGD

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
42800	KGD 08	TRANSFER TRAILER	

GROSS 97,860 lbs 3/17/25 12:56 pm Manual
TARE 43,200 lbs 3/17/25 12:56 pm Manual
NET 54,660 lbs
QTY 27.33tons

PROFILE/ORDER #: LEO1
REMARKS: TT KGD 8
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	27.33tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86062	Cheryl B	03/17/2025

GENERATOR	HAULER
	ALL STATE WASTE

DECAL #	TRUCK	TYPE	CONTAINER
44336	ALL 217	ROLL OFF	

1024 - ALL STATE WASTE
528 BEDFORD STREE
BRIDGEWATER, MA 02324

REPRINT
INVOICE
INBOUND

GROSS 39,980 lbs 3/17/25 1:07 pm Scale
TARE 35,380 lbs 3/17/25 1:43 pm Scale
NET 4,600 lbs
QTY 2.30tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 217
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	2.30tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86063	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
CASH LEO	LEOMINSTER CASH CUSTOMER	OTHER	

1059 - CASH CUSTOMERS LEOMINSTER (COD)
200 TANZIO ROAD
LEOMINSTER, MA 01453

REPRINT
CASH
INBOUND

GROSS 14,920 lbs 3/17/25 1:10 pm Scale
TARE 12,560 lbs 3/17/25 1:45 pm Scale
NET 2,360 lbs
QTY 1.18tons

PROFILE/ORDER #: LEO1
REMARKS: ST - ALFA DESIGN BUILD
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT ADMIN FEE Environmental Fee FUEL CHARGE		MA	1.18tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86056	Cheryl B	03/17/2025

GENERATOR	HAULER

1259 - WIN - WORCESTER COLLECTIONS
22 WEST STREET SUITE #20
MILLBURY, MA 01527

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
101018	WIN WASTE FEL239475	FRONT END LOADER	

GROSS 55,340 lbs 3/17/25 1:20 pm Scale
TARE 41,120 lbs 3/17/25 1:27 pm Scale
NET 14,220 lbs
QTY 7.11tons

PROFILE/ORDER #: LEO1
REMARKS: PAC
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	7.11tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86066	Cheryl B	03/17/2025

GENERATOR	HAULER

1059 - CASH CUSTOMERS LEOMINSTER (COD)
200 TANZIO ROAD
LEOMINSTER, MA 01453

REPRINT
CASH
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
CASH LEO	LEOMINSTER CASH CUSTOMER	OTHER	

GROSS 17,300 lbs 3/17/25 1:24 pm Scale
TARE 13,520 lbs 3/17/25 1:55 pm Scale
NET 3,780 lbs
QTY 1.89tons

PROFILE/ORDER #: LEO1
REMARKS: ST BATH BUSTERS
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT ADMIN FEE Environmental Fee FUEL CHARGE		MA	1.89tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86058	Cheryl B	03/17/2025

GENERATOR	HAULER

1291 - JUNK KING
245 CRAWFORD ST
FITCHBURG, MA 01420

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43784	JUNK KING #3A	ROLL OFF	

GROSS 15,060 lbs 3/17/25 8:43 am Manual
TARE 12,260 lbs 3/17/25 8:43 am Manual
NET 2,800 lbs
QTY 1.40tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 3A
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D		MA	1.40tn			
WHITE GOODS			1.00ea			
Environmental Fee						
FUEL CHARGE						

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86064	Cheryl B	03/17/2025

GENERATOR	HAULER

2369 - CITY OF LEOMINSTER - HEALTH DEPT
25 WEST ST STE 11
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43170	GW SHAW 99	SIDE LOADER	

GROSS 66,120 lbs 3/17/25 1:39 pm Scale
TARE 38,620 lbs 3/17/25 1:48 pm Scale
NET 27,500 lbs
QTY 13.75tons

PROFILE/ORDER #: LEO1-MSW
REMARKS: PAC 99 CURBSIDE
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	13.75tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86065	Cheryl B	03/17/2025

GENERATOR	HAULER

1005 - D & D WASTE REMOVAL
72 JACKSON AVENUE
FITCHBURG, MA 01420

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43633	D & D 3	ROLL OFF	

GROSS 20,780 lbs 3/17/25 1:41 pm Scale
TARE 19,500 lbs 3/17/25 1:53 pm Scale
NET 1,280 lbs
QTY 0.64tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 3
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	0.64tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86067	Cheryl B	03/17/2025

GENERATOR	HAULER

2369 - CITY OF LEOMINSTER - HEALTH DEPT
25 WEST ST STE 11
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
101030	GW SHAW #33	REAR END LOADER	

GROSS 68,840 lbs 3/17/25 1:46 pm Scale
TARE 41,340 lbs 3/17/25 2:00 pm Scale
NET 27,500 lbs
QTY 13.75tons

PROFILE/ORDER #: LEO1-MSW
REMARKS: PAC 33 CURBSIDE
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW		MA	13.75tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86069	Cheryl B	03/17/2025

GENERATOR	HAULER

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
43621	GUIDO'S #16	ROLL OFF	

GROSS 43,440 lbs 3/17/25 1:54 pm Scale
TARE 37,860 lbs 3/17/25 2:13 pm Scale
NET 5,580 lbs
QTY 2.79tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 16
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	2.79tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86068	Cheryl B	03/17/2025

GENERATOR	HAULER

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

DECAL #	TRUCK	TYPE	CONTAINER
44150	GUIDO'S SERVICES INC #	ROLL OFF	

GROSS 18,460 lbs 3/17/25 2:01 pm Scale
TARE 17,020 lbs 3/17/25 2:08 pm Scale
NET 1,440 lbs
QTY 0.72tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 20
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	0.72tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86070	Cheryl B	03/17/2025

GENERATOR	HAULER
	LOREDO

DECAL #	TRUCK	TYPE	CONTAINER
44698	LOREDO	ROLL OFF	

2431 - LOREDO CONSTRUCTION GROUP LLC
48 CRESTWOOD LN
MARLBOROUGH, MA 01752

REPRINT
INVOICE
INBOUND

GROSS 24,300 lbs 3/17/25 2:03 pm Scale
TARE 18,140 lbs 3/17/25 2:21 pm Scale
NET 6,160 lbs
QTY 3.08tons

PROFILE/ORDER #: LEO1
REMARKS: ROO
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	3.08tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86071	Cheryl B	03/17/2025

GENERATOR	HAULER
	RED CARPET DISPOSAL

DECAL #	TRUCK	TYPE	CONTAINER
43746	RED CARPET #2	ROLL OFF	

1244 - RED CARPET DISPOSAL
1 OLD COUNTY ROAD
WESTMINSTER, MA 01462

REPRINT
CASH
INBOUND

GROSS 19,420 lbs 3/17/25 2:16 pm Scale
TARE 17,880 lbs 3/17/25 2:25 pm Scale
NET 1,540 lbs
QTY 0.77tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 2
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	0.77tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86072	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
CASH LEO	LEOMINSTER CASH CUSTOMER	OTHER	

1059 - CASH CUSTOMERS LEOMINSTER (C
OD)
200 TANZIO ROAD
LEOMINSTER, MA 01453

REPRINT
CASH
INBOUND

GROSS 16,100 lbs 3/17/25 2:19 pm Scale
TARE 13,220 lbs 3/17/25 2:40 pm Scale
NET 2,880 lbs
QTY 1.44tons

PROFILE/ORDER #: LEO1
REMARKS: ST BATH BUSTERS
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT		MA	1.44tn			
MATTRESS(ES)			1.00ea			
ADMIN FEE						
Environmental Fee						
FUEL CHARGE						

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86073	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43213	MD RECYCLING # 77	ROLL OFF	

1202 - MD RECYCLING
PO BOX 155
MILFORD, NH 03055-0155

REPRINT
INVOICE
INBOUND

GROSS 43,040 lbs 3/17/25 2:47 pm Scale
TARE 34,020 lbs 3/17/25 2:56 pm Scale
NET 9,020 lbs
QTY 4.51tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 77
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT		NH	4.51tn			
Environmental Fee						
FUEL CHARGE						

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

1244 - RED CARPET DISPOSAL
1 OLD COUNTY ROAD
WESTMINSTER, MA 01462

REPRINT
CASH
INBOUND

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86074	Cheryl B	03/17/2025

GENERATOR	HAULER
	RED CARPET DISPOSAL

DECAL #	TRUCK	TYPE	CONTAINER
43746	RED CARPET #2	ROLL OFF	

GROSS 24,080 lbs 3/17/25 2:51 pm Scale
TARE 18,480 lbs 3/17/25 2:58 pm Scale
NET 5,600 lbs
QTY 2.80tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 2
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	2.80tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

2381 - GM DEMOLITION & GENERAL CLEANING SERVICE
10 GLENDALE AVE
LEOMINSTER, MA 01453

REPRINT
CASH
INBOUND

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86076	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43135	GM DEMOLITION BLACK TRUCK	OTHER	

GROSS 14,860 lbs 3/17/25 3:00 pm Scale
TARE 12,600 lbs 3/17/25 3:11 pm Scale
NET 2,260 lbs
QTY 1.13tons

PROFILE/ORDER #: LEO1
REMARKS: ROO DUMPSTAR FOR GM DEMOLITION
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	1.13tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86075	Cheryl B	03/17/2025

GENERATOR	HAULER
	TRENTOS DISPOSAL

DECAL #	TRUCK	TYPE	CONTAINER
43720	TRENTOS	ROLL OFF	

1328 - TRENTOS DISPOSAL
68 SYCAMORE ROAD
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

GROSS 19,680 lbs 3/17/25 3:01 pm Scale
TARE 17,240 lbs 3/17/25 3:08 pm Scale
NET 2,440 lbs
QTY 1.22tons

PROFILE/ORDER #: LEO1
REMARKS: ROO
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	1.22tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86079	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43146	ROO 14 BUSY BEE	ROLL OFF	

1046 - BUSY BEE
399 FERRY ST. UNIT B
EVERETT, MA 02149

REPRINT
CASH
INBOUND

GROSS 22,460 lbs 3/17/25 3:10 pm Scale
TARE 17,420 lbs 3/17/25 3:25 pm Scale
NET 5,040 lbs
QTY 2.52tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 14
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
C&D Environmental Fee FUEL CHARGE		MA	2.52tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86078	Cheryl B	03/17/2025

GENERATOR	HAULER
	STAR WASTE

DECAL #	TRUCK	TYPE	CONTAINER
27698	STAR WASTE 324	TRANSFER TRAILER	

1399 - North Andover Waste Systems
PO Box 227
East Greenwich, RI 02818

REPRINT
INVOICE
INBOUND

GROSS 97,460 lbs 3/17/25 2:57 pm Manual
TARE 43,580 lbs 3/17/25 3:16 pm Scale
NET 53,880 lbs
QTY 26.94tons

PROFILE/ORDER #: LEO1
REMARKS: TT STAR WASTE 324 (161318)
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	26.94tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86080	Cheryl B	03/17/2025

GENERATOR	HAULER

DECAL #	TRUCK	TYPE	CONTAINER
43621	GUIDO'S #16	ROLL OFF	

1130 - GUIDO'S SERVICES INC
269 CRAWFORD STREET
LEOMINSTER, MA 01453

REPRINT
INVOICE
INBOUND

GROSS 42,280 lbs 3/17/25 3:25 pm Scale
TARE 36,940 lbs 3/17/25 3:35 pm Scale
NET 5,340 lbs
QTY 2.67tons

PROFILE/ORDER #: LEO1
REMARKS: ROO 16
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
MSW CLEANOUT Environmental Fee FUEL CHARGE		MA	2.67tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86081	Cheryl B	03/17/2025

GENERATOR	HAULER
	KGD

DECAL #	TRUCK	TYPE	CONTAINER
42800	KGD 08	TRANSFER TRAILER	

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

GROSS 100,980 lbs 3/17/25 3:46 pm Manual
TARE 42,320 lbs 3/17/25 3:46 pm Manual
NET 58,660 lbs
QTY 29.33tons

PROFILE/ORDER #: LEO1
REMARKS: TT KGD 8
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	29.33tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86082	Cheryl B	03/17/2025

GENERATOR	HAULER
	KGD

DECAL #	TRUCK	TYPE	CONTAINER
43190	KGD #25	TRANSFER TRAILER	

1306 - WIN - MILLBURY TS
200 FRIBERG PARKWAY SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
INBOUND

GROSS 102,280 lbs 3/17/25 4:23 pm Manual
TARE 43,680 lbs 3/17/25 4:23 pm Manual
NET 58,600 lbs
QTY 29.30tons

PROFILE/ORDER #: LEO1
REMARKS: TT KGD 25
PO #:
DESTINATION:

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
RESIDUALS		MA	29.30tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

WIN Waste Innovations Millbury TS
WIN Waste Innovations at Leominster
200 Tanzio Rd
Leominster, MA 01453
Phone:(508) 752-6900

SITE	TICKET	SCALE OPERATOR	TICKET DATE
01	86042	IN - Aliyah Oswald OUT - Cheryl B	03/17/2025

GENERATOR	HAULER
	RECORE

DECAL #	TRUCK	TYPE	CONTAINER
44042	RECORE 53	TRANSFER TRAILER	

1358 - WIN - UMM OF MILLBURY (OUTBOUND)
200 FRIBERG PARKWAY, SUITE 4001
WESTBOROUGH, MA 01581

REPRINT
INVOICE
OUTBOUND

GROSS 66,880 lbs 3/17/25 12:20 pm Scale
TARE 38,920 lbs 3/17/25 10:41 am Scale
NET 27,960 lbs
QTY 13.98tons

PROFILE/ORDER #: LEO1
REMARKS: TT - RECORE 53
PO #:
DESTINATION: Outbound

DESCRIPTION	%	ORIGIN	QTY	RATE	TAX	TOTAL
WOOD CLEAN			13.98tn			

MANIFEST/BOL:
DETAILS/CELL:

TOTAL
AMOUNT PAID
CHANGE
PAYMENT TYPE

I hereby certify that this load does not contain any unauthorized hazardous waste.

SIGNATURE:_____

Bowman

APPENDIX F

HIGHWAY CAPACITY MANUAL METHODOLOGIES

CAPACITY/LEVEL-OF-SERVICE ANALYSES METHODOLOGY

The detailed capacity/level-of-service analysis contained in this traffic impact study was performed in accordance with the standard techniques contained in the *Highway Capacity Manual*.(1) By definition, capacity represents "the maximum rate of flow that can reasonably be expected to pass a point on a uniform section of a lane or roadway under prevailing roadway, traffic, and control conditions." The level of functioning of an intersection or a uniform section of a lane or roadway can be expressed in terms of levels of service. Level of service (LOS) is defined as "a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers". Such measures include "speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety."

At unsignalized intersections, a methodology for evaluating the relative functioning of intersections controlled by stop or yield signs has been developed, and is based on several assumptions, including:

- Major street flows are not affected by the minor (stop-sign controlled) street movements.
- Left turns from the major street to the minor street are influenced only by opposing major street through flow.
- Minor street left turns are impeded by all major street traffic plus opposing minor street traffic.
- Minor street through traffic is impeded by all major street traffic.
- Minor street right turns are impeded only by the major street traffic coming from the left.

The concept of stop-controlled or yield-controlled intersection analysis is based on the estimate of average total delay on minor streets. The methodology of analysis relies on three elements: the size and distribution of gaps in the major traffic stream, the usefulness of these gaps to the minor stream drivers, and the relative priority of the various traffic streams at the intersection. The results of the analysis provide an estimate of average total delay for the various critical movements at the unsignalized intersections. Correlation between average total delay and the respective levels of service are provided for unsignalized intersections as follows:

---

(1) *Transportation Research Board, Highway Capacity Manual, 6th Edition, published by the Transportation Research Board, Washington, DC, 2016.*

Unsignalized Intersections

Level of Service	Control Delay Per Vehicle (seconds)
A	0 – 10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F	> 50

At signalized intersections, an additional element must be considered: time allocation. Level of service is based on the average control delay per vehicle for various movements within the intersection. Volume/capacity relationships also affect the operations of signalized intersections. Thus, both volume/capacity and delay must be considered to evaluate the overall operation of a signalized intersection. Correlation between average delay per vehicle and the respective levels of service are provided for signalized intersections as follows:

Signalized Intersections

Level of Service	Control Delay Per Vehicle (seconds)
A	$\leq$ 10
B	>10 – 20
C	>20 – 35
D	>35 – 55
E	>55 – 80
F	> 80

Bowman

APPENDIX G

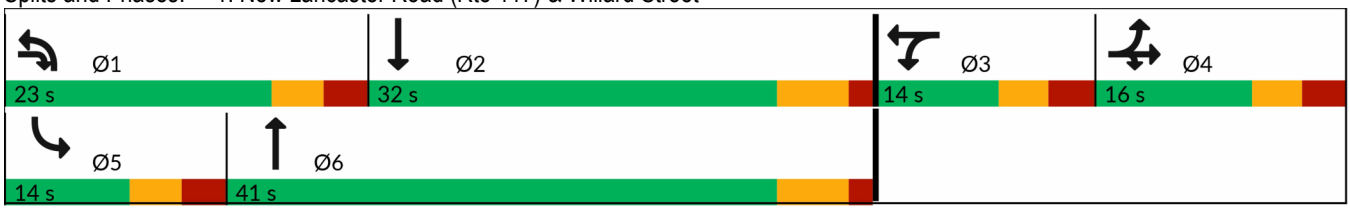
2025 EXISTING CAPACITY/ LEVEL-OF-SERVICE ANALYSIS

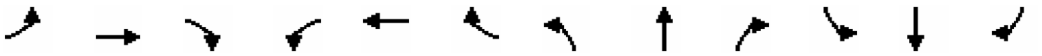
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	6	173	24	7	4	108	304	24	2	324	49
Future Volume (vph)	64	6	173	24	7	4	108	304	24	2	324	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		140	0		0	200		0	52		200
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			138		
Satd. Flow (prot)	0	1770	1538	0	1669	0	1703	1715	0	1805	3250	0
Flt Permitted		0.957			0.967		0.950			0.950		
Satd. Flow (perm)	0	1770	1538	0	1669	0	1703	1715	0	1805	3250	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			190		5			6			20	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		712			842			797			2256	
Travel Time (s)		16.2			19.1			12.1			34.2	
Peak Hour Factor	0.91	0.91	0.91	0.80	0.80	0.80	0.96	0.96	0.96	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	5%	4%	14%	25%	6%	10%	4%	0%	9%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	77	190	0	44	0	113	342	0	2	405	0
Turn Type	Split	NA	pt+ov	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4	4 1	3	3		1	6		5	2	
Permitted Phases												
Detector Phase	4	4	4 1	3	3		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		8.0	8.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	12.0	12.0		14.0	14.0		12.0	16.0		12.0	16.0	
Total Split (s)	16.0	16.0		14.0	14.0		23.0	41.0		14.0	32.0	
Total Split (%)	18.8%	18.8%		16.5%	16.5%		27.1%	48.2%		16.5%	37.6%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	4.5		3.2	4.5	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.8	1.5		2.8	1.5	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)		7.6	22.5		8.5		8.6	25.8		6.4	12.7	
Actuated g/C Ratio		0.14	0.41		0.15		0.16	0.47		0.12	0.23	
v/c Ratio		0.32	0.26		0.17		0.42	0.42		0.01	0.53	
Control Delay (s/veh)		29.4	3.6		26.0		29.6	14.9		29.0	22.4	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		29.4	3.6		26.0		29.6	14.9		29.0	22.4	
LOS		C	A		C		C	B		C	C	
Approach Delay (s/veh)		11.1			26.0			18.6			22.5	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)		26	0		12		37	78		1	66	
Queue Length 95th (ft)		70	36		40		91	203		7	119	
Internal Link Dist (ft)		632			762			717			2176	
Turn Bay Length (ft)			140				200			52		
Base Capacity (vph)		340	912		261		557	1157		278	1636	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		0.23	0.21		0.17		0.20	0.30		0.01	0.25	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 55.1			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay (s/veh): 18.5		Intersection LOS: B	
Intersection Capacity Utilization 46.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: New Lancaster Road (Rte 117) & Willard Street





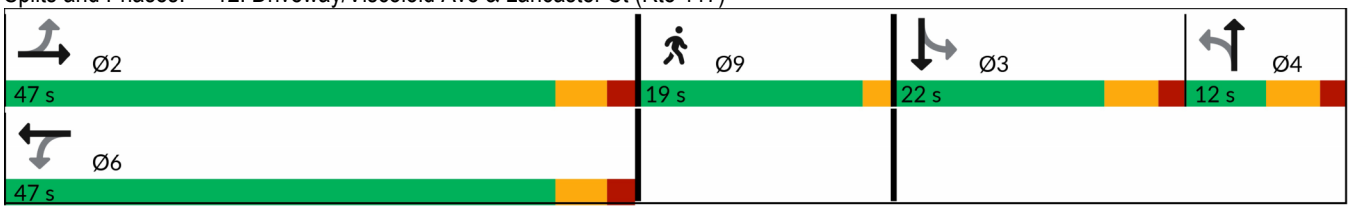
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	434	0	0	257	82	0	0	0	97	0	79
Future Volume (vph)	137	434	0	0	257	82	0	0	0	97	0	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	0	0	1734	0	0	1900	0	0	1629	0
Flt Permitted	0.484										0.950	
Satd. Flow (perm)	884	1827	0	0	1734	0	0	1900	0	0	1591	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					19						120	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		690			943			166			748	
Travel Time (s)		13.4			18.4			3.8			17.0	
Peak Hour Factor	0.93	0.93	0.93	0.95	0.95	0.95	0.80	0.80	0.80	0.86	0.86	0.86
Heavy Vehicles (%)	4%	4%	0%	0%	4%	12%	0%	0%	0%	7%	0%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	147	467	0	0	357	0	0	0	0	0	205	0
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases	2			6			4			3		
Detector Phase	2	2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	47.0	47.0		47.0	47.0		12.0	12.0		22.0	22.0	
Total Split (%)	47.0%	47.0%		47.0%	47.0%		12.0%	12.0%		22.0%	22.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)	19.1	19.1			19.1						17.1	
Actuated g/C Ratio	0.37	0.37			0.37						0.33	
v/c Ratio	0.45	0.69			0.54						0.34	
Control Delay (s/veh)	17.9	19.9			15.8						10.9	
Queue Delay	0.0	0.0			0.0						0.0	
Total Delay (s/veh)	17.9	19.9			15.8						10.9	
LOS	B	B			B						B	
Approach Delay (s/veh)		19.4			15.8						10.9	
Approach LOS		B			B						B	
Queue Length 50th (ft)	27	96			64						14	
Queue Length 95th (ft)	100	276			195						92	
Internal Link Dist (ft)		610			863			86			668	
Turn Bay Length (ft)	50											
Base Capacity (vph)	746	1542			1466						609	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	19.0
Total Split (s)	19.0
Total Split (%)	19%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0			0						0	
Spillback Cap Reductn	0	0			0						0	
Storage Cap Reductn	0	0			0						0	
Reduced v/c Ratio	0.20	0.30			0.24						0.34	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 51.4			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 16.8		Intersection LOS: B	
Intersection Capacity Utilization 66.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 12: Driveway/Viscoloid Ave & Lancaster St (Rte 117)



Lane Group	Ø9
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	12	11	318	410	9
Future Vol, veh/h	7	12	11	318	410	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	89	89	90	90
Heavy Vehicles, %	14	75	45	7	4	67
Mvmt Flow	9	15	12	357	456	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	842	461	466	0	-	0
Stage 1	461	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Critical Hdwy	6.54	6.95	4.55	-	-	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.975	2.605	-	-	-
Pot Cap-1 Maneuver	319	475	903	-	-	-
Stage 1	611	-	-	-	-	-
Stage 2	665	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	314	475	903	-	-	-
Mov Cap-2 Maneuver	314	-	-	-	-	-
Stage 1	601	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.6	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	903	-	400	-	-
HCM Lane V/C Ratio	0.014	-	0.059	-	-
HCM Ctrl Dly (s/v)	9	0	14.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q (veh)	0	-	0.2	-	-

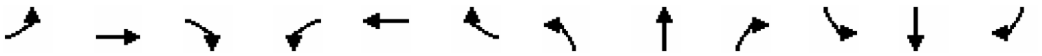
Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	12	0	0	0
Future Vol, veh/h	0	10	12	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	70	83	0	0	0
Mvmt Flow	0	13	15	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	31	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	30	-	-	-	-	-
Critical Hdwy	6.4	6.9	4.93	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.93	2.947	-	-	-
Pot Cap-1 Maneuver	988	915	1220	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	998	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	976	915	1220	-	-	-
Mov Cap-2 Maneuver	976	-	-	-	-	-
Stage 1	1016	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9	8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1220	-	915	-	-
HCM Lane V/C Ratio	0.012	-	0.014	-	-
HCM Ctrl Dly (s/v)	8	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-

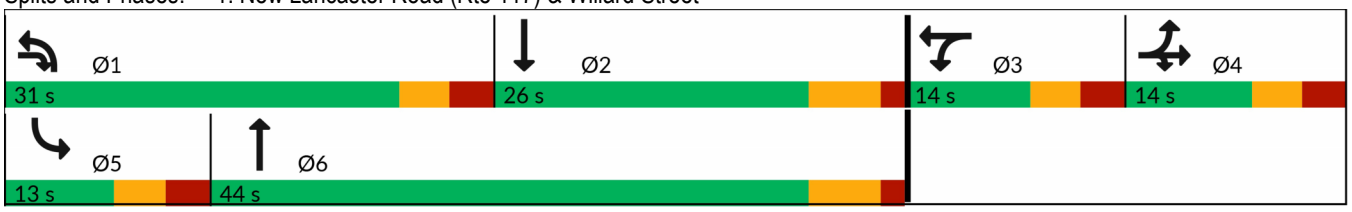


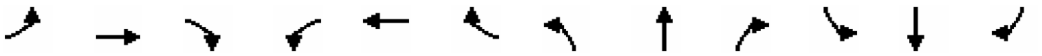
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	8	201	34	11	6	253	445	33	4	370	87
Future Volume (vph)	85	8	201	34	11	6	253	445	33	4	370	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		140	0		0	200		0	52		200
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			138		
Satd. Flow (prot)	0	1764	1524	0	1675	0	1736	1843	0	1805	3403	0
Flt Permitted		0.956			0.968		0.950			0.950		
Satd. Flow (perm)	0	1764	1524	0	1657	0	1734	1843	0	1805	3403	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			216		7			6			32	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		712			842			797			2256	
Travel Time (s)		16.2			19.1			12.1			34.2	
Confl. Peds. (#/hr)			6	6			1					1
Peak Hour Factor	0.93	0.93	0.93	0.80	0.80	0.80	0.94	0.94	0.94	0.93	0.93	0.93
Heavy Vehicles (%)	2%	13%	6%	0%	18%	33%	4%	2%	3%	0%	2%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	100	216	0	65	0	269	508	0	4	492	0
Turn Type	Split	NA	pt+ov	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4	4 1	3	3		1	6		5	2	
Permitted Phases												
Detector Phase	4	4	4 1	3	3		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		8.0	8.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	12.0	12.0		14.0	14.0		12.0	16.0		12.0	16.0	
Total Split (s)	14.0	14.0		14.0	14.0		31.0	44.0		13.0	26.0	
Total Split (%)	16.5%	16.5%		16.5%	16.5%		36.5%	51.8%		15.3%	30.6%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	4.5		3.2	4.5	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.8	1.5		2.8	1.5	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)		7.7	29.0		8.6		14.9	33.8		6.4	14.3	
Actuated g/C Ratio		0.12	0.46		0.14		0.24	0.53		0.10	0.23	
v/c Ratio		0.47	0.27		0.28		0.66	0.51		0.02	0.62	
Control Delay (s/veh)		39.7	3.2		32.1		32.3	14.0		34.3	26.4	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		39.7	3.2		32.1		32.3	14.0		34.3	26.4	
LOS		D	A		C		C	B		C	C	
Approach Delay (s/veh)		14.7			32.1			20.3			26.5	
Approach LOS		B			C			C			C	
Queue Length 50th (ft)		40	0		23		105	135		2	95	
Queue Length 95th (ft)		#113	37		60		196	294		12	162	
Internal Link Dist (ft)		632			762			717			2176	
Turn Bay Length (ft)			140				200			52		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		239	1009		232		734	1198		213	1172	
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		0.42	0.21		0.28		0.37	0.42		0.02	0.42	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 63.3			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 21.6		Intersection LOS: C	
Intersection Capacity Utilization 54.9%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: New Lancaster Road (Rte 117) & Willard Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	374	0	0	508	95	0	0	0	129	0	234
Future Volume (vph)	154	374	0	0	508	95	0	0	0	129	0	234
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1787	1863	0	0	1821	0	0	1900	0	0	1671	0
Flt Permitted	0.287										0.950	
Satd. Flow (perm)	540	1863	0	0	1821	0	0	1900	0	0	1615	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					11						120	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		690			943			166			748	
Travel Time (s)		15.7			21.4			3.8			17.0	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.80	0.80	0.80	0.96	0.96	0.96
Heavy Vehicles (%)	1%	2%	4%	0%	2%	3%	0%	0%	0%	4%	0%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	416	0	0	655	0	0	0	0	0	378	0
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases	2			6			4			3		
Detector Phase	2	2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	47.0	47.0		47.0	47.0		12.0	12.0		22.0	22.0	
Total Split (%)	47.0%	47.0%		47.0%	47.0%		12.0%	12.0%		22.0%	22.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)	41.4	41.4			41.4						16.2	
Actuated g/C Ratio	0.57	0.57			0.57						0.22	
v/c Ratio	0.56	0.39			0.63						0.84	
Control Delay (s/veh)	21.7	11.4			15.4						37.9	
Queue Delay	0.0	0.0			0.0						0.0	
Total Delay (s/veh)	21.7	11.4			15.4						37.9	
LOS	C	B			B						D	
Approach Delay (s/veh)		14.4			15.4						37.9	
Approach LOS		B			B						D	
Queue Length 50th (ft)	38	82			153						104	
Queue Length 95th (ft)	#178	233			430						#328	
Internal Link Dist (ft)		610			863			86			668	
Turn Bay Length (ft)	50											
Base Capacity (vph)	306	1059			1040						451	

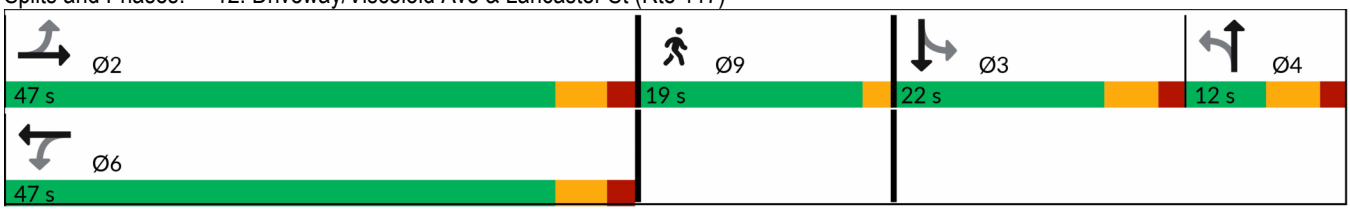
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	19.0
Total Split (s)	19.0
Total Split (%)	19%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0			0						0	
Spillback Cap Reductn	0	0			0						0	
Storage Cap Reductn	0	0			0						0	
Reduced v/c Ratio	0.56	0.39			0.63						0.84	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 72.8			
Natural Cycle: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay (s/veh): 20.3		Intersection LOS: C	
Intersection Capacity Utilization 88.7%		ICU Level of Service E	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: Driveway/Viscoloid Ave & Lancaster St (Rte 117)



Lane Group	Ø9
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	10	5	568	416	4
Future Vol, veh/h	20	10	5	568	416	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	94	94	90	90
Heavy Vehicles, %	25	10	0	2	1	50
Mvmt Flow	25	13	5	604	462	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1078	464	466	0	-	0
Stage 1	464	-	-	-	-	-
Stage 2	614	-	-	-	-	-
Critical Hdwy	6.65	6.3	4.1	-	-	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.39	2.2	-	-	-
Pot Cap-1 Maneuver	219	582	1106	-	-	-
Stage 1	587	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	217	582	1106	-	-	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	583	-	-	-	-	-
Stage 2	498	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	20.2	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1106	-	274	-	-
HCM Lane V/C Ratio	0.005	-	0.137	-	-
HCM Ctrl Dly (s/v)	8.3	0	20.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	9	3	0	0	0
Future Vol, veh/h	0	9	3	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	44	100	0	0	0
Mvmt Flow	0	11	4	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	11	3	3	0	-	0
Stage 1	3	-	-	-	-	-
Stage 2	8	-	-	-	-	-
Critical Hdwy	6.4	6.64	5.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.696	3.1	-	-	-
Pot Cap-1 Maneuver	1014	970	1158	-	-	-
Stage 1	1025	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1007	968	1156	-	-	-
Mov Cap-2 Maneuver	1007	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1018	-	-	-	-	-

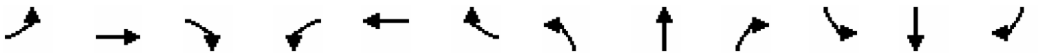
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.8	8.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1156	-	968	-	-
HCM Lane V/C Ratio	0.003	-	0.012	-	-
HCM Ctrl Dly (s/v)	8.1	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-

Bowman

APPENDIX H

2032 NO BUILD CAPACITY/ LEVEL-OF-SERVICE ANALYSIS

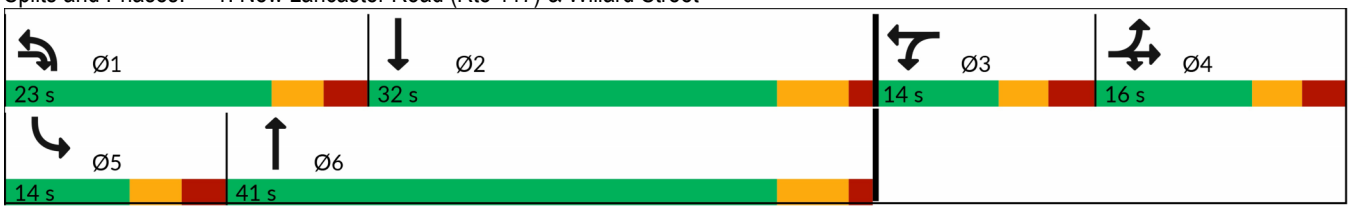


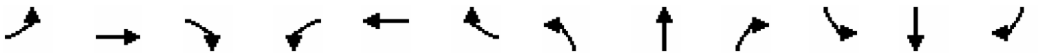
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	7	199	28	8	5	124	349	28	2	372	56
Future Volume (vph)	74	7	199	28	8	5	124	349	28	2	372	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		140	0		0	200		0	52		200
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			138		
Satd. Flow (prot)	0	1770	1538	0	1669	0	1703	1715	0	1805	3250	0
Flt Permitted		0.957			0.967		0.950			0.950		
Satd. Flow (perm)	0	1770	1538	0	1669	0	1703	1715	0	1805	3250	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			216		5			6			20	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		712			842			797			2256	
Travel Time (s)		16.2			19.1			12.1			34.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	0%	5%	4%	14%	25%	6%	10%	4%	0%	9%	8%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	88	216	0	44	0	135	409	0	2	465	0
Turn Type	Split	NA	pt+ov	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4	4 1	3	3		1	6		5	2	
Permitted Phases												
Detector Phase	4	4	4 1	3	3		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		8.0	8.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	12.0	12.0		14.0	14.0		12.0	16.0		12.0	16.0	
Total Split (s)	16.0	16.0		14.0	14.0		23.0	41.0		14.0	32.0	
Total Split (%)	18.8%	18.8%		16.5%	16.5%		27.1%	48.2%		16.5%	37.6%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	4.5		3.2	4.5	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.8	1.5		2.8	1.5	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)		7.9	23.8		8.6		9.5	28.1		6.5	13.9	
Actuated g/C Ratio		0.14	0.41		0.15		0.16	0.49		0.11	0.24	
v/c Ratio		0.37	0.28		0.17		0.48	0.49		0.01	0.58	
Control Delay (s/veh)		32.1	3.7		28.1		31.4	15.3		31.5	23.6	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		32.1	3.7		28.1		31.4	15.3		31.5	23.6	
LOS		C	A		C		C	B		C	C	
Approach Delay (s/veh)		11.9			28.1			19.3			23.6	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)		31	0		13		47	101		1	81	
Queue Length 95th (ft)		83	39		48		110	247		7	141	
Internal Link Dist (ft)		632			762			717			2176	
Turn Bay Length (ft)			140				200			52		
Base Capacity (vph)		330	901		253		539	1121		269	1585	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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	0.24		0.17		0.25	0.36		0.01	0.29	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 57.7			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 19.4		Intersection LOS: B	
Intersection Capacity Utilization 49.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: New Lancaster Road (Rte 117) & Willard Street





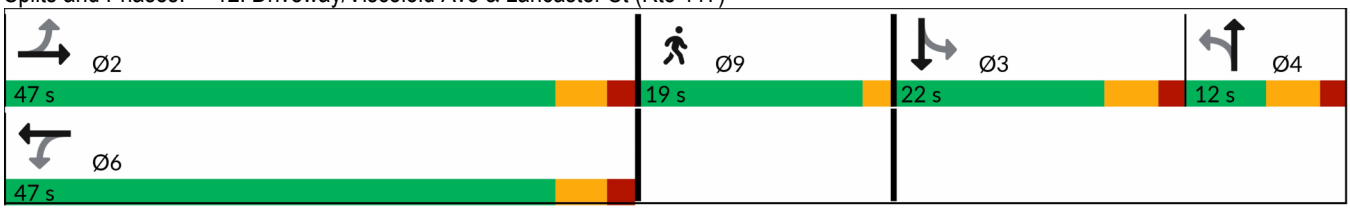
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	499	0	0	295	94	0	0	0	111	0	91
Future Volume (vph)	157	499	0	0	295	94	0	0	0	111	0	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	0	0	1734	0	0	1900	0	0	1629	0
Flt Permitted	0.417										0.950	
Satd. Flow (perm)	762	1827	0	0	1734	0	0	1900	0	0	1591	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					19						120	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		690			943			166			748	
Travel Time (s)		13.4			18.4			3.8			17.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	0%	0%	4%	12%	0%	0%	0%	7%	0%	6%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	542	0	0	423	0	0	0	0	0	220	0
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases	2			6			4			3		
Detector Phase	2	2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	47.0	47.0		47.0	47.0		12.0	12.0		22.0	22.0	
Total Split (%)	47.0%	47.0%		47.0%	47.0%		12.0%	12.0%		22.0%	22.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)	22.2	22.2			22.2						17.2	
Actuated g/C Ratio	0.41	0.41			0.41						0.32	
v/c Ratio	0.55	0.73			0.59						0.38	
Control Delay (s/veh)	20.8	20.5			16.1						12.8	
Queue Delay	0.0	0.0			0.0						0.0	
Total Delay (s/veh)	20.8	20.5			16.1						12.8	
LOS	C	C			B						B	
Approach Delay (s/veh)		20.5			16.1						12.8	
Approach LOS		C			B						B	
Queue Length 50th (ft)	34	118			81						19	
Queue Length 95th (ft)	125	330			236						121	
Internal Link Dist (ft)		610			863			86			668	
Turn Bay Length (ft)	50											
Base Capacity (vph)	614	1473			1401						583	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	19.0
Total Split (s)	19.0
Total Split (%)	19%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0			0						0	
Spillback Cap Reductn	0	0			0						0	
Storage Cap Reductn	0	0			0						0	
Reduced v/c Ratio	0.28	0.37			0.30						0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 54.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 17.9		Intersection LOS: B	
Intersection Capacity Utilization 74.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 12: Driveway/Viscoloid Ave & Lancaster St (Rte 117)



Lane Group	Ø9
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	12	11	365	471	9
Future Vol, veh/h	7	12	11	365	471	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	14	75	45	7	4	67
Mvmt Flow	8	13	12	397	512	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	938	517	522	0	-	0
Stage 1	517	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Critical Hdwy	6.54	6.95	4.55	-	-	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.975	2.605	-	-	-
Pot Cap-1 Maneuver	279	438	858	-	-	-
Stage 1	575	-	-	-	-	-
Stage 2	637	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	274	438	858	-	-	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	565	-	-	-	-	-
Stage 2	637	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.6	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	858	-	359	-	-
HCM Lane V/C Ratio	0.014	-	0.058	-	-
HCM Ctrl Dly (s/v)	9.3	0	15.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	12	0	0	0
Future Vol, veh/h	0	10	12	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	70	83	0	0	0
Mvmt Flow	0	11	13	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	27	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	26	-	-	-	-	-
Critical Hdwy	6.4	6.9	4.93	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.93	2.947	-	-	-
Pot Cap-1 Maneuver	993	915	1220	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	1002	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	982	915	1220	-	-	-
Mov Cap-2 Maneuver	982	-	-	-	-	-
Stage 1	1017	-	-	-	-	-
Stage 2	1002	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9	8	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1220	-	915	-	-
HCM Lane V/C Ratio	0.011	-	0.012	-	-
HCM Ctrl Dly (s/v)	8	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-

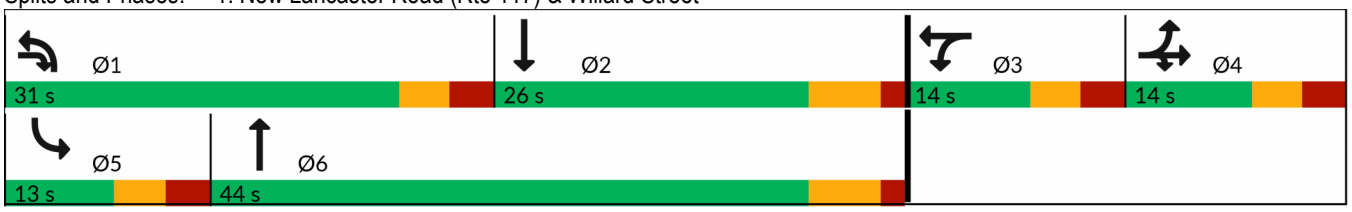
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	9	231	39	13	7	291	511	38	5	425	100
Future Volume (vph)	98	9	231	39	13	7	291	511	38	5	425	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		140	0		0	200		0	52		200
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			138		
Satd. Flow (prot)	0	1765	1524	0	1673	0	1736	1843	0	1805	3403	0
Flt Permitted		0.956			0.968		0.950			0.950		
Satd. Flow (perm)	0	1765	1524	0	1655	0	1734	1843	0	1805	3403	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232		7			6			31	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		712			842			797			2256	
Travel Time (s)		16.2			19.1			12.1			34.2	
Confl. Peds. (#/hr)			6	6			1					1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	13%	6%	0%	18%	33%	4%	2%	3%	0%	2%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	251	0	64	0	316	596	0	5	571	0
Turn Type	Split	NA	pt+ov	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4	4 1	3	3		1	6		5	2	
Permitted Phases												
Detector Phase	4	4	4 1	3	3		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		8.0	8.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	12.0	12.0		14.0	14.0		12.0	16.0		12.0	16.0	
Total Split (s)	14.0	14.0		14.0	14.0		31.0	44.0		13.0	26.0	
Total Split (%)	16.5%	16.5%		16.5%	16.5%		36.5%	51.8%		15.3%	30.6%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	4.5		3.2	4.5	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.8	1.5		2.8	1.5	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)		7.9	31.5		8.6		17.1	37.4		6.4	15.8	
Actuated g/C Ratio		0.12	0.47		0.13		0.25	0.56		0.10	0.24	
v/c Ratio		0.56	0.30		0.29		0.72	0.58		0.03	0.69	
Control Delay (s/veh)		46.1	3.7		34.2		34.5	14.8		36.0	29.2	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		46.1	3.7		34.2		34.5	14.8		36.0	29.2	
LOS		D	A		C		C	B		D	C	
Approach Delay (s/veh)		17.2			34.2			21.6			29.3	
Approach LOS		B			C			C			C	
Queue Length 50th (ft)		52	5		25		134	169		2	122	
Queue Length 95th (ft)		#143	45		68		231	365		13	195	
Internal Link Dist (ft)		632			762			717			2176	
Turn Bay Length (ft)			140				200			52		

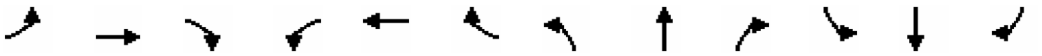
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		225	998		219		691	1172		201	1106	
Starvation Cap Reductn		0	0		0		0	0		0	0	
Spillback Cap Reductn		0	0		0		0	0		0	0	
Storage Cap Reductn		0	0		0		0	0		0	0	
Reduced v/c Ratio		0.52	0.25		0.29		0.46	0.51		0.02	0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 67.2			
Natural Cycle: 65			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay (s/veh): 23.5		Intersection LOS: C	
Intersection Capacity Utilization 59.1%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: New Lancaster Road (Rte 117) & Willard Street





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	430	0	0	584	109	0	0	0	148	0	269
Future Volume (vph)	177	430	0	0	584	109	0	0	0	148	0	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1787	1863	0	0	1821	0	0	1900	0	0	1671	0
Flt Permitted	0.217										0.950	
Satd. Flow (perm)	408	1863	0	0	1821	0	0	1900	0	0	1615	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					11						120	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		690			943			166			748	
Travel Time (s)		15.7			21.4			3.8			17.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	2%	0%	0%	2%	3%	0%	0%	0%	4%	0%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	467	0	0	753	0	0	0	0	0	453	0
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases	2			6			4			3		
Detector Phase	2	2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	47.0	47.0		47.0	47.0		12.0	12.0		22.0	22.0	
Total Split (%)	47.0%	47.0%		47.0%	47.0%		12.0%	12.0%		22.0%	22.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)	41.4	41.4			41.4						16.2	
Actuated g/C Ratio	0.57	0.57			0.57						0.22	
v/c Ratio	0.83	0.44			0.72						1.00	
Control Delay (s/veh)	47.4	12.1			18.5						67.9	
Queue Delay	0.0	0.0			0.0						0.0	
Total Delay (s/veh)	47.4	12.1			18.5						67.9	
LOS	D	B			B						E	
Approach Delay (s/veh)		22.4			18.5						67.9	
Approach LOS		C			B						E	
Queue Length 50th (ft)	55	95			193						144	
Queue Length 95th (ft)	#244	268			#595						#428	
Internal Link Dist (ft)		610			863			86			668	
Turn Bay Length (ft)	50											
Base Capacity (vph)	232	1059			1040						451	

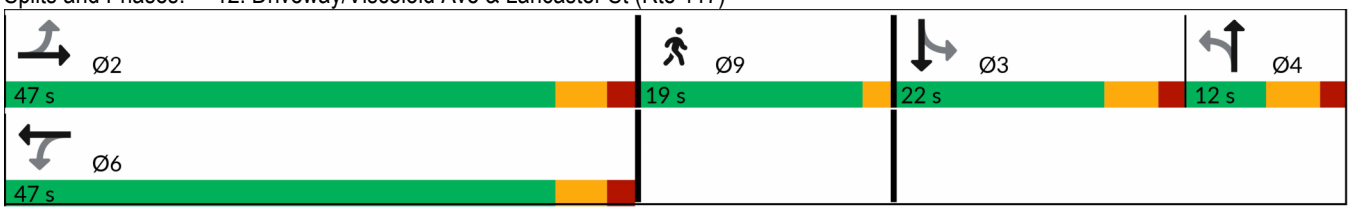
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	19.0
Total Split (s)	19.0
Total Split (%)	19%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0			0						0	
Spillback Cap Reductn	0	0			0						0	
Storage Cap Reductn	0	0			0						0	
Reduced v/c Ratio	0.83	0.44			0.72						1.00	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 72.8			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 31.9		Intersection LOS: C	
Intersection Capacity Utilization 99.7%		ICU Level of Service F	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: Driveway/Viscoloid Ave & Lancaster St (Rte 117)



Lane Group	Ø9
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	10	5	652	478	4
Future Vol, veh/h	20	10	5	652	478	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	25	10	0	2	1	50
Mvmt Flow	22	11	5	709	520	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1241	522	524	0	-	0
Stage 1	522	-	-	-	-	-
Stage 2	719	-	-	-	-	-
Critical Hdwy	6.65	6.3	4.1	-	-	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.39	2.2	-	-	-
Pot Cap-1 Maneuver	173	539	1053	-	-	-
Stage 1	551	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	172	539	1053	-	-	-
Mov Cap-2 Maneuver	172	-	-	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	443	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	24	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1053	-	222	-	-
HCM Lane V/C Ratio	0.005	-	0.147	-	-
HCM Ctrl Dly (s/v)	8.4	0	24	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	9	3	0	0	0
Future Vol, veh/h	0	9	3	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	44	100	0	0	0
Mvmt Flow	0	10	3	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	9	3	3	0	-	0
Stage 1	3	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.4	6.64	5.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.696	3.1	-	-	-
Pot Cap-1 Maneuver	1017	970	1158	-	-	-
Stage 1	1025	-	-	-	-	-
Stage 2	1022	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	1010	968	1156	-	-	-
Mov Cap-2 Maneuver	1010	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1020	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.8	8.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1156	-	968	-	-
HCM Lane V/C Ratio	0.003	-	0.01	-	-
HCM Ctrl Dly (s/v)	8.1	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0	-	-

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APPENDIX I

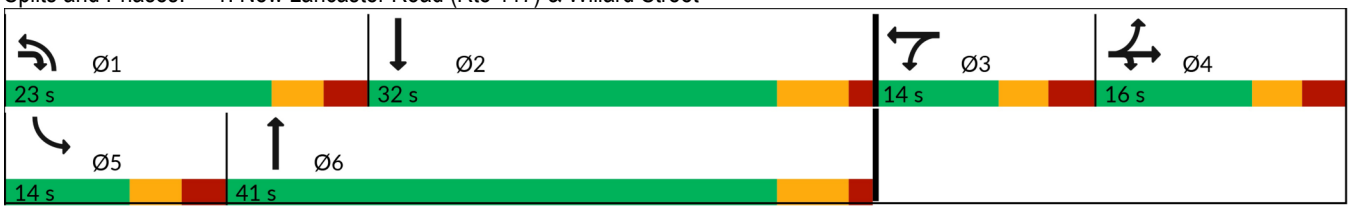
2032 BUILD CAPACITY/ LEVEL-OF-SERVICE ANALYSIS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	7	199	28	8	5	124	362	28	2	385	57
Future Volume (vph)	75	7	199	28	8	5	124	362	28	2	385	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		140	0		0	200		0	52		200
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			138		
Satd. Flow (prot)	0	1753	1553	0	1681	0	1719	1686	0	1805	3198	0
Flt Permitted		0.956			0.967		0.950			0.950		
Satd. Flow (perm)	0	1753	1553	0	1681	0	1719	1686	0	1805	3198	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			216		5			5			20	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		712			842			797			2256	
Travel Time (s)		16.2			19.1			12.1			34.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	0%	4%	4%	13%	20%	5%	12%	4%	0%	11%	9%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	90	216	0	44	0	135	423	0	2	480	0
Turn Type	Split	NA	pt+ov	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4	4 1	3	3		1	6		5	2	
Permitted Phases												
Detector Phase	4	4	4 1	3	3		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		8.0	8.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	12.0	12.0		14.0	14.0		12.0	16.0		12.0	16.0	
Total Split (s)	16.0	16.0		14.0	14.0		23.0	41.0		14.0	32.0	
Total Split (%)	18.8%	18.8%		16.5%	16.5%		27.1%	48.2%		16.5%	37.6%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	4.5		3.2	4.5	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.8	1.5		2.8	1.5	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)		7.9	24.0		8.7		9.6	28.7		6.5	14.4	
Actuated g/C Ratio		0.14	0.41		0.15		0.16	0.49		0.11	0.25	
v/c Ratio		0.38	0.28		0.17		0.48	0.51		0.01	0.60	
Control Delay (s/veh)		32.9	3.7		28.6		31.9	15.6		32.0	23.8	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		32.9	3.7		28.6		31.9	15.6		32.0	23.8	
LOS		C	A		C		C	B		C	C	
Approach Delay (s/veh)		12.3			28.6			19.5			23.8	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)		32	0		14		48	107		1	84	
Queue Length 95th (ft)		87	40		49		112	259		8	146	
Internal Link Dist (ft)		632			762			717			2176	
Turn Bay Length (ft)			140				200			52		
Base Capacity (vph)		324	904		253		541	1094		267	1550	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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		0.28	0.24		0.17		0.25	0.39		0.01	0.31	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 58.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 19.7		Intersection LOS: B	
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: New Lancaster Road (Rte 117) & Willard Street



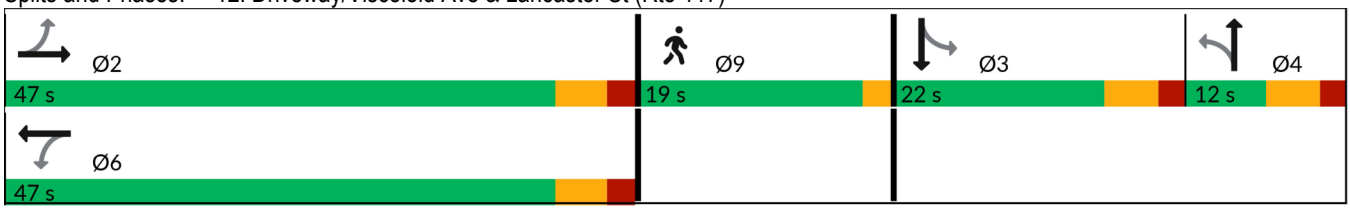
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	500	0	0	296	95	0	0	0	112	0	91
Future Volume (vph)	157	500	0	0	296	95	0	0	0	112	0	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	0	0	1738	0	0	1900	0	0	1638	0
Flt Permitted	0.415										0.950	
Satd. Flow (perm)	758	1827	0	0	1738	0	0	1900	0	0	1599	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					20						120	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		690			943			166			748	
Travel Time (s)		13.4			18.4			3.8			17.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	4%	4%	0%	0%	4%	11%	0%	0%	0%	7%	0%	5%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	543	0	0	425	0	0	0	0	0	221	0
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases	2			6			4			3		
Detector Phase	2	2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	47.0	47.0		47.0	47.0		12.0	12.0		22.0	22.0	
Total Split (%)	47.0%	47.0%		47.0%	47.0%		12.0%	12.0%		22.0%	22.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)	22.2	22.2			22.2						17.2	
Actuated g/C Ratio	0.41	0.41			0.41						0.31	
v/c Ratio	0.56	0.73			0.59						0.38	
Control Delay (s/veh)	20.9	20.5			16.0						12.8	
Queue Delay	0.0	0.0			0.0						0.0	
Total Delay (s/veh)	20.9	20.5			16.0						12.8	
LOS	C	C			B						B	
Approach Delay (s/veh)		20.6			16.0						12.8	
Approach LOS		C			B						B	
Queue Length 50th (ft)	34	118			81						20	
Queue Length 95th (ft)	125	331			237						121	
Internal Link Dist (ft)		610			863			86			668	
Turn Bay Length (ft)	50											
Base Capacity (vph)	611	1472			1404						585	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	19.0
Total Split (s)	19.0
Total Split (%)	19%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0			0						0	
Spillback Cap Reductn	0	0			0						0	
Storage Cap Reductn	0	0			0						0	
Reduced v/c Ratio	0.28	0.37			0.30						0.38	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 54.7			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 17.9		Intersection LOS: B	
Intersection Capacity Utilization 74.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 12: Driveway/Viscoloid Ave & Lancaster St (Rte 117)



Lane Group	Ø9
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	26	25	365	471	11
Future Vol, veh/h	9	26	25	365	471	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	33	88	76	6	3	73
Mvmt Flow	10	28	27	397	512	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	969	518	524	0	-	0
Stage 1	518	-	-	-	-	-
Stage 2	451	-	-	-	-	-
Critical Hdwy	6.73	7.08	4.86	-	-	-
Critical Hdwy Stg 1	5.73	-	-	-	-	-
Critical Hdwy Stg 2	5.73	-	-	-	-	-
Follow-up Hdwy	3.797	4.092	2.884	-	-	-
Pot Cap-1 Maneuver	247	420	753	-	-	-
Stage 1	540	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	236	420	753	-	-	-
Mov Cap-2 Maneuver	236	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	16.5	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	753	-	350	-	-
HCM Lane V/C Ratio	0.036	-	0.109	-	-
HCM Ctrl Dly (s/v)	10	0	16.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	26	28	0	0	0
Future Vol, veh/h	0	26	28	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	88	93	0	0	0
Mvmt Flow	0	28	30	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	61	1	1	0	-	0
Stage 1	1	-	-	-	-	-
Stage 2	60	-	-	-	-	-
Critical Hdwy	6.4	7.08	5.03	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	4.092	3.037	-	-	-
Pot Cap-1 Maneuver	950	879	1184	-	-	-
Stage 1	1028	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	926	879	1184	-	-	-
Mov Cap-2 Maneuver	926	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	968	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.2	8.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1184	-	879	-	-
HCM Lane V/C Ratio	0.026	-	0.032	-	-
HCM Ctrl Dly (s/v)	8.1	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0.1	-	0.1	-	-

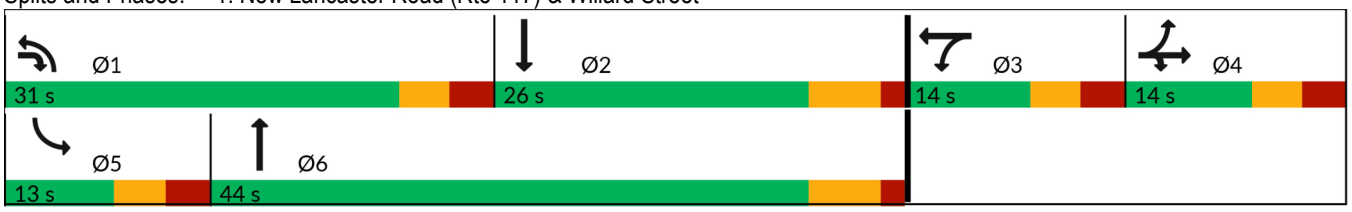
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	9	231	39	13	7	291	516	38	5	430	100
Future Volume (vph)	98	9	231	39	13	7	291	516	38	5	430	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		140	0		0	200		0	52		200
Storage Lanes	0		1	0		0	1		0	1		1
Taper Length (ft)	25			25			25			138		
Satd. Flow (prot)	0	1767	1524	0	1691	0	1752	1826	0	1805	3386	0
Flt Permitted		0.956			0.968		0.950			0.950		
Satd. Flow (perm)	0	1767	1524	0	1673	0	1751	1826	0	1805	3386	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			231		7			6			31	
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		712			842			797			2256	
Travel Time (s)		16.2			19.1			12.1			34.2	
Confl. Peds. (#/hr)			6	6			1					1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	11%	6%	0%	15%	29%	3%	3%	3%	0%	3%	4%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	251	0	64	0	316	602	0	5	576	0
Turn Type	Split	NA	pt+ov	Split	NA		Prot	NA		Prot	NA	
Protected Phases	4	4	4 1	3	3		1	6		5	2	
Permitted Phases												
Detector Phase	4	4	4 1	3	3		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		8.0	8.0		6.0	10.0		6.0	10.0	
Minimum Split (s)	12.0	12.0		14.0	14.0		12.0	16.0		12.0	16.0	
Total Split (s)	14.0	14.0		14.0	14.0		31.0	44.0		13.0	26.0	
Total Split (%)	16.5%	16.5%		16.5%	16.5%		36.5%	51.8%		15.3%	30.6%	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	4.5		3.2	4.5	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.8	1.5		2.8	1.5	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
Act Effct Green (s)		7.9	31.4		8.6		17.1	37.5		6.4	15.9	
Actuated g/C Ratio		0.12	0.47		0.13		0.25	0.56		0.10	0.24	
v/c Ratio		0.56	0.30		0.29		0.71	0.59		0.03	0.70	
Control Delay (s/veh)		46.1	3.8		34.2		34.4	15.0		36.0	29.3	
Queue Delay		0.0	0.0		0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)		46.1	3.8		34.2		34.4	15.0		36.0	29.3	
LOS		D	A		C		C	B		D	C	
Approach Delay (s/veh)		17.2			34.2			21.7			29.4	
Approach LOS		B			C			C			C	
Queue Length 50th (ft)		52	5		25		134	173		2	123	
Queue Length 95th (ft)		#143	46		68		231	374		13	198	
Internal Link Dist (ft)		632			762			717			2176	
Turn Bay Length (ft)			140				200			52		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Base Capacity (vph)		225	998		221		698	1161		201	1100	
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		0.52	0.25		0.29		0.45	0.52		0.02	0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 67.3			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 23.6		Intersection LOS: C	
Intersection Capacity Utilization 59.4%		ICU Level of Service B	
Analysis Period (min) 15			

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: New Lancaster Road (Rte 117) & Willard Street



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	430	0	0	584	110	0	0	0	149	0	269
Future Volume (vph)	177	430	0	0	584	110	0	0	0	149	0	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1787	1881	0	0	1818	0	0	1900	0	0	1669	0
Flt Permitted	0.216										0.950	
Satd. Flow (perm)	406	1881	0	0	1818	0	0	1900	0	0	1615	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					12						120	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		690			943			166			748	
Travel Time (s)		15.7			21.4			3.8			17.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	0%	0%	2%	4%	0%	0%	0%	4%	0%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	192	467	0	0	755	0	0	0	0	0	454	0
Turn Type	Perm	NA			NA					Perm	NA	
Protected Phases		2			6			4			3	
Permitted Phases	2			6			4			3		
Detector Phase	2	2		6	6		4	4		3	3	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Total Split (s)	47.0	47.0		47.0	47.0		12.0	12.0		22.0	22.0	
Total Split (%)	47.0%	47.0%		47.0%	47.0%		12.0%	12.0%		22.0%	22.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0			6.0			6.0			6.0	
Lead/Lag							Lag	Lag		Lead	Lead	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	None		None	None	
Act Effct Green (s)	41.4	41.4			41.4						16.2	
Actuated g/C Ratio	0.57	0.57			0.57						0.22	
v/c Ratio	0.83	0.44			0.73						1.01	
Control Delay (s/veh)	48.1	12.0			18.6						68.5	
Queue Delay	0.0	0.0			0.0						0.0	
Total Delay (s/veh)	48.1	12.0			18.6						68.5	
LOS	D	B			B						E	
Approach Delay (s/veh)		22.5			18.6						68.5	
Approach LOS		C			B						E	
Queue Length 50th (ft)	56	95			194						145	
Queue Length 95th (ft)	#244	267			#598						#429	
Internal Link Dist (ft)		610			863			86			668	
Turn Bay Length (ft)	50											
Base Capacity (vph)	231	1069			1039						451	

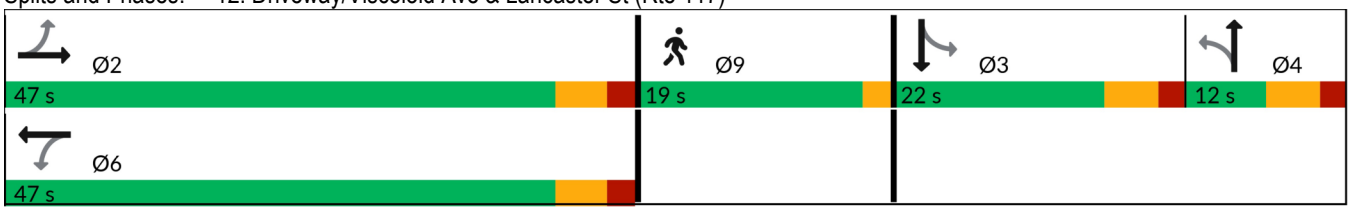
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	5.0
Minimum Split (s)	19.0
Total Split (s)	19.0
Total Split (%)	19%
Yellow Time (s)	2.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay (s/veh)	
Queue Delay	
Total Delay (s/veh)	
LOS	
Approach Delay (s/veh)	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Starvation Cap Reductn	0	0			0						0	
Spillback Cap Reductn	0	0			0						0	
Storage Cap Reductn	0	0			0						0	
Reduced v/c Ratio	0.83	0.44			0.73						1.01	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 72.8			
Natural Cycle: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 32.1		Intersection LOS: C	
Intersection Capacity Utilization 99.8%		ICU Level of Service F	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 12: Driveway/Viscoloid Ave & Lancaster St (Rte 117)



Lane Group	Ø9
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	15	10	652	478	5
Future Vol, veh/h	21	15	10	652	478	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	29	40	50	1	1	60
Mvmt Flow	23	16	11	709	520	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1254	523	525	0	-	0
Stage 1	523	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Critical Hdwy	6.69	6.6	4.6	-	-	-
Critical Hdwy Stg 1	5.69	-	-	-	-	-
Critical Hdwy Stg 2	5.69	-	-	-	-	-
Follow-up Hdwy	3.761	3.66	2.65	-	-	-
Pot Cap-1 Maneuver	167	486	837	-	-	-
Stage 1	544	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	163	486	837	-	-	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	431	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	24.3	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	837	-	225	-	-
HCM Lane V/C Ratio	0.013	-	0.174	-	-
HCM Ctrl Dly (s/v)	9.4	0	24.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0	-	0.6	-	-

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	15	9	0	0	0
Future Vol, veh/h	0	15	9	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	67	100	0	0	0
Mvmt Flow	0	16	10	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	23	3	3	0	-	0
Stage 1	3	-	-	-	-	-
Stage 2	20	-	-	-	-	-
Critical Hdwy	6.4	6.87	5.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.903	3.1	-	-	-
Pot Cap-1 Maneuver	998	919	1158	-	-	-
Stage 1	1025	-	-	-	-	-
Stage 2	1008	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	985	917	1156	-	-	-
Mov Cap-2 Maneuver	985	-	-	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	1006	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9	8.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1156	-	917	-	-
HCM Lane V/C Ratio	0.008	-	0.018	-	-
HCM Ctrl Dly (s/v)	8.1	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q (veh)	0	-	0.1	-	-

Bowman

APPENDIX J

CAPACITY/LEVEL-OF-SERVICE ANALYSIS SUMMARY

CAPACITY ANALYSIS SUMMARY

Weekday Morning Peak Hour
Solid Waste Facility Tonnage Expansion
Leominster, MA

			2025 Existing			2032 No Build			2032 Build		
Intersection	**Movement**		**LOS[1]**	**Delay[2]**	**V/C[3]**	**LOS**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**
New Lancaster Rd (Rte 117) at	EB	LT	C	29.4	0.32	C	32.1	0.37	C	32.9	0.38
Willard St		R	A	3.6	0.26	A	3.7	0.28	A	3.7	0.28
	WB	LTR	C	26.0	0.17	C	28.1	0.17	C	28.6	0.17
	NB	L	C	29.6	0.42	C	31.4	0.48	C	31.9	0.48
		TR	B	14.9	0.42	B	15.3	0.49	B	15.6	0.51
	SB	L	C	29.0	0.01	C	31.5	0.01	C	32.0	0.01
		TR	C	22.4	0.53	C	23.6	0.58	C	23.8	0.60
	Overall		*B*	*18.5*	*0.46*	*B*	*19.4*	*0.49*	*B*	*19.7*	*0.50*
Lancaster St (Rte 117) at	EB	LR	B	14.6	0.06	C	15.6	0.06	C	16.5	0.11
Tanzio Rd	NB	LT	A	0.3	0.01	A	0.3	0.01	A	0.6	0.04
	SB	TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
Lancaster St (Rte 117) at	EB	LTR	B	19.4	0.69	C	20.5	0.73	C	20.6	0.73
Viscoloid Ave	WB	LTR	B	15.8	0.54	B	16.1	0.59	B	16.0	0.59
	NB	LTR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
	SB	LTR	B	10.9	0.34	B	12.8	0.38	B	12.8	0.38
	Overall		*B*	*16.8*	*0.67*	*B*	*17.9*	*0.74*	*B*	*17.9*	*0.75*
Tanzio Rd at	EB	LR	A	9.0	0.01	A	9.0	0.01	A	9.2	0.03
Site Driveway	NB	LT	A	8.0	0.01	A	8.0	0.01	A	8.1	0.03
	SB	TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00

1 Level-of-Service

2 Average vehicle delay, in seconds

3 Volume to capacity ratio

n/a Not Applicable

QUEUE SUMMARY

Weekday Morning Peak Hour
Solid Waste Facility Tonnage Expansion
Leominster, MA

Intersection	Movement		2025 Existing 50th Q[1]	2025 Existing 95th Q[2]	2032 No Build 50th Q	2032 No Build 95th Q	2032 Build 50th Q	2032 Build 95th Q
New Lancaster Rd (Rte 117) at Willard St	EB	LT	26	70	31	83	32	87
		R	0	36	0	39	0	40
	WB	LTR	12	40	13	48	14	49
	NB	L	37	91	47	110	48	112
		TR	78	203	101	247	107	259
	SB	L	1	7	1	7	1	8
		TR	66	119	81	141	84	146
Lancaster St (Rte 117) at Tanzio Rd	EB	LR	n/a	5	n/a	5	n/a	10
	NB	LT	n/a	0	n/a	0	n/a	3
	SB	TR	n/a	0	n/a	0	n/a	0
Lancaster St (Rte 117) at Viscoloid Ave	EB	LTR	96	276	118	330	118	331
	WB	LTR	64	195	81	236	81	237
	NB	LTR	0	0	0	0	0	0
	SB	LTR	14	92	19	121	20	121
Tanzio Rd at Site Driveway	EB	LR	n/a	0	n/a	0	n/a	3
	NB	LT	n/a	0	n/a	0	n/a	3
	SB	TR	n/a	0	n/a	0	n/a	0

1 50th percentile queue length, in feet

2 95th percentile queue length, in feet

n/a Not Applicable

CAPACITY ANALYSIS SUMMARY

Weekday Afternoon Peak Hour
Solid Waste Facility Tonnage Expansion
Leominster, MA

			2025 Existing			2032 No Build			2032 Build		
Intersection	**Movement**		**LOS[1]**	**Delay[2]**	**V/C[3]**	**LOS**	**Delay**	**V/C**	**LOS**	**Delay**	**V/C**
New Lancaster Rd (Rte 117) at	EB	LT	D	39.7	0.47	D	46.1	0.56	D	46.1	0.56
Willard St		R	A	3.2	0.27	A	3.7	0.30	A	3.8	0.30
	WB	LTR	C	32.1	0.28	C	34.2	0.29	C	34.2	0.29
	NB	L	C	32.3	0.66	C	34.5	0.72	C	34.4	0.71
		TR	B	14.0	0.51	B	14.8	0.58	B	15.0	0.59
	SB	L	C	34.3	0.02	D	36.0	0.03	D	36.0	0.03
		TR	C	26.4	0.62	C	29.2	0.69	C	29.3	0.70
	Overall		*C*	*21.6*	*0.55*	*C*	*23.5*	*0.59*	*C*	*23.6*	*0.59*
Lancaster St (Rte 117) at	EB	LR	C	20.2	0.14	C	24.0	0.15	C	24.3	0.17
Tanzio Rd	NB	LT	A	0.1	0.01	A	0.1	0.01	A	0.1	0.01
	SB	TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
Lancaster St (Rte 117) at	EB	LTR	B	14.4	0.39	C	22.4	0.44	C	22.5	0.44
Viscoloid Ave	WB	LTR	B	15.4	0.63	B	18.5	0.72	B	18.6	0.73
	NB	LTR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
	SB	LTR	D	37.9	0.84	E	67.9	1.00	E	68.5	1.01
	Overall		*C*	*20.3*	*0.89*	*C*	*31.9*	*1.00*	*C*	*32.1*	*1.00*
Tanzio Rd at	EB	LR	A	8.8	0.01	A	8.8	0.01	A	9.0	0.02
Site Driveway	NB	LT	A	8.1	0.00	A	8.1	0.00	A	8.1	0.01
	SB	TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00

1 Level-of-Service

2 Average vehicle delay, in seconds

3 Volume to capacity ratio

n/a Not Applicable

QUEUE SUMMARY

Weekday Afternoon Peak Hour
Solid Waste Facility Tonnage Expansion
Leominster, MA

			2025 Existing		2032 No Build		2032 Build	
Intersection	**Movement**		**50th Q[1]**	**95th Q[2]**	**50th Q**	**95th Q**	**50th Q**	**95th Q**
New Lancaster Rd (Rte 117) at	EB	LT	40	113	52	143	52	143
Willard St		R	0	37	5	45	5	46
	WB	LTR	23	60	25	68	25	68
	NB	L	105	196	134	231	134	231
		TR	135	294	169	365	173	374
	SB	L	2	12	2	13	2	13
		TR	95	162	122	195	123	198
Lancaster St (Rte 117) at	EB	LR	n/a	13	n/a	13	n/a	15
Tanzio Rd	NB	LT	n/a	0	n/a	0	n/a	0
	SB	TR	n/a	0	n/a	0	n/a	0
Lancaster St (Rte 117) at	EB	LTR	82	233	95	268	95	267
Viscoloid Ave	WB	LTR	153	430	193	595	194	598
	NB	LTR	0	0	0	0	0	0
	SB	LTR	104	328	144	428	145	429
Tanzio Rd at	EB	LR	n/a	0	n/a	0	n/a	3
Site Driveway	NB	LT	n/a	0	n/a	0	n/a	0
	SB	TR	n/a	0	n/a	0	n/a	0

1 50th percentile queue length, in feet

2 95th percentile queue length, in feet

n/a Not Applicable

ATTACHMENT 4

SOUND STUDY

TECH environmental
FOCUSED KNOWLEDGE. REAL SOLUTIONS.

MEMORANDUM

To: Laura A. Bugay, Green Seal Environmental
From: Tech Environmental
Date: August 13, 2025
Subject: UMML Sound Study for DEIR Ref. 4885

A sound study was performed for the proposed tonnage expansions for the United Materials Management of Leominster (UMML) (the Facility) at 200 Tanzio Road, Leominster, MA as part of the Environmental Notification Form (ENF) submittal. This memorandum provides updates to the study to address the comments provided in the ENF certificate. The original sound study, dated July 2, 2024, is attached to this memorandum for completeness.

The Facility consists of a 32,400 square foot ("sf") solid waste transfer/waste handling building (including 1,260 sf of attached office space for a total footprint of 33,660 sf). The Facility is located on 13.46 acres of land of which 11.33 acres are site assigned per 310 CMR 16.00 as a solid waste handling facility. The Facility is designed to accept MSW and C&D delivered by truck for subsequent transfer into rail cars and secondarily as conditions dictate, larger trucks for transport to various locations throughout the country for disposal and/or recycling.

As per the Certificate of the Secretary of Energy and Environmental Affairs (EEA) on the ENF dated December 9, 2024 the following comments are addressed herein:

1. Include noise from additional truck traffic along local roads.
2. Include mitigation measures to be implemented as part of the expanded operations.

As stated previously, UMML intends to increase their permitted daily tonnage from 1,000 tpd (300,000 tons annually) to 1,500 tpd of C&D and MSW with a maximum annualized capacity of 450,000 tons. Based on the traffic analysis the net change in haul trucks traveling to and from the facility is expected to be no more than forty-four (44) per hour during normal daytime periods. And during end-of-day periods there would be no more than sixteen (16) trucks from 3:00 p.m. to 4:00 p.m., four (4) trucks from 4:00 p.m. to 5:00 p.m. and zero trucks from 5:00 p.m. to 7:00 p.m.

As per Table 1 on the next page, the increase in truck traffic due to the Facility tonnage expansion would only lead to a 3.7% increase in vehicle volume at New Lancaster Road and Tanzio Road, this is based on the rail not being used for out bound materials (worst- case scenario). This small increase in vehicle volume would generate a negligible increase in traffic noise. Please note that the increased truck traffic would need to more than double to generate a perceptible change in ambient noise (i.e., 3 dBA or greater). Therefore, truck traffic will result in a de minimis increase in sound.

Table 1: Facility Impacts on Traffic at New Lancaster Road and Tanzio Road Intersection

Peak Hour	2032 No-Build (vehicle volume)	2032 Build (vehicle volume)	Percent Increase in Traffic
AM	875	907	3.7%
PM	1169	1181	1.0%

As presently approved, the Facility operation hours are limited to six (6) days per week and accept waste only from 6:00 a.m. to 7:00 p.m. Monday through Friday, and from 7:00 a.m. to 3:00 p.m. on Saturdays.

UMML plans to employ the following Best Management Practices and Mitigation to minimize noise impacts to nearby residential receptors:

1. Limiting any noise created from the Facility to the days and hours presented above.
2. Waste-handling and processing activities will continue to consist of the unloading of MSW and C&D waste inside the Facility.
3. The railcar mover operates primarily outside the Facility, and intermittently moves rail cars into and out of the Facility, but not prior to 6:00 a.m.
4. To limit the sound of tailgates slamming, all trucks shall remain inside the receiving building while they close their tailgate unless the trucks are equipped with tailgate seals or gasketing. Although the Facility cannot require seals or gasketing, Some trucks, MSW dump trucks in particular often have sealed tailgates to minimize potential leachate.
5. A front-end loader or skid steer will not operate outside the building prior to 6:00 a.m.
6. Even though maximum sound levels are modeled as part of the permitting process, the Facility will operate all equipment at reduced speeds to minimize wear and tear, which also equates to lower sound levels.
7. Ventilation fans and motors are located inside the Facility and exhaust under positive pressure through vents on the walls of the Facility.
8. Roll-up doors used for truck tipping activities or for rail cars entering or exiting the indoor loadout area are typically kept closed, except during peak operating hours when bays receive multiple access requests per hour. For the purpose of a conservative sound study analysis, the doors were assumed to remain open continuously for an hour or more in order to evaluate the reasonable worst-case scenario.
9. The facility will store vendor recommended spare parts on-site for the garage doors to minimize potential door time when a truck inevitably backs into or bumps into a door damaging it.
10. One of the three overhead tipping doors will remain closed after 4 PM simply because the access door demand will decrease at the end of the day based on current operations and hourly truck distribution patterns.
11. The Facility will re-educate haulers on hours of operation and discourage the arrival of early trucks to the Facility. Any early-arriving trucks are given a warning to not repeat early arrival. After multiple warnings the Facility can elect to refuse access to the facility. If they do arrive early, they are required to queue on-site only and turn off the engines in accordance with the Massachusetts anti-idling law until the facility opens.

This original sound study demonstrates that the Facility with the proposed increase in throughput, pursuant to 310 CMR 16.40(4)(g), will not cause a nuisance sound condition which would constitute a danger to public health, safety, or the environment. This assessment shows that the impacts from all sounds due to the Project demonstrate compliance with the MassDEP Noise Policy and the Leominster Noise Ordinance and therefore will not cause a condition of noise pollution.

ATTACHMENT 5

ODOR STUDY

TECH environmental
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MEMORANDUM

To: Laura A. Bugay, Green Seal Environmental
From: Tech Environmental
Date: July 29, 2025
Subject: Odor Study Update for United Materials Management of Leominster (UMML)Ref. 4885

This memorandum provides an update to the original odor study to address comments presented in the Environmental Notification Form (ENF) certificate. The original study, dated July 10, 2024, was prepared for the proposed expansion in permitted tonnage at the United Materials Management of Leominster (UMML) facility located at 200 Tanzio Road, Leominster, MA. A copy of that study is attached for reference.

Facility Overview
UMML currently operates a municipal solid waste (MSW) and construction and demolition (C&D) waste transfer station with a permitted capacity of 1,000 tons per day (tpd) at the Leominster site. The Facility includes a 32,400-square-foot waste handling and transfer building, which houses 1,260 square feet of office space (totaling a footprint of 33,660 square feet). The site also includes a rail yard, scale house, vehicle scales, paved access roads, parking areas, and other supporting infrastructure.

The Facility occupies two parcels totaling 13.46 acres, of which 11.33 acres are site-assigned as a solid waste handling facility under 310 CMR 16.00. The Facility is designed to receive MSW and C&D waste by truck for subsequent transfer to railcars and, as needed, to larger trucks for transportation to off-site disposal or recycling locations.

ENF Certificate Comments and Responses
The Certificate of the Secretary of Energy and Environmental Affairs (dated December 9, 2024) requested that the following four odor-related items be addressed in the Draft Environmental Impact Report (DEIR):

1. Discussion of odor potential from railcars stored onsite prior to pickup.
2. Review of historical odor complaints and incidents.
3. Description of odor Best Management Practices (BMPs) and proposed mitigation measures.
4. Evaluation of facility operations to ensure MSW stored overnight on the tipping floor can be adequately mitigated with odor controls.
5. Respond to odor-related public comments.

Comment 1 – Odor Potential from Railcars

UMML is seeking approval to increase the Facility's permitted daily capacity from 1,000 tpd (300,000 tons/year) to 1,500 tpd (450,000 tons/year) of MSW and C&D. Although throughput will increase, the number of railcars stored onsite remains limited by existing yard capacity and logistical constraints, such as the number of available sidings and the need for railcar maneuverability.

In the original odor model, railcars were excluded due to their de minimis contribution to total site odors. In response to the ENF comments, Tech has revised the model to include railcars. The updated modeling confirms that, with adherence to BMPs—particularly waste covering and timely railcar rotation—odors from railcars remain negligible.

It is acknowledged that enclosed railcars can reach elevated internal temperatures, especially on sunny days, increasing internal odor concentrations. However, detectable odors are generally confined to areas within a few feet of the cars and dissipate quickly due to the low emission rate. To illustrate this concept, imagine a waste-hauling railcar outdoors that heats up from 60 degrees F to a covered internal temperature of 150 F over a two-to-four-hour period. At 6,500 cubic feet of volume and an expansion ratio rounded up to 1.2, the flow rate from breathing losses would be approximately 5 to 10 cubic feet per minute, which means essentially that all breathing losses could only move off-site with wind and mixing. There is no possibility of a concentrated centerline plume with so little loading. Therefore, in order for the odor to be above detectable levels 100 feet away, the undiluted concentration coming out would need to 10,000 D/T or greater. Those odor concentrations are higher than one would typically see from second or third stage landfill gas decomposition.

Properly covering railcars effectively limits emissions from a combination of wind erosion and breathing losses to minor breathing losses. Conversely, incomplete coverage or open railcars can allow wind-induced flux and odor escape.

When BMPs are followed, modeled railcar contributions remain below 1 D/T (Dilution-to-Threshold ratio), which is within the margin of error for odor detection modeling.

Ideally, railcars are dispatched within 24 hours of being filled. Combined with first-in, first-out (FIFO) processing and limited floor storage (typically <600 tons overnight), MSW is rarely on-site for more than 24–48 hours, minimizing odor generation.

Comment 2 – Nuisance Complaint History

Based on the comments, Tech initially expected a much higher volume of complaints—both overall and confirmed. At first, the numbers appeared larger because complaints were submitted to multiple entities, including the Board of Health (BOH), MassDEP, and the facility itself. However, review of the records showed that many were duplicate reports of the same incident filed with more than one organization. Ultimately, between April 7, 2021, and March 18, 2025, there were only eleven (11) unique nuisance complaints. Of these, just six (6) related to odor—and all originated from the same location. This raises the question: is this individual unusually sensitive to odor?

Of the six odor complaints, four were investigated by the BOH or MassDEP for potential nuisance conditions. A summary of these investigations is provided in Table 1. None of the six odor complaints were "confirmed" as having nuisance potential. A brief discussion of each investigated odor complaint is provided below:

- **Odor Complaint #1 (4/7/2021):** Odor being "unbearable" Based upon records provided by the BOH or MassDEP, this complaint was not evaluated. **Unconfirmed complaint**.

- **Odor Complaint #2 (8/8/2021):** Garbage odor reported; MassDEP conducted site visits before and after the date and did not detect odors. **Unconfirmed complaint**.

- **Odor Complaint #3 (4/29/2023):** "Very strong odor" reported on the street, not at any dwelling. Wind direction variable; two MSW loads received that day. Based upon records provided by the BOH or MassDEP, this complaint was not evaluated. **Unconfirmed complaint.**

- **Odor Complaint #4 (9/6/2024):** Odor was stronger on 9/06/2024 and 9/20/2024. BOH reported that equipment was operating as intended. BOH responded and found faint, intermittent odor present. Wind direction variable; two MSW loads received that day. **Unconfirmed complaint.**

- **Odor Complaint #5 (9/23/2024):** General odor complaint made, cited 9/6/24 around 2pm and 9/20/24 for majority of the day. Wind direction (W/NW) was away from the complainant's location. The BOH determined that there was some intermittent odor noted around the facility. **Unconfirmed complaint.**

- **Odor Complaint #6 (3/18/2025):** "Sour Stench" reported all day. Wind direction (W/NW) was away from the complainant's location with average wind speeds in the 10-15 mph range with gusts of 20-30 mph. While this complaint was not examined, it is simply unrealistic to think that this facility could cause an odor "all day" in the opposite direction of a sustained wind with high gusts. **Unconfirmed complaint.**

Although odor was noted during two of the complaint evaluations, in both instances it was either very faint or extremely intermittent. These observations cannot reasonably be considered confirmations of nuisance potential. Even if we were to count these two faint detections as "confirmed" complaints, the occurrence rate would be only about 0.1% of the time. Over the full period for which complaint logs were available, all nuisance complaints—whether for odor, dust, open doors, noise, or other issues—occurred on less than 1% of the total days. Furthermore, all odor complaints originated from a single individual. These findings support the assertion made in the ENF, and reiterated here, that validated odor complaints since startup have been minimal.

Comment 3 – Odor Best Management Practices (BMPs) and Mitigation Measures
Tech has identified the following BMPs as essential to minimizing odor emissions:

1. **First-In, First-Out Waste Handling:** Ensures no waste remains on the tipping floor for extended periods, limiting decomposition and odor generation.

2. **Indoor Waste Handling:** All transfer activities occur indoors, preventing wind from dispersing odors.

3. **Routine Housekeeping:** Daily cleaning prevents buildup of residual waste in corners and non-handling areas. Keeping the overnight floor storage volume low (typically <100 tons) allows for full cleaning and operational planning.

4. **Covering Railcars with Posi-Shell Indoors:** A spray-on Posi-Shell coating is applied to loaded railcars before they are moved outdoors. This minimizes wind-driven odor flux.

5. **Utilize overhead doors:** Close overhead doors if delivered loads are extra odorous.

These practices have proven effective at other sites and are essential for continued compliance and operational efficiency at UMML.

Lastly there is always the possibility of incorporating odor control if needed in the future, examples include;
1. Add carbon filters to air handling units for added odor control.
2. Add recirculating carbon units within the building.
3. Apply misting to the headspace above the active floor.

Comment 4 – Odor Dispersion Modeling
A revised dispersion modeling analysis was conducted to evaluate odor impacts, particularly under increased tonnage and inclusion of railcar emissions. The model assumed a worst-case scenario of 1,500 tpd MSW, although this is operationally unlikely due to the Facilities acceptance of C&D and C&D residuals in addition to MSW.

Floor Storage Scenarios Modeled:

- **150 tons:** Represents typical upper-end daily storage volume.
- **600 tons:** Current maximum permitted floor storage.

Under the 150-ton storage scenario, modeled odor levels remain below 5 D/T at all receptors, consistent with regulatory thresholds.

By contrast, the 600-ton scenario showed potential exceedances of the 5 D/T threshold approximately 5.5% of the time. However, this was based on a conservative assumption of continuous 600-ton storage, which does not reflect typical facility operations.

In practice, overnight floor storage typically remains below 100 tons. On rare occasions—such as during late deliveries or equipment downtime—storage levels may temporarily approach 600 tons, but such instances are expected to occur no more than once or twice per month. When these more realistic operational patterns are considered, the modeled exceedance rate drops significantly, to an estimated 0.2–0.4% of calendar days.

As a result of this analysis and considering that having 600 tons of material on the floor overnight would constitute an anomaly—such as an unusually high number of late-day deliveries—a threshold of 600 tons is reasonable for rare circumstances. However, the typical operational goal should remain at no more than 150 tons to minimize nuisance conditions. It is important to note that consistently storing 600 tons on the floor would compromise operational efficiency given the spatial constraints, making 150 tons a more realistic and sustainable daily target.

Conclusion

Updated modeling, complaint history analysis, and BMP implementation demonstrate that the UMML Facility operates with minimal odor impact to surrounding areas. Railcars, when managed correctly, contribute insignificantly to overall odor levels. Continued adherence to BMPs and proposed mitigation measures, coupled with periodic performance evaluations, will ensure the Facility will not cause an adverse impact to health, safety or the environment with respect to odors at nearby residential receptors.

Table 1: Submitted Facility Nuisance Complaints to Leominster Health Department, Board of Health (BOH) and Massachusetts Department of Environmental Protection (MassDEP)

Complaint ID	Location	Contacted Agency	Complaint Description	Response
1	Calza St	BOH/DEP	Odor: being "unbearable"	
2	Calza St	MassDEP	Odor of garbage waste in front of residence. Observed a hydraulic lull being used to move around railcars. Observed that atomized misting system wasn't being used.	MassDEP followed up with United Material on 8/10. Additionally, MassDEP was on-site on 8-6 and everything was in compliance with no odor violations.
3	NA	MassDEP	Noise and dust were reported to be coming from the facility and property on Saturday (9/18) and on Sunday about forklift being in operation. There was a complaint about the bay door being open and covered only by a tarp.	Misters were in operation on Saturday. Sunday operations with the forklift were due to a baler being repaired. The garage bay door had a tarp due to a part failure and was being fixed.
4	NA	Sr. Environmental Manager	Complaint stated a bay door was left open with an empty rail car parked in that bay door. Also noted that there was an opening on the side of the facility.	The bay door was damaged by a truck hauler, new one was ordered. Also noted that the Track mobile malfunctioned and not able to be used.
5	Calza St	MassDEP	Bay Door 2 was open and Lull being used.	Bay door was damaged again beyond repair in the fall. Another one was ordered in Oct/Nov.
6	NA	MassDEP/BOH	Complaint about rodents being around railcars.	NA
7	Calza St	MassDEP	"Very strong smell" at his street. Complaint noted "dust or mist coming from opened garage doors" and smell being "overpowering" 300' away.	MA responded asking when the odors are most noticeable
8	Calza St	BOH	Complaint of odor made.	Health Dept followed up with calling the transfer station, only 2 loads of MWS dropped off. Otherwise, all C&D. Health Dept went in the afternoon, all equip running properly. It has a very faint smell of trash.
9	Calza St	MassDEP/BOH	Noted that they have contacted in the past and that the odor hasn't been a problem, but in recent months, that certain days, the odor has been stronger. Noted 9/6 and 9/20 being days where it was more noticeable.	Health Dept followed up saying there was waves of MSW odors around facility and Calza St. Fans/misting were operating. There were 12 railcars full of MSW/C&C waiting for CSX.
10	NA	BOH	Reports of trash around train tracks	Mayor emailed the Health Dept about reports of trash. CSX sent some to access and clean up the trash.
11	Calza St	MassDEP	Noted of a "sour stench" all day long.	Followed up with having DEP visit the area to investigate for any offsite odors.

ATTACHMENT 6

GREENHOUSE GAS AND ENVIRONMENTAL JUSTICE AIR QUALITY REPORT

GREENHOUSE GAS AND ENVIROMENTAL JUSTICE AIR QUALITY ANALYSES FOR UNITED MATERIALS MANAGEMENT OF LEOMINSTER

LEOMINSTER, MASSACHUSETTS

August 2025

tech environmental
FOCUSED KNOWLEDGE. REAL SOLUTIONS.

GREENHOUSE GAS AND ENVIROMENTAL JUSTICE AIR QUALITY ANALYSES FOR UNITED MATERIALS MANAGEMENT OF LEOMINSTER

LEOMINSTER, MASSACHUSETTS

Prepared for:

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August 14, 2025

TABLE OF CONTENTS

Section	Contents	Page
1.0	INTRODUCTION	4
2.0	GREENHOUSE GAS ANALYSIS	5
2.1	Stationary Greenhouse Gas	5
2.2	Transportation GHG Emissions	5
3.0	EXISTING ENVIRONMENTAL BURDEN and public health assessment	7
3.1	Vulnerable Health Environmental Justice Criteria	7
3.2	Potential Sources of Pollution	8
3.3	Environmental Indicators	9
3.4	Pediatric Asthma Prevalence For K- 8 Schools	10
4.0	ENVIRONMENTAL JUSTICE AIR QUALITY ANALYSIS	13
4.1	Introduction	13
4.1	Applicable Air Quality Standards and Existing Air Quality	13
4.3	Assessment of the Project Air Quality Impacts	16
4.4	Mesoscale Study Area	18
4.5	Mesoscale Analysis Procedure	18
4.6	Predicted Project Impacts	18
4.7	Build Air Quality Impacts	20
4.8	Mitigation Measures	21
4.9	Microscale Analysis	25
4.10	Conclusion	26

APPENDIX A – EMISSIONS FOOTPRINT ESTIMATTION TOOL OUTPUTS

APPENDIX B – GHG MOBILE SOURCE AND AIR QUALITY MESOCALE ANALYSIS EMISSIONS

LIST OF TABLES

Table	Description	Page
1	Motor Vehicle CO_2 Emissions Summary	6
2	Vulnerable Health Criteria Within 1 Miles of the Project	8
3	Potential Sources of Pollution Within 1 Miles of the Project	9
4	Environmental Indicator Percentages for the Project	10
5	Summary of Representative MassDEP Air Monitoring Data (ug/m^3)	16
6	Mesoscale Emissions Summary (kg/day)	20
7	Summary of Level of Service	25

Figure	Description	Page
1	MassDEP CIA Mapping Tool	11
2	Environmental Justice Designated Geographic Area	14
3	Worcester County Daily VOC Emissions	23
4	Worcester County Daily NO_x Emissions	23
5	Worcester County Daily $PM_{2.5}$ Emissions	24
6	Worcester County Daily DPM/ PM_{10} Emissions	24

1.0 INTRODUCTION

A greenhouse gas (GHG) analysis assessment of environmental burdens and an environmental justice (EJ) mesoscale air quality analyses, was performed for the proposed tonnage expansions for the United Materials Management of Leominster (UMML) (the Facility) at 200 Tanzio Road, Leominster, MA. The project consists of a 32,400 square foot ("sf") solid waste transfer/waste handling building (including 1,260 sf of attached office space for a total footprint of 33,660 sf). The site also includes a rail yard, scale house and scales, parking areas, paved access roads, and associated appurtenances. The Facility intends to increase their permitted daily tonnage from 1,000 tons per day [tpd] (300,000 tons annually) to 1,500 tpd of C&D and MSW with a maximum annualized capacity of 450,000 tons.

The following analyses were conducted based on the Certificate of the Secretary of Energy and Environmental Affairs (EEA) on the Environmental Notification Form (ENF) dated December 9 2024:

- Perform a quantitative GHG emissions of main facility building to demonstrate that emissions reductions are negligible.
- Perform an assessment on the environmental burdens, and pediatric asthma prevalence for school K-8.
- Perform air quality emissions calculations for CO_2, NO_x, VOC, $PM_{2.5}$, PM_{10}, and DPM for project related vehicle trips based within the traffic study area in EJ and non-EJ communities using traffic data supplied by Bowman Consulting Group, Ltd. and the EPA MOVES model.
- Perform a qualitative air quality microscale analysis for traffic intersections included in the traffic study performed by Bowman Consulting Group, Ltd.

2.0 GREENHOUSE GAS ANALYSIS

2.1 Stationary Greenhouse Gas

The GHG emissions analysis was performed to show that the Project does not expect to generate 2,000 or more tons per year (tpy) of CO_2 emissions. The estimate of GHG emissions generated by the building was determined using Emissions Footprint Estimation Tool. The analysis is based on the 2010 MEPA Greenhouse Gas Emissions Policy and Protocol (the "2010 GHG Policy"). According to the policy, the analysis should provide energy efficiency modeling to support GHG estimates for the Base Case and Design Case. To the extent a project is already required to conduct a GHG analysis under the 2010 GHG Policy, that analysis will satisfy the requirements of Part IV.B.[1] The Emissions Footprint Estimation Tool was used to calculate CO_2 emissions for the Project. Based on the existing building area of 33,660 square feet (sf), the tool calculated annual CO_2 emissions of 81 tons in both existing and proposed conditions (Base and Design case) as no construction is proposed. Appendix A presents the Emissions Footprint Estimation Tool output.

2.2 Transportation GHG Emissions

The transportation portion of the GHG analysis calculated emissions of CO_2 for the traffic study area for three traffic analysis scenarios:

- 2025 Existing
- 2032 No-Build
- 2032 Build

The vehicle miles traveled (VMT) for the major roadway segments in the traffic study area was calculated by multiplying the length of each road segment by the average daily traffic (ADT) volume on the segment. The CO_2 emissions for each roadway segment were calculated with the EPA MOVES4 model. The average daily traffic volumes were provided by Bowman Consulting Group, Ltd. Appendix B presents the VMT and emission calculations. Transportation CO_2 emissions are summarized in Table 1. The emissions listed for the No-Build and Build cases include both existing volumes on the roadway network and new project-generated trips. The project's transportation emissions are calculated by subtracting the No-Build values from those for the Build case. Since there were no roadway improvements or traffic demand measures (TDMs) proposed for the Project,

[1] MEPA Interim Protocol for Analysis of Project Impacts on Environmental Justice Populations Effective Date:

there were no CO_2 emission reductions calculated. The increase in mobile source CO_2 emissions from the expansion of the Facility is 1.14 ton/year. Trucks that may queued on site will be required to shut down to comply with 310 CMR 7.11, the anti-idling regulation. Signs will be posted requiring compliance with the regulation. The total stationary and mobile source CO_2 emissions will be 82.14 tons/year.

TABLE 1

MOTOR VEHICLE CO_2 EMISSIONS SUMMARY

Total Predicted CO_2 Emissions Burden		
2025 Existing	**2032 No-Build**	**2032 Build**
53.77 kg/day	61.70 kg/day	64.54 kg/day
		Project: 2.84 kg/day
21.6 tons/year	24.8 tons/year	25.9 tons/year
		Project: 1.14 tons/year

3.0 EXISTING ENVIRONMENTAL BURDEN AND PUBLIC HEALTH ASSESSMENT

Under Section 58 of the Climate Roadmap Act and consistent with new 301 CMR 11.07(6)(n) and the "MEPA Public Involvement Protocol for EJ Populations" (January 1, 2022) per requirements of the EEA Certificate dated December 9, 2024, an assessment of the existing vulnerable health concerns and potential sources of pollution, and environmental indicators within the Designated Geographic Area (DGA) of any environmental justice (EJ) population within one mile was performed. As per the ENF certificate, a more detailed analysis of pediatric asthma prevalence for K-8 schools was also performed.

3.1 Vulnerable Health Environmental Justice Criteria

The Massachusetts Department of Public Health (DPH) EJ Tool[2] was used to identify whether any municipality or census tract that is within the EJ populations exhibits the following vulnerable health criteria:

- Heart attack hospitalization
- Childhood asthma
- Childhood blood lead
- Low birth weight

Table 2 presents the four vulnerable health criteria within one mile of the Project compared to the 110% statewide rate. As outlined in the MEPA Interim Protocol, health criteria exceeding the 110% statewide rate could be viewed as exhibiting "vulnerable health EJ criteria," and therefore, potentially bearing an "unfair or inequitable" environmental burden and related public health consequences. For each of the four vulnerable health criteria were identified to be below the 110% statewide rate. Therefore, it is not anticipated that this health criteria represents an unfair or inequitable environmental burden or related public health consequences even when looked at on the census-tract level.

TABLE 2

VULNERABLE HEALTH CRITERIA WITHIN 1 MILE OF THE PROJECT

Vulnerable Health Criteria	Leominster	110% Statewide Rate	Below 110% Statewide Rate? (Yes/No)
Childhood Asthma (per 10,000)	28	65.7	No
Heart Attack (per 10,000)	36.4	28	No
Elevated Blood Lead Prevalence (per 1,000)	8.8	14.1	No
Low Birth Weight (per 1,000)	157.7	238.5	No

3.2 Potential Sources of Pollution

The DPH EJ Tool was also used to access additional data layers to assess other potential sources of pollution within one (1) mile of the Project. Table 3 shows the additional 13 mapping layers that were assessed from the DPH EJ Tool, which equated to a total of 38 potential sources of pollution. The enforcement history of those facilities permitted by Massachusetts Department of Environmental Protection (MassDEP)[3] was researched and it was determined that out of the 38 potential sources of pollution, the enforcement history revealed only 6 sources have had historical notices of non-compliance.

[2] https://matracking.ehs.state.ma.us/Environmental-Data/ej-vulnerable-health/environmental-justice.html
[3] Enforcement information is available at https:/ /eeaonline.eea.state.ma.us/Portal/#!/search/enforcements

TABLE 3

POTENTIAL SOURCES OF POLLUTION WITHIN 1 MILE OF THE PROJECT

Sources of Pollution	Description	# of Sources	Notice of Non-Compliance
MassDEP Major Air and Waste Facilities	Air Operting Permits	0	2
	Large Quantity Generators	3	
	Large Quantity Toxic User	2	
M.G.L. c. 21E sites	---	3	0
"Tier II" Toxics Use Reporting Facilities	---	9	4
MassDEP Sites with Acivity and Use Limitations (AULs)	---	1	0
MassDEP Groundwater Discharge Permits	---	0	0
MassDEP Public Water Suppliers	---	0	0
Underground Storage Tanks	---	3	N/A
EPA Facilities	Supperfund Site Boundaries	0	N/A
	Toxic Release Inventory Sites	3	
Road Infrastructure	MassDOT Roads	3	N/A
MBTA Bus and Rapid Transit	MBTA Commuter Rail Lines	0	N/A
	MBTA Commuter Rail Stations	0	
Other Transportation Infrastructure	Airports	0	N/A
	Freight Rail Yards	0	
	Railroad Tracks	3	
Regional Transit Agencies (RTA)	RTA Stops	2	N/A
Energy Generation and Supply	Power Plants	0	N/A
	Transmission Lines	6	
Total		**38**	**6**

3.3 Environmental Indicators

The U.S. EPA's Environmental Justice Screening and Mapping Tool was used to obtain percentile ranking by census block group and statewide averages for thirteen (13) environmental indicators.[4] Table 4 shows the percentile for each EJ block of the 13 indicators within a mile of the project and highlights in orange the percentiles that are elevated at or above the 80th percentile of the statewide average. Figure 2 identifies the location of each EJ block. The following indicators: Nitrogen Dioxide, Lead Paint, Hazardous Waste Proximity and Underground Storage Tank, there are one to two EJ blocks with a percentile that is greater than or equal to 80th percentile of the statewide average. There are five EJ Blocks that are greater than or equal to 80th percentile of the statewide average for the Superfund Proximity Indicator.

[4] The EPA EJ Tool website is current unavailable so the following was used instead to obtain the information needed. https://pedp-ejscreen.azurewebsites.net/

TABLE 4
ENVIRONMENTAL INDICATOR PERCENTAGES FOR THE PROJECT

EJ Blocks within 1 mile radius of Project	Environmental Indicators					
	Particulate Matter (PM2.5) (annual average)	Ozone (summer seasonal average, daily 8-hr max)	Nitrogen Dioxide (NO2)	Diesel Particulate Matter (ug/m3)	Toxic Release to Air	Traffic Proximity and Volume (daily traffic count/ distance to road)
EJ Block #1	41%	39%	60%	22%	19%	45%
EJ Block #2	51%	50%	62%	28%	23%	51%
EJ Block #3	58%	53%	76%	33%	27%	67%
EJ Block #4	43%	38%	72%	28%	25%	57%
EJ Block #5	62%	55%	84%	49%	39%	72%
EJ Block #6	46%	65%	65%	36%	26%	48%
EJ Block #7	34%	24%	41%	20%	14%	32%
EJ Block #8	43%	40%	57%	30%	21%	43%
EJ Blocks within 1 mile radius of Project	Lead Paint indicator (% of housing built before 1960)	Superfund Proximity (site count/km distance)	RMP Proximity (facility count/ km distance)	Hazardous Waste Proximity (facility count/ km distance)	Underground Storage Tanks (UTS) indicator	Wastewater Discharge Indicator (Toxicity-weighted concentration/ distance)
EJ Block #1	48%	73%	50%	54%	73%	50%
EJ Block #2	52%	81%	57%	61%	69%	58%
EJ Block #3	88%	86%	67%	80%	81%	64%
EJ Block #4	67%	80%	56%	67%	73%	60%
EJ Block #5	93%	90%	70%	83%	67%	76%
EJ Block #6	60%	83%	51%	57%	63%	69%
EJ Block #7	30%	63%	36%	37%	50%	41%
EJ Block #8	7%	59%	48%	46%	70%	54%

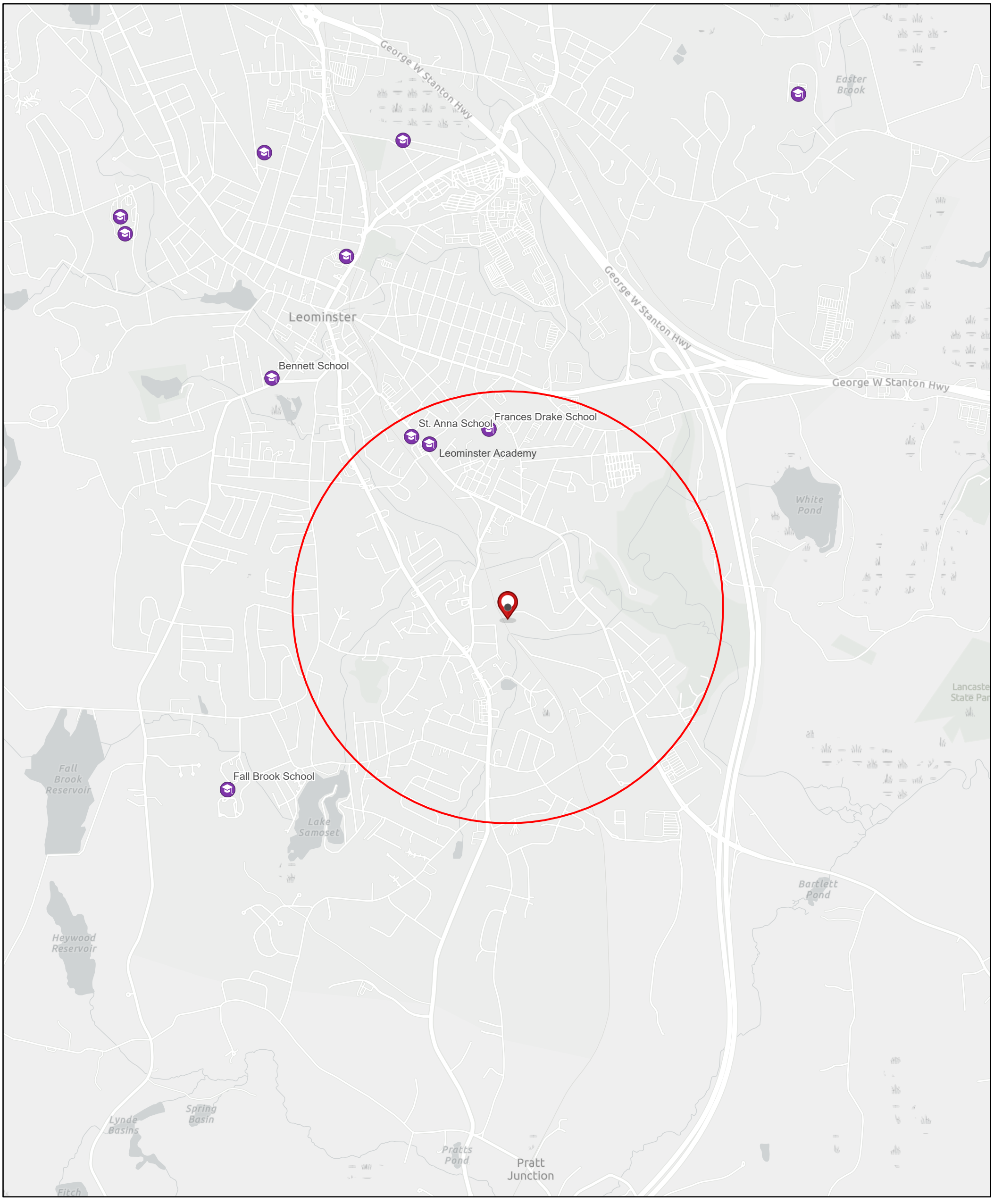
* Drinking Water Non-Compliance is 0% for all EJ blocks

3.4 Pediatric Asthma Prevalence For K- 8 Schools

The Massachusetts Department of Environmental protection (MassDEP) Cumulative Impact Analysis (CIA)[5] methods were used to analysis pediatric asthma prevalence for K-8 schools in the project truck route area that is within an EJ block group, within one mile of the project area. Figure 1 shows that there are three schools that are nearest the existing and proposed (note that they do not change as a result of a capacity increase) Facility truck routes. Out of the three schools only Frances Drake School, located at 95 Viscoloid Avenue, Leominster, MA, had data in the Indicator Data for CIA Analysis[6]. The pediatric asthma prevalence for Frances Drake School is 10.7% of the students which is 87% of Massachusetts rate. The main truck route ultimately proceeds away (south) from the three identified schools towards Route I-190.

[5] https://mass-eoeea.maps.arcgis.com/apps/webappviewer/index.html?id=5a876b759df24d10b4a9e9e5b3921310

Figure 1: MassDEP Cumulative Impact Analysis Mapping Tool- Leominster within 1 mile



3/26/2025, 9:39:14 AM

Massachusetts Schools: PreK-High School Source: MassGIS - Massachusetts PK-12 Schools

1:36,112

0 0.3 0.6 1.2 mi

0 0.5 1 2 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

3.5 Summary of Environmental Burden on EJ Population.

Based on the data collected from the DPH EJ Screen, the vulnerable health criteria for the EJ community near the Facility are below the statewide rate, therefore, it is not anticipated that this health criteria represents an unfair or inequitable environmental burden or related public health consequences even when looked at on the census-tract level. Out of the 38 potential sources of pollution, only 6 of those sources have historical notices of non-compliance, see Table 3. The EPA EJ tool was used to determine that for the following indicators: Nitrogen Dioxide, Lead Paint, Hazardous Waste Proximity and Underground Storage Tank, there are one to two EJ blocks with a percentile that is greater than or equal to 80th percentile of the statewide average. There are five EJ Blocks that greater than or equal to 80th percentile of the statewide average for the Superfund Proximity Indicator. From the four schools nearest to the project site, only one school has a report of 10.7% of the school body with pediatric asthma prevalence. From the information discussed above, the EJ population near the Project has not been impacted by unfair environmental burdens. Nonetheless, the next section assesses the Facility's air quality impact on the EJ community, and what mitigation measures that can be taken to limit any disproportionate adverse effect the Project may have on the EJ communities.

[6] https://www.mass.gov/doc/indicator-data-for-cumulative-impact-analysis-updated-jan-30-2025

4.0 ENVIRONMENTAL JUSTICE AIR QUALITY ANALYSIS

4.1 Introduction

An air quality environmental justice (EJ) analysis was performed for the project consistent with the "MEPA Public Involvement Protocol for EJ Populations" (January 1, 2022) per requirements of the EEA Certificate dated December 9, 2024. Within one (1) mile there are eight EJ blocks (See Figure 2). A mesoscale air quality analysis of mobile sources was performed to determine the possible disproportionate effects it would have on the EJ populations. The Certificate scope specifically requires this analysis for roadway segments included in the traffic study (to the extent data is available).

4.1 Applicable Air Quality Standards and Existing Air Quality

The U.S. Environmental Protection Agency (EPA) has developed a set of National Ambient Air Quality Standards (NAAQS) for six air contaminants that are collectively known as criteria pollutants. These NAAQS are intended to protect public health and welfare. The six criteria pollutants are sulfur dioxide (SO_2); particulate matter (which is broken up into two categories: PM_{10} which is particulate having an aerodynamic diameter of 10 micrometers or less, and $PM_{2.5}$ which is particulate matter having an aerodynamic diameter of 2.5 micrometers or less); nitrogen dioxide (NO_2); carbon monoxide (CO); ozone (O_3); and lead (Pb). Coinciding with the NAAQS, the Commonwealth of Massachusetts has set forth its own state air quality standards called the Massachusetts Ambient Air Quality Standards (MAAQS) which are codified in 310 CMR 6.00. These MAAQS generally follow the NAAQS, though the MAAQS have not been updated to reflect some of the more recent EPA updates to the NAAQS.

On February 7, 2024, EPA announced a final rule to strengthen the NAAQS for $PM_{2.5}$. EPA is revising the level of the primary (health based) annual $PM_{2.5}$ standard from 12.0 micrograms per cubic meter ($\mu g/m^3$) to 9.0 $\mu g/m^3$. EPA is retaining the primary 24-hour $PM_{2.5}$ standard at the level of 35 $\mu g/m^3$.

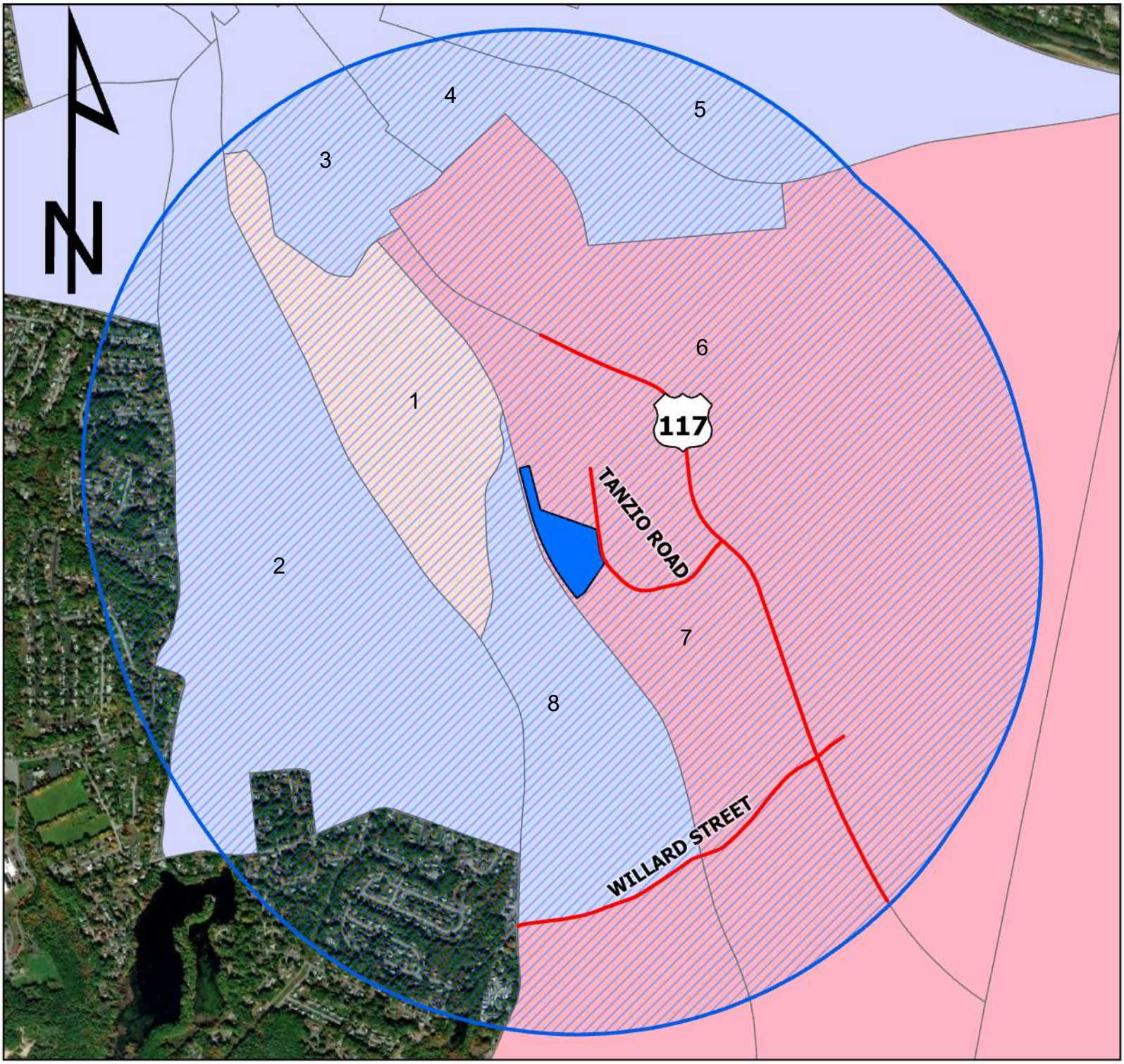


Figure 2
EJ Communities Map
Lexington, MA

TECH environmental
FOCUSED KNOWLEDGE. REAL SOLUTIONS.

The NAAQS and MAAQS have been developed for various durations of exposure. The short-term standards typically refer to pollutant levels that are not to be exceeded except for a limited number of times per year. The long-term standards typically refer to pollutant levels that are not to be exceeded on an annual average basis. These standards can be further broken down into primary and secondary standards. Primary standards are intended to protect human health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. The secondary standards are intended to provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Table 5 summarizes the MassDEP air monitoring data, for the most recent three-year period (2021-2023), that are considered to be representative of the Project Area. The closest, most representative, MassDEP monitors for all pollutants is Summer Street, Worcester, MA. Table 4 shows that the existing air quality in the Project Area is generally much better than the NAAQS. The highest impacts relative to NAAQS is for the annual $PM_{2.5}$ and ozone.

MassDEP has set forth guideline values known as the Ambient Air Limits (AALs) and Threshold Effect Exposure Limits (TELs) to allow evaluation of the potential for human health risks associated with exposure from certain chemicals in the air.

To demonstrate compliance with the NAAQS, AALs and TELs would require air dispersion modeling. However, since the Project's projected diesel truck trips represent an extremely small fraction of the total vehicle miles traveled when including background traffic volumes without the Project, air dispersion modeling would result in insignificant impacts when compared to NAAQS and AALs and TELs. Instead, Section 4.6 presents the historical and future improvement in NO_x, $PM_{2.5}$ and DPM/PM_{10} emissions in Worcester County and how the Project-related NO_x, $PM_{2.5}$ and DPM/PM_{10} emissions compare to Worcester County NO_x, $PM_{2.5}$ and DPM/PM_{10} emissions in the future.

TABLE 5

SUMMARY OF REPRESENTATIVE MASSDEP AIR MONITORING DATA (ug/m^3)

Pollutant	Monitoring Location	Averaging Period	2021	2022	2023	Selected Background	NAAQS (ug/m^3)	Percent of NAAQS
NO_2	Summer St., Worcester, MA	1-hour	82.8	90.3	77.1	83.4	188	44.4%
		Annual	17.5	19.0	17.2	19.0	100	19.0%
SO_2	Summer St., Worcester, MA	1-Hour	6.3	5.8	5.5	5.8	196	3.0%
CO	Summer St., Worcester, MA	1-Hour	1,114	1,380	1,596	1,596	40,000	4.0%
		8-Hour	802	802	1,260	1,260	10,000	12.6%
$PM_{2.5}$	Summer St., Worcester, MA	24-Hour	19.0	17.9	21.0	19.3	35	55.1%
		Annual	9.07	8.61	7.03	8.2	9	91.5%
PM_{10}	Summer St., Worcester, MA	24-Hour	31.0	45.0	23.0	45.0	150	30.0%
O_3 (ppm)	Airport., Worcester, MA	8-Hour	124	124	106	118	137	86.0%

Source: MassDEP, https://www.mass.gov/lists/massachusetts-annual-air-quality-reports, downloaded January 31, 2025.
Notes:
(1) Annual averages are highest measured during the most recent three-year period for which data are available (2021 - 2023). Values for periods of 24 hours or less are highest and second highest over the three-year period unless otherwise noted.
(2) The eight-hour ozone value is the three-year average of the annual fourth-highest values, the 24-hour PM2.5 value is the three-year average of the 98th percentile values, the annual PM2.5 value is the three-year average of the annual values, the one-hour NO2 value is the three-year average of the 98th percentile values, the one-hour SO2 value is the three-year average of the 99th percentile values – these are the values used to determine compliance with the NAAQS for these air pollutants.

4.3 Assessment of the Project Air Quality Impacts

The mesoscale analysis was performed for diesel particulate matter (DPM) since DPM emissions can lead to serious health conditions such as asthma and can worsen existing heart or lung disease[7],

[7] EPA, "Learn About Impacts of Diesel Exhaust and the Diesel Emissions Reduction Act (DERA)", https://www.epa.gov/dera/learn-about-impacts-diesel-exhaust-and-diesel-emissions-reduction-act-dera

which both fall under the category of vulnerable health criteria. This analysis used the US Environmental Protection Agency (EPA) MOVES4 Mobile Source Emission Factor Model and followed the Massachusetts Department of Environmental Protection (MassDEP) guideline for mesoscale analyses[8]. Per the requirements of the December 9, 2024 Certificate, the mesoscale analysis includes volatile organic compounds (VOC), oxides of nitrogen (NO_x), and fine particulate matter ($PM_{2.5}$ and PM_{10}). Furthermore, calculations were performed to compare area-wide VOC, NO_x, $PM_{2.5}$, DPM/ PM_{10}, emissions after the Full Build of the Facility is expanded with existing and future No-Build VOC, NO_x, $PM_{2.5}$, DPM/ PM_{10}, emissions in the EJ community and compared to Worcester County emissions data.

Elevated levels of $PM_{2.5}$, PM_{10}, and DPM are known carcinogens that can worsen existing heart or lung disease, which both fall under the category of vulnerable health criteria [9]. Elevated levels of VOC and NO_2 can cause damage to the human respiratory tract and increase a person's vulnerability to, and/or the severity of respiratory infections and asthma.[10]

[8] Massachusetts DEP, Guidelines for Performing Mesoscale Analysis of Indirect Sources, Division of Air Quality Control, May 1991.
[9] https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm
[10] https://www.epa.gov/no2-pollution/basic-information-about-no2

4.4 Mesoscale Study Area

The mesoscale area was determined based on the Project Traffic study prepared by Bowman Consulting Group, Ltd. The mesoscale study area includes the following seven (7) roadway segments, which are all within an EJ community:

- Site Driveway
- Tanzio Road between Site Driveway & Route 117
- Route 117 north of Tanzio Road
- Route 117 between Tanzio Road & Willard Street
- Willard Street west of Route 117
- Willard Street east of Route 117
- Route 117 south of Willard Street

The closest EJ community within the access route is on the east side of the Project as shown in Figures 2. Using the traffic study provided by Bowman Consulting Group, Ltd., the roadway segments were determined to be within the EJ community, as shown in Figure 2.

4.5 Mesoscale Analysis Procedure

The mesoscale analysis calculated VOC, NO_x, $PM_{2.5}$, DPM/ PM_{10} emissions over the Project study area for three cases:

- 2025 Existing
- 2032 No-Build
- 2032 Build

The emissions for each roadway segment were calculated by multiplying the vehicles miles per day by the EPA MOVES4 model predicted emission factors in grams per mile. The MOVES4 model was run using input files provided by MassDEP for 2025 and 2032. Average daily traffic volumes were provided by Bowman Consulting Group, Ltd. and with county specific vehicle data from MassDEP MOVES4 data. With this information the average daily truck volumes were calculated. Appendix B presents the mesoscale emissions calculations.

4.6 Predicted Project Impacts

A summary of the results of the mesoscale analysis is presented in Table 6. The total VOC emissions for the 2025 Existing case are 0.0114 kg/day. The total VOC emissions for the 2032 No-Build case are 0.0107 kg/day. This is a 5.7% decrease from the 2025 Existing VOC emissions. The total VOC

emissions for the 2032 Build case are 0.00112 kg/day. This is a 1.7% decrease from the 2025 Existing VOC emissions.

The total NO_x emissions for the 2025 Existing case are 0.1661 kg/day. The total NO_x emissions for the 2032 No-Build case are 0.1376 kg/day. This is a 17.3% decrease from the 2025 Existing NO_x emissions. The total NO_x emissions for the 2032 Build case are 0.1140 kg/day. This is a 13.4% decrease from the 2025 Existing NO_x emissions.

The total $PM_{2.5}$ emissions for the 2025 Existing case are 0.00717 kg/day. The total $PM_{2.5}$ emissions for the 2032 No-Build case are 0.00472 kg/day. This is a 34.1% decrease from the 2025 Existing $PM_{2.5}$ emissions. The total $PM_{2.5}$ emissions for the 2032 Build case are 0.00495 kg/day. This is a 31.0% decrease from the 2025 Existing $PM_{2.5}$ emissions.

The total DPM/ PM_{10} emissions for the 2025 Existing case are 0.00780 kg/day. The total DPM/PM10 emissions for the 2032 No-Build case are 0.00513 kg/day. This is a 34.1% decrease from the 2025 Existing DPM/PM10 emissions. The total DPM/ PM_{10} emissions for the 2032 Build case are 0.00538 kg/day. This is a 31.0% decrease from the 2025 Existing DPM/PM10 emissions.

The US EPA has established stricter emission standards for new motor vehicles than older vehicles. The MOVES4 model predicts motor vehicle VOC, NO_x, $PM_{2.5}$, DPM/ PM_{10} emissions to decrease between 2025 and 2032, as new, lower polluting vehicles replace older vehicles on the roadways. The MOVES4 model predicts further declines in VOC, NO_x, $PM_{2.5}$, DPM/ PM_{10} motor vehicle emission rates after 2032. These national control programs are the most effective mitigation measures for VOC, NO_x, $PM_{2.5}$, DPM/ $PM_{10,}$ all regional air pollutants. While each individual project needs to pursue all reasonable mitigation measures for motor vehicle emissions, the net effect of a single project is very small at the margins. Since the inception of this Facility, rail is used to move waste away from the facility, which is less emissions than trucks. Further discussion on the improvements in air emissions using rail compared to trucks to haul materials is presented in Section

TABLE 6

MESOSCALE EMISSIONS SUMMARY (kg/day)

Pollutant	2025 Existing	2032 No-Build	2032 Build
VOC	0.0114	0.0107	0.0112
NO_x	0.1661	0.1374	0.1440
$PM_{2.5}$	0.00717	0.00472	0.00495
DPM/ PM_{10}	0.00780	0.00513	0.00538

4.7 Build Air Quality Impacts

The total VOC emissions for the 2032 Build case are 0.00050 kg/day higher than those for the 2032 No-Build case. For comparison purposes, the 2032 Build case VOC emissions were compared to Worcester County VOC emissions. Worcester County VOC emissions were calculated using MOVES4 and countywide data for the period from 2014 to 2032. Figure 3 presents a graph of VOC emissions, in kg/day, showing a significant decrease in VOC emissions since 2014 and continuing. The primary reason for the reduction in VOC emissions is due to more stringent EPA diesel vehicle emissions standards. Figure 3 also shows the total Project 2032 Build VOC emissions, which represents an insignificant area-wide increase of approximately 0.000011 % of the projected 2032 Worcester County VOC emissions.

The total NO_X emissions for the 2032 Build case are 0.0065 kg/day higher than those for the 2032 No-Build case. For comparison purposes, the 2032 Build case NO_X emissions were compared to Worcester County NO_X emissions. Worcester County NO_X emissions were calculated using MOVES4 and countywide data for the period from 2014 to 2032. Figure 3 presents a graph of NO_X emissions, in kg/day, showing a significant decrease in NO_X emissions since 2014 and continuing into the future. The primary reason for the reduction in NO_X emissions is due to more stringent EPA diesel vehicle emissions standards. Figure 3 also shows the total Project 2032 Build NO_X emissions, which represents an insignificant area-wide increase of approximately 0.000005% of the projected 2032 Worcester County NO_X emissions.

The total $PM_{2.5}$ emissions for the 2032 Build case are 0.000226 kg/day higher than those for the 2032 No-Build case. For comparison purposes, the 2032 Build case $PM_{2.5}$ emissions were compared to Worcester County $PM_{2.5}$ emissions. Worcester County $PM_{2.5}$ emissions were calculated using MOVES4 and countywide data for the period from 2014 to 2032. Figure 4 presents a graph of $PM_{2.5}$ emissions, in kg/day, showing a significant decrease in $PM_{2.5}$ emissions since 2014 and continuing downward into the future. The primary reason for the reduction in $PM_{2.5}$ emissions is due to more stringent EPA diesel vehicle emissions standards. Figure 4 also shows the total Project 2032 Build $PM_{2.5}$ emissions, which represents an insignificant area-wide increase of approximately 0.000015% of the projected 2032 Worcester County $PM_{2.5}$ emissions.

The total DPM/PM_{10} emissions for the 2032 Build case are 0.000256 kg/day higher than those for the 2032 No-Build case. For comparison purposes, the 2032 Build case DPM/ PM_{10} emissions were compared to Worcester County DPM/ PM_{10} emissions. Worcester County DPM/PM_{10} emissions were calculated using MOVES4 and countywide data for the period from 2014 to 2032. Figure 6 presents a graph of DPM/ PM_{10} emissions, in kg/day, showing a significant decrease in DPM/PM_{10} emissions since 2014 and continuing downward into the future. The primary reason for the reduction in DPM/PM_{10} emissions is due to more stringent EPA diesel vehicle emissions standards. Figure 6 also shows the total Project 2032 Build DPM/ PM_{10} emissions, which represents an insignificant area-wide increase of approximately 0.00013% of the projected 2032 Worcester County DPM/PM_{10} emissions.

4.8 Mitigation Measures

The primary reason for the reduction in NO_x. DPM/PM_{10} and $PM_{2.5}$ emissions is due to more stringent EPA diesel vehicle emissions standards. Furthermore, the Massachusetts Department of Environmental Protection (MassDEP) has proposed regulations to adopt California's Advanced Clean Trucks regulation. This requires an increasing percentage of zero-emission vehicles (ZEV) truck sales starting with Model Year 2025 and ramping up through Model Year 2035[11]. Thus, it is expected that the Project diesel vehicle fleet will meet these standards proposed by MassDEP, and the proponent will continue to work with clientele to make sure they are met. Additionally, on December 20, 2024, EPA finalized the strongest-ever national clean air standards to cut smog- and

11 https://www.mass.gov/news/massdep-files-new-regulations-to-reduce-emissions-advance-market-for-clean-trucks-in-the-commonwealth.

soot-forming emissions from heavy-duty trucks beginning with model year 2027. The new standards, which is the first update to clean air standards for heavy duty trucks in more than 20 years, are more than 80% stronger than current standards.

MEPA requested evaluating other air quality mitigation measures that included tree plantings, highway barriers, limiting hours of operations, installing air filters on nearby residential dwellings and battery electric charging for trucks. The addition of tree plantings and/or highway barriers can make the air quality worse due to trapping or eliminating proper dispersion of pollutants.[12] Limiting the times of day of travel is not a feasible option and may actually make air quality worse by re-routing traffic into neighborhood areas to avoid the time restrictions on the preferred trucking routes to major highways. The addition of air filters on nearby residences is not a feasible option depending on the age and design of residential dwellings and will be cost prohibitive. The current Traffic Impact Study overestimates the number of truck trips associated with the site expansion, assuming waste is transported exclusively by truck. However, in actual operations, the project utilizes rail to transport waste away from the facility, reducing the reliance on trucks. Research has found that rail can haul a load that would otherwise require over 300 trucks to haul and get about 3.5% more mileage out of one gallon of fuel compared to trucks; thus, overall emission of rail would be less when compared to trucks[13]. Finally, battery electric charging for trucks would require to be a regional or state implemented program and would require a significant change in current and future truck fleet from diesel to electric.

[12] https://www.greeningscience.info/post/when-greening-doesn-t-deliver-the-case-of-trees-and-air-quality .
[13] *Green Rail: Is Rail Better for the Environment than Trucks*. https://www.rsilogistics.com/blog/is-rail-better-for-the-environment-than-trucks/. January 30, 2024.

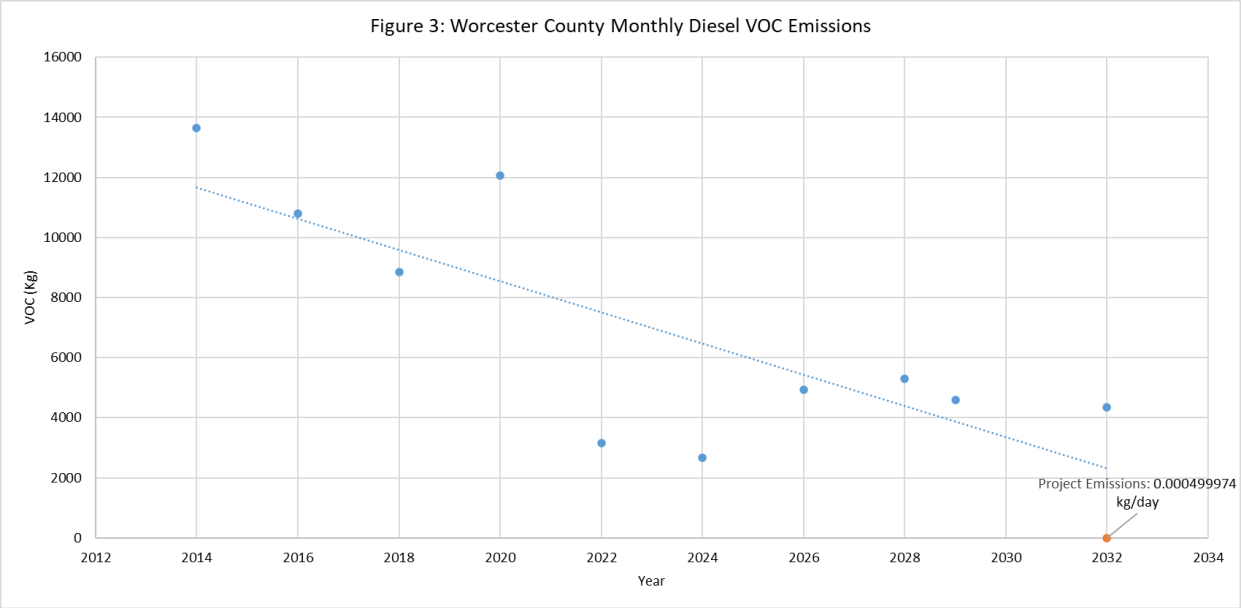


Figure 3: Worcester County Monthly Diesel VOC Emissions
16000
14000
12000
10000
8000
6000
4000
2000
0
VOC (Kg)
2012
2014
2016
2018
2020
2022
2024
2026
2028
2030
2032
2034
Year
Project Emissions: 0.000499974 kg/day

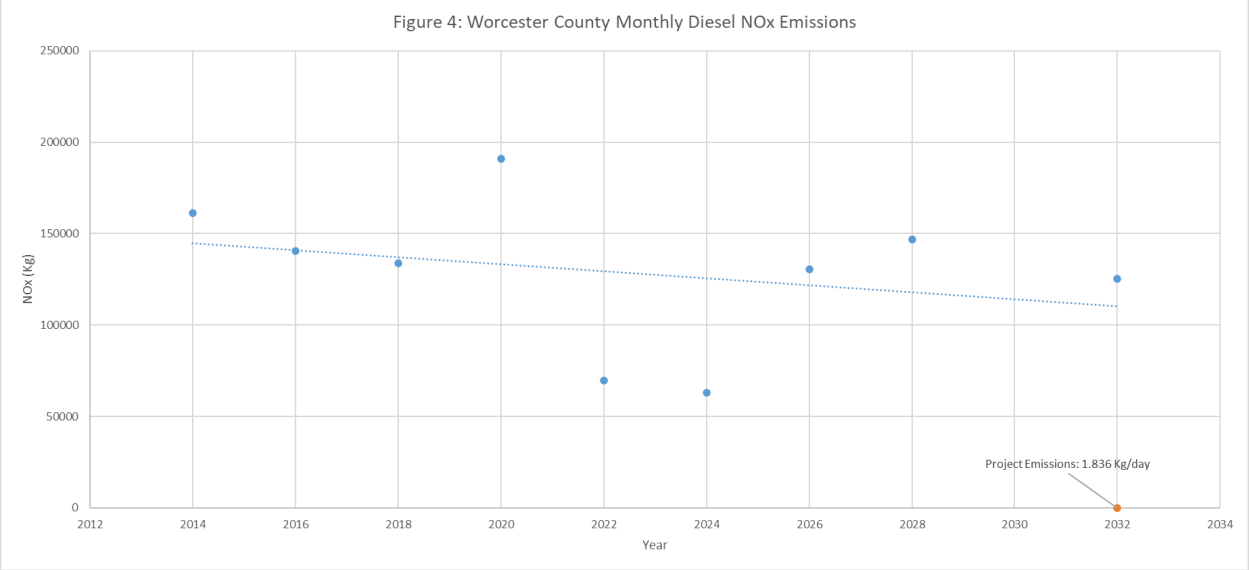


Figure 4: Worcester County Monthly Diesel NOx Emissions
250000
200000
150000
100000
50000
0
NOx (Kg)
2012
2014
2016
2018
2020
2022
2024
2026
2028
2030
2032
2034
Year
Project Emissions: 1.836 Kg/day

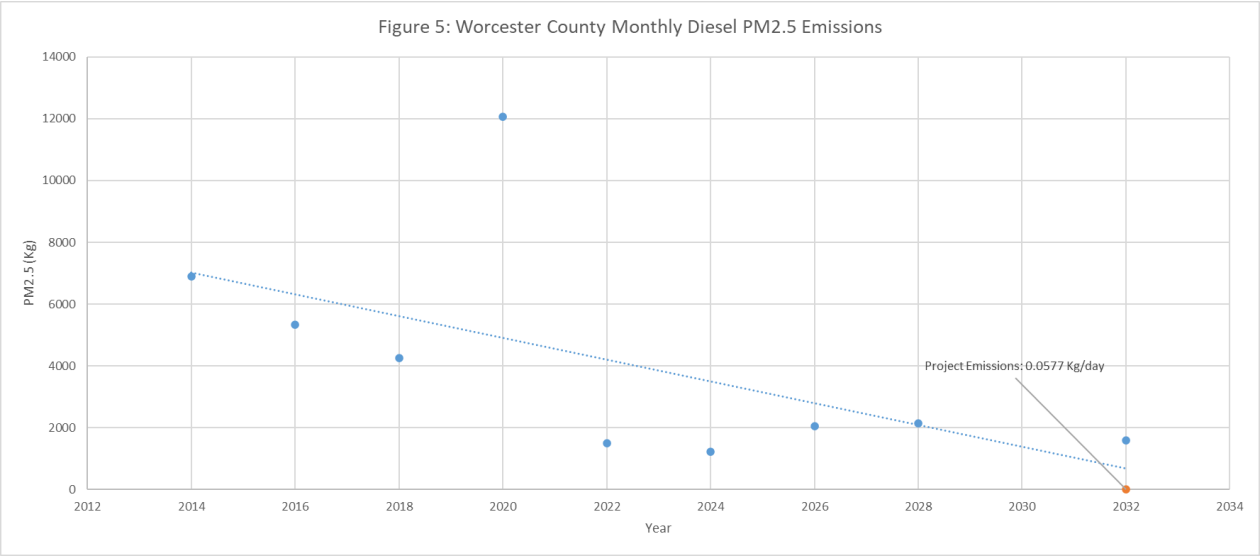


Figure 5: Worcester County Monthly Diesel PM2.5 Emissions
PM2.5 (Kg)
14000
12000
10000
8000
6000
4000
2000
0
2012
2014
2016
2018
2020
2022
2024
2026
2028
2030
2032
2034
Year
Project Emissions: 0.0577 Kg/day

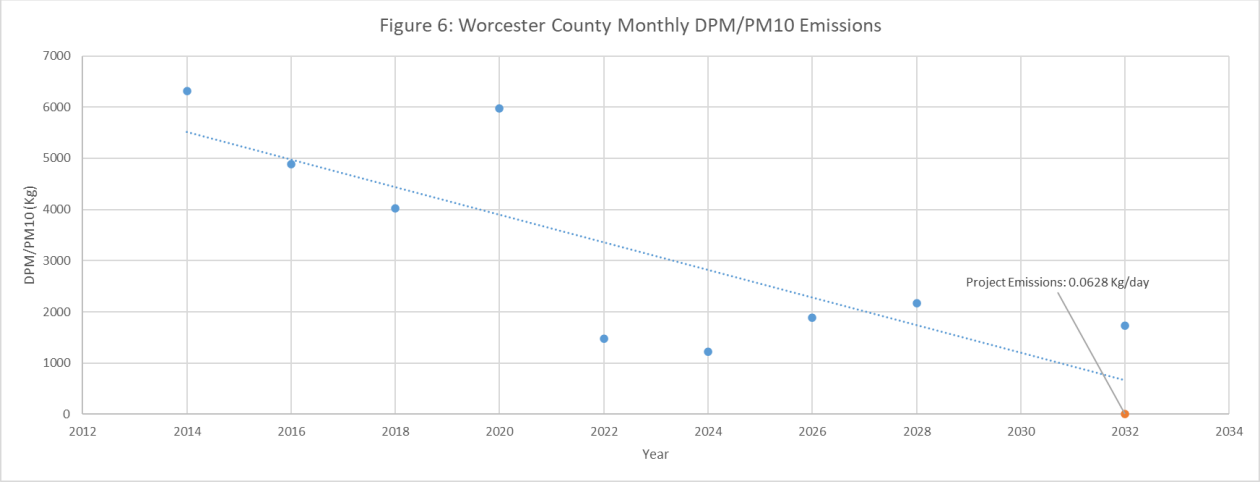


Figure 6: Worcester County Monthly DPM/PM10 Emissions
DPM/PM10 (Kg)
7000
6000
5000
4000
3000
2000
1000
0
2012
2014
2016
2018
2020
2022
2024
2026
2028
2030
2032
2034
Year
Project Emissions: 0.0628 Kg/day

4.9 Microscale Analysis

The MEPA Office requested a microscale air quality analysis for any intersection in the Project study adjacent to EJ communities, for the area where the level of service ("LOS") is expected to deteriorate to D or where the level of service is E or F, and the Project contributes to a reduction in LOS. For such intersections, a microscale air quality analysis is required to examine air quality concentrations at sensitive receptors near the intersection.

Table 7 provides a comparison of the Existing (2025), No-Build and Build (2032) LOS at the three intersections as determined by the overall delay at each intersection. The Project traffic is not projected to cause the LOS to deteriorate to D, E, or F at New Lancaster Street (Route 117) at Willard Street, Lancaster Street (Route 117) at Viscoloid Avenue, Lancaster Street (Route 117) at Tanzio Road and Tanzio Road at Site Driveway intersections. As a result, the Project is expected to cause a negligible increase in air quality impacts in EJ communities; thus, a quantitative microscale analysis is not required.

TABLE 7

SUMMARY OF LEVEL OF SERVICE

Intersection	2025 Existing (AM/PM)	2032 No-Build (AM/PM)	2032 Build (AM/PM)	Requires Analysis?
New Lancaster Street (Route 117) at Willard Street	B/C	B/C	B/C	NO
Lancaster St (Route 117) at Viscoloid Avenue)	B/C	B/C	B/C	NO
Lancaster Street (Route 117) at Tanzio Road	B/C	C/C	C/C	NO
Tanzio Road at Site Driveway	A/A	A/A	A/A	NO

4.10 Conclusion

The Facility intends to increase their permitted daily tonnage from 1,000 tpd (300,000 tons annually) to 1,500 tpd of C&D and MSW with a maximum annualized capacity of 450,000 tons. The results of the EJ air quality mesoscale and microscale analyses demonstrate that the Facility increased daily tonnage will not cause disproportionate impact on EJ populations.

APPENDIX A

EMISSIONS FOOTPRINT ESTIMATTION TOOL OUTPUTS

Emissions Footprint Estimation Tool

The objective of this tool is to provide an estimate of project emissions without having to do energy modeling.

To use the tool:
- **populate the area of each proposed building (column C), in square feet.**
- **use the pull down menu to select building use (column D)**

For mixed use buildings, use multiple rows. For example, if a building is proposed to be 10,000-sf ground floor retail and 40,000-sf residential use two rows, one for the retail and one for the residential.

If more then twenty rows are needed, use multiples of this spreadsheet and sum the totals.

Emissions estimates are based on pre-solved prototypes and utility emission rates. See the "calculations" sheet for more details.

	Building Area (sf)	Building Use (choose one for each row)	Estimated Emissions (lbs CO2/sf-yr)	(tons per year)
1	32,400	Warehouse (non-refrig)	4.7	76
2	1,260	Office (<20,000-sf)	6.3	4
3			-	-
4			-	-
5			-	-
5			-	-
6			-	-
7			-	-
8			-	-
9			-	-
10			-	-
11			-	-
12			-	-
13			-	-
14			-	-
15			-	-
16			-	-
17			-	-
18			-	-
19			-	-
20			-	-

Estimated Project Emissions	**80**

APPENDIX B

GHG MOBILE SOURCE AND

AIR QUALITY MESOCALE ANALYSIS EMISSIONS

TABLE B-1
Diesel Trucks Vehicle Miles Traveled (VMT) in the Mesoscale Study Area

Link I.D.	Link Length (feet)	Link Descriptor	Average Daily Diesel TruckTraffic (ADT) (vehicles/day)			Diesel Truck Vehicle Miles Traveled (VMT) (miles/day)		
			2025 Existing	2032 No-Build	2032 Full Build	2025 Existing	2032 No-Build	2032 Full Build
1	250	Site Driveway	17	24	144	1	1	7
2	1,925	Tanzio Road between Site Drive Way & Route 117	46	66	186	17	24	68
3	1,720	Route 117 north of Tanzio Road	1,436	2,339	2,359	468	762	768
4	3,200	Route 117 between Tanzio Road & Willard Street	1,452	2,367	2,467	880	1,434	1,495
5	660	Willard Street west of Route 117	906	1,479	1,479	113	185	185
6	975	Willard Street east of Route 117	135	221	221	25	41	41
7	1,350	Route 117 south of Willard Street	1,876	3,060	3,160	480	782	808
		VMT (miles/day):				1,983	3,229	3,372

TABLE B-2
Mesoscale Study Area
Total Daily Diesel Truck Carbon Dioxide (CO_2) Emissions

		MOVES 4 CO2 Emission Rate (gram/mile)		Diesel Truck Vehicle Miles Traveled (VMT) (miles/day)			Mesoscale VOC Emissions (kg/day)		
Link I.D.	Speed (mph)	2024	2030	2023 Existing	2030 No-Build	2030 Full Build	2023 Existing	2030 No-Build	2030 Full Build
1	20	34.63	24.43	0.8	1.1	6.8	0.0	0.0	0.2
2	30	30.60	21.34	16.9	24.0	67.7	0.5	0.5	1.4
3	35	27.08	19.09	467.9	761.8	768.3	12.7	14.5	14.7
4	35	27.08	19.09	879.9	1,434.3	1,494.9	23.8	27.4	28.5
5	35	27.08	19.09	113.2	184.9	184.9	3.1	3.5	3.5
6	35	27.08	19.09	24.9	40.9	40.9	0.7	0.8	0.8
7	35	27.08	19.09	479.6	782.5	808.0	13.0	14.9	15.4
					Total Daily CO_2 Emissions (kg/day):		53.77	61.70	64.54

TABLE B-3
Mesoscale Study Area
Total Daily Diesel Truck Volatile Organic Compounds (VOC) Emissions

		MOVES 4 VOC Emission Rate (gram/mile)		Diesel Truck Vehicle Miles Traveled (VMT) (miles/day)			Mesoscale VOC Emissions (kg/day)		
Link I.D.	Speed (mph)	2024	2030	2023 Existing	2030 No-Build	2030 Full Build	2023 Existing	2030 No-Build	2030 Full Build
1	20	8.78E-03	5.13E-03	0.8	1.1	6.8	7.01E-06	5.81E-06	3.50E-05
2	30	6.37E-03	3.72E-03	16.9	24.0	67.7	1.08E-04	8.92E-05	2.52E-04
3	35	5.74E-03	3.33E-03	467.9	761.8	768.3	2.69E-03	2.53E-03	2.55E-03
4	35	5.74E-03	3.33E-03	879.9	1,434.3	1,494.9	5.05E-03	4.77E-03	4.97E-03
5	35	5.74E-03	3.33E-03	113.2	184.9	184.9	6.50E-04	6.15E-04	6.15E-04
6	35	5.74E-03	3.33E-03	24.9	40.9	40.9	1.43E-04	1.36E-04	1.36E-04
7	35	5.74E-03	3.33E-03	479.6	782.5	808.0	2.76E-03	2.60E-03	2.69E-03
					Total Daily VOC Emissions (kg/day):		0.0114	0.0107	0.0112

TABLE B-4
Mesoscale Study Area
Total Daily Diesel Truck Nitrogen Oxides (NOx) Emissions

		MOVES 4 NOx Emission Rate (gram/mile)		Diesel Truck Vehicle Miles Traveled (VMT) (miles/day)			Mesoscale NOx Emissions (kg/day)		
Link I.D.	Speed (mph)	2024	2030	2023 Existing	2030 No-Build	2030 Full Build	2023 Existing	2030 No-Build	2030 Full Build
1	20	1.23E-01	6.55E-02	0.8	1.1	6.8	0.0001	0.0001	0.0004
2	30	9.91E-02	5.08E-02	16.9	24.0	67.7	0.0017	0.0012	0.0034
3	35	8.36E-02	4.25E-02	467.9	761.8	768.3	0.0391	0.0324	0.0326
4	35	8.36E-02	4.25E-02	879.9	1,434.3	1,494.9	0.0736	0.0609	0.0635
5	35	8.36E-02	4.25E-02	113.2	184.9	184.9	0.0095	0.0079	0.0079
6	35	8.36E-02	4.25E-02	24.9	40.9	40.9	0.0021	0.0017	0.0017
7	35	8.36E-02	4.25E-02	479.6	782.5	808.0	0.0401	0.0332	0.0343
					Total Daily NOx Emissions (kg/day):		0.1661	0.1374	0.1440

TABLE B-5
Mesoscale Study Area
Total Daily Diesel Truck Particulate Matter ($PM_{2.5}$) Emissions

		MOVES 4 PM2.5 Emission Rate (gram/mile)		Diesel Truck Vehicle Miles Traveled (VMT) (miles/day)			Mesoscale PM2.5 Emissions (kg/day)		
Link I.D.	Speed (mph)	2024	2030	2023 Existing	2030 No-Build	2030 Full Build	2023 Existing	2030 No-Build	2030 Full Build
1	20	5.5E-03	2.2E-03	0.8	1.1	6.8	4.36E-06	2.46E-06	1.48E-05
2	30	4.6E-03	1.8E-03	16.9	24.0	67.7	7.76E-05	4.32E-05	1.22E-04
3	35	3.6E-03	1.5E-03	467.9	761.8	768.3	1.69E-03	1.11E-03	1.12E-03
4	35	3.6E-03	1.5E-03	879.9	1,434.3	1,494.9	3.17E-03	2.09E-03	2.18E-03
5	35	3.6E-03	1.5E-03	113.2	184.9	184.9	4.08E-04	2.70E-04	2.70E-04
6	35	3.6E-03	1.5E-03	24.9	40.9	40.9	8.98E-05	5.96E-05	5.96E-05
7	35	3.6E-03	1.5E-03	479.6	782.5	808.0	1.73E-03	1.14E-03	1.18E-03
					Total Daily PM2.5 Emissions (kg/day):		0.00717	0.00472	0.00495

TABLE B-6
Mesoscale Study Area
Total Daily Diesel Truck Particulate Matter (DPM/PM_{10}) Emissions

		MOVES 4 DPM/PM10 Emission Rate (gram/mile)		Diesel Truck Vehicle Miles Traveled (VMT) (miles/day)			Mesoscale DPM/PM10 Emissions (kg/day)		
Link I.D.	Speed (mph)	2024	2030	2023 Existing	2030 No-Build	2030 Full Build	2023 Existing	2030 No-Build	2030 Full Build
1	20	5.9E-03	2.4E-03	0.8	1.1	6.8	4.74E-06	2.68E-06	1.61E-05
2	30	5.0E-03	2.0E-03	16.9	24.0	67.7	8.43E-05	4.69E-05	1.33E-04
3	35	3.9E-03	1.6E-03	467.9	761.8	768.3	1.83E-03	1.21E-03	1.22E-03
4	35	3.9E-03	1.6E-03	879.9	1,434.3	1,494.9	3.45E-03	2.28E-03	2.37E-03
5	35	3.9E-03	1.6E-03	113.2	184.9	184.9	4.44E-04	2.93E-04	2.93E-04
6	35	3.9E-03	1.6E-03	24.9	40.9	40.9	9.76E-05	6.48E-05	6.48E-05
7	35	3.9E-03	1.6E-03	479.6	782.5	808.0	1.88E-03	1.24E-03	1.28E-03
					Total Daily DPM/PM10 Emissions (kg/day):		0.00780	0.00513	0.00538

ATTACHMENT 7

ENF PUBLIC COMMENTS

Energy & Environmental Affairs
Public Comments Portal

alexander.strysky@mass.gov

View Comment

Comment Details

MP 1-3

EEA #/MEPA ID
16878

Comments Submit Date
10-1-2024

Certificate Action Date
10-15-2024

Reviewer
Alexander Strysky, (857)408-6957, alexander.strysky@mass.gov

First Name
Michelle

Last Name
Powell

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Address Line 1
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State
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Zip Code
01453

Organization
--

Affiliation Description
Individual

Status
Accepted

Comment Title or Subject

Topic: United Material Management of Leominster, LLC

Comments

As a resident of the City of Leominster living in the vicinity of the current location, I have concerns regarding a possible expansion in processing from the Tanzio Road transfer station. At its current capacity, there are issues with noise pollution, acrid and unpleasant smells, and larger traffic volume. With an increase of 50% capacity, this is going to also increase the current issues experienced by the residents who live in the vicinity of UMML.

Even though the location is in an industrial zoned area, this doesn't mean the by-products of UMML aren't felt outside of the industrial zone. As a tax paying citizen and resident of Leominster, I do not want to be forced to deal with even more disturbances and ask you to please re-consider the position of approving this expansion.

Attachments

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Status

Accepted

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alexander.strysky@mass.gov

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Comment Details

EEA #/MEPA ID
16878

Comments Submit Date
10-4-2024

DB 1

Certificate Action Date
10-15-2024

Reviewer
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Zip Code
01453

Organization
--

Affiliation Description
Individual

Status
Opened

Comment Title or Subject

Topic: United Material Management of Leominster, LLC

Comments

I do not support this proposal.

Attachments

Update Status

Status

Opened

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PB 1-3

From: PAUL BRAYTON
To: Strysky, Alexander (EEA)
Subject: UMML to age increase in Leominster EEA NO16878
Date: Monday, October 7, 2024 9:43:43 AM

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

The UMML is proposing to increase their tonnage from 1000 tons a day to 1500. When this facility was being built, most of the neighborhood wasn't even aware it was happening. We got a letter from another neighbor about it, and when we showed up at the meeting to protest it, we were snowballed. That meeting was just a requirement they had to have. It was already too late. We were told we wouldn't even hear the increased train traffic, or notice it. Those were lies. There used to be one train a day, usually around 3:30-ish. Now, there are several. We get caught in traffic by the train crossing on Litchfield street quite often. I also remember hanging out in the backyard, and my wife said, "What's that loud noise ?" I told her that was the train they said we never would hear. Oh, we hear them. And there is massive banging going on down there. Lastly, there is now a smell that drifts through the neighborhood. That was also brought up, and we were told there would be no smell. Just another lie. These conditions are all bringing our house values down. Now they want to increase that by 50 percent. We on Columbus St. are totally against that. Back in the day, we would be paid off with a substantial stipend to keep quiet. I don't see that either.

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alexander.strysky@mass.gov

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Comment Details

EEA #/MEPA ID
16878

Comments Submit Date
10-10-2024

Certificate Action Date
11-28-2024

FB 1-3

Reviewer
Alexander Strysky, (857)408-6957, alexander.strysky@mass.gov

First Name
Frank

Last Name
Bangrazi

Phone
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State
MASSACHUSETTS

Zip Code
01453

Organization
Resident

Affiliation Description
Individual

Status
Opened

Comment Title or Subject

Topic: Opposition to Proposed Tonnage Increase

Comments

To the Office of the Massachusetts Environmental Policy Act,

My name is Frank Bangrazi Jr., I live with my family at 27 Calza Street in Leominster Massachusetts. I am writing on behalf of myself and my neighborhood in opposition to the proposed increase of municipal solid waste (MSW) at United Material Management of Leominster (UMML) on Tanzio Road from 1000 tons per day to 1500 tons per day. Since the inception of this facilities operation, we have had numerous issues with noise and smell which have been reported to the city of Leominster as well as the Massachusetts DEP many times over the years. When WIN Waste Innovations first purchased the facility from the previous owner, we were hopeful that these issues would be remediated. This has not been the case, and in the past months we have had more issues than ever with the smell of garbage at our home. Many days are so bad that we can no longer open our windows without smelling rotting garbage. This has affected our quality of life and has raised health concerns from prolonged exposure to the poor air quality surrounding the facility and our home.

As previously stated, these issues have been reported to the City of Leominster as well as the Mass DEP, but it seems that WIN has done nothing to improve the air quality and strong odors which drift over to my residence. According to the city, WIN claims to be using misters to stifle the smell, but this just causes the air to smell like chemicals mixed with garbage. There is also a constant drone from the ventilation fans which seem to always be running. Because of the recent increase in days where the smell of garbage engulfs our home, I have reason to believe that WIN has already started to process 1500 tons of MSW per day. During the months of August, September, and now October, there has been a drastic increase in days where the smell is unavoidable, and at times, unbearable. The smell is especially bad in the morning, and when the wind is blowing southwest towards my home. I have recently had to contact city officials or the Mass DEP because of the stench on 9/6/24 and 9/20/24 and 9/23/24.

I am saddened by the fact that such a large and established corporation does not have the funds or wherewithal to fix these issues. I understand that corporate profits and interests often supersede the health of the citizens who must make concessions in their quality of life so that companies like WIN can continue to operate with an increasingly higher margin of profit. This approach is morally corrupt and reprehensible. I beg you to please think of the families who live in the immediate area surrounding this facility before making the conscious choice to allow this increase in MSW tonnage, and in turn, further harm and erode the quality of life for the citizens.

With Much Concern,

Frank Bangrazi Jr.

27 Calza Street

Leominster, MA

Attachments

MEPA Proposal Comment 10-10-24.pdf(null)

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alexander.strysky@mass.gov

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Comment Details

DD 1-4

EEA #/MEPA ID
16878

Comments Submit Date
10-14-2024

Certificate Action Date
11-28-2024

Reviewer
Alexander Strysky, (857)408-6957, alexander.strysky@mass.gov

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State
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Zip Code
01453

Organization
--

Affiliation Description
Individual

Status
Opened

Comment Title or Subject

Topic: EEA# 16878

Comments

I am opposed to UMML's proposal to increase their daily tonnage from 1000 to 1500 for the following reasons.

1. I have noticed a severe deterioration of the roadway on Rt. 117/Lancaster St. due to truck traffic since the opening of UMML facility. Increasing the tonnage allowed will increase the truck traffic which will cause increased and quicker deterioration of the roadway.
2. There is debris left on Tanzio Rd. from the trucks bringing material to the UMML facility which can cause damage to vehicle tires. Increasing the tonnage will increase the amount of debris left on the road.
3. I have observed trucks transporting material to UMML using Malburn St., even though they have been instructed not to do so. The trucks are required to use Tanzio Rd. only. Increasing the tonnage allowed could cause more trucks to use Malburn St.
4. A rat infestation issue has started in the local neighborhood since the opening of the UMML facility. Rat infestation was not an issue before the facility was opened. I am concerned that increasing the tonnage allowed will make the rat infestation problem worse.

Thank you

Attachments

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LC 1-3

From: Lisa Christy
To: Strysky, Alexander (EEA)
Subject: MEPA LEOMINSTER # 16878 ALEXANDER STRYSKY
Date: Monday, October 14, 2024 3:48:24 PM

CAUTION: This email originated from a sender outside of the Commonwealth of Massachusetts mail system. Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Hello,

I am writing to you today **against** the proposed **daily** increase of 500 tons of waste through the United Material Management site on Tanzio Dr in Leominster, MA. Per the MEPA document, that's an extra 150,000 tons per year.

I reside on Calza Street and can sometimes smell what is coming in and going out of the UMM. Smell? Yes smell- at least twice a week when I walk my dogs in the early morning there is a garbage smell wafting through the neighborhood coming from the direction of UMM. This is not a solid waste smell, its household trash. I have contacted their representative a few times and by the time they arrive, the smell has dissipated.

I also want to mention for the first time since we moved to this neighborhood, (**26** years ago) we have had to contract a Pest Control company to put down traps for the rats that now walk around our neighborhood. My home is closer to Litchfield Street where there are no new restaurants or food buildings that could be luring these creatures in.

Let's talk about blocked railroad crossings- (Litchfield St and Elm Hill Ave) to attach railroad cars to an engine right now, blocks the road at the railroad crossing for an average of 30-45 minutes, I have sat and timed it. Adding more cars due to the increased tonnage is going to add more time. Its' funny- how long the crossing would be occupied during the hook up was not mentioned at the meeting in City Hall a few years ago. To go another route (out of resident's way) causes more traffic flow elsewhere. Will there be more scheduled days that will be blocking this critical railroad crossing or just longer periods of wait time? This railroad crossing is a critical conduit for safety vehicles to access routes 12 and 117. If this area of the tracks are blocked for longer periods of time or more times per day, how are visitors and residents supposed to get the help they need when they need it?

Now let's talk about the extra 142 vehicles **daily** that are not going to impact traffic on the surrounding streets, routes and highways... Really? In order for residents to avoid these routes, the overflow of traffic will again impact other side streets. Not only are they going to impact our traffic, they are going to cause damage to the roads even **more** with their big heavy trucks and big heavy loads. Our roads and streets NEED a lot of attention now as it is.

Let me ask this question: how will this positively impact the residents of Leominster? Wil

the extra tonnage bring in more taxable income for the citys' use? What are we going to get out of the increase in tonnage, besides more vermin, hassles, busted roads and traffic?

Sincerely,
Lisa Christy
5 Calza Street
Leominster, MA

Energy & Environmental Affairs
Public Comments Portal

alexander.strysky@mass.gov

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Comment Details

EEA #/MEPA ID
16878

Comments Submit Date
10-14-2024

Certificate Action Date
11-28-2024

Reviewer
Alexander Strysky, (857)408-6957, alexander.strysky@mass.gov

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SA 1-4

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Zip Code
01453

Organization
Work from Home

Affiliation Description
Individual

Status
Opened

Comment Title or Subject

Topic: United Material Management of Leominster, LLC EEA # 16878 increase the existing waste handling operation, currently permitted for 1,000 tons per day, by 500 tons per day (tpd) to 1,500 tpd.

Comments

UMML intends to increase the existing waste handling operation, currently permitted for 1,000 tons per day, by 500 tons per day (tpd) to 1,500 tpd.

This proposal would be good for UMML, the city of Leominster and the railroad.

This proposal would not be good for the residents who live on Lancaster Street from downtown Leominster to Tanzio Rd. This section of Lancaster Street is one of the busiest streets in Leominster. Over 100 tractor trailer trucks pass 644 Lancaster Street, a residential address on a daily basis. Because the road needs monthly repair and should be re-asphalted, the empty trash/recycle container trucks create a LOUD BANG when they hit any pothole in the road. This vehicle traffic causes the house on 644 Lancaster Street to shake at multiple times a day. There was a vehicle that hit 644 Lancaster Street in February 2024. Since March 2024 three families have moved into the truck zone neighborhood with children under 10 years old.

Increasing waste handling would be less of an issue if the street could be paved and sound barrier fences could be put up to shield residential houses from noise caused by speeding trucks.

There was a traffic study done by Bowman Consulting Group out of Taunton Ma. This study did not take into account any of the residential houses that are along the route of the full and empty recycle vehicles that cause noise and emission pollution for current homeowners.

Attachments

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Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Monica Tibbits-Nutt, Secretary & CEO

massDOT
Massachusetts Department of Transportation

MassDOT 1

October 15, 2024

Rebecca Tepper, Secretary
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114-2150

RE: Leominster – United Material Management of Leominster – ENF
(EEA # 16878)

ATTN: MEPA Unit
Alex Strysky

Dear Secretary Tepper:

On behalf of the Massachusetts Department of Transportation, I am submitting comments regarding the Environmental Notification Form filed for the United Material Management of Leominster as prepared by the Office of Transportation Planning. If you have any questions regarding these comments, please contact J. Lionel Lucien, P.E., Manager of the Public/Private Development Unit, at (857) 368-8862.

Sincerely,

David J. Mohler
Executive Director
Office of Transportation Planning

DJM/jll

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

cc: Jonathan Gulliver, Administrator, Highway Division
Carrie Lavallee, P.E., Chief Engineer, Highway Division
Barry Lorion, P.E., District 3 Highway Director
Jim Danila. P.E., State Traffic Engineer
Montachusett Regional Planning Commission (MRPC)
Leominster Office of Planning and Development

Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Monica Tibbits-Nutt, Secretary & CEO

massDOT
Massachusetts Department of Transportation

MEMORANDUM

TO: David J. Mohler, Executive Director
Office of Transportation Planning

FROM: J. Lionel Lucien, P.E., Manager
Public/Private Development Unit

DATE: October 15, 2024

RE: Leominster – United Material Management of Leominster – ENF
(EEA # 16878)

The Public/Private Development Unit (PPDU) has reviewed the Environmental Notification Form (ENF) for the United Material Management of Leominster (the "Project") submitted by Green Seal Environmental, LLC on behalf of United Material Management of Leominster, LLC (the "Proponent"). The Project site consists of a 32,400 square foot (sf) solid waste transfer/waste handling building (including 1,260 sf of attached office space for a total footprint of 33,660 sf). The site features a rail yard, scale house, parking areas, and grading and paving, along with related facilities. The site is bordered by Tanzio Road to the east and a rail line to the west. A section of the northern part of the property has an electrical easement with transmission towers, while the further north area is vacant industrial-zoned land. The southern part of the site contains additional vacant land with a wooded wetland area surrounding a brook.

The project aims to increase the permitted tonnage at the MSW and C&D handling and transfer facility. The goal is to raise its maximum daily capacity from 1,000 tons per day (tpd) to 1,500 tpd, which is an increase of 500 tpd. The facility operates six days a week and is projected to achieve an annual capacity of 450,000 tons. It is expected to have a lifespan of approximately 30 years, which translates to an estimated lifetime capacity of 13.5 million tons for the facility. Access to the site is provided via Tanzio Road.

The Project surpasses Massachusetts Environmental Policy Act (MEPA) thresholds for review of an Environmental Notification Form (ENF) due to impacts on solid or hazardous waste per 301 CMR 11.03(9)(b)(1). The Project does not require a Vehicle Access Permit.

The Proponent provides basic information on anticipated transportation impacts resulting from the Project in the ENF Application. The Project is expected to have minimal impact on traffic operations in the study area. According to the ENF, most waste will be transported from the site by rail. A rail line will extend through the loading area at the back of the proposed building so that waste can be loaded directly onto rail cars.

Based on minimal transportation impacts on the state highway system, MassDOT recommends that no additional MEPA review be required for this project based on transportation issues. We encourage the Proponent to consult with the MassDOT Rail and Transit Division regarding the feasibility of an Industrial Rail Access Program (IRAP) grant. IRAP provides financial assistance to eligible applicants who are prepared to invest in rail improvement projects connected to the Massachusetts freight rail transportation network and focused on increasing or improving rail transportation to Massachusetts shippers. If you have any questions about these comments, please feel free to contact William Simon at William.M.Simon@dot.state.ma.us.

Energy & Environmental Affairs
Public Comments Portal

alexander.strysky@mass.gov

View Comment

Comment Details

EEA #/MEPA ID
16878

Comments Submit Date
10-16-2024

Certificate Action Date
11-28-2024

Reviewer
Alexander Strysky, (857)408-6957, alexander.strysky@mass.gov

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State
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Zip Code
01453

Organization
Terrace Condo Association

Affiliation Description
Individual

Status
Opened

Comment Title or Subject

Topic: Trash

Comments

I am currently the head of the home owners association located at Malburn Terrace. I am also an owner at the is location. I have a few concerns regarding the increase in trash to be processed at WIN:

I walk on Tanzio Road on a daily basis, the trash and nails and screws strewn all over is just a mess. I warn everyone not to go up there so they don't get a flat. Not only on Tanzio but on Lancaster Street also

The wear and tear on our streets will only get worse, Lancaster street is just holes and bumps

I have a concern that the trucks will use Malburn Street as a cut over to Tanzio, if an emergency should happen at the condos and safety vehicles cannot get to us there could be a tragedy

There are empty lots on Tanzio Road and if they can't use WIN they just dump their stuff in the empty lots and in the woods. Furniture and even oil based paints and stain are in the woods. I fear for the environment as no one has tended to the junk in the wooded area.

Attachments

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alexander.strysky@mass.gov

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Comment Details

EEA #/MEPA ID
16878

Comments Submit Date
11-12-2024

Certificate Action Date
11-28-2024

Reviewer
Alexander Strysky, (857)408-6957, alexander.strysky@mass.gov

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Yancarlos

Last Name
Alvarez

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State
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Zip Code
01453

Organization
JC Transport Corp.

Affiliation Description
Proponent

Status
Opened

Comment Title or Subject

Topic: JC Transport Corp. Comment

Comments

My name is Yancarlos, owner of JC Transport Corp, a local trucking company here in Leominster. I am writing to support UMML's request to increase their daily waste capacity (EEA No. 16878). I've been a vendor for UMML for a while now, and I see every day how much they do to help small businesses like mine.

UMML is an essential partner for JC Transport. They give me steady work, which lets me keep my business growing and provide jobs for people in our community. The team at UMML is always professional and respectful. They really care about our success and treat both their employees and partners well. It's clear that they run a top-notch operation.

UMML's proposed increase will help many small businesses like mine and will make our community cleaner and stronger. I'm proud to work with UMML and am glad to support them as they grow.

Thank you for considering my comment.

Sincerely,
Yancarlos
Owner, JC Transport Corp.

26 Walker St. Leominster, MA 01453

Attachments

Update Status

Status

Opened

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From: Vincenzo Seretto
To: Strysky, Alexander (EEA)
Subject: UMM Leominster
Date: Wednesday, November 13, 2024 8:16:35 AM

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Alexander Strysky,

I support UMML's proposal to expand its accepted tons per day at the transfer station located in Leominster at 200 Tanzio Road (EEA # 16878). I'm Vincenzo Seretto, and I've been working as the Operations Supervisor at WIN Waste's UMML site for four years. I was born and raised in Leominster and am proud to be a current resident at Woodsome Avenue. I went to school here, my kids go to school here, and this community is my home.

I am also proud to work at the UMML transfer station. I see the benefit we provide to local businesses and the dedication from our hardworking team to always do the right thing for the environment. I see many familiar faces in our customers and the drivers that come through our facility, because they are local just like me. It's important to have local waste disposal access, especially for construction and demolition waste, because illegal dumping is a real issue and the costs to transport it elsewhere is just not affordable for small businesses.

Sincerely,

Sincerely,

VS 1

Vincenzo Seretto
Operation Supervisor
Vseretto@WIN-WASTE.COM
200 Tanzio Rd. Leominster, MA 01453
Mobile- (978) 627-6215

WIN WASTE INNOVATIONS®

PERFORMANCE FOR THE PLANET

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Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Central Regional Office • 8 New Bond Street, Worcester MA 01606 • 508-792-7650

Maura T. Healey
Governor

Kimberley Driscoll
Lieutenant Governor

Rebecca L. Tepper
Secretary

Bonnie Heiple
Commissioner

November 29, 2024

Secretary Rebecca Tepper
Executive Office of Environmental Affairs
100 Cambridge Street, 9th Floor
Boston, MA 02114

MassDEP 1-2

Attention: MEPA Unit – Alexander Strysky

Re: Environmental Notification Form (ENF)
United Material Management of Leominster, LLC
Leominster
EEA #16878

Dear Secretary Tepper,

The Massachusetts Department of Environmental Protection's (MassDEP) Central Regional Office has reviewed the DEIR for the proposed expanded operations at United Material Management of Leominster, LLC (the "Project"). United Material Management of Leominster, LLC (the "Proponent") is proposing to increase the existing waste handling operation, currently permitted for 1,000 tons per day (tpd), by 500 tpd to 1,500 tpd. The maximum annual capacity will increase from 300,000 tons to 450,000 tons. The facility, located at 200 Tanzio Road, consists of a 32,400-square-foot (sf) solid waste handling building with 1,260 sf of attached office space. The property includes a rail yard, a scale house and scales, parking areas, stormwater collection structures, and associated appurtenances. The Project will not include an increase in the building size or construction of additional buildings.

The Project is under MEPA review because it meets or exceeds the following review threshold:

- 301 CMR 11.03(9)(b)(1) - New Capacity or Expansion in Capacity for combustion or disposal of any quantity of solid waste, or storage, treatment or processing of 50 or more tpd of solid waste, unless the Project is exempt from site assignment requirements.

The Project requires the following State Agency Permit:

- MassDEP - Large Handling Facility Modification (SW 07).

United Material Management of Leominster LLC filed an Environmental Notification Form (ENF) for the United Material Management of Leominster project to construct and operate a 1,000-tons/day handling and transfer station at this location (EEA #15896), which was published in the Environmental Monitor on August 8, 2018. The Secretary of Environmental Affairs (the "Secretary") issued a Certificate on the ENF for this project on September 7, 2018, stating no EIR was required.

One or more Environmental Justice Populations are located within the Designated Geographic Area around the Project. MassDEP offers the following comments:

Solid Waste

The 13.46-acre Project parcel is owned by the Proponent and was assigned for use as a solid waste transfer station facility by the Leominster Board of Health on December 19, 2018, pursuant to 310 CMR 16.00. The site assignment establishes a maximum capacity of 1,000 tons per day and 300,000 tons per year (combined Construction & Demolition Waste and Municipal Solid Waste). The Project, which would increase the maximum capacity to 1,500 tpd, requires a MassDEP BWP SW 07 Modification of a Large Handling Facility permit established under 310 CMR 19.000 - Solid Waste Management regulations. The Proponent should include details in the BWP SW 07 Modification of a Large Handling Facility permit application demonstrating that the existing facility operational equipment can handle the additional 500 tpd in compliance with the existing permit conditions, including but not limited to maintaining effective odor controls.

MassDEP notes the Project will require a minor modification to the Site Assignment from the City of Leominster Board of Health. The Project does not require a Major Modification of a Site Suitability Report (SW 38) from MassDEP.

MassDEP encourages this type of solid waste transfer facility to assist in managing Massachusetts waste including the reuse/recycling of construction and demolition materials. Proper waste management and waste diversion is important to conserve the state's declining landfill space and resources if accomplished in an environmentally sound manner.

MassDEP appreciates the opportunity to comment on the Project. If you have any questions regarding these comments, please do not hesitate to contact JoAnne Kasper-Dunne, Central Regional Office MEPA Coordinator, at joanne.kasper-dunne@mass.gov.

Very truly yours,

Mary Jude Pigsley
Regional Director

cc: Commissioner's Office, MassDEP

ATTACHMENT 8

COMPLAINT LOG

UMM Leominster
Complaint Log Summary
Prepared: 8/8/2025

Date	Complaint	Complaint to	Complaint by	via method	Inspection	Resolution/follow up
4/7/2021	Odor on Calza Street	MassDEP	Frank Bangrazi	email	BOH	undocumented
8/8/2021	Odor on Calza Street	MassDEP	Frank Bangrazi		MassDEP	MassDEP conducted inspections before and after complaint and did not detect any.
9/18/2021	Dust, non-use of misting system, operating on Sunday, tarp over tipping door.	MassDEP	unknown	unknown	n/a	Reply to MassDEP that misting system was in operation, plus hand held hoses were used for added dust control; Sunday work was the removal of the baler equipment to prepare for the sorting line installation; and the tarp was in place because a door failed and they were waiting repair.
11/15/2021	open doors overnight the previous weekend	UMML & MassDEP	unknown	unknown		not documented
9/6/2022	rats near offsite rail cars	BOH	unknown	unknown	BOH	informed MassDEP of complaint. Complaint was about an offsite location, not at the Facility.
4/29/2023	odor on Calza St	MassDEP	Frank Bangrazi	email	BOH	unknown if confirmed
9/23/2024	odor on 9/6 at 2pm and 9/20-most of day at Calza St	MassDEP& BOH	Frank Bangrazi	email	BOH	unknown if confirmed
3/18/2025	odor on Calza St	MassDEP & BOH	Frank Bangrazi	email	BOH	unknown if confirmed
8/1/2025	odor on Calza St	BOH & UMML	Frank Bangrazi	email	BOH & UMML	Found source of odor to be a dumpster on a neighboring property, not from UMML

Notes:
1.Complaint log based upon various information sources and was prepared to the best of the available information.

ATTACHMENT 9

COMMUNITY OUTREACH/ PUBLIC INVOLVEMENT PLAN (PIP)

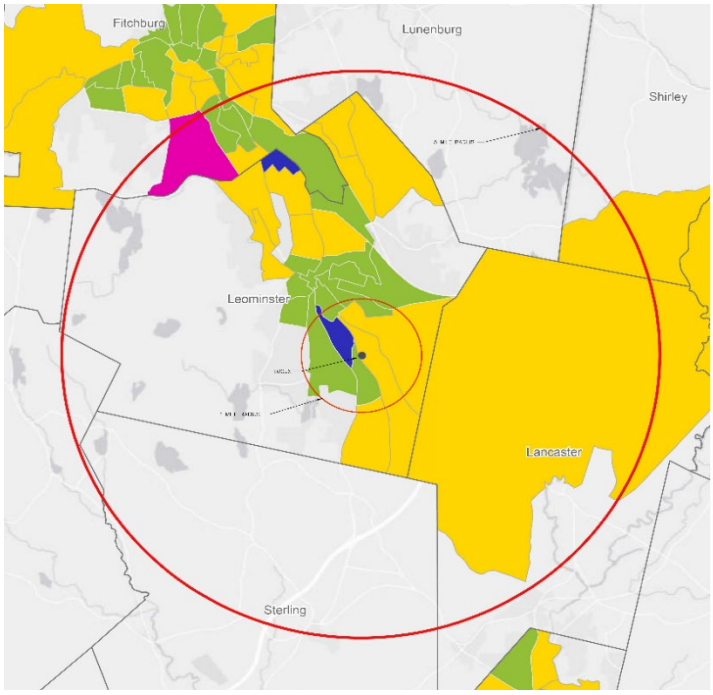
Project Background and Purpose of PIP

Intro	This Public Involvement Plan (PIP) outlines the actions and efforts planned to obtain meaningful public comment from the community for the United Materials Management of Leominster Expansion Project. This document will be updated as necessary as the Project progresses through permitting to capture any identified appropriate changes in outreach strategy.
Project Background	United Materials Management of Leominster (UMML) is a rail-served solid waste handling and transfer station located at 200 Tanzio Road in Leominster, Massachusetts. The Facility has been in operation since May of 2020, as a 1,000 ton per day Facility that accepts Municipal Solid Waste and Construction and Demolition Debris. The Facility is located on a 13.46-acre parcel of land within an Industrial Park and includes an access driveway, parking areas, an existing 32,500-square-foot building with a metal frame and sheathing, and rail spur and siding.
Purpose of PIP	As UMML is requesting to increase its daily tonnage from 1,000 tons per day (tpd) to 1,500 tpd, which is considered an Expansion per 301 CMR 11.03(9), there are permitting efforts associated with obtaining approval. As part of the initial permitting step through the Executive Office of Environmental Affairs, MEPA Office, this PIP has been requested.

Existing Community Conditions

EJ Populations in DGA

The Project's Designated Geographic Area (DGA) for which Environmental Justice-related outreach is based upon whether or not the Project will either exceed any air threshold at 301 CMR 11.03(8) or generate greater than 150 or more adt of diesel traffic over a duration of 1 year or more. As this Project will not exceed or generate either impacts noted, the DGA is a 1-mile radius. The below figure summarizes the EJ communities surrounding the project area and those within the 1-mile DGA. A larger Figure with expanded legend is included as Attachment 1.



	UMML site
	1 and 5-mile radii
	Minority
	Minority and income
	Minority, income, and English isolation
	Minority and English isolation

Existing Health Vulnerabilities

The DPH EJ Tool shows that the City of Leominster contains one Vulnerable Health EJ neighborhood, for heart attack criteria.

Potential Impacts and Mitigation

Potential Impacts

There will be no physical building expansion to the existing Facility for this Project. The potential environmental and public health impacts to the local EJ Population are expected to be limited to that associated with traffic, however, will not necessarily lead to more vehicles in the surrounding EJ areas. There will be more vehicle activity with the increased capacity but mainly at the Facility.

The Facility provides a local outlet for locally generated waste so that vehicles already travelling on local roads won't have to travel as far to dispose/recycle waste materials, which saves fuel and reduces emissions. The increased vehicle activity and the associated emissions will be mitigated through compliance with MassDEP's Anti-Idling law, Tier IV-compliant vehicle usage, and facility design that includes two truck scales to minimize time trucks are on site and air handling systems for equipment operating inside. EPA's March 2024, Greenhouse Gas Emissions Standards for Heavy Duty Vehicles – Phase 3 Rule will further regulate GHG emissions from refuse and tractor trailer heavy duty trucks starting in 2027 that will further reduce GHG emissions associated with this project.

Mitigation and BMPs

The Facility's advanced Best Management Practices for air quality include:

1. Enclosing all tipping, handling, and loading operations within the handling building.
2. Utilizing a misting system in the handling building to control dust and odor.
3. Conducting daily cleanups and sweeping.
4. Using covered transportation for trucks and railcars.
5. Applying first in/first out procedures to reduce the time municipal solid waste (MSW) remains on site, minimizing the potential for nuisance conditions.
6. Using two vehicle scales to increase efficiency and minimize time trucks are on site.

UMML will continue to utilize advanced sorting equipment for the recovery of recyclables and use low-carbon rail for transport. These efficiencies preserve precious natural resources and reduce CO_2 emissions as moving waste by rail is four times more fuel efficient than using tractor trailers.

Outreach Strategy

Notification

Notification of upcoming public meetings will include the following at a minimum:

1. Post notice in City Hall, Spanish American Center, Leominster Library
2. Publish in Sentinel (English) and Vocero (Spanish)
3. Send notice to Project Distribution list
4. Send notices to City for inclusion on City calendar
5. Post notice on website
6. Post in Environmental Monitor (for MEPA submittals and MassDEP Site Suitability)

Notice of submittals to MEPA will include the following at a minimum:

1. Post in Environmental Monitor as required
2. Post in Sentinel (English) and Vocero (Spanish), as required
3. Send notice to Project Distribution list
4. Post on project website

Notice of Minor Modification to Site Assignment Hearing (post-MEPA process) will include the following at a minimum:

1. Post on project website
2. Notify Distribution List
3. Notify MassDEP distribution list per 310 CMR 16.08(2)
4. Notify Abutters via certified mail
5. Publish in Sentinel (English) and Vocero (Spanish)
6. Send notice to Spanish American Center

Notifications of Public Meetings will occur approximately 2 weeks in advance, and no later than 3 days in advance in accordance with Open Meeting law, unless otherwise required by regulations.

Outreach Efforts

In addition to providing Advance Notification of the ENF submittal and hosting a public meeting, UMML has reached out not only to the Spanish American Center, but to other City Departments like the Cultural Council and Mayor's office. A website was established, as described below, to function as a single-source of information and communication platform as part of outreach. Fact Sheets have been prepared in both English and Spanish (see Attachment 4).

Continued on next page

Outreach Strategy, Continued

Public Meetings

The anticipated Public Meetings for the Project include the following:

1. Pre-MEPA filing Advance Notification: June 19, 2024 (translation services were provided)
2. MEPA Site Walk: Anticipated Mid- September 2024 following submittal and notice in Environmental Monitor
3. Pre-DEIR filing Meeting, as
4. Pre-FEIR filing Meeting, if requested by public or MEPA
5. Post-MEPA Site Assignment Modification Hearings

Public Engagement

The Public engagement strategy for the Project includes the following:

1. Provide Advance Notification of the Project to the Project-Specific EJ Distribution List that includes Community based organizations, indigenous organizations, tribes, City officials, and other appropriate organizations, residents, etc., that requests to be on contact list or comments on submittals/reports.
2. Hold required and requested Public Meetings throughout the Project, as further identified in the Public Meeting section above.
3. Hold Public meetings during evening hours at accessible City locations near public transportation, as feasible.
4. Continue to communicate with public officials (State Representative, Mayor's office, Spanish American Center, and local City officials).
5. Continue outreach and notification of upcoming submittals and public meetings.
6. Maintain and update Project website and Distribution List.
7. Provide online virtual tour video of Facility on the Project website which will include Spanish translation.
8. Post virtual tour flyer on community bulletin boards with QR code to view virtual tour and link to Project website for more information.
9. Provide Project Summary in both English and Spanish.
10. Conduct "door-knocking" at nearby residences upon submittal of ENF.
11. Posting notice of upcoming meetings in both English and Spanish community newspapers.
12. Establish Information Repository of Project reports and communications at the Leominster Library.

Strategies 2, 3, 4, 5, 6, 7, 9, 10, 11, 12 listed above are consistent with those identified in the MEPA EJ Public Involvement Protocol.

Continued on next page

Outreach Strategy, Continued

Communication

A Project website was established as a source for information and to facilitate communication on the Project:

www.ummleominster.com

The website functions as an information repository with links to Project factsheets, copies of submitted reports, presentations, public notices, virtual tour video, and distribution list. It also will provide updated schedules of upcoming hearings and public comment periods; and will provide a contact for questions or requests to be added to the Distribution/Contact list. Translation services will be provided as requested, during public meetings. The Project website will be continually updated throughout the MEPA permitting process.

Advance Notification Summary

UMML provided Advance Notification prior to submitting the Environmental Notification Form to engage the public and provide awareness about the Project and the upcoming permitting process. This advance notification included sending EJ Screening Forms in English and Spanish (see Attachment 3) to the Project-Specific EJ Distribution List with information on the upcoming pre-application public informational meeting. This Distribution List is included as Attachment 2 and has been since amended following the initial July 22, 2024 public hearing. Additional Town entities and the State Representative were included in the Advance Notification.

The Public Meeting notice was published in the Sentinel in English and Vocero in Spanish prior to the meeting. It was also posted on the Leominster Public Library's bulletin board and sent to the City to be included on the City's meeting calendar.

Following the public informational meeting, additional Project information was provided and a site walk was held on August 16, 2024 for City Board of Health Officials and the State Representative's office.

Attachments

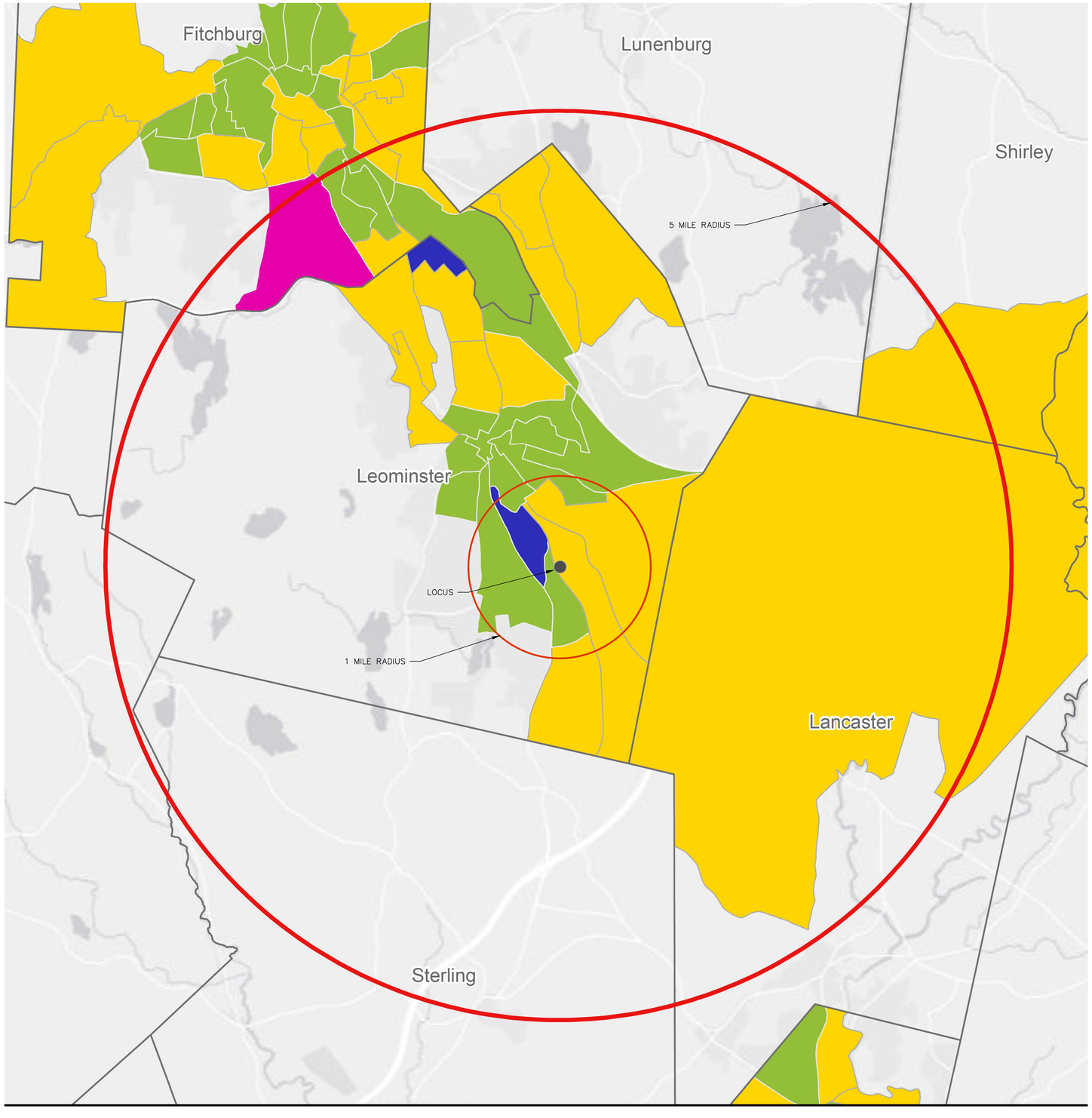
Attachments

The following supporting documents can be found as Attachments to this Public Involvement Plan:

Item	Attachment
Environmental Justice Populations- Figure 8	1
Project-Specific EJ Distribution List	2
EJ Screening Form (English and Spanish)	3
Project Fact Sheet (English and Spanish)	4

ATTACHMENT 1

ENVIRONMENTAL JUSTICE POPULATIONS - FIGURE 8



Minority: the block group minority population is >= 40%, or the block group minority population is >= 25% and the median household income of the municipality the block group is in is < 150% of the Massachusetts median household income

Income: at least 25% of households have a median household income 65% or less than the state median household income

Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well

Minority and Income

Minority and English isolation

Income and English isolation

Minority, Income and English isolation

NOTES:
1. THESE DATA WERE OBTAINED FROM https://www.mass.gov/info-details/massgis-data-2020-environmental-justice-populations
2. PER GUIDELINES, PROJECT IS SUBJECT TO THE 1-MILE DESIGNATED GEOGRAPHIC AREA (DGA) FOR ENVIRONMENTAL JUSTICE RELATED PROTOCOLS.

LOCUS MAP
N.T.S.

Green Seal Environmental, LLC
114 State Road, Building B
Sagamore Beach, MA 02562
Tel: (508) 888-6034
Fax: (508) 888-1506
www.gseenv.com

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Dimensions are as indicated.

Use of this plan constitutes acceptance of terms and conditions set forth in accompanying project documentation.

It is the responsibility of the user to confirm discrepancies with the Engineer prior to use.

REVISIONS

NO.	DATE	COMMENT

PURPOSE:

SITE SUITABILITY MODIFICATION

LOCUS:

200 TANZIO ROAD
LEOMINSTER, MA 01453

PREPARED FOR:

UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC

DRAWING TITLE:

ENVIRONMENTAL JUSTICE POPULATIONS 2020

CAD TECH:	CHECKED BY:
D. HAZEN	L. BUGAY
ENGINEER:	DATE:
L. BUGAY	5/22/2024
	SCALE: 1"=3000'
	SHEET: FIGURE 8

ATTACHMENT 2

PROJECT- SPECIFIC EJ DISTRIBUTION LIST

Project-Specific EJ Reference List

Populate this Project-Specific Reference List with the appropriate contacts from all 4 tabs in the EJ Reference List workbook

Project Name: United Material Management of Leominster

Project Address: 200 Tanzio Road, Leominster MA 01453

MA Municipalities in Project's DGA: Leominster

Date Generated: 6/9/2025

Filing Type:

☐ ENF/EENF ☑ DEIR/FEIR ☐ SEIR ☐ Other

First Name	Last Name	Title	Phone	Email	Affiliation	Contact Type *(autopopulates)*
Claire	B.W. Muller	Movement Building Director	(508) 308-9261	claire@uumassaction.org	Unitarian Universalist Mass Action Network	Statewide CBO
Julia	Blatt	Executive Director	(617) 714-4272	juliablatt@massriversalliance.org	Mass Rivers Alliance	Statewide CBO
Jodi	Valenta	Massachusetts State Director	(617) 367-6200	Jodi.Valenta@tpl.org	The Trust for Public Land	Statewide CBO
Kerry	Bowie	Board President	Not Provided	kerry@msaadapartners.com	Browning the GreenSpace	Statewide CBO
Sylvia	Broude	Executive Director	(617) 292-4821	sylvia@communityactionworks.org	Community Action Works	Statewide CBOLocal CBO
Britteny	Jenkins	Vice President	Not Provided	Bjenkins@clf.org	Conservation Law Foundation	Statewide CBO
Alex	St. Pierre	Director of Communities & Toxics	Not Provided	aestpierre@clf.org	Conservation Law Foundation	Statewide CBO
Paulina	Muratore	Director of Transportation Justice and Infrastructure	Not Provided	pmuratore@clf.org	Conservation Law Foundation	Statewide CBO
Breanne	Frank	Associate Attorney	Not Provided	bfrank@clf.org	Conservation Law Foundation	Statewide CBO
Amy	Boyd Rabin	Vice President of Policy	(617) 221-8258	aboydrabin@environmentalleague.org	Environmental League of Massachusetts	Statewide CBO
Zahra	Saifee	Policy & Advocacy Coordinator	(435) 632-9482	zsaifee@environmentalleague.org	Environmental League of Massachusetts	Statewide CBO
Ben	Hellerstein	MA State Director	(617) 747-4368	ben@environmentmassachusetts.org	Environment Massachusetts	Statewide CBO
Robb	Johnson	Executive Director	(978) 443-2233	robb@massland.org	Mass Land Trust Coalition	Statewide CBO
Cindy	Luppi	New England Director	(617) 338-8131 x208	cluppi@cleanwater.org	Clean Water Action	Statewide CBO
Dálida	Rocha	Executive Director	Not Provided	dalida@n2nma.org	Neighbor to Neighbor Mass.	Statewide CBOLocal CBO

Project-Specific EJ Reference List

Populate this Project-Specific Reference List with the appropriate contacts from all 4 tabs in the EJ Reference List workbook

Project Name: United Material Management of Leominster

Project Address: 200 Tanzio Road, Leominster MA 01453

MA Municipalities in Project's DGA: Leominster

Date Generated: 6/9/2025

Filing Type:

☐ ENF/EENF ☑ DEIR/FEIR ☐ SEIR ☐ Other

First Name	Last Name	Title	Phone	Email	Affiliation	Contact Type *(autopopulates)*
Lena Miles	Entin Gresham	Director of Individual Giving Campaign Director	Not Provided	Lena@N2NMa.org Miles@N2NMa.org	Neighbor to Neighbor Mass.	Statewide CBOLocal CBO
Rob	Moir	Executive Director	Not Provided	rob@oceanriver.org	Ocean River Institute	Statewide CBO
Vickash	Mohanka	Director, MA Chapter	Not Provided	vick.mohanka@sierraclub.org	Sierra Club MA	Statewide CBO
Heidi	Ricci	Director of Policy	Not Provided	hricci@massaudubon.org	Mass Audubon	Statewide CBO
Bettina	Washington	Tribal Historic Preservation Officer	(508) 560-9014	thpo@wampanoagtribe-nsn.gov	Wampanoag Tribe of Gay Head (Aquinnah)	Federal Tribe
Brian	Weeden	Chair	(774) 413-0520	Brian.Weeden@mwtribe-nsn.gov	Mashpee Wampanoag Tribe	Federal Tribe
Shared Email Address				106Review@mwtribe-nsn.gov	Mashpee Wampanoag Tribe	Federal Tribe
David	Weeden	THPO/Director	(774) 327.0068	David.Weeden@mwtribe-nsn.gov	Mashpee Wampanoag Tribe	Federal Tribe
Nakia	Hendricks Jr.	Office Manager	Not Provided	106Review@mwtribe-nsn.gov	Mashpee Wampanoag Tribe	Federal Tribe
Alma	Gordon	President	Not Provided	tribalcouncil@chappaquiddickwampanoag.org	Chappaquiddick Tribe of the Wampanoag Nation	Indigenous Org
Cheryll	Toney Holley	Chair	(774) 317-9138	crwritings@aol.com	Nipmuc Nation (Hassanamisco Nipmucs)	Indigenous Org
John	Peters, Jr.	Executive Director	(617) 573-1292	john.peters@mass.gov	Massachusetts Commission on Indian Affairs (MCIA)	Indigenous Org
Melissa	Ferretti	Chair	(508) 304-5023	melissa@herringpondtribe.org	Herring Pond Wampanoag Tribe	Indigenous Org
Patricia	D. Rocker	Council Chair	Not Provided	rockerpatriciad@verizon.net	Chappaquiddick Tribe of the Wampanoag Nation, Whale Clan	Indigenous Org
Raquel	Halsey	Executive Director	(617) 232-0343	rhalsey@naicob.org	North American Indian Center of Boston	Indigenous Org
Cora	Pierce	Not Provided	Not Provided	Coradot@yahoo.com	Pocassett Wampanoag Tribe	Indigenous Org

Project-Specific EJ Reference List

Populate this Project-Specific Reference List with the appropriate contacts from all 4 tabs in the EJ Reference List workbook

Project Name: United Material Management of Leominster

Project Address: 200 Tanzio Road, Leominster MA 01453

MA Municipalities in Project's DGA: Leominster

Date Generated: 6/9/2025

Filing Type:

☐ ENF/EENF ☑ DEIR/FEIR ☐ SEIR ☐ Other

First Name	Last Name	Title	Phone	Email	Affiliation	Contact Type *(autopopulates)*
Elizabeth	Solomon	Not Provided	Not Provided	Solomon.Elizabeth@gmail.com	Massachusetts Tribe at Ponkapoag	Indigenous Org
Neddy	Latimer	Not Provided	(978) 534-3145	info@spanishamericancenter.org	Spanish American Center	*Local CBO*
Nicole	Butler	Assistant Director		nbutler@leominster-ma.gov	Leominster Library	
Natalie	Higgins	State Representative		natalie.higgins@mahouse.gov	House of Representatives	

ATTACHMENT 3

EJ SCREENING FORMS
(ENGLISH AND SPANISH)

Environmental Justice Screening Form

Project Name	Permit Modification at United Material Management of Leominster, LLC
Anticipated Date of MEPA Filing	September 3, 2024
Proponent Name	United Material Management of Leominster, LLC
Contact Information (e.g., consultant)	**Environmental Consultant:** Laura Bugay, PE Green Seal Environmental, LLC l.bugay@gseenv.com 508-888-6034 **Community Involvement Contact:** UMM of Leominster Mary Urban, Senior Director of Communications and Community Relations comms@win-waste.com (866) 946-9278
Public website for project or other physical location where project materials can be obtained (if available)	www.ummleominster.com
Municipality and Zip Code for Project (if known)	Municipality: Leominster, MA Zip Code: 01453
Project Type* (list all that apply)	Solid Waste, Industrial
Is the project site within a mapped 100-year FEMA flood plain? Y/N/ unknown	No
Estimated GHG emissions of conditioned spaces (click here for GHG Estimation tool)	N/A, as there will be no modification to existing facility/conditioned spaces. The existing facility was constructed in 2019-2020 with three conditioned spaces including the employee facility trailer, offices, and scale house. According to the GHG estimation tool, these spaces currently generate 13 tons per year of CO_2 emissions (less than 2 single-family houses). No changes are proposed.

Project Description

1. Provide a brief project description, including overall size of the project site and square footage of proposed buildings and structures if known.

United Material Management of Leominster (UMML) is a state-of-the-art municipal solid waste (MSW) and construction & demolition (C&D) waste handling and transfer station with an integrated rail line. The facility, located at 200 Tanzio Road in Leominster, Massachusetts, specializes in the recycling of C&D debris and the transfer of residuals for responsible end disposal.

In order to meet the growing demand for waste handling in Massachusetts, UMML is proposing a project, subject to Massachusetts Environmental Policy Act (MEPA) review, that will increase the handling capacity at its current facility in Leominster. The facility will not require any building expansion to accommodate the increased handling capacity. The facility is currently permitted to process up to 1,000 tons of waste per day (TPD). This project would increase that capacity to 1,500 TPD.

The UMML facility is located on a 13.46-acre parcel of land within an Industrial Park and includes an access driveway, parking areas, and an existing 32,500-square-foot building with a metal frame and sheathing. Even with this proposed capacity increase, all waste handling functions will continue to be performed entirely within the existing material processing building and its confines, including tipping and inspection, temporary waste storage, and outbound rail and truck loading. C&D processing activities will continue to utilize sorting equipment for the removal and recovery of recyclables. The facility will continue to predominantly ship material for end disposal via rail, the least carbon-intensive mode for land transport.

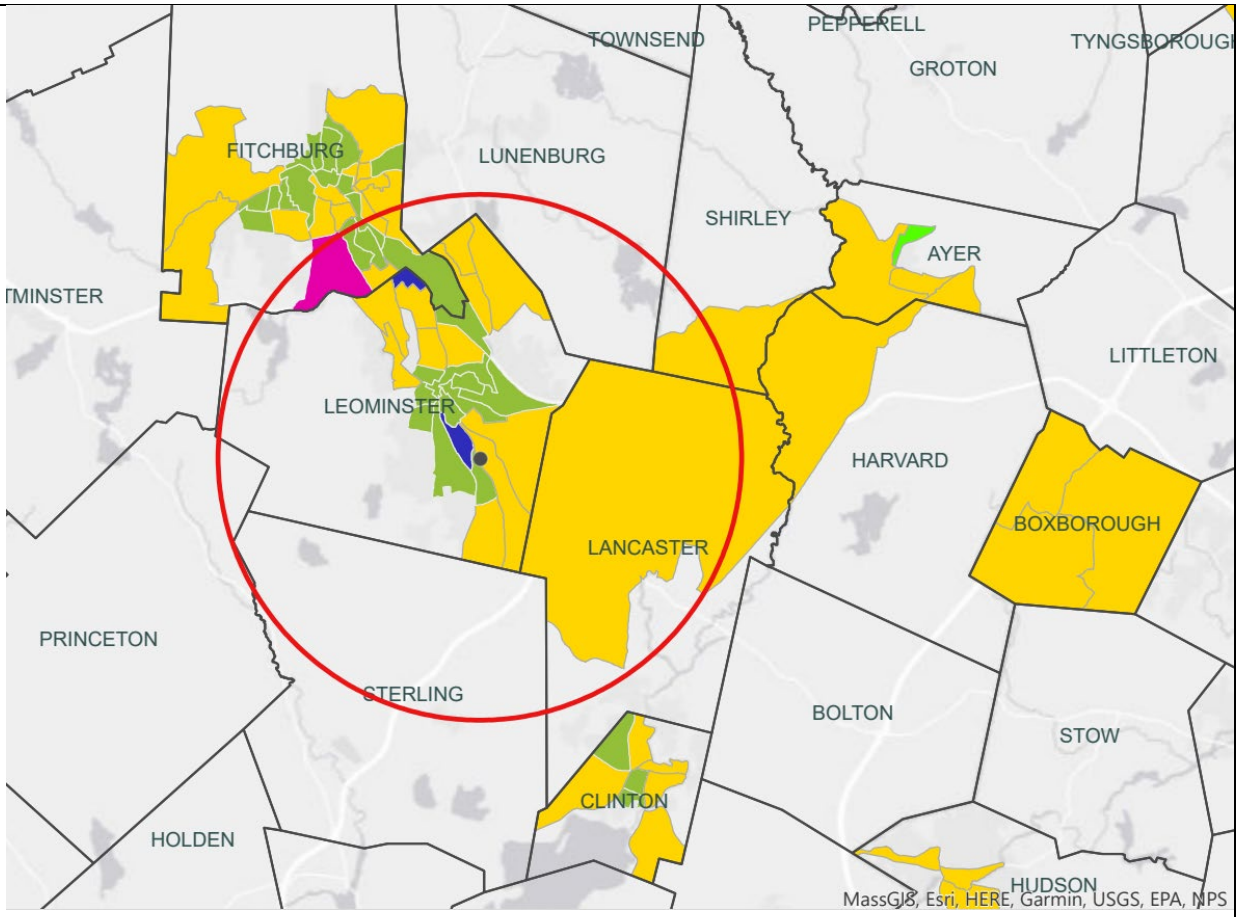
2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known)

(9) Solid Waste

3. List all anticipated state, local and federal permits needed for the project (if known)

Local: Leominster Board of Health – Major Modification to an Existing Site Assignment
State: MassDEP Site Suitability (BWP SW 38); MassDEP Permit Modification (BWP SW 07)

4. Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles of project site (can attach map identifying 5-mile radius from EJ Maps Viewer in lieu of narrative)



UMML site

5-mile radius

Minority

Minority and income

Minority, income, and English isolation

Minority and English isolation

5. Identify any municipality or census tract meeting the definition of "vulnerable health EJ criteria" in the DPH EJ Tool located in whole or in part within a 1 mile radius of the project site

The DPH EJ Tool shows that the City of Leominster contains one Vulnerable Health EJ neighborhood, for heart attack criteria. The Lancaster municipal boundary is within 1 mile of the project although Lancaster does not have any Vulnerable Health EJ criteria.

6. Identify potential short-term and long-term environmental and public health impacts that may affect EJ Populations and any anticipated mitigation

There will be no physical building expansion to the existing facility for this project. The potential environmental and public health impacts to the local EJ Population are expected to be limited to that associated with traffic, however, will not necessarily lead to more vehicles in the surrounding EJ areas. There will be more vehicle activity with the increased capacity but mainly at the facility.

The facility provides a local outlet for locally generated waste so that vehicles already travelling on local roads won't have to travel as far to dispose/recycle waste materials, which saves fuel and reduces emissions. The increased vehicle activity and the associated emissions will be mitigated through compliance with MassDEP's Anti-Idling law, Tier IV-compliant vehicle usage, and facility design that includes two truck scales to minimize time trucks are on site and air handling systems for equipment operating inside. EPA's March 2024, Greenhouse Gas Emissions Standards for Heavy Duty Vehicles – Phase 3 Rule will further regulate GHG emissions from refuse and tractor trailer heavy duty trucks starting in 2027 that will further reduce GHG emissions associated with this project.

The facility's advanced Best Management Practices for air quality include:

1. Enclosing all tipping, handling, and loading operations within the handling building.
2. Utilizing a misting system in the handling building to control dust and odor.
3. Conducting daily cleanups and sweeping.
4. Using covered transportation for trucks and railcars.
5. Applying first in/first out procedures to reduce the time municipal solid waste (MSW) remains on site, minimizing the potential for nuisance conditions.
6. Using two vehicle scales to increase efficiency and minimize time trucks are on site.

UMML will continue to utilize advanced sorting equipment for the recovery of recyclables and use low-carbon rail for transport. These efficiencies preserve precious natural resources and reduce CO_2 emissions as moving waste by rail is four times more fuel efficient than using tractor trailers.

7. Identify project benefits, including "Environmental Benefits" as defined in 301 CMR 11.02, that may improve environmental conditions or public health of the EJ population

Key project benefits include:

Meeting the demand for waste management – The need for economical and environmentally-sensitive handling of both MSW and C&D waste in the City of Leominster is a critically-important, growing challenge. If its service capability is expanded under this project, the UMML facility will be able to better address that challenge for the city, its residents, and its businesses. Additionally, the facility will also be an important asset for the region's ability to provide an economically competitive and efficient means to manage C&D and MSW due to its unique use of rail for transport. This rail-served facility will allow the region to access disposal outlets that are generally not economically viable through traditional trucking alone.

It should also be noted that based on the inevitable closure of the Fitchburg/Westminster landfill and others, more disruptions in waste management across the region as well as the entire Commonwealth can be expected. This will place additional pressures on a statewide system that is already struggling to keep pace with demand. The UMML facility is perfectly positioned and able to alleviate some of that pressure with no new construction required.

Providing a driver for economic development – According to the Leominster Economic Development Office, industrial development in Leominster is a priority. This region continues to boast of a highly skilled workforce, particularly within manufacturing industries.

The existing UMML facility was approved for construction in 2019 and the current service expansion proposal will offer a unique opportunity to further both economic and environmental

goals without additional construction impact to the surrounding environment. It will create more employment opportunities for residents and grow the tax base.

Additionally, it is very likely that with the anticipated shortage of adequate disposal and landfill capacity in the future, exportation of waste will become more significant in Massachusetts. It is this fact that differentiates the UMML site from other waste handling facilities in that it has access to railway transport and can export waste with considerably less environmental impact that trucking transfer.

Increasing recycling – UMML specializes in the sorting and recycling of C&D materials and is a MassDEP-compliant C&D processor. An increase in permitted daily capacity would increase the quantity of materials the facility is recycling. The facility recovers hundreds of tons of recyclables each month. Asphalt, brick, concrete, cardboard, ferrous and non-ferrous metals, asphalt shingles, gypsum, tires, and wood are all sent to recycling facilities for reuse in new products — helping conserve our natural resources for future generations. What we cannot recycle is transferred to its final disposal by rail, the lowest carbon mode of land transport.

Reducing GHGs in the waste management handling process – The UMML facility is committed to sustainable business practices by taking the most efficient transport routes, recycling materials for reuse, and investing in sustainable technologies.

UMML's state-of-the-art waste handling process uses numerous GHG-reduction tactics to protect our planet, but the most impactful at this site includes consolidating waste prior to transport, using rail transport instead of traditional truck transport whenever possible, and diverting as much waste from near-capacity landfills via recycling, reuse, and recovery.

Rail transport is four times more efficient than trucking in terms of fuel use and emissions since trains can move a ton of freight more than 470 miles on a single gallon of fuel compared to trucks that can move the same for only 134 miles (approximately). Thanks to this fuel-efficient transport option at UMML, negative environmental impacts from traditional trucking such as the emission of diesel particulate, carbon dioxide, nitrogen oxides, and other greenhouse gases, are greatly reduced.

Protects open space – The existing UMML facility does not impact open space as it has adequate separation to any designated open space, is outside of mapped habitats, and is located in an existing industrial park that is zoned for this type of facility. By utilizing the existing facility, no new facility must be constructed. Therefore, no demand for additional land space is required to increase waste handling capacity.

8. Describe how the community can request a meeting to discuss the project, and how the community can request oral language interpretation services at the meeting. Specify how to request other accommodations, including meetings after business hours and at locations near public transportation.

A public meeting has been scheduled for Monday, July 22, 2024, at 6 p.m., in the Community Room at Leominster Public Library located at 30 West St, Leominster, MA 01453, which is within walking distance to bus stops along the MART Fitchburg/Leominster Bus Route System. More information about the meeting is included in the attached public meeting notice. To request language interpretation services at the meeting please email comms@win-waste.com. Please allow a two-weeks' notice prior to the meeting to request interpretation services.

Formulario de evaluación de justicia ambiental

Nombre del proyecto	Modificación del permiso en United Material Management of Leominster, LLC
Fecha prevista de presentación ante MEPA	3 de septiembre, 2024
Nombre del proponente	United Material Management of Leominster, LLC
Información de contacto (p. ej., consultor)	**Consultor ambiental:** Laura Bugay, PE Green Seal Environmental, LLC l.bugay@gseenv.com 508-888-6034 **Contacto de participación comunitaria:** UMM of Leominster Mary Urban, Director sénior de Comunicaciones y Relaciones Comunitarias comms@win-waste.com (866) 946-9278
Sitio web público para el proyecto u otra ubicación física donde se pueden obtener materiales del proyecto (si está disponible)	www.ummleominster.com
Municipio y código postal del proyecto (si se conoce)	Municipio: Leominster, MA Código postal: 01453
Tipo de proyecto* (indique todos los que correspondan)	Desechos sólidos, industriales
¿Se encuentra el sitio del proyecto dentro de un terreno inundable dentro de 100 años mapeado por la FEMA? S/N/Se desconoce	No
Emisiones estimadas de GEI de los espacios acondicionados (haga clic aquí para acceder a la herramienta de estimación de GEI)	N/A, ya que no habrá modificaciones en las instalaciones ni en los espacios acondicionados existentes. La instalación existente se construyó en 2019-2020 con tres espacios acondicionados, incluido el remolque con instalaciones para empleados, las oficinas y la estación de pesaje. Según la herramienta de estimación de GEI, estos espacios actualmente generan 13 toneladas por año de emisiones de CO_2 (menos que 2 casas unifamiliares). No se proponen cambios.

Descripción del proyecto

1. Proporcione una breve descripción del proyecto, incluido el tamaño total del sitio del proyecto y los pies cuadrados de los edificios y estructuras propuestos, si se conocen.

United Material Management of Leominster (UMML) es una estación de última generación de transferencia y manejo de desechos sólidos municipales (municipal solid waste, MSW), y desechos de construcción y demolición (construction & demolition, C&D) que cuenta con una línea ferroviaria integrada. La instalación, ubicada en 200 Tanzio Road en Leominster, Massachusetts, se especializa en el reciclaje de desechos de C&D y la transferencia de residuos para la eliminación final responsable.

A fin de satisfacer la creciente demanda de manejo de desechos en Massachusetts, UMML propone un proyecto, sujeto a la revisión de la Massachusetts Environmental Policy Act (MEPA), que aumentará la capacidad de manejo en sus instalaciones actuales en Leominster. La instalación no requerirá ninguna expansión del edificio para adaptarse al aumento de la capacidad de manipulación. Actualmente, la instalación tiene permiso para procesar hasta 1,000 toneladas de desechos por día (TPD). Este proyecto aumentaría esa capacidad a 1,500 TPD.

La instalación de UMML está ubicada en una parcela de terreno de 13.46 acres dentro de un parque industrial e incluye una entrada de acceso, áreas de estacionamiento y un edificio existente de 32,500 pies cuadrados con un marco de metal y revestimiento. Incluso con este aumento de capacidad propuesto, todas las funciones de manejo de desechos se seguirán realizando completamente dentro del edificio de procesamiento de materiales existente y sus límites, incluidos el volcado y la inspección, el almacenamiento temporal de desechos y la carga saliente en trenes y camiones. Para las actividades de procesamiento de C&D, se seguirán utilizando equipos de clasificación para eliminar y recuperar los materiales reciclables. La instalación continuará enviando material para su eliminación final predominantemente por ferrocarril, el modo de menor generación de carbono para el transporte terrestre.

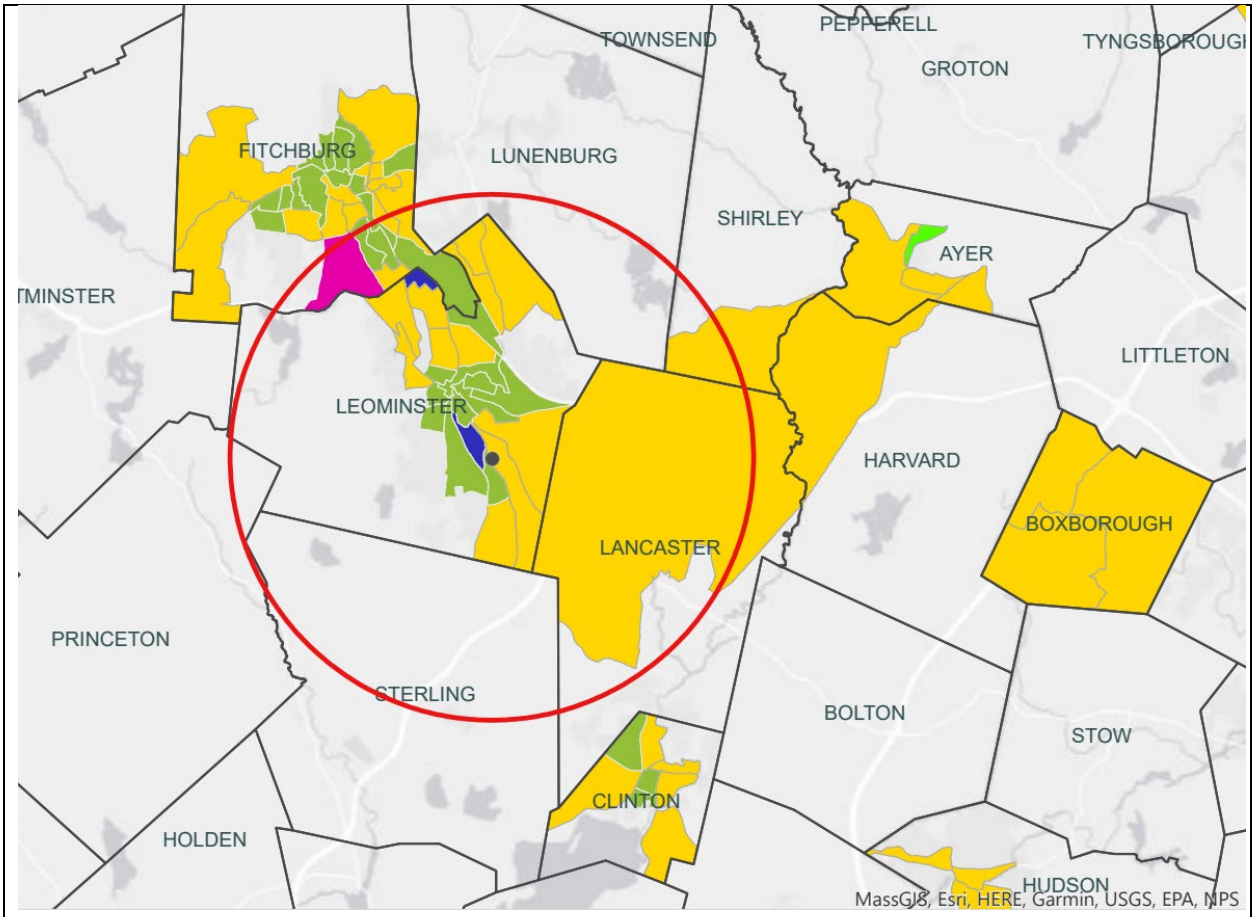
2. Indique los niveles de revisión anticipada de MEPA (301 CMR 11.03) (si se conocen).

(9) Desechos sólidos

3. Enumere todos los permisos estatales, locales y federales previstos necesarios para el proyecto (si se conocen).

Local: Junta de Salud de Leominster: principal modificación a una asignación de sitio existente
Estado: idoneidad del sitio de MassDEP (BWP SW 38); modificación del permiso de MassDEP (BWP SW 07)

4. Identifique las poblaciones y características de justicia ambiental (EJ) (minoría, ingresos, aislamiento inglés) dentro de las 5 millas del sitio del proyecto (puede adjuntar un mapa que identifique un radio de 5 millas desde la opción Visor de mapas de EJ en lugar de texto)



- Sitio de UMML
- Radio de 5 millas
- Minoría
- Minoría e ingresos
- Aislamiento de minorías, ingresos e inglés
- Aislamiento de minorías e inglés

5. Identifique cualquier municipio o sección censal que cumpla con la definición de "criterios de población de EJ con salud vulnerable" en la Herramienta de EJ del Departamento de Salud Pública (DPH) ubicado en su totalidad o en parte dentro de un radio de 1 milla del sitio del proyecto.

La herramienta DPH EJ muestra que la ciudad de Leominster contiene un vecindario de EJ de salud vulnerable, para los criterios de ataque cardíaco. El límite municipal de Lancaster está a menos de 1 milla del proyecto, aunque Lancaster no tiene ningún criterio de EJ de salud vulnerable.

6. Identifique los potenciales impactos a corto y largo plazo sobre el ambiente y la salud pública que pueden afectar a las poblaciones de EJ y cualquier mitigación prevista.

No habrá expansión física de construcción de las instalaciones existentes para este proyecto. Se espera que los posibles impactos ambientales y de salud pública para la población de EJ se limiten a los asociados con el tráfico; sin embargo, no necesariamente generarán más vehículos en las áreas de EJ circundantes. Habrá más actividad vehicular con el aumento de la capacidad, pero principalmente en las instalaciones.

La instalación ofrece una salida local para los desechos generados localmente, de modo que los vehículos que ya circulan por carreteras locales no tienen que circular tanto para desechar/reciclar los materiales de desecho, lo que ahorra combustible y reduce las emisiones. El aumento de la actividad vehicular y las emisiones asociadas se mitigarán mediante el cumplimiento de la ley contra la inactividad de MassDEP, el uso de vehículos conforme al Nivel IV y el diseño de instalaciones que incluye dos básculas de pesaje de camiones para minimizar el tiempo que los camiones están en el sitio y sistemas de manejo de aire para los equipos que operan en el interior. Normas de emisiones de gases de efecto invernadero para vehículos de servicio pesado de la EPA de marzo de 2024: la regla de fase 3 regulará aún más las emisiones de GEI de los camiones de servicio pesado de desechos y remolques de tractores a partir de 2027, lo que reducirá aún más las emisiones de GEI asociadas con este proyecto.

Las Mejores prácticas de gestión avanzadas para la calidad del aire incluyen:

- Realizar todas las operaciones de volcado, manipulación y carga dentro del edificio de manipulación.
- Utilizar un sistema de rociado en el edificio de manipulación para controlar el polvo y el olor.
- Realizar limpiezas y barridos diarios.
- Usar transporte cubierto para camiones y vagones.
- Aplicar el procedimiento de primero en entrar/primero en salir para reducir el tiempo que los desechos sólidos municipales están en el sitio, lo que minimiza el potencial de condiciones molestas.
- Usar dos básculas para vehículos para aumentar la eficiencia y minimizar el tiempo que los camiones permanecen en el sitio.

UMML continuará utilizando equipos de clasificación avanzados para la recuperación de materiales reciclables y utilizará para el transporte el ferrocarril, que genera un bajo nivel de carbono. Estas eficiencias preservan los valiosos recursos naturales y reducen las emisiones de CO_2, ya que el consumo de combustible para transportar los desechos por ferrocarril es cuatro veces más eficiente que hacerlo con remolques de tractores.

7. Identifique los beneficios del proyecto, incluidos los "beneficios ambientales", tal como se definen en 301 CMR 11.02, que pueden mejorar las condiciones ambientales o la salud pública de la población de EJ.

Los beneficios clave del proyecto incluyen:

Satisfacer la demanda de gestión de desechos: la necesidad de un manejo económico y respetuoso con el medioambiente de los desechos de MSW y C&D en la ciudad de Leominster es un desafío creciente con una importancia crítica. Si su capacidad de servicio se amplía en virtud de este proyecto, la instalación de UMML podrá abordar mejor ese desafío para la ciudad, sus residentes y sus negocios. Además, la instalación también será un activo importante, ya que

la región podrá proporcionar un medio económicamente competitivo y eficiente para gestionar C&D y MSW gracias a su uso único del ferrocarril para el transporte. Esta instalación ferroviaria permitirá que la región acceda a salidas de desecho que generalmente no son económicamente viables a través de camiones tradicionales.

También se debe tener en cuenta que, en función del cierre inevitable del vertedero de Fitchburg/Westminster y otros, es posible que se interrumpa más la gestión de desechos en toda la región, así como en toda la Mancomunidad. Esto supondrá presiones adicionales al sistema estatal que ya tiene dificultades para mantenerse al día con la demanda. La instalación de UMML está perfectamente situada y puede aliviar parte de esa presión sin la necesidad de nuevas construcciones.

Proporcionar un impulsor para el desarrollo económico: según la Oficina de Desarrollo Económico de Leominster, el desarrollo industrial en Leominster es prioridad. Esta región sigue contando con una fuerza laboral altamente calificada, particularmente en las industrias manufactureras.

La construcción de la instalación existente de UMML se aprobó en 2019 y la propuesta actual de expansión del servicio ofrecerá una oportunidad única para promover objetivos económicos y ambientales sin impacto adicional de construcción en el entorno circundante. Creará más oportunidades de empleo para los residentes y aumentará la base impositiva.

Además, es muy probable que, debido a la escasez prevista de la capacidad adecuada de desecho y vertedero en el futuro, la exportación de desechos se vuelva más significativa en Massachusetts. Este hecho es lo que diferencia al sitio de UMML de otras instalaciones de manejo de desechos, ya que tiene acceso a transporte ferroviario y puede exportar desechos con un impacto ambiental considerablemente menor que el traslado en camiones.

Aumentar el reciclaje: UMML se especializa en la clasificación y el reciclaje de materiales de C&D, y procesa C&D en cumplimiento con el MassDEP. Un aumento en la capacidad diaria permitida incrementaría la cantidad de materiales que la instalación recicla. La instalación recupera cientos de toneladas de materiales reciclables cada mes. Asfalto, ladrillo, concreto, cartón, metales ferrosos y no ferrosos, tejas de asfalto, yeso, neumáticos y madera se envían a instalaciones de reciclaje para su reutilización en nuevos productos, lo que ayuda a conservar nuestros recursos naturales para las generaciones futuras. Lo que no podemos reciclar se transfiere para su eliminación final por ferrocarril, el modo de transporte terrestre con menos generación de carbono.

Reducir los GEI en el proceso de manejo de desechos: la instalación de UMML asume el compromiso de cumplir prácticas comerciales sostenibles al elegir las rutas de transporte más eficientes, reciclar materiales para su reutilización e invertir en tecnologías sostenibles.

El proceso de manejo de desechos de última generación de UMML utiliza numerosas tácticas de reducción de GEI para proteger nuestro planeta, pero la más impactante en este sitio incluye compactar los desechos antes del transporte, usar el transporte ferroviario en lugar del transporte tradicional de camiones siempre que sea posible y desviar la mayor cantidad de desechos de los vertederos casi colapsados a través del reciclaje, la reutilización y la recuperación.

El transporte ferroviario es cuatro veces más eficiente que el transporte en camiones en términos de uso de combustible y emisiones, ya que los trenes pueden transportar una tonelada de carga más de 470 millas con un solo galón de combustible en comparación con los camiones que pueden transportar la misma carga solo 134 millas (aproximadamente). Gracias a esta opción de transporte de bajo consumo de combustible en UMML, los impactos ambientales negativos de los camiones tradicionales, como la emisión de partículas diésel, dióxido de carbono, óxidos de nitrógeno y otros gases de efecto invernadero, se reducen en gran medida.

Proteger el espacio abierto: la instalación existente de UMML no afecta el espacio abierto, ya que se encuentra lo suficientemente apartada de cualquier espacio abierto designado, está fuera de los hábitats asignados y se ubica en un parque industrial existente que está zonificado para este tipo de instalación. Al utilizar las instalaciones existentes, no es necesario construir instalaciones nuevas. Por lo tanto, no se requiere demanda de espacio terrestre adicional para aumentar la capacidad de manejo de desechos.

8. Describa cómo la comunidad puede solicitar una reunión para analizar el proyecto y cómo la comunidad puede solicitar servicios de interpretación de lenguaje oral en la reunión. Especifique cómo solicitar otras adaptaciones, incluidas reuniones fuera del horario laboral y en lugares cercanos al transporte público.

Se programó una reunión pública para el lunes 22 de julio de 2024, a las 6 p. m., en la sala comunitaria de la Biblioteca pública de Leominster ubicada en 30 West St, Leominster, MA 01453, que está cerca de las paradas de autobús del sistema de rutas de autobús MART Fitchburg/Leominster. Se incluye más información sobre la reunión en el aviso adjunto de la reunión pública. Para solicitar servicios de interpretación de idiomas en la reunión, envíe un correo electrónico a comms@win-waste.com. Envíe un aviso con dos semanas de anticipación antes de la reunión para solicitar los servicios de interpretación.

ATTACHMENT 4

PROJECT FACT SHEET
ENGLISH AND SPANISH

UNITED MATERIAL MANAGEMENT OF LEOMINSTER

A TRANSFER STATION IN LEOMINSTER, MASSACHUSETTS

United Material Management of Leominster (UMML), located at 200 Tanzio Road in Leominster, is a state-of-the-art waste transfer station with an integrated rail line. The facility specializes in the recycling of construction & demolition (C&D) waste and the transfer of municipal solid waste (MSW) and residuals for responsible end disposal. The site recovers hundreds of tons of recyclables each month, which are sent to recycling facilities for reuse in new products – helping conserve our natural resources for future generations. What we cannot recycle is transferred to its final disposal by rail, the lowest carbon mode of land transport.

Permit modification increases region's critical disposal capacity

In order to meet the growing demand for waste handling in Massachusetts, UMML is proposing a project, subject to Massachusetts Environmental Policy Act (MEPA) review, that will increase the handling capacity at the existing Leominster facility. The facility is currently permitted to process up to 1,000 tons of waste per day (TPD). This project would increase that capacity to 1,500 TPD without requiring any building expansion to accommodate the increase in daily handling.

Essential to the region's waste management infrastructure

Meets regional demand: With recent and inevitable closures of large landfills in the Commonwealth, there is a disposal capacity shortage in the region putting pressure on statewide systems that are already struggling to meet demand. By increasing the capacity and efficiency of an existing transfer station, UMML can help meet the demands of the growing population and changing waste patterns in the region.

Integrated rail provides access to disposal outlets: The facility exists in an area that has direct access to rail. UMML's rail connectivity provides the unique ability to move waste where there's space, alleviating the state's declining capacity and supports MassDEP's Solid Waste Master Plan. The region is better served by utilizing disposal outlets that are not generally accessible or viable through traditional long-haul trucking.

UNITED MATERIAL MANAGEMENT OF LEOMINSTER
A TRANSFER STATION IN LEOMINSTER, MASSACHUSETTS

Delivers a more sustainable waste management solution

Enhanced recycling: UMML specializes in the sorting and recycling of C&D materials and is a MassDEP-compliant C&D processor. The site recovers hundreds of tons of recyclables each month for reuse in new products, and an increase in permitted daily capacity would further expand recycling quantities at the site. Recyclable materials include asphalt, brick, concrete, cardboard, metals, and wood.

Reduces greenhouse gas emissions: UMML employs several strategies to reduce GHG emissions. The most impactful tactics involve consolidating waste before transport, utilizing rail transport over traditional trucking whenever feasible, and diverting waste from near-capacity landfills. Moving waste by rail is four times more fuel efficient than trucks on a highway and has the lowest carbon footprint per ton of waste transported, reducing GHG emissions by up to 75 percent.

Existing facility located in industrial park: The existing facility has adequate separation to any designated open space, is outside of mapped habitats and residential areas, and is within an industrial zoned area. By utilizing the existing facility, we can increase regional waste disposal capacity without the need for new construction or additional land space.

Supports the local economy: UMML significantly contributes to the local economic landscape and generates revenue for the City of Leominster in the form of taxes and royalties. Increasing regional disposal capacity at UMML creates jobs, encourages local investment, and further expands the tax base and revenue for the city, while also reducing disposal costs for local waste haulers. According to the Leominster Economic Development Office, industrial development in Leominster is a priority as the region boasts a highly-skilled workforce within manufacturing industries.

State-of-the-art facility: The existing building was constructed in 2019 and is equipped with translucent panels to reduce the need for artificial light and energy usage. When lighting is required, energy efficient lighting such as LED was installed on both the interior and exterior of the building.

How it works: Waste handling is performed entirely within the existing 32,500-square-foot building. The building includes tipping and inspection areas, temporary waste storage areas, and outbound rail and truck loading areas. Processing activities include advanced sorting equipment for the recovery of recyclables, which are then transported to recycling facilities. What we cannot recycle is transferred to its final disposal by rail.

Learn more

The proposed permit modification is subject to MEPA review, and MEPA will welcome public comment. Information about UMML, MEPA filings, and supporting documents can be found at www.ummleominster.com. Should you have questions about the UMML project, please contact comms@win-waste.com.

UNITED MATERIAL MANAGEMENT OF LEOMINSTER

UNA ESTACIÓN DE TRANSFERENCIA EN LEOMINSTER, MASSACHUSETTS

United Material Management of Leominster (UMML), ubicada en 200 Tanzio Road en Leominster, es una estación de transferencia de desechos de última generación con una línea ferroviaria integrada. La instalación se especializa en el reciclaje de desechos de construcción y demolición (construction & demolition, C&D) y la transferencia de desechos sólidos municipales (municipal solid waste, MSW) y desechos para la eliminación final responsable. La instalación recupera cientos de toneladas de materiales reciclables cada mes, que se envían a instalaciones de reciclaje para su reutilización en nuevos productos, lo que ayuda a conservar nuestros recursos naturales para las generaciones futuras. Lo que no podemos reciclar se transfiere para su eliminación final por ferrocarril, el modo de transporte terrestre con menos generación de carbono.

La modificación del permiso aumenta la capacidad de eliminación crítica de la región

A fin de satisfacer la creciente demanda de manejo de desechos en Massachusetts, UMML propone un proyecto, sujeto a la revisión de la Ley de Política Ambiental de Massachusetts (Massachusetts Environmental Policy Act, MEPA), que aumentará la capacidad de manejo en sus instalaciones actuales en Leominster. Actualmente, la instalación tiene permiso para procesar hasta 1,000 toneladas de desechos por día (TPD). Este proyecto aumentaría esa capacidad a 1,500 TPD sin requerir ninguna expansión del edificio para adaptarse al aumento en la manipulación diaria.

Esencial para la infraestructura de gestión de desechos de la región

Satisface la demanda regional: Con los recientes e inevitables cierres de grandes vertederos en la Mancomunidad (Commonwealth), existe una escasez de capacidad de desecho en la región que ejerce presión sobre los sistemas estatales que ya están haciendo un gran esfuerzo para satisfacer la demanda. Al aumentar la capacidad y la eficiencia de una estación de transferencia existente, UMML puede ayudar a satisfacer las demandas de la creciente población y cambiar los patrones de desechos en la región.

La línea ferroviaria integrada proporciona acceso a las salidas de desechos: La instalación está ubicada en un área que tiene acceso directo al ferrocarril. La conectividad ferroviaria de UMML proporciona la capacidad única de mover desechos donde hay espacio, lo que alivia la capacidad decreciente del estado y apoya el Plan Maestro de Desechos Sólidos del Departamento de Protección Ambiental de Massachusetts (MassDEP). La región recibe un mejor servicio mediante el uso de salidas de desechos que generalmente no son accesibles o viables a través de camiones tradicionales de larga distancia.

UNITED MATERIAL MANAGEMENT OF LEOMINSTER
UNA ESTACIÓN DE TRANSFERENCIA EN LEOMINSTER, MASSACHUSETTS

Ofrece una solución de gestión de desechos más sostenible

Reciclaje mejorado: UMML se especializa en la clasificación y el reciclaje de materiales de C&D y es un procesador de C&D en cumplimiento con el MassDEP. El sitio recupera cientos de toneladas de materiales reciclables cada mes para su reutilización en nuevos productos, y un aumento en la capacidad diaria permitida expandiría aún más las cantidades de reciclaje en el sitio. Los materiales reciclables incluyen asfalto, ladrillo, concreto, cartón, metales y madera.

Reduce las emisiones de gases de efecto invernadero: UMML emplea varias estrategias para reducir las emisiones de GEI. Las tácticas más impactantes implican consolidar los desechos antes del transporte, utilizar el transporte ferroviario en lugar de los camiones tradicionales siempre que sea posible y desviar los desechos de los vertederos que están llegando a su capacidad. Mover los desechos por ferrocarril es cuatro veces más eficiente en el consumo de combustible que los camiones en una autopista y tiene la huella de carbono más baja por tonelada de desechos transportados, lo que reduce las emisiones de GEI hasta en un 75 por ciento.

Instalaciones existentes ubicadas en un parque industrial: La instalación existente tiene una separación adecuada con cualquier espacio abierto designado, está fuera de hábitats y áreas residenciales mapeados, y está dentro de un área zonificada industrial. Al utilizar las instalaciones existentes, podemos aumentar la capacidad de eliminación de desechos regionales sin la necesidad de nuevas construcciones o espacio terrestre adicional.

Apoya la economía local: UMML contribuye significativamente al panorama económico local y genera ingresos para la ciudad de Leominster en forma de impuestos y regalías. El aumento de la capacidad de eliminación regional en UMML crea empleos, fomenta la inversión local y amplía aún más la base fiscal y los ingresos para la ciudad, al tiempo que reduce los costos de eliminación para los transportistas de desechos locales. Según la Oficina de Desarrollo Económico de Leominster, el desarrollo industrial en Leominster es una prioridad, ya que la región cuenta con una fuerza laboral altamente calificada dentro de las industrias manufactureras.

Instalaciones de última generación: La instalación existente se construyó en el 2019 y está equipada con paneles translúcidos para reducir la necesidad de luz artificial y uso de energía. Se instaló una iluminación de bajo consumo, como LED, tanto en el interior como en el exterior del edificio para cuando se requiere iluminación.

Cómo funciona: La manipulación de desechos se realiza completamente dentro del edificio existente de 32,500 pies cuadrados. El edificio incluye áreas de vuelco e inspección, áreas de almacenamiento de desechos temporales y áreas de carga saliente de trenes y camiones. Las actividades de procesamiento incluyen equipos de clasificación avanzados para la recuperación de materiales reciclables, que luego se transportan a instalaciones de reciclaje. Lo que no podemos reciclar se transfiere para su eliminación final por ferrocarril.

Más información

La modificación del permiso propuesta está sujeta a la revisión de la MEPA, y la MEPA aceptará comentarios públicos. Puede encontrar información sobre UMML, presentaciones de la MEPA y documentos de respaldo en www.ummleominster.com. Si tiene preguntas sobre el proyecto de UMML, envíe un correo electrónico a comms@win-waste.com.

ATTACHMENT 10

MA CLIMATE RESILIENCE DESIGN STANDARDS- 2070 PRECIPITATION DEPTH

CLIMATE RESILIENCE DESIGN STANDARDS

PROJECTED PEAK INTENSITY DESIGN CRITERIA METHODS

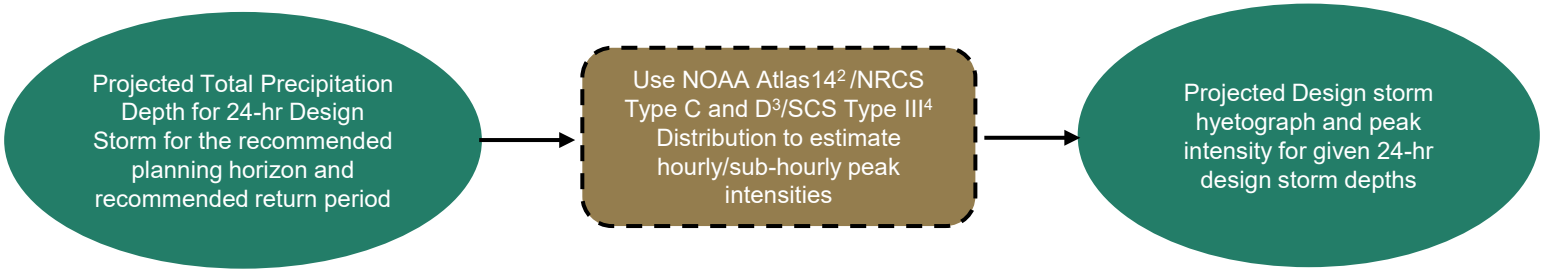
All Tiers

Version 1.4

DECEMBER 2024

Tiered Method to Assess Projected Peak Intensity for All Tiers

Given Standards Output from Tool: Projected Total Precipitation Depth for 24-Hr Design Storm for recommended Planning Horizon (2030, 2050, 2070); Return Period (5-yr, 10-yr, 25-yr, 50-yr, 100-yr, 200-yr, 500-yr)



Legends

Calculation steps
Design Criteria
Existing practice

VERSION 1.4 METHODS
December 2024

1. NOAA Atlas 14 Precipitation Frequency Estimates: Northeastern States; NOAA Atlas 14, Volume 10, Version 3
2. Engineering Field Handbook Chapter 2: Estimating Runoff and Peak Discharges: Massachusetts EFH-2 Supplement Number: MA-EFH2. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1097125.pdf
3. HEC-HMS Technical Reference Manual – SCS Storm; https://www.hec.usace.army.mil/confluence/hmsdocs/hmstrm/precipitation/scs-storm

Tiered Methodology to Assess Projected Peak Intensity

Example: 24-hr design storm hyetographs for projected peak intensity for given planning horizon and design storm*, Moakley Park, South Boston, MA using SCS Type III Distribution

Return Period	NOAA Atlas 14 Present Baseline - 24hr (in)	Projected Total Precip Depth 2070 Values - 24hr (in)
2-yr	3.3	3.8
5-yr	4.3	5.2
10-yr	5.1	6.4
25-yr	6.3	8.1
50-yr	7.2	9.5
100-yr	8.1	11.2
200-yr	9.3	13.5
500-yr	11.1	17.4

*These charts show 24-hr design storm hyetographs for peak intensity for the 2070s planning horizon only

10yr - 24 hr 2070s		6.4 in	
Duration (hr)	Ratio	Cumulative depth (in.)	Hourly peak intensity (in./hr)
0	0	0	0
1	0.01	0.06	0.06
2	0.02	0.13	0.06
3	0.03	0.19	0.07
4	0.04	0.27	0.08
5	0.06	0.36	0.09
6	0.07	0.45	0.10
7	0.09	0.57	0.12
8	0.11	0.72	0.15
9	0.15	0.92	0.20
10	0.19	1.19	0.27
11	0.25	1.58	0.38
12	0.50	3.15	1.58
13	0.75	4.73	1.58
14	0.81	5.11	0.38
15	0.85	5.38	0.27
16	0.89	5.58	0.20
17	0.91	5.73	0.15
18	0.93	5.85	0.12
19	0.94	5.94	0.10
20	0.96	6.03	0.09
21	0.97	6.11	0.08
22	0.98	6.18	0.07
23	0.99	6.24	0.06
24	1	6.30	0.06

VERSION 1.4 METHODS
December 2024