

# Green Seal Environmental, LLC

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May 15, 2023

Mark Dakers, Section Chief MassDEP- Solid Waste 20 Riverside Drive Lakeville, MA 02347

Re: Response to Determination of Administrative Completeness South Coast Renewables, LLC 100 Duchaine Boulevard New Bedford, Massachusetts Application No. 23-SW01-001-APP

Mr. Dakers:

On behalf of South Coast Renewables, LLC (SCR, formerly Parallel Products of New England), Green Seal Environmental, LLC (GSE) submits this response to MassDEP's Determination of Administrative Incompleteness (the Determination) dated March 15, 2023. The Determination is related to the Site Suitability Application (BWP SW 01) submitted on February 22, 2023.

### **Response to Determination**

As requested by MassDEP in the Determination, GSE provides responses herein and supporting information in the Appendices to this response letter. Responses to each MassDEP request can be found in the paragraphs below which follow the order and numbering within MassDEP's Determination which is included as Appendix A for reference. As necessary, supporting information including revised reports, plan, and narrative are included as Appendices. Please note that lettered 'Appendices' are referenced for this response to comments documents to discern from numbered 'Attachments' that were included in the original Site Suitability Application.

MassDEP Comment 1- <u>Waste Handling Area</u>: Under 310 CMR 16.02 <u>Handling area</u> is defined as an "area used for the processing, storage, transfer or treatment of solid waste, excluding weigh stations or access road." The Applicant shall submit revised site plans, as necessary, depicting the proposed facility with the proposed waste handling area clearly defined.

GSE Response to Comment 1: GSE has provided a delineated waste handling area on Inserts 2, 3, and 9, included in Appendix B. All proposed waste handling areas meets the setback requirements of 310 CMR 16.40(4)(h). Two waste handling areas (WHAs) are shown on these plans: 1. Presently Proposed WHA which generally includes the rail storage tracks, portion of the existing building to be used as part of waste processing and loadout, the proposed new building addition, and the tarmac area. 2. Available WHA is also shown on the plans to indicate future available area that could be used for waste handling that also meets site setback requirements.

MassDEP Comment 2- Page 4 of the BWP SW 01 form under *A. Site Location and Project Description c.*, the Application stated yearly capacity of the proposed facility as "486,000 (based on maximum capacity." Under

expected yearly capacity, the application stated "468,000" for "All years." MassDEP requires that any discrepancy on the yearly capacity to be addressed and corrected, as necessary.

*GSE Response to Comment 2: The correct yearly capacity is 468,000. The BWP SW 01 application form (page 4 of 42) has been revised and provided as Appendix C.* 

MassDEP Comment 3- <u>Agricultural Land</u>: Insert 3- The Land Use Plan shows agricultural land classified by the United States Department of Agriculture (USDA) as farmland of statewide importance bordering the proposed limit of site assignment in an area south of the proposed site. Page 36 of the Application narrative includes the following statement, "The proposed "Site" (i.e., the proposed Site Assignment Limits is not within 100 feet of prime farmland, farmland of unique importance, or farmland of statewide importance as identified by soils classification" and references a Soils Analysis report prepared by APEX, which is included in the Application as Attachment 12. The Land Use Plan and application narrative should be corrected or clarified to identify the boundary of Agricultural Land based on the findings in the Detailed Soil survey in Attachment 12. In addition, please be advised, Attachment 12 should include test pit boring logs and Figure C-1 in Attachment 12 should show the location of test pits and should be prepared by the soil scientist. The Application narrative should also address land deemed Land Actively Devoted to Agricultural or Horticultural Uses in accordance with 310 CMR 16.40(4)(a)2.

GSE Response to Comment 3: The mapped farmland of statewide importance bordering the proposed limit of site assignment to the south of the proposed site was not evaluated by APEX because the area is not on the Applicant's property and is fully developed with the Eversource building, paved access driveway, paved access road, a solar canopy parking structure, a stormwater basin, and wetlands. Please refer to the Land Use Plan as Insert 3 in Appendix B showing the mapped soils overlaid onto a 2021 aerial photo. As such, this mapped farmland is no longer farmland as cover soils have been disturbed with construction and built upon. However, given the fact the GSE and SCR do not have access to perform test pitting activities on private property, GSE has revised the southerly site assignment line to provide the required 100-foot buffer in compliance with 310 CMR 16.40 (4). Please note that the following revised plans reflect this change:

- Water Resources Plan (Presented as Insert 2 in Appendix B)
- Land Use Plan (Presented as Insert 3 in Appendix B)
- Site Zoning Plan (Presented as Insert 4 in Appendix B)
- Site Plan (Previously submitted within Insert 5 as sheet 10 of 10 and presented in Appendix B)
- Site Zoning- 500-Foot Setback Plan (Presented as new Insert 9 in Appendix B)

Additionally, the Land Use Plan revisions reflect the areas confirmed as Prime Farmland Soils per the APEX Soil Survey and Report. Test pit logs were previously provided as part of the APEX Report in Attachment 12 of the original application. Specific test pit locations were not surveyed and depicted on the large-scale plan but were described in the report, photo log, and test pit logs. Please note the Soil Evaluation was originally performed for the previously-proposed Biosolids portion of the project, which has since been eliminated. The Site Assignment boundary for the solid waste transfer station project maintains the 100-foot offset from the more-conservative MassGIS-mapped Prime Farmland limits, even in areas in which the Prime Farmland-type soils were not found on-site.

MassDEP Comment 4- Private Water Supply Wells: Page 32 of the Application narrative addresses private water supply wells stating: "Private well locations in the vicinity of the site were obtained from the Commonwealth of Massachusetts Energy & Environmental Affairs Data Portal and through communication with the City of New Bedford. No private wells were identified within 500 feet of the proposed site

assignment limits and waste handling areas." The Application does not appear to include any documentation of the communication with the City of New Bedford. The Application does not address Potential Private Water Supplies in accordance with 310 CMR 16.40(3)(d)4. Private water supply information can be obtained by:

- Reviewing the City of New Bedford Board of Health's records for private wells in the vicinity of the project. The Applicant should search for private wells within 500 feet of the waste handling area. The Applicant should document this search in the Application through written communication from the Board of Health or another means.
- Additionally, MassDEP recommends the Applicant should conduct a more comprehensive evaluation
  of private wells by working with the City of New Bedford Water Supply department to compare
  residential/commercial properties in the vicinity of the project with addresses that receive water
  supply bills. Any developed residential/commercial properties whose owners are not receiving water
  bills may be using an alternative water source. The Applicant should search for
  commercial/residential properties within 500' of the waste handling area an include documentation
  in the Application.

The Application must also address Potential Private Water Supplies. Potential Private water supply data can be obtained from the planning department or building department.

GSE Response to Comment 4: GSE conducted additional research with the City of New Bedford including communicating with the New Bedford Planning Office, Engineering Office, and Water Department. Documentation of these efforts are included in Appendix D, including a site plan of properties within 500 feet of the Waste Handling Area to correlate documentation and research. As originally stated in the Application, no private water supplies exist within 500 feet of the waste handling area. Additionally, no Potential Private Water Supplies were identified by the City's Planning Department and Engineering Department.

Appendix D provides e-mail communications from the New Bedford Planning Office, Water Department, and Engineering Department. Both the Planning Department and Engineering Department concurred with that they are unaware of any projects in the vicinity of the subject site that are and/or would be proposing a public and/or private water supply well(s) in the vicinity of the subject site. Additionally, GSE worked with Amanda Jupin (Program Director – Permits and Engineering) to provide written documentation that commercial facilities and residential dwellings in the vicinity of the subject site were served with municipal water. Further email communication is provided from Eversource at 50 Duchaine Blvd, IMTRA at 30 Samuel Barnett Blvd and the City of New Bedford for the Wastewater Pumping Station property at 107 Duchaine Blvd, confirming municipal water service to these commercial/industrial properties. A spreadsheet and map are also provided in Appendix D that identifies the properties researched; although all, with the exception of the following are outside of the 500-foot waste handling area setback:

- City of New Bedford wastewater pumping station (107 Duchaine Blvd) Served by Municipal Water
- Parallel Products (100 Duchaine Blvd) Served by Municipal Water
- Eversource (50 Duchaine Blvd) Served by Municipal Water

It should be noted that two potential private wells were identified outside of the 500-foot waste handling setback. GSE has made this assumption as the City of New Bedford Water Department does not have water bills associated with these two properties. These two potential private wells are located at 1784 and 1884 Phillips Road. Additionally, it was not confirmed if the Commonwealth Electric Substation located at 1885 Phillips Road has a water service as there were no City records, however, as it is a substation it is unlikely to need water service and additionally, it is located outside the 500-foot waste handling area setback. The revised

Water Resources Plan presented as Insert 2 in Appendix B identifies these locations.

MassDEP Comment 5- <u>Protection of Open Space</u>: Page 42 of the Application narrative addresses the Protection of Open Space stating: *"The site borders the Acushnet Cedar Swamp State Reservation"...* and *"The siting of the Facility will not have an adverse impact on the physical environment of, or on the use and enjoyment of, state or municipal parklands or conservation land, or other open space."* The Applicant should provide supporting information, comments or analysis to support their conclusion that the Facility will not have an adverse impact.

GSE Response to Comment 5: GSE has created a figure (see Insert 10 in Appendix B) that depicts the subject site and its locations relative to the Acushnet Cedar Swamp State Reservation as well as the trails that are utilized for public enjoyment. As described on page 28 of the originally submitted narrative, "the Acushnet Cedar Swamp State Reservation is located to the west of the Site. The Site is separated from the Acushnet Cedar Swamp State Reservation by the main rail line at the property's westerly property line." Additionally, the following observations are made with respect to whether such siting of a facility would have an adverse impact on the physical environment of, or on the use and enjoyment of this reservation:

- The presently proposed site assignment area is a minimum of 3,839 feet (0.73 miles) to the nearest trail in the Acushnet Cedar Swamp State Reservation.
- The available waste handling area will be a minimum of 3,848 feet to the closest trail system within the Acushnet Cedar Swamp State Reservation.
- No construction activities will occur within the Acushnet Cedar Swamp State Reservation boundaries.
- The rail line that will service the site is already an active rail line utilized by Mass Coastal Railroad and physically separates the site from the Reservation.
- Almost one mile of forested wetland exists between the site and trails within the Reservation providing a significant visual and sound buffer from the Facility.
- Based on the design/location of the Facility and proposed waste handling areas and distances to the trails where the public may use, access, and enjoy the Acushnet Cedar Swamp State Reservation, it is GSE's and SCR's opinion that the proposed facility will not yield any adverse impacts on the reservation or the enjoyment of it.

# MassDEP Comment 6- <u>Groundwater Contour Map</u>: The Application should include a groundwater contour map to address criteria at 310 CMR 16.40(3)(d)7.

GSE Response to Comment 6: Groundwater level measurements collected from on-site monitoring wells were presented in tabular form in the Site Suitability application to address criteria at 310 CMR 16.40(3)(d)7. Monitoring wells located closest to the handling building were used to calculate the maximum high groundwater expected where waste handling will occur and to ensure proposer separation to groundwater in design of the building components including the leachate collection system and tipping floor. A groundwater contour plan, although not specifically required by the regulations, has been prepared as requested to present groundwater flow direction based upon water level measurements taken from on-site monitoring wells in April 2023. Data collected in April of 2021 was used for monitoring well 4, as it is was eliminated during construction of the rail siding and not available for recent gauging. The April 2021 data closely correlated to the April 2023 data and is considered representative and similar. These contours were added to the Groundwater Monitoring Well Plan included as Insert 8 in Appendix B. MassDEP Comment 7- Existing Facilities {16.40(4)(j)} and Regional Participation {16.40(4)(l)}: The Application does not include the information required in the BWP SW 01 form Section III, Part J, question 3 on page 35 of the form and Section III, Part L, question 2 on page 37 of the form.

## GSE Response to Comment 7:

The following was presented on page 66 of the Site Suitability Application narrative: The Crapo Hill Landfill is located in North Dartmouth but with the address of 300 Samuel Barnet Boulevard, New Bedford, as it is accessed through New Bedford and is used for disposal by the City of New Bedford and the Town of Dartmouth. The City of New Bedford and the Town of Dartmouth are not expected to utilize the proposed Facility for MSW disposal. However, the Host Community Agreement with the City of New Bedford does allow for the Facility to give "favored/lowest" pricing to the City should they use it in the future."

Based on the proximity and use of the Crapo Hill Landfill, GSE checked the "yes" box off within the BWP SW 01 application form, Section 16.40(4)(j)1, indicating there is an active disposal facility within the municipality. It should also be noted that that private companies within the City of New Bedford will have the opportunity to utilize this facility. The percentage and volumes cannot be estimated at this point in time as no contracts and/or volume obligation have been exercised between SCR and potential clients of the facility.

The following table was presented within the S-FEIR regarding solid waste facilities within New Bedford (including the Crapo Hill Landfill located within Dartmouth) which addresses portions of Section III, Part J, question 3.

Facility	Facility 1	Facility 2	Facility 3	Facility 4
	New Bedford City	New Bedford	New Bedford	Crapo Landfill
	Transfer Station	Waste Services	Landfill	Dartmouth
Address	1103 Shawmut	1245 Shawmut	1103 Shawmut	300 Samuel
	Avenue	Avenue	Avenue	Barnet Blvd
Distance to Site	~3.6 miles to S	~3.4 miles to S	~3.6 miles to S	~1.5 miles to NW
Capacity (TPD)	274	1,500	Closed	425
Property Size	6 <sup>1</sup>	6.55 <sup>2</sup>	37.35 <sup>1</sup>	152 <sup>3</sup>
(acres)				
Hours of	M,W,F 12pm-5pm;	M-Sa 8am-6pm	N/A- Closed	M-F 7:15am-
Operation	Sa 7:30am-3pm	with allowed 24-		3:15pm;
		hour/day		Sa 8am-11am
Annual Days	312	281	0	287
Open⁴				
Materials	Recyclables	C&D/MSW	N/A- Closed	MSW and C&D
Accepted				residuals

Notes:

1. Per New Bedford Assessors, Parcel ID's 123-90 and 123-24

2. Per Authorization to Operate (ATO) Permit, July 3, 2012.

3. Per: http://gnbrrmdistrict.org/crapo-hill-landfill/

4. As reported in MassDEPs Master Facility List, updated Jan 2021.

The proposed project is being developed to fill a need in the Commonwealth for processing and economical transfer of generated solid waste materials to out of state disposal sites. Massachusetts solid waste disposal capacity is currently impacted by the closures of in-state landfills and the fact that no new landfills or incinerators are being constructed. The Fall River landfill has recently closed, the Bourne landfill has become an ash landfill for ash generated at SEMASS, and the Crapo Hill Landfill is largely limited to member towns. The Taunton Landfill closed in 2020, the Southbridge Landfill closed at the end of 2018, and the Chicopee Landfill is presently closed. Additionally, two incinerators that had reached their useful life were shut down in 2022, further reducing in-state disposal capacity and increasing the reliance on transfer and rail.

The Massachusetts 2030 Solid Waste Master Plan reports:

- Landfill capacity for municipal solid waste and construction and demolition debris (C&D) is projected to decline to virtually zero by the end of the next decade.
- Massachusetts has extensive waste transfer capacity; however, most waste transfer facilities do not
  increase overall waste management capacity because they are not able to deliver waste beyond
  Massachusetts and our neighboring states, where disposal capacity is also limited. Some facilities are
  investing in capacity to transfer waste out of the region by rail, though those facilities face logistical
  challenges arranging rail shipments and ensuring an adequate supply of the right type of railcars.

By providing additional annual capacity of 468,000 tons to the region, this facility will complement local and regional need for disposal capacity as well as recycling/diversion. Additionally, should the City of New Bedford utilize this facility in the future (post Crapo Hill Landfill Closure), it could satisfy the City's need for a long-term waste disposal outlet, as well as long-term needs of surrounding communities. The Proponent acknowledges in the hierarchy of solid waste that diversion and recycling is of the utmost importance. The Proponent's investment in MSW processing infrastructure to promote recycling and diversion is a sign of their commitment to these objectives.

The information presented above is now incorporated in the revised Site Suitability Application Narrative presented as Appendix E.

MassDEP Comment 8- Land Use Plan: MassDEP has the following comments regarding the Land Use Plan included in the Application as Insert 3:

- The Land Use Plan must identify all residential dwellings within 500 feet of the property boundary. The plan does not show the residents on the west side of Phillips Road.
- The Land Use Plan should identify the Acushnet Cedar Swamp State Reservation by name.
- The Land Use Plan should identify the proposed waste handling areas (see comment #1 above).
- The Land Use Plan should identify all access roads on the site and show the traffic flow of the site.
- The Land Use Plan should show all occupied commercial buildings and dwellings within 500 feet of the property line or be updated to indicate that none exist.
- MassDEP requests that the opacity of the background aerial be decreased to make the lines and details of the plan appear more prominent.

GSE Response to Comment 8: A revised Land Use Plan is included as Insert 3 in Appendix B.

MassDEP Comment 9- Water Resources Plans: MassDEP has the following comments regarding the Water Resources Plan included in the Application as Insert 2:

- Please ensure that all surface water bodies are clearly depicted on the Water Resources Plan.
- The Water Resources Plan should depict all perennial streams and any Zone B of a surface water supply or indicate on the plan that none exist.
- MassDEP requests you decrease the opacity of the background aerial to make the lines and details of the plan appear more prominent.

GSE Response to Comment 9: A revised Water Resource Plan is included as Insert 2 in Appendix B. Although, the identification of Zone B areas is listed as a required component of the Water Resource Plan per Section I. General Information of the BWP SW 01 permit form, the Zone B is not applicable to solid waste handling facilities but are pertinent to landfills per 310 CMR 16.40(3)(a)(8), and the reason it was not included in the previously submitted plan. No Zone B's exist within ½-mile of the Site.

## MassDEP Comment 10-Sound:

MassDEP Comment 10.a): The Sound Level Assessment Report should include an isopleth map depicting No Build sound levels or the Applicant should explain why one cannot be prepared.

GSE Response to Comment 10.a): A No Build sound level isopleth map cannot be prepared because the No Build condition is measured not modeled. As described in Site Suitability Application, Attachment 7 Section 6.2, the No Build sound condition would include sounds from on-site vehicle traffic, noise from the Eversource operations immediately south of the Project site, vehicle traffic along Phillips Road, birds, insects and planes overhead. It is not feasible or appropriate to model such sources.

The No-Build sound levels are depicted in Attachment 7 Figure 6-2. This is not an isopleth map, but is instead a depiction of the hourly variability in sound levels under the No Build condition. If the project is not built, sound levels will be the same as the background levels, measured as described in Attachment 7 Section 6 of the Site Suitability Application. To be consistent with MassDEP guidance and precedent, the No Build condition is described as the noise level present during the quietest 10% of the time (the "L90", as described in Attachment 7 Section 4).

MassDEP Comment 10.b1): During the site assignment pre-application meeting on October 21, 2022, MassDEP advised SCR they will be required to mitigate sound impacts to the maximum extent practical using a Best Available Control Technology (BACT) like approach which requires that "top case" sound suppression/mitigation measures must be proposed.

MassDEP advised SCR the application must include a MassDEP BWP AQ Sound Form (<u>https://www.mass.gov/doc/supplemental-form-ag-sound/download</u>). A completed BWP AQ Sound Form was not included in the permit application submittal and must be submitted for MassDEP review.

GSE Response to Comment 10.b1): The requested form is attached and presented as Appendix F.

MassDEP Comment 10.b2): Please take note of the following guidance from the BWP AQ Sound Form:

When proposing sound suppression/mitigation measures, similar to the traditional "top-down" BACT process, the "top case" sound suppression/mitigation measures which deliver the lowest sound level increase above background are required to be implemented, unless these measures can be eliminated based

upon technological or economic infeasibility. An applicant cannot "model out" of the use of the "top case" sound suppression/ mitigation measures by simply demonstrating that predicted sound levels at the property line when employing a less stringent sound suppression/mitigation strategy will result in a sound level increase of less than or equal to the 10 dBA (decibel, A -Weighted) above background sound level increase criteria contained in the MassDEP Noise Policy.

A 10 dBA increase is the maximum increase allowed by MassDEP; it is not the sound level increase upon which the design of sound suppression/ mitigation strategies and techniques should be based.

GSE Response to Comment 10.b2): Within the Site Suitability Application, Attachment 7 Section 11 documents that the project proposes maximum practicable mitigation, consistent with the guidance on the AQ Sound Form. Section 11.0 describes the "top case" sound suppression/mitigation measures that will be used. Sections 11.1 and 11.2 document that additional sound barriers and high-speed roll-up doors are eliminated from "top case" based on technical infeasibility.

The proposed mitigation strategies are also enumerated below:

- The fans on the MSW building and glass building (7 fans in total) have a 5 dBA sound level reduction applied. These sound levels could be achieved by using quieter fans, rooftop barriers, or fan silencers. See Section 7.1 of the Sound Level Assessment Report.
- The baghouse ventilation system intakes will incorporate an acoustic louver of the "Slimshield Louver, type SL-12" variety which achieves a 17 dBA reduction. See Section 7.1 of the Sound Level Assessment Report.
- The baghouse exhaust system will include noise controls such as a stack silencer or stack directional orientation to provide an additional 2 dB of sound reduction. See Section 7.1 of the Sound Level Assessment Report.
- The following additional mitigation measures are discussed in Section 11 of the Sound Level Assessment Report:
  - Selection of an industrially zoned parcel,
  - o Siting of noise generating equipment and material handling routes away from residences,
  - Specification of an electric, rather than diesel powered, rail car pusher,
  - Selection of a combination of low noise equipment, silencing equipment, and/or noise reducing insulated walls to achieve lower impacts than required by MassDEP policy for stationary sources, and
  - Use of a speed limit and location of weigh scales on the west side of the property to minimize sound from trucking operations.

MassDEP Comment 10.b3): Also, take into consideration that the city or town that the project is located in may have a noise ordinance (or similar) that may be more stringent than the criteria in the MassDEP Noise Policy.

GSE Response to Comment 10.b3): As identified within Report Section 5.3 of Attachment 7 of the Site Suitability Application, there are no local quantitative noise regulations applicable to this Project.

# MassDEP Comment 10.b4): The evaluation of the sound analysis will be measured against requirements under the Solid Waste Regulations for nuisance conditions.

GSE Response to Comment 10.b4): As stated within Section 12 of Attachment 7 of the Site Suitability Application, the report concludes that pursuant to 310 CMR 16.40(4)(g), the facility will not cause a nuisance sound condition which would constitute a danger to the public health, safety, or the environment.

MassDEP Comment 10.b5): Sound from mobile sources related to transportation is not applicable to MassDEP's Air Quality permitting and is excluded from the analysis. However, any transportation modes that are operating within the proposed site-assigned area and related to the Facility operations, including but not limited to, back up signal for delivery trucks, the coupling and/uncoupling rail cars, loading and unloading materials for further processes, shall be included in the analysis.

GSE Response to Comment 10.b5): Attachment 7 includes analysis for transportation modes that are operating within the proposed site-assigned area and related to the Facility operations, including back up signal for delivery trucks, the coupling and/uncoupling rail cars, loading and unloading materials for further processing.

MassDEP Comment 10.b6): Best management practices (BMPs) to prevent noise nuisance conditions for mobile sources shall be presented.

GSE Response to Comment 10.b6: SCR proposes maximum practicable mitigation for noise, including Best Management Practices, as described at Page 49 and Page 50 of the original application narrative and at Attachment 7 Section 11. BMPs for mobile sources will include: all waste handling to be conducted within enclosed buildings; use of an electric rail car mover instead of diesel-powered; limitations on tipping hours; requiring trucks to travel at slow speeds; closing building doors whenever possible; and the use of white noise backup alarm technology on Proponent-owned equipment such as the railcar mover.

SCR will prepare a Draft O&M plan as part of their Authorization to Construct (ATC) process and a final O&M Plan will be submitted as part of the Authorization to Operate (ATO) process. This plan will be subject to MassDEP review/approval. That O&M plan will include operational policies and procedures that will be part of the facility's best management practices (BMPs) to prevent noise nuisance conditions. Additionally, the facility will have protocols in-place that will allow the public communicate with the facility (either by name or anomalously) should they have questions and/or issues with on-going operations.

MassDEP Comment 11: PE Signature and stamp: PE signature and stamp are missing from the following site plans and shall be revised to include PE signature and stamp:

- Insert 1 Site Locus Map
- Insert 4 Site Zoning Map
- Insert(s) 7.1, 7.2, 7.3, 7.4, 7.5 and 7.6 Rail Car Movements
- Insert 8 Groundwater Monitoring Well Plan

MassDEP requests that a scale bar, in addition to a scale indicated as a ratio, shall be included on any site plans and/or engineering drawings that are to scale.

GSE Response to Comment 11: GSE has provided stamped plans for Insert 4, 7, and 8. Please note that GSE does not stamp USGS site locus maps included as Insert 1 because GSE did not prepare the content beyond identifying the site location. Scale bars where previously omitted were provided on the revised plans included in Appendix B.

MassDEP Additional Comment (not provided within the MassDEP's Determination of Administrative Completeness letter): The MassDEP requested that the Traffic Impact Study (TIS) be prepared in one document and not require the reader to reference previously-prepared TIS reports. Additionally, it was requested that a summary of the TIS observations be included into the Site Suitability Narrative with specific reference 310 CMR 16.40(4)(b). This portion of the regulation states "No site shall be determined to be suitable or be assigned as a solid waste management facility where traffic impacts from the facility operation would constitute a danger to the public health, safety, or the environment taking into consideration the following factors:

- 1. traffic congestion;
- 2. pedestrian and vehicular safety;
- 3. road configurations;
- 4. alternate routes; and
- 5. vehicle emissions.

GSE Response to Additional Comment: McMahon Associates has revised the TIS to include specific reference to the aforementioned regulations. Additionally, GSE has revised the Site Suitability Application narrative as requested. Please refer to Appendix E for a copy of the revised narrative and Appendix G for a copy of the compiled TIS.

We trust these responses adequately address MassDEPs comments and questions regarding the Site Suitability Application and qualifies the application as Administratively Complete.

Should you have any questions or need additional information, please do not hesitate to contact me at (508) 888-6034.

Sincerely,

GREEN SEAL ENVIRONMENTAL, LLC

fana att

Laura A. Bugay, P.E. Executive Vice President

cc: Tim Cusson, South Coast Renewables Site Suitability Distribution List

Appendices:

- A. MassDEP Determination Letter
- B. Revised and New Site Plans (Inserts)
- C. BWP SW 01 Form Revision
- D. Private Well Research
- E. Revised Narrative
- F. AQ Form
- G. Compiled Traffic Impact Study



APPENDIX A

MASSDEP ADMINISTRATIVE COMPLETENESS LETTER





Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

# Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Maura T. Healey Governor

Kimberley Driscoll Lieutenant Governor Rebecca L. Tepper Secretary

Gary Moran Acting Commissioner

March 15, 2023

Mr. Tim Cusson Vice President South Coast Renewables, LLC 100 Duchaine Boulevard New Bedford, MA 02745

# RE: **DETERMINATION OF ADMINISTRATIVE INCOMPLETENESS** Application for: BWP SW01 Site Suitability Report for a New Site Assignment Application No. 23-SW01-001-APP

 AT: South Coast Renewables, LLC (FKA Parallel Products of New England) 100 Duchaine Boulevard New Bedford, MA 02745 Facility # 600281

Dear Mr. Cusson:

The Massachusetts Department of Environmental Protection, Solid Waste Management Section ("MassDEP""), has completed its Administrative Review of the permit application ("Application") listed above and determined that the application is administratively incomplete.

The Application was submitted on behalf of South Coast Renewables, LLC (the "Applicant" or "South Coast Renewables") by Green Seal Environmental, LLC of Sagamore Beach, Massachusetts (the "Engineer"), and received by MassDEP on February 22, 2023. MassDEP is reviewing the Application under the provisions of 310 CMR 16.00, <u>Site Assignment Regulations for Solid Waste Facilities</u>. MassDEP has assigned Report Number 201-004-A to this permit application.

South Coast Renewables proposes to site assign property located at 100 Duchaine Boulevard, New Bedford, Massachusetts in order to construct and operate a solid waste management facility that will handle 1,500 tons per day ("tpd") of municipal solid waste ("MSW") and construction and demolition ("C&D") waste. The area under consideration for site assignment is 26.1 acres

This information is available in alternate format. Please contact Melixza Esenyie at 617-626-1282. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep located on a 71-acre parcel within the New Bedford Business Park at 100 Duchaine Boulevard, New Bedford, Massachusetts.

The permit application consists of the document entitled:

# South Coast Renewables, LLC Site Suitability Application - BWP SW01 Solid Waste Processing and Transfer Station 100 Duchaine Boulevard New Bedford, Massachusetts 02745 February 2023

The Application was submitted electronically via the Massachusetts Executive Office of Energy and Environmental Affairs ePlace Portal at <u>https://permitting.state.ma.us/CitizenAccess/</u> on February 13, 2023 and payment was complete on February 22, 2023.

The Application may be reviewed online at: <u>https://eeaonline.eea.state.ma.us/EEA/PublicApp/.</u> Scroll down on the first screen and in the "Site Name/Location Name" box type "South Coast Renewables" and then click on the orange "Search" box at the bottom of the page. Under "Record Type", select the "Application" file with the 2/13/2023 "Application Date". The Permit Application and supporting documents will appear in blue links. Click on one link at a time to access each separate document.

Based on its Administrative Review, MassDEP has determined that the following information must be submitted to complete the required elements of the Application:

- 1. <u>Waste Handling Area</u>: Under 310 CMR 16.02 <u>Handling area</u> is defined as an "area used for the processing, storage, transfer or treatment of solid waste, excluding weigh stations or access roads." The Applicant shall submit revised site plans, as necessary, depicting the proposed facility with the proposed waste handling area clearly delineated.
- 2. Page 4 of the BWP SW01 form under *A. Site Location and Project Description c.*, the Application stated the yearly capacity of the proposed facility as "486,000 (based on maximum capacity." Under expected yearly capacity, the Application stated "468,000" for "All years." MassDEP requires that any discrepancy on the yearly capacity to be addressed and corrected, as necessary.
- 3. <u>Agricultural Land</u>: Insert 3 The Land Use Plan shows agricultural land classified by the United States Department of Agriculture (USDA) as farmland of statewide importance bordering the proposed limit of site assignment in an area south of the proposed site. Page 36 of that Application narrative includes the following statement, "*The proposed "Site"* (*i.e.., the proposed Site Assignment limits) is not within 100 feet of prime farmland, farmland of unique importance, or farmland of statewide importance as identified by soils classification*" and references a Soils Analysis report prepared by APEX, which is

included in the Application as Attachment 12. The Land Use Plan and Application narrative should be corrected and/or clarified to identify the boundary of Agricultural Land based on the findings in the Detailed Soil Survey in Attachment 12. In addition, please be advised, Attachment 12 should include test pit boring logs and Figure C-1 in Attachment 12 should show the location of test pits and should be prepared by the soil scientist. The Application narrative should also address land deemed Land Actively Devoted to Agricultural or Horticultural Uses in accordance with 310 CMR 16.40(4)(a)2.

- 4. <u>Private Water Supply Wells:</u> Page 32 of the Application narrative addresses private water supply wells stating: "*Private well locations in the vicinity of the site were obtained from the Commonwealth of Massachusetts Energy & Environmental Affairs Data Portal and through communication with the City of New Bedford. No private wells were identified within 500 feet of the of the proposed site assignment limits and waste handling areas.*" The Application does not appear to include any documentation of the communication with the City of New Bedford. The Application does not address Potential Private Water Supplies in accordance with 310 CMR 16.40(3)(d)4. Private water supply information can be obtained by:
  - Reviewing the City of New Bedford Board of Health's records for private wells in the vicinity of the project. The Applicant should search for private wells within 500 feet of the waste handling area. The Applicant should document this search in the Application through written communication from the Board of Health or another means.
  - Additionally, MassDEP recommends that the Applicant should conduct a more comprehensive evaluation of private wells by working with the City of New Bedford Water Supply department to compare residential/commercial properties in the vicinity of the project with addresses that receive water supply bills. Any developed residential/commercial properties whose owners are not receiving water bills may be using an alternative water source. The Applicant should search for commercial/residential properties within 500 feet of the waste handling area and include documentation in the Application.

The Application must also address Potential Private Water Supplies. Potential Private Water Supply data can be obtained from the planning department or building department.

5. <u>Protection of Open Space</u>: Page 42 of the Application narrative addresses the Protection of Open Space stating: "The site borders the Acushnet Cedar Swamp State Reservation" ... and "The siting of the Facility will not have an adverse impact on the physical environment of, or on the use and enjoyment of, state or municipal parklands or conservation land, or other open space." The Applicant should provide supporting

information, comments or analysis to support their conclusion that the Facility will not have an adverse impact.

- 6. <u>Groundwater Contour Map</u>: The Application should include a groundwater contour map to address criteria at 310 CMR 16.40(3)(d)7.
- Existing Facilities {16.40(4)(j)} and Regional Participation {16.40(4)(l)}: The Application does not include the information required in the BWP SW01 form Section III, Part J, question 3 on page 35 of the form and Section III, Part L, question 2 on page 37 of the form.
- 8. <u>Land Use Plan</u>: MassDEP has the following comments regarding the Land Use Plan included in the Application as Insert 3:
  - The Land Use Plan must identify all residential dwellings within 500 feet of the property boundary. The plan does not show the residents on the west side of Phillips Road.
  - The Land Use Plan should identify the Acushnet Cedar Swamp State Reservation by name.
  - The Land Use Plan should identify the proposed waste handling areas (see comment #1 above). –
  - The Land Use Plan should identify all access roads on the site and show the traffic flow of the site.
  - The Land Use Plan should show all occupied commercial buildings and dwellings within 500 feet of the property line or be updated to indicate that none exist.
  - MassDEP requests that the opacity of the background aerial be decreased to make the lines and details of the plan appear more prominent.
- 9. <u>Water Resources Plan</u>: MassDEP has the following comments regarding the Water Resources Plan included in the Application as Insert 2:
  - Please ensure that all surface water bodies are clearly depicted on the Water Resources Plan.
  - The Water Resources Plan should depict all perennial streams and any Zone B of a surface water supply or indicate on the plan that none exist.
  - MassDEP requests you decrease the opacity of the background aerial to make the lines and details of the plan appear more prominent.
- 10. <u>Sound</u>:
  - a) The Sound Level Assessment Report should include an isopleth map depicting No Build sound levels or the Applicant should explain why one cannot be prepared.
  - b) During the site assignment pre-application meeting on October 21, 2022, MassDEP advised SCR they will be required to mitigate sound impacts to the maximum extent practical using a Best Available Control Technology (BACT) like approach which

requires that "top case" sound suppression/mitigation measures must be proposed. MassDEP advised SCR the application must include a MassDEP BWP AQ Sound Form (<u>https://www.mass.gov/doc/supplemental-form-aq-sound/download</u>). A completed BWP AQ Sound Form was not included in the permit application submittal and must be submitted for MassDEP review. Please take note of the following guidance from the BWP AQ Sound Form:

- When proposing sound suppression/mitigation measures, similar to the traditional "top-down" BACT process, the "top case" sound suppression/mitigation measures which deliver the lowest sound level increase above background are required to be implemented, unless these measures can be eliminated based upon technological or economic infeasibility. An applicant cannot "model out" of the use of the "top case" sound suppression/ mitigation measures by simply demonstrating that predicted sound levels at the property line when employing a less stringent sound suppression/mitigation strategy will result in a sound level increase of less than or equal to the 10 dBA (decibel, A –Weighted) above background sound level increase criteria contained in the MassDEP Noise Policy. A 10 dBA increase is the maximum increase allowed by MassDEP; it is not the sound level increase upon which the design of sound suppression/mitigation strategies and techniques should be based. Also, take into consideration that the city or town that the project is located in may have a noise ordinance (or similar) that may be more stringent than the criteria in the MassDEP Noise Policy.
- The evaluation of the sound analysis will be measured against requirements under the Solid Waste Regulations for nuisance conditions.
- Sound from mobile sources related to transportation is not applicable to MassDEP's Air Quality permitting and is excluded from the analysis. However, any transportation modes that are operating within the proposed site-assigned area and related to the Facility operations, including but not limited to, back up signal for delivery trucks, the coupling and/uncoupling rail cars, loading and unloading materials for further processes, shall be included in the analysis. Best management practices (BMPs) to prevent noise nuisance conditions for mobile sources shall be presented.
- 11. <u>PE signature and stamp</u>: PE signature and stamp are missing from the following site plans and shall be revised to include PE signature and stamp:
  - Insert 1 Site Locus Map
  - Insert 4 Site Zoning Map
  - Insert(s) 7.1, 7.2, 7.3, 7.4, 7.5 and 7.6 Rail Car Movements
  - Insert 8 Groundwater Monitoring Well Plan

MassDEP requests that a scale bar, in addition to a scale indicated as a ratio, shall be included on any site plans and/or engineering drawings that are to scale.

Should there be any questions, please contact MassDEP at the letterhead address or telephone me at (508) 946-2847 or Alison Cochrane at (617) 694-3441 or Elza Bystrom at (617) 413-2711. Any correspondence regarding this matter should reference DEP FILE # 201-004-A.

Very truly yours. Mal Dalu

Mark Dakers, Chief Solid Waste Management Section Bureau of Air and Waste

### CERTIFIED MAIL# 7021 0950 0000 9321 6942

ec: Massachusetts Department of Public Health Bureau of Environmental Health Services 250 Washington Street, 7th Fl. Boston, MA 02108 Email: <u>steven.hughes@mass.gov</u> Email: <u>bharathi.patimalla-dipali@mass.gov</u>

> City of New Bedford Health Department Attn: Damon Chaplin - Director Damon.Chaplin@newbedford-ma.gov

Green Seal Environmental, LLC Greg Wirsen - <u>greg@gseenv.com</u> Laura Bugay - <u>l.bugay@gseenv.com</u>

DEP-Boston ATTN: G. Cooper J. Fischer D. Simpson

DEP-SERO ATTN: S. Pickering M. Dakers



# **Communication for Non-English-Speaking Parties**

#### English

This document is important and should be translated immediately. If you need this document translated, please contact MassDEP's Diversity Director at the telephone number listed below.

#### **Español Spanish**

Este documento es importante y debe ser traducido de inmediato. Si necesita este documento traducido, comuníquese con la Directora de Diversidad de MassDEP al número de teléfono que aparece más abajo.

#### Português Portuguese

Este é um documento importante e deve ser traduzido imediatamente. Se precisar de uma tradução deste documento, entre em contato com o Diretor de Diversidade da MassDEP nos números de telefone listados abaixo.

#### 繁體中文 Chinese Traditional

本文件非常重要,應立即翻譯。如果您需要翻譯這份 文件,請用下面列出的電話號碼聯絡 MassDEP 多元 化負責人。

#### 简体中文 Chinese Simplified

本文件非常重要,应立即翻译。如果您需要翻译这份 文件,请用下面列出的电话号码与 MassDEP 的多元 化主任联系。

#### **Ayisyen Kreyòl Haitian Creole**

Dokiman sa-a se yon bagay enpòtan epi yo ta dwe tradwi I imedyatman. Si ou bezwen dokiman sa a tradwi, tanpri kontakte Direktè Divèsite MassDEP Ia nan nimewo telefòn endike anba.

#### Viêt Vietnamese

Tài liệu này rất quan trọng và cần được dịch ngay lập tức. Nếu quý vị cần dịch tài liệu này, xin liên lạc với Giám đốc Đa dạng của MassDEP theo các số điện thoại ghi dưới đây.

#### ប្រទេសកម្ពុជា Khmer/Cambodian

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#### Kriolu Kabuverdianu Cape Verdean

Kel dukumentu li é inpurtánti y debe ser traduzidu imidiatamenti. Se bu meste di kel dukumentu traduzidu, pur favor kontakta Diretor di Diversidádi di MassDEP na numeru abaxu indikadu.

Contact Glynis L. Bugg, Acting Diversity Director/Civil Rights 857-262-0606 Massachusetts Department of Environmental Protection One Winter Street, Boston MA 02108 TTY# MassRelay Service 1-800-439-2370 • https://www.mass.gov/environmental-justice (Version revised 7.22.2022) 310 CMR 1.03(5)(a

#### Русский Russian

Это важный документ, и он должен быть безотлагательно переведен. Если вам нужен перевод данного документа, пожалуйста, свяжитесь с директором по вопросам многообразия (Diversity Director) компании MassDEP по указанному ниже телефону.

#### Arabic العربية

هذه الوثيقة مهمة ويجب ترجمتها على الفور. اذا كنت بحاجة الى هذه الوثيقة مترجمة، يرجى الاتصال بمدير التنوع PMassDE على أرقام الهواتف المدرجة أدناه.

# 한국어 Korean

이 문서는 중요하고 즉시 번역해야 합니다. 이 문서의 번역이 필요하시다면, 아래의 전화 번호로 MassDEP의 다양성 담당 이사에 문의하시기 바랍니다.

### հայերեն Armenian

Այս փաստաթուղթը կարևոր է և պետք է անմիջապես թարգմանվի: Եթե Ձեզ անհրաժեշտ է այս փաստաթուղթը թարգմանել, դիմեք MassDEP-ի բազմազանության տնօրենին ստորև նշված հեռախոսահամարով:

#### Farsi Persian فارسی

این سند مهم است و باید فورا ترجمه شود. اگر به ترجمه این سند نیاز دارید، نطفا با مدیر بخش نتوع نژادی MassDEP به شماره تلفن ذکر شده در زیر تماس بگیرید.

#### **Français French**

Ce document est important et devrait être traduit immédiatement. Si vous avez besoin de ce document traduit, veuillez communiquer avec le directeur de la diversité MassDEP aux numéros de téléphone indiqués ci-dessous.

#### **Deutsch German**

Dieses Dokument ist wichtig und sollte sofort übersetzt werden. Sofern Sie eine Übersetzung dieses Dokuments benötigen, wenden Sie sich bitte an den Diversity Director MassDEP unter der unten aufgeführten Telefonnummer.

#### Ελληνική Greek

Το παρόν έγγραφο είναι σημαντικό και θα πρέπει να μεταφραστεί αμέσως. Αν χρειάζεστε μετάφραση του παρόντος εγγράφου, παρακαλούμε επικοινωνήστε με τον Διευθυντή Διαφορετικότητας του MassDEP στους αριθμούς τηλεφώνου που αναγράφονται παρακάτω.

#### Italiano Italian

Comunicazione per parti che non parlano inglese. Questo documento è importante e dovrebbe essere tradotto immediatamente. Se avete bisogno di questo documento tradotto, potete contattare il Direttore di Diversità di MassDEP al numero di telefono elencato di seguito.

#### Język Polski Polish

Dokument ten jest ważny i powinien zostać natychmiast przetłumaczony. Jeśli potrzebujesz przetłumaczonej wersji dokumentu, prosimy o kontakt z dyrektorem ds. różnorodności MassDEP pod jednym z numerów telefonu wymienionych poniżej.

### हिन्दी Hindi

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Contact Glynis L. Bugg, Acting Diversity Director/Civil Rights 857-262-0606 Massachusetts Department of Environmental Protection One Winter Street, Boston MA 02108 TTY# MassRelay Service 1-800-439-2370 • https://www.mass.gov/environmental-justice (Version revised 7.22.2022) 310 CMR 1.03(5)(a

APPENDIX B

REVISED AND NEW INSERTS (SITE PLANS)



REVISED WATER RESOURCES PLAN





**REVISED LAND USE PLAN** 





**REVISED SITE ZONING MAP** 





# **New Bedford Zoning** Zoning 2015



**Residential A** Residential Dwellings



Mixed Use Business

Industrial C Commercial Properties



**REVISED SHEET 10 OF 10** 





RAILCAR MOVEMENT PLANS





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CAD TECH: R. VAUTRINOT	CHECKED BY:
ENGINEER:	DATE: 1/2/2023
HILLAURA A. BUGAY CIVIL No. 47599 RO-REGISTERED	SCALE: <b>1"=100'</b> SHEET:
Sound Leiter	INSERT 7.6

REVISED GROUNDWATER MONITORING WELL LOCATIONS




NOTE: GROUNDWATER CONTOURS BASED ON WATER ELEVATIONS COLLECTED FOR WELLS 1,2 & 5 ON 4/14/2023 AND WELL 4 ON 4/12/2021



**INSERT 9** 

500-FOOT SETBACK PLAN











**INSERT 10** 

ACUSHNET CEDAR SWAMP TRAIL OFFSET PLAN





APPENDIX C

REVISED SW 01 FORM - PAGES 4, 8 AND 30





#### **Massachusetts Department of Environmental Protection** Bureau of Waste Prevention - Solid Waste Management

BWP SW 01 Site Suitability Report for a New Site Assignment

#### BWP SW 38 Site Suitability for a Major Modification of an Existing Site Assignment

Transmittal Number

Facility ID# (if known)

#### A. Site Location and Project Description (cont.)

State the yearly capacity of the proposed facility and, if the capacity is expected to change over C. the life of the facility, indicate the capacity in each year the proposed facility is expected to operate:

		468,000 (based on maximum capacity)	
		Expected change in capacity (if applicable):	
		Expected yearly capacity	Year
		468,000	All years
	d.	State the number of years the facility is expect	ed to operate:
		30 (Life of facility is not restricted)	
	e.	State the total lifetime capacity of the proposed	d facility:
		14 MM+ tons (Life of facility is not restricted) total lifetime capacity	
7.	Ту	pe of Waste: What type of waste will be accepte	ed at the proposed facility? (check all that apply)
	$\square$	municipal solid waste	

- i municipal solid waste
- $\boxtimes$  construction and demolition waste
- industrial waste
- other, please specify:

#### 8. Project Description: describe the proposed project:

See Site Suitability Application Narrative



#### Massachusetts Department of Environmental Protection Bureau of Waste Prevention – Solid Waste Management

BWP SW 01 Site Suitability Report for a New Site Assignment

**BWP SW 38** Site Suitability for a Major Modification of an Existing Site Assignment

Transmittal Number

Facility ID# (if known)

#### H. Maps

1. Ground Water Contour Map: Has a ground water contour map for the site been developed?

🛛 Yes 🗌 No

If Yes, please attach the map and identify the location of the attachment:

A groundwater contour plan although not specifically required by the regulations, has been prepared as requested to present groundwater flow direction based upon water level measurements taken from on-site monitoring wells. This plan is included as Insert 8 in Appendix B within the Response to Comments submittal.

Please submit the following with the Application:

2. Locus Map: A US Geological Survey (USGS) topographic map of at least 8.5 x 11 inches in size (7.5 minute series scale) should be attached which clearly delineates the proposed site boundaries and shows all access roads to the proposed site.

Identify the attachment:

See Site Suitability Application, USGS Topographic Map (Insert 1)	
section and/or page numbers	

- 3. Water Resources Site Plan: The following information regarding water resources should be indicated on a site plan (scale no larger than one inch equals two hundred feet) that covers the site plus a one-half mile extension in all directions from the site boundary. Please refer to the definitions at 310 CMR 16.02 for guidance on the meaning of the terms.
  - All wetlands, associated buffer zones and riverfront areas as defined in 310 CMR 10.00
  - All 100-year flood plains
  - All surface water bodies (rivers, streams, ponds, lakes, reservoirs etc),
  - All perennial streams draining to surface drinking water supplies,
  - All private water supply wells
  - All public water supply wells
  - All or any fractions of Interim Wellhead Protection Areas (IWPA) or Zone II areas
  - All or any fractions of Proposed Drinking Water Source Areas
  - All or any fraction of a Zone A or B of a surface water supply

Identify the location of the attachment:

See Site Suitability Application, Water Resources Plan (Insert 2) section and/or page numbers



Massachusetts Department of Environmental Protection Bureau of Waste Prevention – Solid Waste Management

BWP SW 01 Site Suitability Report for a New Site Assignment

Transmittal Number

BWP SW 38 Site Suitability for a Major Modification of an Existing Site Assignment

Facility ID# (if known)

#### D. Areas of Critical Environmental Concern {16.40(4)(d)} (cont.)

3. Mitigation Measures: If there is a determination by EOEA that the proposed facility may potentially adversely impact the ACEC, are there any reasonable mitigation measures the proponent may use to minimize or eliminate any adverse impacts?

Yes		No
-----	--	----

If "no," the site is not suitable.

If "yes," then with regard to this criterion the site may be assigned with conditions which will meet EOEA approval for mitigation of the adverse impacts. The mitigation measures proposed shall be appended to this application.

Identify location of supporting information or comments:

N/A section and/or page numbers

#### E. Protection of Open Space {6.40(4)(e)}

1. State Forests: Will the proposed solid waste management facility have an adverse impact on the physical environment of, or on the use and enjoyment of state forests?

🗌 Yes 🛛 🖾 No

Identify location of supporting information or comments: See Site Suitability Application Narrative, State Forests (Section III, Part E) and Insert 3 section and/or page numbers

2. State or Municipal Lands: Will the proposed solid waste management facility have an adverse impact on the physical environment of, or on the use and enjoyment of state or municipal parklands or conservation land, or other open space held for natural resource purposes in accordance with Article 97 of the Massachusetts Constitution?



Identify location of supporting information or comments:

See Site Suitability Application Narrative, State or Municipal Conservation and Park Lands (Section III, Part E) and Inserts 3 and 10.

section and/or page numbers

APPENDIX D

WATER SUPPLY WELL RESEARCH



From:	Anne Louro <anne.louro@newbedford-ma.gov></anne.louro@newbedford-ma.gov>
Sent:	Monday, April 3, 2023 8:35 AM
То:	Greg Wirsen; Engineering
Cc:	timc@parallelproducts.com; Laura Bugay; Jennifer Carloni
Subject:	RE: [EXTERNAL] RE: SCR - 100 Duchaine BLVD

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Good morning,

The Planning Department does not possess information responsive to this request.

Best-Anne

From: Greg Wirsen <greg@gseenv.com> Sent: Monday, April 3, 2023 8:02 AM To: Engineering <Engineering@newbedford-ma.gov> Cc: Anne Louro <Anne.Louro@newbedford-ma.gov>; timc@parallelproducts.com; Laura Bugay <l.bugay@gseenv.com> Subject: [EXTERNAL] RE: SCR - 100 Duchaine BLVD

Good Morning,

I am following up on my e-mail sent to the engineering Department on March 24, 2023. From my understanding, this email is sent to multiple parties within the Engineering Department. If it would be better for me to make a call and/or a visit to a particular individual, please let me know. We are inquiring if the Engineering Department is aware of any planned developments in the area that are proposing and private and/or public water supplies in the vicinity of 100 Duchaine BLVD.

Thank you in advance for looking in this matter.

Best regards,

**Gregory C. Wirsen, MSc.** Vice President

Green Seal Environmental, LLC 114 State Road, Sagamore Beach, MA 02562 office: 508.888.6034 ext. 16 | cell: 508.280.8488 www.gseenv.com Engineering | Environmental | Survey | Energy To Whom It May Concern:

We are performing some research for the part of the MassDEP permitting process for the proposed South Coast Renewables facility located at 100 Duchaine Blvd withing the industrial park. I have attached a locus map for ease of reference. We have are presently working with Stephanie Sloan at the BOH and I have also placed a request for water tie card information with the New Bedford Water Department. The last MassDEP comment ( the text below is a snip from a MassDEP letter highlighted in green below) was to inquire if there are any plans developments in the area that are proposing and private and/or public water supplies. I met with Anne Louro (Planning Department) this morning and she advised me that I would need to inquire with Public Infrastructure/Engineering. As such, I'm hopeful you may be able to help. A simple email if you're unaware of any related project would suffice. My contact information including my cell phone is listed below should you need to speak to me.

- Reviewing the City of New Bedford Board of Health's records for private wells in the vicinity of the project. The Applicant should search for private wells within 500 feet of the waste handling area. The Applicant should document this search in the Application through written communication from the Board of Health or another means.
- Additionally, MassDEP recommends that the Applicant should conduct a more comprehensive evaluation of private wells by working with the City of New Bedford Water Supply department to compare residential/commercial properties in the vicinity of the project with addresses that receive water supply bills. Any developed residential/commercial properties whose owners are not receiving water bills may be using an alternative water source. The Applicant should search for commercial/residential properties within 500 feet of the waste handling area and include documentation in the Application.

The Application must also address Potential Private Water Supplies. Potential Private Water Supply data can be obtained from the planning department or building department.

Best regards,

**Gregory C. Wirsen, MSc.** Vice President

Green Seal Environmental, LLC 114 State Road, Sagamore Beach, MA 02562

From: Sent: To: Cc: Subject: Dominic Galotti <Dominic.Galotti@newbedford-ma.gov> Tuesday, April 18, 2023 9:40 AM Greg Wirsen Laura Bugay Re: [EXTERNAL] RE: SCR - 100 Duchaine BLVD

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Good morning Gregory,

With respect to water provision at new developments in the vicinity of Duchaine Blvd, I have no proposals or plans before the Water Division.

Thank you Dominic Galotti

Get Outlook for iOS

From: Greg Wirsen <greg@gseenv.com> Sent: Monday, April 17, 2023 11:04:54 AM To: Dominic Galotti <Dominic.Galotti@newbedford-ma.gov> Cc: Laura Bugay <l.bugay@gseenv.com> Subject: RE: [EXTERNAL] RE: SCR - 100 Duchaine BLVD

Dominic,

Can you concur with Karen's e-mail below with respect to new developments that would be installing a public and/or private water supply? See the e-mail chain below (3 down) that outlined out inquiry.

Best regards.

**Gregory C. Wirsen, MSc.** Vice President

Green Seal Environmental, LLC 114 State Road, Sagamore Beach, MA 02562 office: 508.888.6034 ext. 16 | cell: 508.280.8488 www.gseenv.com Engineering | Environmental | Survey | Energy

From: Karen Raposas <Karen.Raposas@newbedford-ma.gov>
Sent: Monday, April 3, 2023 8:41 AM
To: Greg Wirsen <greg@gseenv.com>; Laura Bugay <I.bugay@gseenv.com>; Dominic Galotti

<Dominic.Galotti@newbedford-ma.gov>

Cc: Manuel Washburn <Manuel.Washburn@newbedford-ma.gov>; Engineering <Engineering@newbedford-ma.gov> Subject: FW: [EXTERNAL] RE: SCR - 100 Duchaine BLVD

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#### Good morning Greg

Apologies for delay response, I have no information on specific line up proposing projects on that area. If you are looking for existing water conditions on that address, I could pull the record plans for your reference. I have included Dominic on this email as he's the one who supervise the whole water department, he can give you concrete information for on-going and proposing future projects.

Thanks,



Karen Raposas Office Assistant III City of New Bedford Department of Public Infrastructure | Engineering 1105 Shawmut Avenue, New Bedford, MA 02746 508-979-1550 ext. 67554 email: karen.raposas@newbedford-ma.gov

From: Greg Wirsen <<u>greg@gseenv.com</u>> Sent: Monday, April 3, 2023 8:02 AM To: Engineering <<u>Engineering@newbedford-ma.gov</u>> Cc: Anne Louro <<u>Anne.Louro@newbedford-ma.gov</u>>; <u>timc@parallelproducts.com</u>; Laura Bugay <<u>l.bugay@gseenv.com</u>> Subject: [EXTERNAL] RE: SCR - 100 Duchaine BLVD

Good Morning,

I am following up on my e-mail sent to the engineering Department on March 24, 2023. From my understanding, this email is sent to multiple parties within the Engineering Department. If it would be better for me to make a call and/or a visit to a particular individual, please let me know. We are inquiring if the Engineering Department is aware of any planned developments in the area that are proposing and private and/or public water supplies in the vicinity of 100 Duchaine BLVD.

Thank you in advance for looking in this matter.

Best regards,

Greg	ory	C.	Wirsen,	MSc.
Vice	Pres	side	ent	

Green Seal Environmental, LLC 114 State Road, Sagamore Beach, MA 02562 office: 508.888.6034 ext. 16 | cell: 508.280.8488 www.gseenv.com

Engineering | Environmental | Survey | Energy

From: Greg Wirsen Sent: Friday, March 24, 2023 1:52 PM To: engineering@newbedford-ma.gov Cc: anne.louro@newbedford-ma.gov; 'timc@parallelproducts.com' <<u>timc@parallelproducts.com</u>>; Laura Bugay (I.bugay@gseenv.com) <I.bugay@gseenv.com> Subject: SCR - 100 Duchaine BLVD

To Whom It May Concern:

We are performing some research for the part of the MassDEP permitting process for the proposed South Coast Renewables facility located at 100 Duchaine Blvd withing the industrial park. I have attached a locus map for ease of reference. We have are presently working with Stephanie Sloan at the BOH and I have also placed a request for water tie card information with the New Bedford Water Department. The last MassDEP comment ( the text below is a snip from a MassDEP letter highlighted in green below) was to inquire if there are any plans developments in the area that are proposing and private and/or public water supplies. I met with Anne Louro (Planning Department) this morning and she advised me that I would need to inquire with Public Infrastructure/Engineering. As such, I'm hopeful you may be able to help. A simple email if you're unaware of any related project would suffice. My contact information including my cell phone is listed below should you need to speak to me.

- Reviewing the City of New Bedford Board of Health's records for private wells in the vicinity of the project. The Applicant should search for private wells within 500 feet of the waste handling area. The Applicant should document this search in the Application through written communication from the Board of Health or another means.
- Additionally, MassDEP recommends that the Applicant should conduct a more comprehensive evaluation of private wells by working with the City of New Bedford Water Supply department to compare residential/commercial properties in the vicinity of the project with addresses that receive water supply bills. Any developed residential/commercial properties whose owners are not receiving water bills may be using an alternative water source. The Applicant should search for commercial/residential properties within 500 feet of the waste handling area and include documentation in the Application.

The Application must also address Potential Private Water Supplies. Potential Private Water Supply data can be obtained from the planning department or building department.

#### Gregory C. Wirsen, MSc.

Vice President

#### Green Seal Environmental, LLC

114 State Road, Sagamore Beach, MA 02562 office: 508.888.6034 ext. 16 | cell: 508.280.8488

www.gseenv.com

Engineering | Environmental | Survey | Energy

From:	Amanda Jupin <amanda.jupin@newbedford-ma.gov></amanda.jupin@newbedford-ma.gov>
Sent:	Wednesday, April 12, 2023 10:06 AM
То:	Greg Wirsen
Cc:	timc@parallelproducts.com; Laura Bugay
Subject:	RE: [EXTERNAL] RE: Water Tie-in research
Attachments:	Private Well Lots-Addresses.xlsx

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Good morning,

I am sorry for the delay on your request. I have attached the excel sheet received with notes. Thank you,



#### Amanda Jupin

#### **Program Director – Permits Eng**

City of New Bedford | Department of Public Infrastructure 1105 Shawmut Ave, New Bedford, MA 02746 main:-508.979.1550 ext. 67312 email: <u>Amanda.Jupin@newbedford-ma.gov</u>

From: Greg Wirsen <greg@gseenv.com> Sent: Monday, April 3, 2023 9:36 AM To: Amanda Jupin <Amanda.Jupin@newbedford-ma.gov> Cc: timc@parallelproducts.com; Laura Bugay <l.bugay@gseenv.com> Subject: RE: [EXTERNAL] RE: Water Tie-in research

Thank you Amanda.

#### Gregory C. Wirsen, MSc.

Vice President

#### Green Seal Environmental, LLC

114 State Road, Sagamore Beach, MA 02562 office: 508.888.6034 ext. 16 | cell: 508.280.8488 www.gseenv.com Engineering | Environmental | Survey | Energy

From: Amanda Jupin <<u>Amanda.Jupin@newbedford-ma.gov</u>> Sent: Monday, April 3, 2023 9:11 AM

#### To: Greg Wirsen <<u>greg@gseenv.com</u>> Cc: <u>timc@parallelproducts.com</u>; Laura Bugay <<u>l.bugay@gseenv.com</u>> Subject: RE: [EXTERNAL] RE: Water Tie-in research

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Good morning,

Thank you for reaching out. As discussed the office short staffed for a few weeks. I do have this at the location to look at to confirm the address provided on the list are connected to city water. I apologize for the delay but will address as soon as possible.



#### Amanda Jupin

**Program Director – Permits Eng.** 

City of New Bedford | Department of Public Infrastructure 1105 Shawmut Ave, New Bedford, MA 02746 main:-508.979.1550 ext. 67312 email: Amanda.lupin@newbedford-ma.gov

From: Greg Wirsen <greg@gseenv.com>
Sent: Monday, April 3, 2023 8:05 AM
To: Amanda Jupin <<u>Amanda.Jupin@newbedford-ma.gov</u>>
Cc: timc@parallelproducts.com; Laura Bugay <<u>l.bugay@gseenv.com</u>>
Subject: [EXTERNAL] RE: Water Tie-in research

Amanda,

Good morning. I am following up from my office visit and email mail to you back on March 23/24<sup>th.</sup> I know that last week was busy for you. Please let me know if you need anything additional from me so that you can determine if the parcels have a municipal water tie in.

Best regards,

**Gregory C. Wirsen, MSc.** Vice President

#### Green Seal Environmental, LLC

114 State Road, Sagamore Beach, MA 02562 office: 508.888.6034 ext. 16 | cell: 508.280.8488 www.gseenv.com Engineering | Environmental | Survey | Energy From: Greg Wirsen Sent: Friday, March 24, 2023 1:37 PM To: Amanda Jupin <<u>Amanda.Jupin@newbedford-ma.gov</u>> Cc: 'timc@parallelproducts.com' <<u>timc@parallelproducts.com</u>>; Laura Bugay (<u>l.bugay@gseenv.com</u>) <<u>l.bugay@gseenv.com</u>> Subject: Water Tie-in research

Amanda,

Thank you for spending some time with me this morning. As discussed when we spoke, I'm e-mailing you a plan along with the a spreadsheet. I think if you wanted to just type <u>yes</u> on <u>no</u> in column D that would work out great. My sneaking suspicion is that 1884/1885 Phillips road may not be served by municipal water as it appears to be a laydown area for the utility. I look forward to receiving the information. Please let me know if there are any fees associated with this and I'll drop off a check.

Best regards,

Gregory C. Wirsen, MSc. Vice President Green Seal Environmental, LLC 114 State Road, Sagamore Beach, MA 02562 office: 508.888.6034 ext. 16 | cell: 508.280.8488 www.gseenv.com

Engineering | Environmental | Survey | Energy

From: Sent: To: Cc: Subject: Tim Cusson <TimC@parallelproducts.com> Monday, April 24, 2023 10:59 AM jeff@imtra.com Greg Wirsen IMTRA 30 Samuel Barnett BLVD

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HI Jeff

As part of our project permitting at 100 Duchaine Blvd we need to confirm that your building has water supplied by the city of New Bedford.

Can you just send me a response to this email confirming the same!

Timothy Cusson Vice President Parallel Products Solar Energy LLC. (617) 908-0825



From: Sent: To: Subject: Tim Cusson <TimC@parallelproducts.com> Monday, April 24, 2023 11:08 AM Greg Wirsen FW: 50 Duchaine water service

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fyi

From: Smith, Brian E <brian.smith@eversource.com> Sent: Monday, April 24, 2023 10:58 AM To: Tim Cusson <TimC@parallelproducts.com> Subject: RE: 50 Duchaine water service

Hi Tim,

We are supplied water by the city of New Bedford as you stated.

Thanks

Brian Smith Eversource Facilities Supervisor Southeastern Mass and Cape Cod 273 Summer St. Plymouth, MA. 02360 508-732-4288

From: Tim Cusson <<u>TimC@parallelproducts.com</u>> Sent: Monday, April 24, 2023 10:55 AM To: Smith, Brian E <<u>brian.smith@eversource.com</u>> Cc: Greg Wirsen <<u>greg@gseenv.com</u>> Subject: 50 Duchaine water service

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From: Sent: To: Cc: Subject: Amanda Jupin <Amanda.Jupin@newbedford-ma.gov> Thursday, April 20, 2023 11:40 AM Greg Wirsen Laura Bugay RE: [EXTERNAL] RE: Water Tie-in research

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50 Duchaine Blvd does have access to the city water supply



#### Amanda Jupin

**Program Director – Permits Eng** 

City of New Bedford | Department of Public Infrastructure 1105 Shawmut Ave, New Bedford, MA 02746 main:-508.979.1550 ext. 67312 email: <u>Amanda.Jupin@newbedford-ma.gov</u>

From: Greg Wirsen <greg@gseenv.com> Sent: Wednesday, April 19, 2023 3:37 PM To: Amanda Jupin <Amanda.Jupin@newbedford-ma.gov> Cc: Laura Bugay <l.bugay@gseenv.com> Subject: RE: [EXTERNAL] RE: Water Tie-in research

#### Amanda,

Thank for all of you help. On the spreadsheet I sent where you couldn't find a record for Eversouce, could you please see if 50 Duahaince BLVD has service. I just listed is as Duchaine so it was understandable why there was no record.

Best regards,

From: Amanda Jupin <<u>Amanda.Jupin@newbedford-ma.gov</u>>
Sent: Wednesday, April 12, 2023 10:06 AM
To: Greg Wirsen <<u>greg@gseenv.com</u>>
Cc: timc@parallelproducts.com; Laura Bugay <<u>l.bugay@gseenv.com</u>>
Subject: RE: [EXTERNAL] RE: Water Tie-in research

Parcle ID (Plot		City Showing	
and Lot)	ADDRESS	Water Service	
133/15	100 DUCHAINE (PARALLEL)	No	No record for parcel or address
133/15	DUCHAINE (EVERSOURCE)	No	No record for parcel or address
133/12	R ES SAMUEL BARNETT BLVD	No	No record for parcel or address
133/53	DUCHAINE (CITY OF NEW BEDFORD))	No	No record for parcel or address
133/50	30 SAMUEL BARNET BLVD	Yes	
,			
			Water listed for 121 Duchaine which has
133/21	127-127 D DUCHAINE BLVD	Yes	this parcel. No record for 127 Duchaine
133/19	126 DUCHAINE BLVD	Yes	
155/15		105	No record for parcel address listed
121/2	1884 PHILLIPS PD	No	helow
134/2		No	No record for parcel or address
134-5		No	No record for parcer of address
134/12	1884 FHILLIFS KOAD	1 05	
125/105		No	No record for parcel address listed above
136/406	112 DIRCUWOOD DRWE	No	No record for pareer address fisted above
134F/68	112 BIRCHWOOD DRIVE	Yes	
134F/29	109 BIRCHWOOD DRIVE	Yes	
134F/30	99 IVY ROAD	Yes	
134F/31	97 IVY ROAD	Yes	
134F/32	95 IVY ROAD	Yes	
134F/33	93 IVY ROAD	Yes	
134/342	1784 PHILLIPS ROAD	No	No record for parcel or address
134E/9	993 PINE HILL DRIVE	Yes	
134E/8	125 RIDGEWOOD RD	Yes	
134E/7	115 RIDGEWOOD ROAD	Yes	
134E/6	107 RIDGEWOOD ROAD	Yes	
134E/5	99 RIDGEWOOD ROAD	Yes	
134E/4	89 RIDGEWOOD ROAD	Yes	
134E/3	81 RIDGEWOOD RD	Yes	
134E/2	69 RIDGEWOOD ROAD	Yes	
134E/1	63 RIDGEWOOD ROAD	Yes	
134D/15	55 RIDGEWOOD ROAD	Yes	
134D/14	47 RIDGEWOOD ROAD	Yes	
134D/13	<b>39 RIDGEWOOD ROAD</b>	Yes	
134D/12	27 RIDGEWOOD ROAD	Yes	
134D/11	17 RIDGEWOOD ROAD	Yes	
134D/10	11 RIDGEWOOD ROAD	Yes	
134D/9	987 HILLCREST RD	Yes	
10 10 0	, , , miller rid		Water for address, plot and lots do not
133/15	1703 PHILLIPS	Ves	match our records
155/15	1705 THEER 5	105	Water for address plot and lots do not
122/15	1602 PHILLIPS	Var	match our records
133/13	1093 FHILLIFS	1 65	Water for address, plot and lots do not
122/15		Vee	match our records
133/15	1687 PHILLIPS	res	Match our records
			water for address, plot and lots do not
133/15	1675 PHILLIPS	Yes	match our records
			Water for address, plot and lots do not
133/15	1669 PHILLIPS	Yes	match our records
			Water for address, plot and lots do not
133/15	1661 PHILLIPS	Yes	match our records
			Water for address, plot and lots do not
133/15	1651 PHILLIPS	Yes	match our records
			Water for address, plot and lots do not
133/15	1643 PHILLIPS	Yes	match our records



#### Laura Bugay

From:	l.bugay@gseenv.com
То:	Greg Wirsen
Subject:	RE: [EXTERNAL] RE: Pump house 100 Duchaine

From: Shawn Syde <<u>Shawn.Syde@newbedford-ma.gov</u>>
Date: April 27, 2023 at 2:13:10 PM EDT
To: Tim Cusson <<u>TimC@parallelproducts.com</u>>
Cc: Stephanie Crampton <<u>Stephanie.Crampton@newbedford-ma.gov</u>>, Greg Wirsen
<<u>greg@gseenv.com</u>>
Subject: RE: [EXTERNAL] RE: Pump house 100 Duchaine

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Hi Tim,

Confirmed – 107 Duchaine Blvd (Industrial Park Pumping Station) is connected to the City's water supply and does not have a private well.

Shawn

From: Tim Cusson <<u>TimC@parallelproducts.com</u>>
Sent: Monday, April 24, 2023 10:53 AM
To: Shawn Syde <<u>Shawn.Syde@newbedford-ma.gov</u>>
Cc: Stephanie Crampton <<u>Stephanie.Crampton@newbedford-ma.gov</u>>; Greg Wirsen
<greg@gseenv.com>
Subject: [EXTERNAL] RE: Pump house 100 Duchaine

Hi Shawn

As part of our permitting, we are required to identify properties with private wells.

Can you confirm the Pump House at 100 Duchaine Blvd has public water or no water service at all?

Thank you.

Timothy Cusson Vice President Parallel Products Solar Energy LLC. (617) 908-0825

APPENDIX E

REVISED SITE SUITABILITY NARRATIVE



#### **Site Suitability Introduction**

## Introduction Green Seal Environmental, LLC (GSE) has prepared the following document for the Massachusetts Department of Environmental Protection (MassDEP) on behalf of South Coast Renewables, LLC (the "Applicant" or "SCR") for the property at 100 Duchaine Boulevard, New Bedford, MA.

This application provides the necessary information for MassDEP and the Board of Health to find the Site suitable to handle solid waste including Municipal Solid Waste (MSW) and Construction and Demolition Debris (C&D), limited to a total of 1,500 tons per day (tpd) and 468,000 tons annually, pursuant to the siting criteria of 310 CMR 16.00 applicable to this proposed site.

Information contained herein includes a Site Suitability Application (BWP SW 01), supporting narrative, attachments, and inserts (figures/site plans) for the proposed site and surrounding area as required under 310 CMR 16.00.

Provisions of Section 16.40 (1) (c) of the Site Assignment Regulations pertinent to determining suitability is as follows:

"(c) Facility Design Review.

 <u>General.</u> All applications shall be evaluated with the presumption that the proposed facility shall be designed and constructed to meet all relevant state and federal statutory, regulatory and policy requirements.
 <u>Design Considerations</u>. The review of an application shall not consider detailed facility designs or operations except where:

a. the Department determines that specific design or operation plans or data are necessary to determine whether potential discharges or emissions from the proposed facility could render the site not suitable and requires the applicant to submit such relevant and detailed information; or

b. the applicant intends to alter the site or design the facility to meet specific site suitability criteria and submits such plans or other information as the Department deems necessary to determine if the criteria is satisfied.

- 3. Design Conditions. When facility design or operation plans are submitted the Department may base a site suitability determination on:
  - a. the incorporation of specific facility design elements; or
  - b. compliance with performance and technical standards and criteria."

#### Site Suitability Introduction, Continued

Introduction, continued	This document coincides with the format of the MassDEP's Site Suitability application and contains the following information:		
	<ul> <li>Site Suitability application form (BWP SW 01) provided by MassDEP;</li> <li>A narrative that provides required information relative to each individual suitability criterion;</li> <li>Attachments that supplement certain sections of the application corresponding with that particular section (e.g., traffic analysis, MEPA, and NHESP); and</li> <li>Inserts (site plans) for comparison to the Site Suitability Criteria such as Water Resources and Land Uses, Existing Conditions, and Proposed Conditions.</li> </ul>		
Updated Narrative	This narrative supersedes the narrative that was originally submitted with the Site Suitability Application (BWP SW 01) on February 22, 2023. This narrative has been revised to address several technical comments/questions raised in the MassDEP's Determination of Administrative Completeness letter dated March 15, 2023.		
Non- Applicability	In the sections of the Site Suitability Application that do not pertain to the project, the statement <i>"not applicable"</i> will appear. However, some of these sections will contain a narrative and/or justification statement. Where a statement is determined to be necessary, the reader will be directed to the appropriate section within this document and any supporting attachments or Inserts.		

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March 15, 2023 Administrative Completeness Determination letter.		

#### **Section I. General Information**

### Introduction The following sections are addenda to the General Information section contained within the Site Suitability application and address the following topics:

- Site Location
- Project Description
- About the Applicant
- Fees
- Collection of Household Hazardous Waste
- Declaration of Waivers
- Massachusetts Environmental Policy Act (MEPA)
- Wetland Resources
- Maps Narrative

Section I -The following Section I table of contents references page numbers of this<br/>document, not the application forms.Contents

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#### Site Location and Project Description (A)

## Site Location SCR proposes to site assign 25.4 acres (the "Site") of a 71-acre parcel located at 100 Duchaine Boulevard in New Bedford within the New Bedford Industrial Park identified by the New Bedford Tax Assessor as Lot 5 on Assessor's Plat 134 (the "Property"). A locus plan of the Site is included as Insert 1.

The project site also includes an existing General Recycling operation (not subject to Site Assignment) which is presently under construction and partially operational. The project site, when fully constructed, will also provide 4.7 megawatts (MW) of photovoltaic solar power mounted on a series of canopies and roofs. The glass processing operations and solar power installation do not require a site assignment or solid waste permit but will be discussed in this application as they are a component of the overall project.

The proposed facility is designed to accept MSW and C&D delivered by truck for subsequent processing (providing the potential for unbaled MSW to be processed) and/or transfer into rail cars and secondarily as conditions dictate, larger trucks for transport to various locations throughout the country for disposal and/or further recycling. The buildings have been sized so that all unloading, handling, any processing, and loading onto rail cars and/or trucks will occur within the building interiors.

Insert 5 depicts existing and proposed features of the Facility including the proposed limits of the site assigned area. Insert 2 – Water Resources Plan and Insert 3 – Land Use Plan provided identify the Site features and relationships to various setbacks and/or receptors relevant to 310 CMR 16.40. These plans also depict the proposed Site Assignment Limits as well as proposed waste handling areas.

**Type of Facility** The Facility will be a state-of-the-art rail-served MSW and C&D handling and transfer facility with the potential to process wastes. Waste handling will be performed within the proposed 65,317-sf metal framed/sheathed "tipping building" and any waste processing will be within a portion of an existing 92,220 sf "processing building" adjacent and connected to the proposed tipping building. Loading of waste into rail cars will be performed within both the tipping and processing buildings. No MSW or C&D will be handled outside with the exception of wastes contained within loaded railcars, trucks, or other appropriate container.

Current construction activities on-site include all development associated with the already-approved glass processing facility subject to the General Recycling Permit. This construction includes a Glass Beneficiation (processing) operation and 1.842 MW of solar power energy generation in addition to the 1.567 MW currently installed. The glass processing/recycling activities includes recycling glass containers that are collected through the Massachusetts bottle deposit system. This previously-approved development also includes the construction of a rail sidetrack onto the site to service the glass processing operation. Bottles collected will be processed such that the glass can be reused to produce new glass containers and other glass products. The buildings associated with glass processing are as follows:

- Glass Processing Building = Completed/operational 27,500 sf
- Bunker Building = 90% Completed 23,320 sf
- Side Bunker Building = 90% Completed 21,973 sf

Construction associated with the proposed Facility will include two rail sidetracks in addition to the main rail spur and three rail side-tracks previously-approved as part of the glass processing facility. Please refer to the Site plans contained in Insert 5 for further detail (note the dashed tracks are previously approved and solid lines indicate to be constructed).

SCR is also adding an additional 1.357 MW of solar power to the site. The solar panels will be mounted on a series of structures located over parking areas, a canopy and on the proposed solid waste handling building. Please refer to Insert 5, Sheet 4 of 10.

# **Type of Facility** The Site is located on a 71-acre parcel located at 100 Duchaine Boulevard in New Bedford within the New Bedford Industrial Park. The Property was formerly owned by Polaroid Corporation and existing buildings and access roads are being reused to the maximum extent possible. SCR proposes to site assign 25.4 acres of the parcel.

As noted, SCR proposes to site assign 25.4 acres of the Property shown on plans included on Inserts 2, 3, and 5 (sheet 10 of 10). Presently proposed waste handling, other than loaded railcars or trucks, is limited to the areas within the proposed 65,317 square foot tipping building, and approximately 50% of the area within the existing 92,200 square foot processing building which is depicted on the plans within Insert 5 and the Interior Layout Plan presented as Insert 6. For the purposes of applying the siting criteria, SCR has conservatively identified presently proposed and future available waste handling areas (5.91 acres and 16.97 acres, respectively within the 25.4-acre proposed site assignment limits. The presently proposed waste handling area includes the areas identified above, whereas the available waste handling area represents the area that meets all regulatory setbacks and could be conceptually used for waste handling either presently or in the future). For instance, the glass processing buildings are presently being used to handle conditionally-exempt recyclables. However, these building areas presently meet all of the siting criteria to be used for solid waste handling activities although these areas are not presently proposed to be used. Regardless of the waste handling areas depicted, no solid waste will be handled outside (now and/or in the future) unless it is contained within a loaded railcar or truck.

Capacity	SCR will operate within the following capacity limits:	
	a.	The proposed Facility will have a maximum daily capacity of 1,500 TPD of solid waste (MSW and C&D debris).
	b.	Based upon a maximum daily capacity of 1,500 TPD of solid waste, the project will handle a maximum of 468,000 tons per year of solid waste (MSW and C&D) waste (312 days x 1,500).
	C.	As presently proposed, the Facility will have waste delivery hours between 6:00 AM and 7:00 PM on weekdays and between 7:00 AM and 4:00 PM on Saturday. The Facility will not accept waste on Sundays.
	d.	The Facility plans to have the ability to process materials and perform maintenance 24/7 (this is predominately based on the throughput of the MSW processing equipment).
	e.	The Facility is expected to have a lifetime of approximately 30 years however, the lifetime capacity does not theoretically have any limitation as it is a transfer station and not a landfill.
	f.	Based upon the projections given above, the estimated lifetime capacity for the Facility is 14 million tons, based on 30 years.

Type of WasteThe Facility will accept MSW and C&D materials (post-processed C&D<br/>residuals as currently planned). As defined by MassDEP, MSW is any<br/>residential or commercial solid waste.

C&D waste is waste building materials and rubble resulting from the construction, renovation, repair, or demolition of buildings, pavements, roads, or other structures. Construction and demolition waste includes but is not limited to concrete, bricks, asphalt pavement, masonry, plaster, gypsum wallboard, metal, lumber, and wood. The proposed Facility presently proposes to accept Category 2 C&D waste (residual waste from C&D processing facilities) and does not intend to process C&D material on-site. However, the requested site assignment is for both MSW and C&D.

The Facility will not accept hazardous wastes.

Project<br/>Description-<br/>SummaryThe following narrative describes how the project was presented and<br/>reviewed in the MEPA process and is proposed to be pursued. The project<br/>was presented in two phases. Phase 1 of the project involved the glass<br/>processing operation that has been approved and is not subject to this<br/>application for site assignment. Phase 2 of the project includes the solid waste<br/>handling proposal which is subject to site assignment. It includes the<br/>MSW/C&D handling facility, which includes an approximate 65,000+ square<br/>foot tipping building addition to the current building on site that SCR intends<br/>to use for waste acceptance and processing. This phase will also include the<br/>expansion of the rail sidetracks in order to provide for additional on-site rail<br/>car storage tracks to service the solid waste operations.
elements.

## Site Location and Project Description (A), Continued

Project Description-	In summary, the two main phases are as follows:			
Summary, continued	<ol> <li>Phase 1. Although not part of this application process, the already approved glass processing facility will process approximately 200 tpd of glass bottles and will produce glass cullet for shipment to bottle manufacturers to produce bottles. Phase 1 includes:         <ul> <li>Construction of the rail spur and three sidetracks for Glass Recycling Operations</li> <li>Construction of the glass bunker building, side bunker building, and associated roof-mounted solar</li> </ul> </li> </ol>			
	Construction of 1.842-MW of solar canopies			
	<ol> <li>Phase 2. A 1,500 tpd solid waste handling facility to handle MSW and C&amp;D waste. Recyclable materials will be sent to recycling markets and the non-recyclable fraction of the waste will be sent off site for disposal. Phase 2 includes:         <ul> <li>Construction of a 65,000 + sf solid waste tipping building</li> <li>Construction of two additional rail sidetracks</li> <li>Reconfiguration of stormwater controls</li> <li>Reduction of impervious surfaces</li> <li>1.35 MW additional solar</li> <li>Installation of scales and scale house</li> <li>Installation of potential baler</li> <li>Installation of associated environmental controls.</li> </ul> </li> </ol>			
	Although not part of this application process, the glass processing facility will			
	for shipment to bottle manufacturers to produce bottles.			
	Project development will also include the construction of a new rail side track from the existing rail line adjacent to the site that will be used for outbound shipment of the products of the above-referenced project			

Site Description The site is an approximately 71-acre parcel identified by the New Bedford Tax Assessor as a combination of Lots 5 and 462 on Assessor's Plat 134 and Lot 67 on Assessor's Plat 133. The site is zoned Industrial C. A locus plan of the site location is included in Insert 1. The site is located within the New Bedford Business Park. The site was previously owned by Multilayer Coating Technologies and before that by Polaroid Corporation. The site was used by both previous owners to manufacture film. The site as developed by Polaroid included access roads, parking areas, stormwater management features, and various buildings. An existing conditions plan of the site is included within Insert 5. SCR intends to utilize the existing infrastructure to the maximum extent possible in developing the proposed project.

> Although not part of the siting criteria, SCR has designed the overall project to reduce total impervious surface area on the Property, an environmental benefit. The site currently has 17.7 acres of impervious surfaces (25.1% lot coverage) consisting of access roads, buildings, parking lots, driveways, and concrete slabs on grade in areas where buildings were previously demolished. Buildings planned for the proposed project are being constructed in areas of the site that are currently impervious when possible. Project construction will partially remove an existing concrete slab on grade in order to construct the rail sidetrack, converting surfaces that are currently impervious to pervious surfaces. Although the proposed project (Phases 1 and 2 combined) will add an additional 138,110 square feet of buildings and additional canopy structures to support solar panels (Phase 1 and 2) will occupy an additional 128,238 square feet, the net impact of the proposed project (Phase 1 and Phase 2 combined with the proposed Phase 2 revisions) is now a **decrease** in impervious surfaces of 0.67 acres compared to pre-existing conditions. This will decrease the impervious surface lot coverage to 24.4% from 25.1%.

Existing Impervious Surfaces: 771,119 sf (17.7 acres).

**Post Phase 1 Construction Activities**: Impervious surfaces reduced to 696,119 sf. This is due to the removal of concrete slabs associated with the development of the rail.

<b>Site Description</b> , continued	<b>Post-Phase 2</b> : Originally, impervious areas were to increase to 785,571 sf (18.03 acres). This equated to an increase of 0.33 acres of impervious surfaces compared to pre-existing conditions. However, with the removal of the biosolids portion of the proposed development, impervious surfaces decrease by 29,112 sf (0.67 acres) to 756,449 sf. As such, impervious surfaces surfaces will decrease when compared to pre-development existing conditions.
	A Limited Subsurface Investigation was conducted at the site by Sage Environmental. This investigation concluded that: "Based on the results of this LSI, SAGE has not identified the presence of subsurface impacts at the site that would require reporting to MassDEP. As such, SAGE is of the opinion that further actions are not warranted at this time."
Waste Handling Facility	Infrastructure associated with the proposed Facility includes the construction of a 65,317 square foot "tipping building", and the redevelopment/use of approximately 50% of the area within the existing 92,200 square foot processing building that SCR intends to use for MSW processing equipment and operations. Please refer to the Interior Layout Plan presented as Insert 6.
	The new waste handling building will connect on the west side of the existing processing building. This new "tipping" building will serve as the tipping floor and will be designed to allow waste delivery trucks to back into the building to unload waste material for processing/handling/transfer. The tipping building consists of these general areas:
	<ol> <li>The waste tipping and inspection areas</li> <li>Temporary waste storage area</li> <li>Baled waste storage area</li> <li>The rail car loading area</li> <li>The MSW processing feed hopper loading area</li> </ol>
_	After tipping, front-end loaders will stage the material for subsequent processing/handling and loadout.
	Continued on next page

Waste Handling<br/>Facility,<br/>continuedThe existing building on site adjacent to the proposed tipping building is<br/>intended to be used for the processing of MSW. SCR intends to modify the<br/>building as required to house MSW processing equipment used to extract<br/>recyclable material from MSW. General MSW processing line specifications,<br/>although they may change as designs progress, are included in Attachment 8.<br/>A baler to bale and shrink wrap (or bag) MSW, if deemed appropriate, will also<br/>be located within the building. The interior Layout Plan presented as Insert 6,<br/>currently shows the potential baler within the new tipping building. Loose,<br/>baled, and shrink-wrapped (or bagged) MSW as well as Category 2 C&D will<br/>be loaded in rail cars for shipment to disposal sites.

The Facility will accept both baled MSW and MSW delivered loose in transfer trailers and packer trucks.

Baled MSW will be delivered to the proposed facility from other transfer stations that have baled MSW to meet the railroad requirements for shipping MSW in rail cars. Baled MSW accepted at the proposed Facility will be loaded into rail cars for shipment to disposal sites such as a landfill or waste to energy facility. The Facility will also accept C&D defined as Category 2 (C&D processing residuals). All shipment of MSW by rail will follow then-applicable CSX-approved shipment standards (e.g., baled, intermodal, or other approved method). Outbound materials are intended to be shipped by rail, but trucks can be also be used when necessary or required.

Presently, the Facility does not intend to de-bale MSW for further processing or reprocess Category 2 C&D residuals.

Waste delivery trucks arriving at the Facility will be weighed on a truck scale before backing into the tipping building and depositing the waste onto the interior tipping floor. MSW will be delivered in transfer trailers and packer trucks (the trucks that provide curbside pickup of MSW). Baled MSW may be delivered in transfer trailers or flatbed trucks. The average capacity of a packer/smaller trucks is 9 tons and transfer trailers are 28 tons. It is expected that Category 2 C&D waste will be delivered in 100-cy live floor trailers.

Waste Handling SCR intends that non-baled MSW received by the Facility will be processed to Facility extract recyclable materials. Such processing would consist of a processing (continued) line that includes both mechanized separation equipment and a manual picking line. Materials extracted may include ferrous and non-ferrous metals, cardboard, wood, glass, PET, paper, and plastic. It is intended that the Facility will likely include two processing lines with each line capable of processing 40 tons per hour of MSW. Note that final line sizing, layout and throughput per hour of any processing equipment will be further refined during future permitting processes. As presently planned, the processing line(s) will operate two to three shifts per day depending on the inbound volume accepted. A general processing line flow diagram and equipment specifications are included in Attachment 8. The location of the processing equipment is presented on the Interior Layout Plan presented as Insert 6. The processing line is expected to extract approximately 20% to 25% recyclables from the MSW that is processed. After the recycled material has been extracted, the remaining waste that will be shipped by rail will be baled and shrink wrapped (or otherwise prepared for shipment by rail as required by then-current CSX shipment requirements) for transport to a disposal facility. Note that pending modifications to existing CSX transportation policies, baling and shrinkwrapping wastes sent via rail may not be necessary. The primary means of transport for disposal will be by rail. Trucks can also be used to transport waste, if necessary. Recyclable materials extracted from MSW will be sent to recycling markets by rail or truck.

The Facility will also accept C&D. At this time, the Facility plans to only accept residual C&D waste classified as Category 2 C&D waste by MassDEP. Category 2 waste is C&D waste that has been processed by a C&D processing facility and has had the "waste ban" materials extracted. The generating processing facility will have removed waste ban material and other recyclable material from the C&D material as deemed appropriate to satisfy existing regulation/policy. This material will be received in the proposed tipping building.

Waste Handling Facility (continued)
At the present time, CSX generally allows shipment of MSW in intermodal containers. However, there are other means and methods presently being used at other rail-served transfer stations (e.g., covering the MSW in a rail car gondola with Posi-shell<sup>™</sup>). SCR commits to following then-current and applicable CSX shipment standards and will adjust procedures and protocols as deemed appropriate. Presently, SCR is also proposing the installation of a MSW baler. SCR may opt to not install a baler based on policies regarding the shipment of MSW by rail.

> Generally, each rail car can carry approximately 90 to 100 tons of solid waste for disposal. It is expected that at full processing capacity the Facility will produce approximately 1,300 tons per day of residual waste that will be sent for disposal. This will require approximately 15 rail cars each day (based on a 90-ton capacity). In the event that the MSW processing equipment is unavailable, up to 1,500 tons of MSW could be sent for disposal daily. The rail sidetrack will be modified in this phase of development to allow for the storage of more rail cars than can be accommodated by the sidetrack construction associated with the glass processing development. With the completion of track construction in Phase 2 associated with the proposed solid waste facility, the sidetrack will allow for the receipt of 18 empty rail cars and the removal of 18 full rail cars. The site will be serviced by Mass Coastal Railroad. The Proponent will also purchase an electric rail car mover for the movement of rail cars on-site. Additional rail side-track will be added to the previously-approved (under Phase I waiver) rail side-tracks. Please refer to Insert 5 for further detail (note the dashed tracks are previously approved and solid lines indicate to be constructed).

> The Facility will use Best Management Practices (BMPs) to minimize potential impacts to the Site and surrounding environment. A partial list of BMPs that will be incorporated into the Facility are as follows:

• All tipping, handling, and loading will be performed within a fullyenclosed processing and tipping building.

Waste Handling Facility (continued)	• The building floor is designed as impervious concrete that will prevent any potential contamination of groundwater, stormwater, or the surrounding environment. Any liquids released from the waste will be collected in a floor drain system. The liquid collected in this system will be gravity fed into the City's sanitary sewer system or stored in a wastewater holding tank to be periodically pumped out and trucked off-site for disposal at a wastewater treatment plant.
	• Use of a fine atomized misting system within the Tipping Building and Processing Building will effectively control fugitive dust and odor in the building. This system can also introduce odor counteractants.
	<ul> <li>Regular cleanup and sweeping will occur on the external paved surfaces. Operation and Maintenance Plans will be developed and staff will be trained on these operational procedures.</li> </ul>
	<ul> <li>Following first in/first out waste handling procedures.</li> </ul>
	<ul> <li>The use of tipping doors that can be opened and closed to reduce the potential for nuisance conditions when deemed appropriate.</li> </ul>
	<ul> <li>Ventilation stacks that promote dispersion.</li> </ul>
	<ul> <li>Location of doorways farthest from the location of offsite receptors.</li> </ul>
	<ul> <li>Limiting doors that would promote the channeling of air through the facility.</li> </ul>
	It should be noted that as the Facility progresses through the permitting
	phases (e.g., MassDEP and City of New Bedford), controls, BMP's, etc., may be modified or enhanced.
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#### **Applicant Information (B)**

# ApplicantThe Applicant is South Coast Renewables, LLC, which has a corporate address<br/>of 100 Duchaine Boulevard, New Bedford, Massachusetts 02745. The Site, at<br/>100 Duchaine Boulevard, New Bedford, is owned by affiliates of SCR, SMRE<br/>100 LLC, and SMRE SUBLOT 20, LLC.

#### Fees, Household Hazardous Waste, Waivers (C-E)

Fees As part of the site suitability process, the New Bedford Board of Health will assess SCR a Technical Fee. The Board of Health may use the fee for eligible costs of reviewing technical data, obtaining technical assistance, and conducting a public hearing. The maximum allowable technical fee that the Board of Health can assess is computed per 310 CMR 16.00 and is based on the type of Facility and the tons of waste accepted per day. From 310 CMR 16.99 Appendix A, Table 2, the Maximum Technical Fee for Handling Facilities is based on the maximum daily volume of waste, measured in tons per day (TPD), that is proposed to be accepted at the Facility. SCR is proposing to accept up to 1,500 TPD of solid waste at the Facility. The Maximum Technical Fee for the proposed Facility capacity is as follows: Maximum Fee = \$3,000 + (1,500 TPD x \$20.00/TPD) = \$33,000.00 ٠ The total of the Maximum Technical Fee (\$33,000) is required be adjusted for inflation by a factor determined by the ratio of the Boston Consumer Price Index ("BCPI") for September of the year preceding the current year, divided by the BCPI for September 1988. Per information provided by the U.S. Department of Labor, Bureau of Labor Statistics, the BCPI for September 2022 was 318.80 and for September 1988 was 126.2. Applying the adjustment factor results in the following Maximum Technical Fee for the proposed facility = \$33,000 x (318.8/126.2) = \$83,363 As such, a check in the amount of \$83,363 has been provided to the Board of Heath. Please see Attachment 1 for a copy of the check. Household The Applicant is not applying, pursuant to the Massachusetts Hazardous Hazardous Waste Regulations (310 CMR 30.000, section 30.190), for approval to operate Waste a Facility for the collection of Household Hazardous Waste. Oil and hazardous waste storage on-site will consist of limited quantities of spent hydraulic oil, motor oil, and anti-freeze, generated from servicing on-site equipment. Furthermore, if Household Hazardous Waste is found during inspections, the oil and/or hazardous material will be placed in a secured and approved container for subsequent removal and proper disposal. Waivers SCR is not requesting any waivers per 310 CMR 16.18.

## Priority Resources and Land Uses (F-H)

ΜΕΡΑ	According to 310 CMR 16.08(5)(d), the Applicant must provide evidence that the proposed project does or does not require review under the Massachusetts Environmental Policy Act (MEPA).
	SCR has completed the MEPA process. The project has received the following certificates:
	<ul> <li>Final Record of Decision (FROD for glass processing and rail spur) – March 19, 2019</li> <li>Environmental Notification Form (ENF) – April 12, 2019</li> <li>Draft Environmental Impact Report (DEIR) – January 30, 2020</li> <li>Draft Environmental Impact Report (FEIR) – April 2, 2021</li> <li>Supplemental Final Environmental Impact Report/Notice of Project Change (NPS-SFEIR) – August 29, 2022</li> </ul>
Wetlands Resources	The wetland boundaries and 100-foot wetland buffer zones, as defined by MassGIS, are shown on the attached Water Resources Plan (Insert 2) and on the site plans included in Insert 5.
	The Phase 1 construction of rail spur and sidetracks has already been approved by the Conservation Commission under an Order of Conditions. A copy of the Order of Conditions (OOC) for the rail spur and sidetracks is presented in Attachment 6. Construction of the additional rail side tracks and the new tipping building addition requires the filing a Notice of Intent with the New Bedford Conservation Commission due to their location partially within the buffer zone to wetland resource areas. SCR will seek and an additional OOC for the construction of these features.

<b>Riverfront Area</b>	None of the areas to be site assigned are within the Riverfront Area.
	A drainage swale was constructed along the northern and western property lines by the former owner of the property associated with construction of the existing site development. A 25-foot Riverfront Area is associated with these drainage swales as shown on Water Resources Plan in Insert 2. Developed areas of the proposed project and the site assigned limits are located outside of the identified Riverfront.
100-Year Floodplain	The 100-year flood boundaries as determined by the Federal Emergency Management Agency (FEMA) are shown on the attached Water Resources Plan included as Insert 2. All of the developed portions of the Site will be above the 100-year floodplain elevation and have no impact on the floodplain. As shown on Insert 2, the limit of the 100-year flood zone is approximately 650 feet south of the SCR property line.
Wetland Impacts	The rail sidetracks and the 63,000 sf + building addition to be constructed as part of Phase 2 and related to this solid waste facility permitting will be located within the buffer zone to wetlands. This work will be permitted through the Conservation Commission prior to construction.
	Continued on next page

Separation of Waste Handling from Groundwater Two groundwater monitoring wells in the area of the proposed Tipping Building, MW-4 and MW-5, were installed and the water elevations were measured monthly during initial design. The location of the monitoring wells is shown on the plan included in Insert 8.

Monitoring Well	Depth to GW-	GW Elev.	Adjusted Max.
MW-4	(Feet)	(Feet)	GW Elev. (Feet)
June 28, 2018	5.35	74.77	78.8
July 27, 2018	6.35	73.77	77.9
August 28, 2018	5.15	74.97	79.4
September 28, 2018	3.40	76.72	80.1
October 31, 2018	3.30	76.82	79.3
November 30, 2018	2.70	77.42	78.4
January 10, 2019	3.00	77.12	79.2
February 6, 2019	3.70	76.42	78.7
March 15, 2019	2.50	77.62	79.5
April 8, 2019	3.30	76.82	78.9
May 17, 2019	3.25	76.87	79.5
March 29, 2021	3.40	76.72	79.5
April 5, 2021	3.35	76.77	79.6
April 12, 2021	3.95	76.17	78.6
April 19, 2021	2.95	77.17	79.6

Separation of				
Waste Handling from	Monitoring Well MW-5	Depth to GW (Feet)	GW Elev. (Feet)	Calculated Max GW Elev. (Feet)
Giounuwaler,	June 28, 2018	6.50	74.16	78.2
continued	July 27, 2018	7.8	72.86	77.1
	August 28, 2018	6.9	73.76	78.2
	September 28, 2018	4.95	75.71	79.1
	October 31, 2018	5.05	75.61	78.1
	November 30, 2018	4.50	76.16	77.1
	January 10, 2019	4.90	75.76	77.8
	February 6, 2019	5.30	75.36	77.6
	March 15, 2019	4.35	76.31	78.2
	April 8, 2019	5.05	75.61	77.7
	May 17, 2019	5.10	75.56	78.2
	March 29, 2021	5.25	75.41	78.2
	April 5, 2021	5.15	75.51	78.3
	April 12, 2021	5.80	74.86	77.3
	April 19, 2021	4.80	75.86	78.3

The table presented above shows groundwater elevations measured in monitoring wells MW-4 and MW-5. The measured groundwater levels in MW-4 and MW-5 have been adjusted to calculate a maximum groundwater level using the Frimpter Method (USGS Water Resources Investigations 80-1205) using the USGS well (MA-ATW-83R) which is located in Attleboro. Water elevations in the USGS well have been recorded since 1964. As shown in the above table the groundwater elevation adjusted to the maximum expected groundwater elevation is 80.1 feet.

The waste handling area of the handling building must be a minimum of 2 feet above the maximum groundwater level. Waste handling areas include the tipping building floor, the rail car loading area floor, and the trench drain system at each truck door in the Tipping Building. The entire trench drain system including the trench drains, the sump that collects water from the trench drains, the industrial wastewater holding tank and all system piping to the tank must be a minimum of 2 feet above maximum groundwater elevation.

Separation of	The lowest area of waste handling for the trench drain system will be
Waste Handling from	approximately 1.5 feet below the floor elevation of the tipping building. To
Groundwater (continued)	floor must be at a minimum elevation of el 83.6 feet to account for a 1.5' deep tranch drain system. The proposed Tinning Elevation is 25 feet
	therefore providing greater than the 2- feet minimum required separation, as summarized in the table below:

Proposed Tipping Floor Elevation	85.0
Bottom of interior trench drains/sump Elevation	83.5
Maximum High Groundwater Elevation	80.1
Provided Separation to Groundwater	3.4 feet

Monitoring of groundwater will continue to be periodically measured as confirmation that the groundwater separation requirement is met. Should groundwater monitoring indicate higher groundwater levels than have currently been recorded, the tipping floor elevation would be raised in the ATC application to provide the required 2-foot separation to maximum groundwater levels.

GroundwaterA groundwater contour plan although not specifically required by the regulations,<br/>has been prepared as requested to present groundwater flow direction based upon<br/>water level measurements taken from four on-site monitoring wells in April 2023.<br/>This plan is included as revised Insert 8 in Appendix B within the April 2023 Response<br/>to Comments document.

Maps	The following section addresses plans that GSE has prepared for the proposed project. Please refer to the Insert section for copies of the appropriate plans.		
Locus Map	The following table provides pertinent information relative to the "Locus Map." A locus map is included in Insert 1.		
	Quad Name and Date	New Bedford North - 2018	
	Latitude and Longitude	Lat. 41.7161 N. Long70.9521 W	
-			
Priority Resources	The following table provides found within ½-mile radius Plan (Insert 2), the Land U within Insert 5 of this applic	s a brief narrative of the priority resource features of the Site. Please refer to the Water Resources se Plan (Insert 3), and the Site Plans presented ation for more information on these features.	
Regional Details (1/2-mile radius)	Description		
Wetlands	The Water Resources Plan MassGIS within a ½-mile ra within Insert 5 shows a fiel SCR property. Buffer areas Site and in the vicinity of the Inserts.	(Insert 2) depicts wetlands as obtained from adius of the Site. The Existing Conditions Plans d-surveyed delineation of wetland areas on the extending 100 feet from wetlands identified on- e Site are also indicated on the above-mentioned	
	The Property was previou developed and operated the Existing infrastructure cons driveways, buildings, building The Property has large area to utilize the existing infra minimize impacts to wetlan	sly owned by Polaroid Corporation. Polaroid e site as a manufacturing facility for its products. sists of access and egress roads, parking areas, ng slabs, and a stormwater management system. as of wetlands. The project has been developed astructure to the maximum extent possible to ds.	
	The design of all stormwate with MassDEP's Stormwate and control of sediment cor	er management systems will be in conformance r Management Policy for water quality, recharge, atamination.	

May 2023

## Priority Resources and Land Uses (F-H) Continued

#### Priority

Resources,

(continued)

Regional	Description
Details	
(1/2-mile	Please refer to the Water Resources Plan included as Insert 2.
radius)	
Proposed	The nearest mapped proposed drinking water source area is an aquifer
Drinking Water	located approximately 1-mile northwest of the site. According MassGIS, the
Source Areas	site is located within a Medium Yield Aquifer as shown on Insert 2. A "Non-
	Potential Drinking Water Source Area – High Yield" is located approximately
	700 feet north of the SCR property line. Note that all waste handling
	operations at the proposed facility will take place indoors beside railcar
	staging.
Zone A	The nearest Zone A is located in the corridor for Route 140. This is
	approximately 1,250 feet from the SCR property line. The SCR site is not
	within a Zone A of a surface water supply. The Zone A is shown on Insert 2.
Zone I	The Site is not located within or in close proximity to Zone I of a public water
	supply. The nearest Public Water Supply Wells are located approximately 2
	miles northeast of the Property off of Middle Road.
IWPA or	The Site is not located within an IWPA or Zone II. The nearest Zone II is
Zone II	approximately 2.5 miles northeast of the Property. The nearest IWPA is
	approximately 2 miles northeast of the Property.
Natural	According to MassGIS, there is Priority Habitat of Rare Species and an
Heritage	Estimated Habitat of Rare Wildlife located approximately 0.5-mile south of
Endangered	the subject Site. A portion of the Rare Species Habitat and Habitat of Rare
Species	Wildlife areas are located within the half mile radius depicted on the Land
Program	Use Plan in Insert 3. MassGIS research and communication with the Natural
	Heritage and Endangered Species Program has confirmed that the Site is not
	located withing any Priority Habitat of Rare Species or Estimated Habitat of
	Rare Wildlife (See Attachment 4).
Wildlife	GSE reviewed the Division of Fisheries and Wildlife website for information
Management	regarding Wildlife Management Areas. No Wildlife Management Areas are
Areas	located within a ½ mile of the Site.

Land Uses The following table provides a brief narrative of land uses within ½-mile of the Site. Please note that this information was obtained using digitized images and vectorized data from the Massachusetts Geographic Information Systems (MassGIS) and other publicly available information from the MassGIS website. Please refer to Insert 3, Land Use Plan.

Regional Details	Description
(1/2-mile	
radiusj	
ACECS	According to MassGIS, the nearest Area of Critical Environmental Concern (ACEC) is located over 10 miles east of the Site.
Agricultural	Areas of prime farmland and farmland of statewide importance as identified
Lands	by soils classification on the MassGIS system are mapped at the Site and are
(Adjacent & On-	identified on the Land Use Plan in Insert 3. Farmland of state-wide
Site)	importance was identified along the eastern property line and prime
	farmland soils were identified along the western property line.
	The "Facility" and proposed site assigned area is greater than 100 feet from all prime farmland soils and from farmland of statewide importance. During the development process, SCR also hired APEX to perform a detailed soils survey to confirm the mapped soils were accurate. This survey is presented as Attachment 12 and confirmed Farmland Soils are presented on the revised Land Use Plan, as Insert 3 which correspond to the plans included in the APEX Report.
	No lands within 0.5-mile radius are actively devoted to agricultural or horticultural uses. The closest mapped lands designated by the Massachusetts Department of Agricultural Resources are located between two and three miles away from the Property.
State Forests	GSE reviewed the Department of Conservation and Recreation website for
	information regarding State Forests. The nearest State Forest is the
	Freetown-Fall River State Forest, which is more than 5 miles from the Site.

#### Land Uses,

(continued)

Regional	Description
Details	
(1/2-mile	Please refer to the Land Use Plan included as Insert 3.
radius)	
Conservation	The Acushnet Cedar Swamp State Reservation is located to the west of the
and Park	Site. The Site is separated from the Acushnet Cedar Swamp State
Lands	Reservation by the main rail line at the property's westerly property line. The
	primary purpose of the State Reservation is recreation and conservation. The
	area is shown on the Land Use Plan in Insert 3. Insert 9 prepared as part of
	the May 2023 Response to Comments submittal shows the setbacks from the
	property line and site assignment line to the nearest trail head within the
	Reservation. Pine Hill Park is located 1,250 feet to the southeast of the
	Property line. The primary purpose is recreation. The park is shown on the
	Land Use Plan in Insert 3. The Greater New Bedford Industrial Foundation
	owns conservation land 1,600 feet to the northwest of the Property line. The
	City of New Bedford owns a small parcel of vacant land just east of Route
	140. This land is labelled on Insert 3 as Clough Cr. This land is approximately
	1,800 feet east of the Property line.
MDC	The MDC is now the Department of Conservation and Recreation (DCR). No
Reservations	DCR parks/reservations were identified within 0.5 miles of the Site.
EOEEA	GSE did not identify any lands with conservation, preservation, agricultural,
Restricted	or watershed protection restrictions approved by the secretary of EOEEA
Land	within a ½ mile of the Site.
Privately	GSE did not identify any privately-owned public access conservation lands in
Owned Public	close proximity to the Site. Based on the proposed location, the subject Site
Access	will not have adverse impacts on the physical environment of local
Conservation	conservation lands.
Land	
Residential	No residential dwellings exist within 500 feet of the proposed site assigned
Dwellings	limits (Site) or proposed waste handling areas.
(500-Foot	
Radius)	

#### Land Uses,

(continued)

Regional	Description					
(1/2-mile radius)	Please refer to the Land Use Plan included as Insert 3.					
Commercial	Five commercial buildings are located	within 500 feet of the property line of				
Buildings	the subject site. All five buildings are	located within the industrial park. The				
(500-Foot	commercial buildings within 500 feet	of the Property are:				
Radius)	Facility/Business	Address				
	IMTRA Corporation	30 Samuel Barnet Blvd				
	Milhench Arthur L "Trustee"	h Arthur L "Trustee" 127 Duchaine Blvd				
	N E Plastics Corporation	cs Corporation 126 Duchaine Blvd				
	C P Bourg Inc.	g Inc. 50 Samuel Barnet Blvd				
	City of New Bedford (Lift Station)	of New Bedford (Lift Station) 107 Duchaine Blvd				
	Eversource	versource 50 Duchaine Blvd				
Health Care	GSE identified did not identify any he	alth care facilities within ½ mile of the				
Facilities	Site.					
Prisons	GSE did not identify any prisons within 1/2 mile of the Site.					
Schools	GSE did not identify any schools within ½ mile of the Site.					
Daycare	GSE did not identify any licensed daycares within ½ mile of the Site.					
Facilities						
Senior &	GSE did not identify any senior or you	th centers within ½ mile of the Site.				
Youth Centers						

On-Site Land	The following table provides a brief overview of the proposed on-site land use.
Use	This information can be found within Inserts 2, 3, 5, and 6.

Criteria	Description						
Solid Waste	GSE did not identify any solid waste facilities within ½ mile of the Site. Note						
Facilities	the Crapo Hill Landfill is located 6,500+ feet to the northwest.						
<b>On-Site Waste</b>	SCR will not handle waste outside of the buildings on the Site other than						
Handling Areas	the loaded railcars or trucks. For the purposes of the siting criteria, SCR has						
	conservatively defined the waste handling areas as any areas within the						
	approved site assigned limits.						
Areas of Waste	Waste will not be landfilled and/or incinerated on the Site. Inbound						
Deposition	materials will be tipped, handled, and loaded within the confines of the						
	buildings. The consolidated waste materials will then be transported off-						
	site via rail or large trucks.						
Existing Buildings	A portion of an existing 92,200-sf building will be used for MSW processing.						
	A new 65,317-sf tipping building will be constructed for tipping solid waste						
	and for loading rail cars prior to shipment to disposal sites.						
Access Roads	Traffic to and from the Facility will use Route 140. Please refer the Traffic						
	Study presented as Attachment 3 and the site plans included in Insert 5 for						
	further detail.						
Traffic Flow	The traffic flow pattern is shown in the Traffic Report (Attachment 3). The						
	Site has adequate room for safe and effective traffic flow and truck						
	queueing on-site. Sheet 6 of 10 in Insert 5 provides a general traffic flow						
	plan.						
Zoning of	The abutting properties, as defined in 310 CMR 16.02, to north of the site						
Abutting	are zoned "Multi-Use 1". The remaining abutting properties are zoned						
Properties	Industrial.						
Site Zoning	The area to be site assigned is located within an area zoned Industrial C.						
	The New Bedford City Solicitor has determined that the use is an allowed						
	use provided a site assignment and all other required permits and licenses						
	have been obtained. The zoning in the area of the project is shown on						
	Insert 4.						

Facilities

#### Section II. Facility Specific Criteria (A-C)

IntroductionThe following section addresses Facility-specific criteria [310 CMR 16.40(3)<br/>(d)] for Waste Handling and Processing Facilities. Please refer to the prior<br/>statements in this narrative in the Priority Resources and Land Uses<br/>description, Attachments, Inserts, and Site Plans for additional information.

# Table of<br/>Contents -<br/>Section IIThe following is a TOC for Section II of the Site Suitability application. The page<br/>numbers cited refer to page numbers of the general document, not the<br/>application form.

Торіс	See Page
Landfills	31
Combustion Facilities	31
Waste Handling and Processing Facilities:	
1. Zone I	32
2. IWPA/Zone II	32
3. Zone A	32
4. Private Water Supplies	32
5. Occupied Facilities	33
6. Riverfront Area	33
7. Depth to Groundwater	33

Landfills The proposed Facility is a solid waste handling and transfer facility that will not landfill or dispose of waste on-site. Therefore, this section does not apply.
 Combustion The proposed Facility is a solid waste handling and transfer facility that will

not burn or incinerate waste on-site. Therefore, this section does not apply.

## Section II. Facility Specific Criteria (A-C), Continued

Zone I of a Public Water Supply	The proposed waste handling area is not located within a Zone I of a public water supply. MassDEP establishes Zone I areas as the area encompassed by a protective radius of 400 feet around a public water system well with a yield of 100,000 gallons per day or greater. The Site is not located within or in close proximity to Zone I of a public water supply. The nearest Public Water Supply Wells are located approximately 2 miles northeast of the Site. The Site complies with the requirements of 310 CMR 16.40(3) (d) (1).
IWPA and Zone II Areas	The proposed waste handling area is not within an Interim Wellhead Protection Area or a Zone II of a public water supply well. The nearest Zone II is approximately 2.6 miles northeast of the proposed facility. The nearest IWPA is approximately 2.0 miles northeast of the proposed facility. The Site complies with the requirements of 310 CMR 16.40(3) (d) (2).
Zone A	The proposed waste handling area is not within the Zone A of a public water supply. The closest Public Surface Water Supply is located approximately 1,300 feet east of the Site as shown on the Water Resources Plan (Insert 2). The Site complies with the requirements of 310 CMR 16.40(3) (d) (3).
Private Water Supplies	Private well locations in the vicinity of the site were obtained from the Commonwealth of Massachusetts Energy & Environmental Affairs Data Portal and through communication with the City of New Bedford. No private wells were identified within 500 feet of the of the proposed site assignment limits and waste handling areas. The Site complies with the requirements of 310 CMR 16.40(3) (d) (4).
	Continued on next page

#### Section II. Facility Specific Criteria (A-C), Continued

Occupied There are no existing occupied residential dwellings, prisons, health care Facilities facilities, elementary schools, middle schools or high schools, children's preschools, licensed day care centers, senior centers, or youth centers within 500 feet of the proposed site assignment limits or waste handling areas at the Facility. The locations of these sensitive receptors are presented within Insert 3. The residential dwellings nearest the proposed waste handling facility are located on Phillips Road to the east of the Property. The closest residential dwelling is located 590 feet from the proposed site assignment limits and 610 feet from the nearest proposed waste handing area (closest being the eastern most portion of the rail spur). Interior waste handling (not including the general recycling/glass processing operations) at it's closest point will be approximately 1,210 feet from the closest residential dwelling and the tipping doors to the facility will be approximately 1,580 feet from the closest residential dwelling. The Site complies with the requirements of 310 CMR 16.40(3) (d) (5). **Riverfront Area** The waste handling area is not within a Riverfront Area as defined at 310 CMR 10.00. A "River" is defined at 310 CMR 10.58(2)1.a., as a perennial stream where "the issuing authority shall presume that a river or stream shown as perennial on the current U.S. Geologic Survey ("USGS") or more recent map provided by the MassDEP is perennial unless rebutted by evidence from a competent source asserting to the contrary or a finding by the issuing authority." The Riverfront Area is defined at 310 CMR 10.58(2)(a)3.a. as "the area of land between a river's mean annual high-water line measured horizontally outward from the river and a parallel line located 25 feet away." The waste handling area will not be within 25 feet of a river.

The Site complies with the requirements of 310 CMR 16.40(3) (d) (6).

#### Section II. Facility Specific Criteria (A-C), Continued

Depth to Groundwater The Facility will maintain at least a two-foot separation between the maximum high groundwater elevation and the waste handling area. The maximum potential groundwater elevation has been calculated based on two groundwater monitoring wells on opposite sides of the proposed waste handling building. Records of groundwater levels in the monitoring wells and calculated maximum groundwater levels are discussed in Section I, H-Priority Resources and Land Uses above. Based on this calculation, the tipping building floor is proposed to be set at or above el. 85.0 feet, providing adequate groundwater separation. The groundwater levels will continue to be monitored periodically up to the ATC application. The tipping floor elevation will be adjusted before construction, as necessary, based upon updated groundwater levels.

The plan in Insert 5 (Sheet 7 of 10) identifies the proposed slab elevations which satisfies the requirements of 310 CMR 16.40(3) (d) (7).

#### Section III. General Criteria (A-L)

Introduction The following section addresses Section III of the Site Suitability Application -General Site Suitability Criteria for a Solid Waste Management Facility. Please refer to the prior statements in this narrative in the Priority Resources and Land Uses description, Attachments, Inserts, and Site Plans for additional information.

# Table of<br/>Contents -<br/>Section IIIThe following is a TOC for Section III of the Site Suitability application. The<br/>page numbers cited refer to page numbers of the general document, not the<br/>application form.

Торіс	See Page
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Traffic Impacts	37-44
Wildlife and Wildlife Habitat	45
Areas of Critical Environmental Concern	46
Protection of Open Space	47-49
Air Quality Impacts	50-54
Nuisance Conditions	55-65
Size of Facility	65-72
Areas Previously Used for Solid Waste Disposal	73
Existing Disposal Facilities	74-75
Other Sources of Contamination or Pollution	76
Regional Participation	77

#### Agricultural Land (A)

# AgriculturalAreas of prime farmland, farmland of unique importance, and farmland of<br/>statewide importance as identified by soils classification on the MassGIS<br/>system are indicated on the Land Use Plan in Insert 3 and the Soils Analysis<br/>report prepared by APEX presented as Attachment 12.

The proposed "Site" (i.e.., the proposed Site Assignment limits) is not within 100 feet of prime farmland, farmland of unique importance, or farmland of statewide importance as identified by soils classification. The Site complies with the requirements of 310 CMR 16.40 (4)(a). Revised Insert 3 includes the on-site areas of Prime Farmland soils confirmed by the Soil Survey.

The mapped farmland of statewide importance bordering the proposed limit of site assignment to the south of the proposed site was not evaluated by APEX because the area is developed with the Eversource building, paved access driveway, paved access road, a solar canopy parking structure, a stormwater basin, and wetlands. Please refer to the Land Use Plan as Insert 3 in Appendix B showing the mapped soils overlaid onto a 2021 aerial photo. As such, this mapped farmland is no longer farmland as cover soils have been disturbed with construction and built upon. However, given the fact that GSE and SCR do not have access to perform test pitting activities on private property, GSE has revised the southerly site assignment line to provide the required 100-foot buffer in compliance with 310 CMR 16.40 (4). This data is presented on the revised plans within the April 2023 Response to Comments document.

#### **Traffic Impacts (B)**

# **Traffic Impacts** The traffic associated with the Facility has been evaluated to demonstrate that the traffic impacts from Facility operations would not constitute a danger to the public health, safety, or the environment, taking into consideration the following factors:

- 1. traffic congestion;
- 2. pedestrian and vehicle safety;
- 3. road configurations;
- 4. alternate routes; and
- 5. vehicle emissions.

Traffic Study Overview McMahon Associates (McMahon), reviewed the existing traffic operations and potential traffic impacts associated with the proposed development of the existing South Coast Renewables (SCR, formerly Parallel Products) solid waste facility. The purpose of the study was to evaluate existing and projected traffic operational and safety conditions in the vicinity of the site and identify mitigating measures to offset potential project-related traffic impacts on the surrounding roadways, if determined to be necessary based on safety and/or operational conditions. In summary, this study has determined that the proposed project, when developed and operational, will allow for safe and efficient access to and from the Facility.

McMahon's assessment was based on a review of current traffic volumes and crash data collected for this study, a review of readily accessible traffic analyses, and the anticipated traffic-generating characteristics of the proposed development. This study examines existing and projected traffic operations (both with and without the proposed project) at key intersections in the vicinity of the project site. The study area was chosen based on a review of the surrounding roadway network and anticipated traffic generating characteristics of the proposed project. The study provides a detailed analysis of traffic operations during the weekday morning, weekday afternoon school dismissal, and weekday afternoon commuter peak hours, when the combination of adjacent roadway volumes and potential traffic increases associated with the project would be greatest.

# Study AreaThe area identified for detailed analysis in this study was determined basedIntersectionson a review of the anticipated traffic generating characteristics of the<br/>proposed project and a review of the surrounding roadway network serving<br/>the project site. The study area intersections include the following:

- Route 140 Northbound on/off-ramp at Braley Road
- Route 140 Southbound on/off-ramp at Braley Road
- Braley Road/Theodore Rice Boulevard at Phillips Road
- Theodore Rice Boulevard at Duchaine Boulevard
- Duchaine Boulevard at Samuel Barnet Boulevard
- Phillips Road at Samuel Barnet Boulevard
- Duchaine Boulevard at Site Driveway

**Trip Generation** The table below presents the estimated trip generation for the proposed facility expansion (with the removal of the biosolids component previously proposed). The proposed expanded facility is projected to generate a total of 190 new daily one-way truck trips with the rail in operation; a reduction of 138 truck trips compared with the 328 new daily one-way truck trips projected in the SFEIR. Assuming no rail service, the proposed expanded facility is projected to generate an additional 278 new daily one-way truck trips assuming no rail service, or 50 trips fewer than projected in the SFEIR. The total number of daily vehicle trips projected to be generated by the proposed project did not exceed the MEPA threshold for transportation review, and therefore not considered significant. Detailed trip generation calculations for Phases 1 and 2 of the project are provided in Appendix G of the compiled TIS.

	Weekday Daily Trips (SFEIR)		Weekday Daily Trips (with rail, no biosolids)			Weekday Daily Trips (without rail, no biosolids)			
Description	In	Out	Total	In	Out	Total	In	Out	Total
Inbound MSW/C&D Trips									
Packer	33	33	66	33	33	66	33	33	66
Transfer Trailer	43	43	86	43	43	86	43	43	86
Inbound Biosolid Trips	23	23	46	0	0	0	0	0	0
Outbound Material	56	56	112	13	13	26	54	54	108
Truck Trip Total (Phase 2 Expansion)	155	155	310	89	89	178	130	130	260
Expanded Glass Trips (Approved under Phase 1)	9	9	18	6	6	12	9	9	18
Truck Trip Total	164	164	328	95	95	190	139	139	278
Facility Employees	75	75	150	75	75	150	75	75	150
Total	239	239	478	170	170	340	214	214	428

Trip The existing facility generates up to 90 truck trips per day. With addition of up to Generation, 18 one-way daily truck trips related to the expansion of glass operations continued approved under Phase 1 and the addition of up to 260 one-way daily truck trips related to MSW and C&D processing under Phase 2, the Facility is estimated to generate a maximum of up to 368 one-way daily truck trips. The maximum daily truck trip generation of the Facility will not exceed 368 one-way trips, which SCR is willing having as a limitation/condition of the Site Assignment for the expanded facility. The total number of maximum daily one-way truck trips is summarized below. However, SCR will base the limitation on an aggregate of 368 gross trips in regardless of how trips are estimated in the table presented below. For example, if glass trips exceed the estimate presented in the table below, SCR would have to reduce the number of solid waste trips to ensure that the aggregate remains below 368 truck trips. It should also be noted that scalehouse operations can verify and track all inbound and outbound truck trips, and this data can be tabulated and reviewed by the MassDEP and/or the City at any given time.

	Existing	Phase 1 Glass	Phase 2	Total One-Way	
	Operations	Processing	Expansion	Truck Trips	
One-Way Truck Trips	90	18	260	368	

**Mitigation** SCR has committed to the following traffic related mitigation measures:

- SCR entered into a Host Community Agreement with the City of New Bedford. Within this Agreement, the Facility shall restrict all inbound and outbound vehicles from using Phillips Road.
- Proposed installation of traffic signal at intersection of Braley Road at Phillips Road/Theodore Rice Boulevard (City discussion in process) (approximately \$300k).
- Restrict transportation of outbound material by truck during the weekday morning, weekday afternoon school dismissal, and weekday afternoon commuter peak hours to mitigate potential increases in delay at the Route 140 interchange ramp (does not include backhauls).
- Donation of \$5,000 for a truck exclusion zone study

<b>Mitigation</b> , continued	<ul> <li>Opportunities for employees to participate in transit subsidy or reimbursement programs.</li> <li>Coordination with SRTA to request revising existing transit service to better service the project site.</li> <li>Informing employees of nearby transit stops and bicycle and pedestrian amenities.</li> <li>Provide incentives to encourage bicycle ridership to the site, such as bike racks and other storage facilities on-site.</li> <li>Implementation of a carpool system among employees.</li> <li>Provide preferential parking for carpools and vanpools.</li> <li>Paperless, direct deposit offered to employees.</li> <li>Provide striped bicycle lanes along Duchaine Boulevard and shared bicycle markings along Theodore Rice Boulevard to provide connectivity to the existing bicycle amenities along Braley Road. This is contingent upon City approval.</li> </ul>
Traffic Congestion	As discussed within the TIS report, the addition of project generated trips to the study area road network would add minimal additional delay. Queues along study area roadway approaches are estimated to increase between 2 feet and a maximum of 55 feet, or approximately the length of two packer trucks or one transfer trailer, during peak hours. Please note, not all study area intersections will have a projected increase in delay. Please refer to Queue Length Figures 19A – 19L in the TIS for visual representation of queue length impacts. To mitigate congestion at the all-way STOP sign-controlled intersection of Braley Road with Phillips Road and Theodore Rice Boulevard, which exists under 2021 Existing and 2028 No-Build conditions without the facility expansion, SCR proposes to install a fully-actuated traffic signal which would improve overall intersection operations from LOS E/F during weekday peak periods to LOS C/D. To further mitigate peak hour roadway impacts, SCR proposes to restrict the departure of trucks transporting outbound material during the weekday morning, weekday afternoon school dismissal, and weekday commuter peak hours (6:30-7:30 am and 3:15-5:00 pm), in accordance with MassDOT's August 22, 2022 SFEIR comment letter.

Pedestrian and As noted by MassDOT in its comment letter to the EENF, included in Appendix H of the TIS report, "The additional traffic volumes associated with the project is not expected to significantly impact safety." In addition, the study area intersection of Braley Road at Phillips Road/Theodore Rice Boulevard presently has a crash rate of 0.64 crashes per million entering vehicles (C/MEV), slightly higher than the Statewide and MassDOT District 5 average of 0.57 C/MEV for unsignalized intersections. Signalization of this intersection under the proposed mitigation is anticipated to reduce crashes and would provide signalized pedestrian accommodations at the intersection. A sidewalk system is provided along the south side of Braley Road, east of the Phillips Road/Theodore Rice Boulevard intersection and the east side of Phillips Road along with dedicated bike lanes.

> Duchaine Boulevard does not have dedicated sidewalks but have 11-foot wide shoulders outside of the 14-wide travel lanes, which provide adequate buffer between pedestrians and vehicle traffic. Striped bike lanes will be added to Duchaine Boulevard following approval by the City, as indicated in the above Mitigation report section.



#### Road Configurations

The SCR facility is located within the New Bedford Business Park, which is designed to accommodate heavy truck traffic along its internal roadways, including Duchaine Boulevard and Theodore Rice Boulevard.

Road Configurations, continued	Furthermore, all truck trips to and from the SCR facility will be restricted to the assigned truck route between the New Bedford Business Park and Route 140 via Braley Road.
	Sight distances were not evaluated because the intersection of the site driveway and Duchaine Boulevard is unobstructed as the driveway is at the end of the roadway; and the Business Park roadways, including Duchaine Boulevard and Theodore Rice Boulevard are designed to accommodate heavy truck traffic.
	Continued on next page

#### Alternate All truck traffic traveling to and from the site will utilize Route 140 to Braley Routes Road, Theodore Rice Boulevard, and Duchaine Boulevard. SCR will prohibit all trucks delivering solid waste or removing solid waste from using Phillips Road. The prohibition on trucks from using Phillips Road will be included in all contracts with customers of the Facility. The contracts will include financial penalties if trucks utilize Phillips Road, including a ban from using the Facility for repeat offenders. In addition, to deter existing truck traffic from Phillips Road south of Braley Road, SCR is amenable to allocating up to \$5,000 toward a Heavy Commercial Vehicle Exclusion (HCVE) study for Phillips Road from Route 140 to Braley Road should the City of New Bedford choose to pursue a HCVE through MassDOT. Vehicle An Environmental Justice (EJ) Analysis and Greenhouse Gas (GHG) Analysis Emissions were prepared separately by Epsilon Associates and provided as Attachments 10 and 11, respectively, of the Site Suitability Application. The EJ Analysis stated, "Because the proposed facility will serve existing needs for material handling at a location that is closer to the sources of the materials, the project

populations such as asthmatics, children, and the elderly." The majority of outbound material will be transported by rail. Based on the GHG analysis, transport via rail results in an approximately 60 percent reduction in greenhouse gas emissions compared with long haul trucks.

avoids transportation-related impacts currently associated with sending the materials farther by truck...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'

	MS	W/Biosolids		Glass
	Truck	Rail	Truck	Rail
GHG (lb/day)	154,426	63,247	19,289	7,441
GHG (tpy)	28,183	11,543	3,520	1,358
Difference (tpy)	-	-16,640	-	-2,162
Difference (%)	-	-59%	-	-61%

#### GHG Comparison of Rail Haul vs. On-Road Haul

McMahon Conclusions McMahon concluded... "Based on the analyses presented, the proposed mitigation measures mitigate project generated impacts to the greatest extent feasible and satisfies the MassDOT Traffic Impact Assessment Guidelines. Additionally, it is our opinion that the traffic impacts of the proposed development of this solid waste facility located at 100 Duchaine Boulevard 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)."

Please refer to Appendix G as part of the April 2023 Response to Comments submittal for a copy of the compiled Traffic Impact Study.

# Wildlife and Wildlife Habitat (C)

Introduction	This section addresses the Natural Heritage and Endangered Species Program (NHESP) administered by the Massachusetts Division of Fisheries & Wildlife (MassWildlife).
Habitat of Endangered Species	According to MassGIS, there is Priority Habitat of Rare Species and an Estimated Habitat of Rare Wildlife located approximately 1,500 feet southwest of the subject Site. These areas are separated from the Site by the existing rail line. The areas of Rare Species Habitat and Habitat of Rare Wildlife are shown on Insert 3. The siting of the proposed Facility will not have an adverse impact on Endangered, Threatened, or Special Concern species listed by the NHESP.
	Additionally, the Massachusetts Division of Fisheries & Wildlife was contacted with respect to the subject Site. The Massachusetts Division of Fisheries & Wildlife responded by email on January 3, 2019 which said, in part, "this project site does not occur within Estimated Habitat of Rare Wildlife or Priority Habitat as indicated in the Massachusetts Heritage Atlas (14 <sup>th</sup> Edition). Therefore, the project is not required to be reviewed for compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations". A copy of the email communication is included in Attachment 4. The proposed Project complies with the requirements of 310 CMR 16.40(4) (c) (1).
Ecologically Significant Communities	The siting of the proposed Facility will not have an adverse impact on an Ecologically Significant Natural Community. There are no areas identified by the Natural Heritage and Endangered Species Program as ecoregions within ½ mile of the Site. The proposed Project complies with the requirements of 310 CMR 16.40(4) (c) (2).
Wildlife Management Area	The siting of the proposed Facility will not have an adverse impact on the wildlife habitat of any state Wildlife Management Area. GSE reviewed MassGIS and the Division of Fisheries and Wildlife website for information regarding Wildlife Management Areas. No Wildlife Management Areas are located with ½ mile of the Site. The proposed Project complies with the requirements of 310 CMR 16.40(4) (c) (3).

# Areas of Critical Environmental Concern (D)

Introduction	This section addresses Areas of Critical Environmental Concern (ACEC) administered by the Executive Office of Environmental Affairs.
ACEC On-Site	Based on GSE's review of the MassGIS ACEC data layer, the Site is not within an ACEC. The proposed Project complies with the requirements of 310 CMR 16.40(4) (d) (1).
ACEC Adjacent to the Site	Based on GSE's review of the MassGIS ACEC data layer, no ACECs are located adjacent to the proposed Site. The proposed Project complies with the requirements of 310 CMR 16.40(4) (d) (2).
#### Protection of Open Space (E)

Introduction	This section addresses land areas that are considered parks and recreation lands under local, regional, and state regulatory agency jurisdiction.
State Forests	GSE reviewed the Department of Conservation and Recreation website for information regarding State Forests. According to the Department of Conservation and Recreation website there are no State owned or operated forests within ½ mile of the Site.
	Therefore, the siting of the Facility will not have an adverse impact on the physical environment of, or on the use and enjoyment of, State Forests in conformance with the requirements of 310 CMR 16.40(4)(e)(1).
State or Municipal Conservation and Park Lands	The site borders the Acushnet Cedar Swamp State Reservation. The site is separated from the Acushnet Cedar Swamp State Reservation by the rail line along the western property line. The primary purpose of the State Reservation is recreation and conservation. This is the only state conservation or park land within one-half mile of the site. The area is shown on the Land Use Plan in Insert 3.
	GSE has created a figure (see Insert 10 in Appendix B of the April 2023 Response to Comments submittal) that depicts the subject site and its locations relative to the Acushnet Cedar Swamp as well as the trails that are utilized for public enjoyment. Additionally, the following observations are made with respect to whether such siting of a facility would have an adverse impact on the physical environment of, or on the use and enjoyment of this reservation:
	• The presently proposed site assignment area is a minimum of 3,839 feet (0.73 miles) to the nearest trail in the Acushnet Cedar Swamp State Reservation.

#### Protection of Open Space (E), Continued

State or Municipal Conservation and Park Lands, continued	<ul> <li>The available waste handling area will be a minimum of 3,848 feet (0.73 miles) to the closest trail system within the Acushnet Cedar Swamp State Reservation.</li> <li>No construction activities will occur within the Acushnet Cedar Swamp State Reservation boundaries.</li> <li>The rail line that will service the site is already an active rail line utilized by Mass Coastal Railroad and physically separates the site from the Reservation.</li> <li>Almost one mile of forested wetland exists between the site and trails within the Reservation providing a significant visual and sound buffer from the Facility.</li> <li>Based on the design/location of the Facility and proposed waste handling areas and distances to the trails where the public may use, access, and enjoy the Acushnet Cedar Swamp State Reservation, it is GSE's and SCR's opinion that the proposed facility will not yield any adverse impacts on the reservation or the enjoyment of it.</li> </ul>
	The siting of the Facility will not have an adverse impact on the physical environment of, or on the use and enjoyment of, state or municipal parklands or conservation land, or other open space held for natural resource purposes in accordance with Article 97 of the Massachusetts Constitution in conformance with the requirements of 310 CMR 16.40(4) (e) (2).
MDC Reservations	The MDC is now the Massachusetts Department of Conservation and Recreation (DCR). GSE reviewed the DCR website for information regarding reservations in the area of the proposed Facility and none were located within ½ mile of the Facility.
	Therefore, the siting of the Facility will not have an adverse impact on the physical environment of, or on the use and enjoyment of, DCR (MDC) reservations in conformance with the requirements of 310 CMR $16.40(4)(e)(3)$ .

#### Protection of Open Space (E), Continued

EOEEA Restricted Lands	GSE reviewed MassGIS and the Executive Office of Energy and Environmenta Affairs website for any lands with conservation, preservation, agricultural, o watershed protection restrictions approved by the secretary of EOEEA within ½ mile of the Site. GSE did not identify any lands with conservation preservation, agricultural, or watershed protection restrictions approved by the Secretary of EOEEA within ½ mile of the Site.		
_	Therefore, the siting of the Facility will not have an adverse impact on the physical environment of, or on the use and enjoyment of, on EOEEA restricted lands in conformance with the requirements of 310 CMR 16.40(4)(e)(4).		
Privately Owned Public Conservation Land	GSE reviewed MassGIS and the Executive Office of Energy and Environmental Affairs website for any privately owned public access conservation lands in close proximity to the subject Site. GSE did not identify any privately owned public access conservation lands in close proximity to the subject Site. Therefore, the siting of the Facility will not have an adverse impact on the physical environment of, or on the use and enjoyment of, local conservation lands in conformance with the requirements of 310 CMR 16.40(4)(e)(5).		

#### Air Quality Impacts (F)

#### Introduction The following section addresses the potential air quality impacts regarding anticipated emissions from operation of the proposed facility. According to 310 CMR 16.40(4)(f), Potential Air Quality Impacts, no site shall be determined to be suitable or be assigned as a Solid Waste Management Facility where the anticipated emissions from the Facility would not meet required State and Federal air quality standards or criteria or would otherwise constitute a danger to the public health, safety, or the environment, taking into consideration: 1. The concentration and dispersion of emissions

- 2. The number and proximity of sensitive receptors; and
- 3. The attainment status of the area.

Regulation The proposed Facility will not be subject to MassDEP air plan approval (air permitting) requirements under 310 CMR 7.02. Key standards for approval are listed in 310 CMR 7.02 (4) for Limited Plan Approvals and 310 CMR 7.02 (5) for Comprehensive Plan Approvals. These standards typically include ensuring that any new stationary sources will be in compliance with all applicable federal and MassDEP air regulatory requirements, ensuring that the new sources will meet ambient air quality criteria, and requiring a certification that any facilities in Massachusetts owned or operated by the applicant are in compliance with MassDEP air requirements (or are on an approved schedule to come into compliance).

## EmissionsEpsilon Associates has evaluated air impacts associated with the proposedAnalysisproject and has prepared several reports detailing its findings. There are three<br/>reports within the Attachments that are relevant to air emissions:

- 1. Air and Odor Modeling Attachment 5
- 2. Environmental Justice Attachment 10
- 3. Greenhouse Gas Emissions (GHG) Attachment 11

The attached reports <u>have not</u> been updated to remove the biosolids portion of the project that was eliminated in the MEPA SFEIR permitting process. However, within these reports, emissions from significant project components are calculated.

Epsilon reports demonstrate... "The analysis shows that, under maximum expected operating conditions and using conservative assumptions, the project's impacts will comply with all applicable standards. Specifically:

- The National Ambient Air Quality Standards (NAAQS) will not be exceeded. Per USEPA, these standards "provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly." The Ambient Air Quality Standards for the Commonwealth of Massachusetts (MAAQS) will not be exceeded. Per 310 CMR 6.00, the MAAQS are currently identical to the NAAQS. In this report, the term "NAAQS" will refer to both sets of standards.
- 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." In some cases, MassDEP had not developed an AAL or TEL for a particular chemical. In these cases, the USEPA Integrated Risk Information System (IRIS) was reviewed for that chemical to determine if a reference concentration (RFC) existed. The reference concentration is derived in a similar manner as the AAL and TEL concentrations and represents a concentration protective of the general population and sensitive subpopulations.

Air and Odor Modeling In Massachusetts, odor is regulated under 310 CMR 7.09 in that operations that emit odors shall not permit their emissions to "cause a condition of air pollution." A Draft Odor Policy for Composting Facilities was published by MassDEP in January 1996. This draft guidance document recommended a minimum design standard benchmark of 5 D/T (Dilution to Threshold), presumably on a 5-minute average basis. The odor impacts from this project are compared to this criterion.

> D/T is a dimensionless ratio defined as the volume of dilution air divided by the volume of odorous air, or commonly described as the number of equivalent volumes of clean air which must be added to an odorous volume such that the odor is undetectable to the average person. Thus, a higher D/T value indicates that a sample must be diluted many times to become undetectable, indicating a stronger sample. Conversely, a weak sample would require only a few volumes to be introduced to make the odor sample undetectable.

> An odor concentration threshold of 1 D/T versus the 5 D/T standard was used for the design of the ventilation stacks in order to avoid nuisance conditions at nearby residences. Based on Epsilon's modelling, there will be no occurrences of odors greater than 1 D/T at any residential neighborhood location (0 events over a 5-year period using a 1-minute average). The design criteria used is more conservative than the MassDEP Draft Policy. Attachment 5 presents the Epsilon report.

> Epsilon concluded... "The predicted air pollutant and odor concentrations are shown to be below the applicable NAAQS, MassDEP AALs and TELs (and RFCs, as applicable), and protective odor concentration criterion, using the USEPA AERMOD model. Therefore, it can be concluded that the proposed project as designed does not cause or contribute to a condition of air pollution in the area.

#### **Environmental** Justice As part of the EOEEA MEPA process, an Environmental Justice report was prepared to present an enhanced analysis of air impacts; data on baseline public health conditions within the affected EJ population; analysis of technological, site planning, and operational alternatives to reduce impacts; and proposed on-site and off-site mitigation measures to reduce multiple impacts and increase environmental and energy benefits for the affected EJ population. This report was also prepared while the biosolids portion of the project was being proposed. Even with the biosolids solids operations proposed, Epsilon concluded the following (See Section 5.0 of their report in Attachment 10):

- 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.
- 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.
- 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." The Massachusetts AALs and TELs will not be exceeded offsite.
- If MassDEP had not developed a specific AAL or TEL for a given chemical, the EPA Integrated Risk Information System was reviewed to determine if the EPA had developed a Reference Concentration. The EPA reference concentrations will not be exceeded off-site.

Please note that Environmental Justice is not a criterion of Site Suitability.

**GHG Emissions** The table presented below outlines the most recent calculations associated with GHG emissions. This calculation was presented within the FEIR (page 137) and differs from the original calculations within the GHG report. It should be noted that although it has been calculated that the development (of which the Facility only comprises a small part) will create 473 tons/year of GHG emissions, the additional solar will offset well over 1,000 ton/year of GHG emissions making this site net negative with respect to GHG emissions.

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Juilding Size	87.000		
<u>v</u>		đ	
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ENERGY USE INDEX		kBtu/st/yr	kBtu/sf/yr
		55.5	52.2
(compared to baseline	)		-6%
		topolar	tonolar
Dimet	Cochumina	0	0
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	Total	502	473
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#### **Nuisance Conditions (G)**

### Introduction The following section addresses nuisance conditions identified at 310 CMR 16.40(4) (g). This section addresses the following potential nuisance conditions:

- Noise
- Litter
- Vectors
- Odors
- Dust
- Bird hazards to air traffic

#### Noise

Noise on site will be minimized by conducting all tipping, handling, and loading of materials within an enclosed building. Trucks delivering waste to the site will utilize major roadway networks (Route 140 to New Bedford Industrial Park). No trucks will be allowed to use Phillips Road to access the Site. In addition, the placement of the new tipping building has been strategically located on the site to:

- Have the tipping/delivery doors on the west building elevation, which is away from the closest receptor.
- Allow the building to act as a sound buffer to the closest receptor.

<b>Noise,</b> continued	Noise controls also included in the project design consist of the following:
	<ul> <li>All waste handling to be conducted within enclosed buildings;</li> <li>Addition to the glass building to enclose the rail where railcars are being loaded;</li> <li>Rail track constructed to the west side of the building, opposite side of the building from residents to the east for noise attenuation;</li> <li>Rail track constructed without at-grade crossings, eliminating the need for the use of bells, horns, or whistles on locomotives;</li> <li>Tipping / delivery doors away from surrounding receptors;</li> <li>Glass unloading designed as a "drive forward" delivery system, eliminating backup alarms as a noise source at that location;</li> <li>Use of an electric rail car mover instead of diesel-powered;</li> <li>Air handling units and fans to be low noise units, fitted with silencers, or be placed within rooftop barriers for sound attenuation;</li> <li>Acoustic louvered air intakes to provide baffling for noise attenuation.</li> </ul>
Noise- Supplemental Sound Analysis	Noise assessments for this project have historically been presented within the Executive Office of Energy and Environmental Affairs MEPA filings including the Draft Environmental Impact Report [DEIR] (November 2019), the Final Environmental Impact Report [FEIR] (January 2021), and the Supplemental Final Environmental Impact Report [SFEIR] (July 2022). Previous reports have addressed noise from truck traffic due to operation of the Facility, as well as continuous operating sources of sound such as rooftop HVAC equipment and building exhaust stacks.

Noise-Supplemental Sound Analysis, continued Epsilon has revised their sound analysis in an effort to addresses comments made by the MassDEP during the SFEIR review by including all ambient data and further evaluating incidental and mobile sources such as truck tipping operations and rail logistics coupled with the stationary source sounds.

The sound assessment modelled both daytime and nighttime scenarios in comparison to ambient sound levels, as collected over a period of 7 days. Daytime measurements were collected between 10AM and 3PM to avoid influence from local commuter traffic and nighttime measurements were collected between 12AM and 3 AM to capture the quietist portion of the night.

The hourly daytime residual background ( $L_{90}$ ) measurements for monitoring location CM-1 located on the southeast property line in proximity to the residential properties and representative, ranged from 38 to 53 dBA. And the hourly nighttime residual background (L90) measurements for CM-1 ranged from 29 to 48 dBA. Adjustment factors were applied and anomalous data that would normally be excluded was instead included and final nighttime and daytime ambient sound levels were established as 28 dBA and 37 dBA, respectively.

Continuous sound sources including rooftop ventilation fans, heavy equipment operating inside the building with the tipping doors and the western rail car loadout bay door open, and the intake and exhaust fans for the glass building ventilation system. Although these stationary sound sources are modelled as continuously operating, not all sources will be operating continuously and therefore provides a conservative estimate of continuous site noise.

Incidental or intermittent sound sources include mobile sources that do not occur continuously when the Facility is operating, which includes backup alarms, railcar coupling, idling locomotives, and inbound/outbound trucks. Most of these noise sources are federally regulated by the Occupational Safety and Health Administration (OSHA) (backup alarms) and the U.S. Environmental Protection Agency (USEPA) (railcar coupling and idling locomotives). Federal laws and regulations preempt state and local government regulation of these sources. In addition, truck noise must comply with the Registry of Motor Vehicles regulations relative to sound emissions.

Noise-<br/>Supplemental<br/>Sound Analysis,<br/>continuedHowever, these sources were modelled and additional noise mitigation for<br/>these sources was evaluated at the request of MassDEP during the MEPA<br/>process.

Modelling assessed impacts at five nearby residential receptors:

- RES-1: Residential property northeast of Project
- RES-2: Residential property east of Project
- RES-3: Residential property east of Project
- RES-4: Residential property southeast of Project
- RES-5: Residential property east of Project

Please note that locations RES-1 through RES-5 represent the closest residential properties to the northeast, east, and southeast of the Project. The locations are shown in Figures 7-1, 9-1, and 9-2 in the Sound Level Assessment Report included as Attachment 7 in the Site Suitability Application. Location RES-5 represents the property line that has the highest sound level contribution from continuous noise sources.

All the future predicted total continuous sound levels documented in Table 10-1 of the Sound Level Assessment Report included as Attachment 7 of the Site Suitability Application (and presented below) show compliance with the MassDEP Noise Policy which restricts the increase over ambient sound levels to 10 dBA or less. In addition, operations from the Facility will not create any "pure tones." Throughout the analysis, SCR has documented that sound impacts will be avoided, minimized, and mitigated to the extent feasible.

Receptor	Project Only Sound Level (dBA)	Ambient L <sub>90</sub> Sound Level (dBA)	Total Ambient Plus Project (dBA)	Increase over Ambient (dBA)
RES-1	34	28	35	7
RES-2	36	28	36	8
RES-3	35	28	36	8
RES-4	31	28	33	5
RES-5	36	28	37	9

With the idling locomotive operation and trucking restricted to the hours of 5:00 AM to 9:00 PM, SCR has mitigated Project-generated sound from all the incidental noise sources to the maximum extent practicable.

Noise-Supplemental Sound Analysis, continued In addition, although these sources are regulated by other agencies, they will also meet the ambient-based sound level limit set forth in the MassDEP Noise Policy as documented in Table 10-2, Table 10-3, Table 10-4, Table 10-5, and Table 10-6 of the Sound Level Assessment Report included as Attachment 7 of the Site Suitability Application. Therefore, this assessment shows that the impacts from all sounds due to the Project will be mitigated to the extent feasible Epsilon's assessment shows that the impacts from all sounds generated from the Site development will be mitigated to the maximum extent practical and will not cause a nuisance noise condition or noise pollution.

It should be noted Epsilon modelled the truck tipping hours/back-up alarms/locomotive operations from 5AM to 9PM (Monday- Saturday) although tipping hours are from 6AM to 7PM M-F and 7AM to 4PM on Saturdays. This analysis was conducted to evaluate any potential incidental exterior movements prior to and/or after the proposed hours of waste acceptance.

Epsilon further opined that pursuant to 310 CMR 16.40(4)(g) the Facility will not cause a nuisance sound condition which would constitute a danger to the public health, safety, or the environment. Please refer to Attachment 7 for a copy of the report.

The Site complies with the requirements of 310 CMR 16.40(4) (g) (1).

Litter All waste handling activities will occur within the confines of the proposed solid waste tipping and solid waste processing buildings with the exception of railcar storage. The buildings will provide for significant protection from the elements, thus significantly reducing the potential for windblown litter related nuisance conditions. All commercial vehicles that will transport materials either to or from the Facility will be required to be covered in order to prevent incidental littering. Shipment of materials by rail will be conducted in conformance with thenapplicable CSX requirements. Additionally, the Facility will provide a phone number and website for the public to use to report any complaints regarding vehicles traveling on roads without covering on their trucks, and such, drivers violating the requirement will be banned from delivering to the Facility.

Operations & Maintenance Program.

For these reasons, the establishment or operation of the Facility will not result in a nuisance condition that would constitute a danger to the public health, safety, or the environment taking into account litter pursuant to 310 CMR 16.40(4)(g)(2).

Vectors Vectors such as vermin and insects, will be discouraged by confining the waste handling operations to the inside of buildings. Additionally, MSW will be handled in such a way as to avoid the attraction of rodents and insects by efficiently moving the material from the tipping floor to the processing lines and then baler and/or loaded for off-site disposal. For these reasons, coupled with the mitigation measures presented in the next section, the establishment or operation of the Facility will not result in nuisance conditions that would constitute a danger to public health, safety, or the environment taking into consideration vermin such as rodents and insects pursuant to 310 CMR 16.40(4)(g)(3).

# Vector SCR will implement mitigation measures to ensure that vectors do not pose a nuisance condition. The following measures will be incorporated into SCR's Operation and Maintenance Plan that will be developed as part of the Authorization to Construct permitting phase to further describe and illustrate the processes and procedures for the control of nuisance conditions. Proposed measures include, but are not limited to, the following subject to revision as operations are finalized and during subsequent operational permitting with MassDEP:

- Contracting with a vector control management firm.
- Installing rodent traps within and around the interior and exterior of the building.
- Minimizing door openings within the proposed building.
- Conducting all waste handling activities indoors.
- Maintaining equipment on-site that will remove the materials from the tipping floor for subsequent handling.
- Covering the containers and trailers prior to leaving the waste handling building.
- Sweeping the paved areas and the interior of the building (as needed) at regular intervals.
- Instituting a daily inspection program for vectors following the Operations and Maintenance Plan that will be prepared for the proposed Facility.

Odor Proposed policies and procedures with respect to nuisance odor conditions include the following measures, subject to revision as operations are finalized and during subsequent operational permitting with MassDEP:

MSW handling and processing:

- Confining all waste handling to within the buildings only except for waste contained within a loaded rail car or truck;
- Waste will be kept in a properly covered railcar (following then applicable CSX policy/regulation) or truck.
- Having the ability to entirely enclose/secure the Facility.
- Using a fine water mist and odor counteractants to reduce odor by adhering to particulate matter to prevent it from escaping the building.

Odor is regulated under 310 CMR 7.09 in that operations that emit odors shall not permit their emissions to "cause a condition of air pollution". A Draft Odor Policy for Composting Facilities was published by MassDEP in January 1996. This draft guidance document recommended a minimum design standard benchmark of 5 D/T.

A study to model odor emissions from the proposed Facility was conducted by Epsilon Associates. An odor concentration threshold of 1 D/T was used for the design of the ventilation stacks in order to avoid nuisance conditions at nearby residences. Based on Epsilon's modelling, there will be no occurrences of odors greater than 1 DT and any residential neighborhood location (0 events over a 5-year period using a 1-minute average). The design criteria used is more conservative than the MassDEP Draft Policy. The Epsilon report is included in Attachment 5.

The Epsilon report demonstrates that odor associated with the establishment or operation of the Facility will not result in nuisance conditions that would constitute a danger to public health, safety, or the environmental taking into consideration odors pursuant to 310 CMR 16.40(4)(g)(4).

Dust	Proposed policies and procedures with respect to nuisance dust conditions include the following measures, subject to revision as operations are finalized and during subsequent operational permitting with MassDEP:
	<ul> <li>All waste handling to be conducted within enclosed buildings;</li> <li>Minimizing door openings within the proposed buildings;</li> <li>Minimizing cross-ventilation of air through the building by designing openings all on one side of the building;</li> <li>Maintaining equipment on-site that will remove the materials from the tipping floor for subsequent processing;</li> <li>Requiring all waste delivery vehicles/rail cars to be covered;</li> <li>Regular sweeping of the paved areas outside and inside, as necessary;</li> </ul>
	<ul> <li>Use of an atomized water mist at multiple locations and a water spray when necessary to control dust from C&amp;D handling and odor for MSW handling and processing operations; and</li> <li>Implementation of a complaint log system for Proponent to respond to public comments regarding any nuisance condition</li> </ul>

Bird Hazards ToThe closest airport identified is the New Bedford Municipal Airport located<br/>approximately 2.2 miles south of the Site. Based on the distance to the<br/>nearest airport and the design considerations noted below, birds will not be a<br/>hazard to air traffic.

generated by the Facility.

- The Facility will not be a landfill, and thus is not subject to the regulations discussed in the FAA Advisory Circular #150/5200-34(2000) regarding the construction or establishment of municipal solid waste landfills near airports.
- The Site is outside of the 3,000-foot buffer established by M.G.L. Chapter 90, Section 35B for building height restrictions within proximity of airports.
- Vectors such as gulls will not be attracted to the Site given the completely enclosed operation.
- No waste handling, loading, or unloading will be allowed outside of the building.
- A vector control service will be contracted.

Bird Hazards to Air Traffic - Mitigation	Even though bird hazards are not a significant concern at the subject Facility, SCR will still implement mitigation measures to ensure that bird hazards do not pose a threat. The following measure will be incorporated into SCR's Operation and Maintenance Plan that will be developed as part of the Authorization to Construct permitting phase to further describe and illustrate the process and procedures for the control of nuisance conditions. These measures include, but are not limited to the following, subject to revision as operations are finalized and during subsequent operational permitting with MassDEP:
	<ul> <li>Minimizing door openings within the proposed building;</li> <li>Conducting all waste handling activities indoors;</li> <li>Maintaining equipment on-site that will remove the materials from the tipping floor for subsequent handling and off-site shipment;</li> <li>Covering the containers and trailers prior to leaving the building;</li> <li>Sweeping the paved areas and the interior of the building (as needed) at regular intervals; and,</li> <li>Instituting a regular inspection program for vectors following the Operations and Maintenance Plan that will be prepared for the proposed Facility.</li> </ul>
	Based on the location of the airports from the Site and the proposed controls at the Site, the establishment or operation of the Facility will not result in nuisance conditions that would constitute a danger to the public health, safety, or the environment taking into consideration bird hazards to air traffic in compliance with the requirements of 310 CMR 16.40(4) (g) (5).
Other Nuisance Conditions	Other nuisance conditions are not anticipated during the construction and operation of the Facility.
	The Site complies with the requirements of 310 CMR 16.40(4) (g) (6).
	Continued on next page

The Proponent will encourage the public to submit complaints in a **Response to** Nuisance confidential manner and will make the complaint log available to the public in Condition an easily accessible manner (the complaint log and air quality data will be Complaints updated and made available the Proponent's on website: https://parallelproductssustainability.com)

The Proponent has prepared a system to log potential odor, noise, and dust complaints associated with operation of the Facility which will be provided to MassDEP and the New Bedford Board of Health. Response measures and mitigation actions that will be implemented will be as follows:

- 1. Log complaint and concurrent weather and operating conditions.
- 2. Independently confirm complaint by on-site and/or off-site observation, to the extent possible.
- 3. Identify any immediate mitigation measures available and implement them.
- Conduct a root-cause analysis and review Best Management Practice (BMP), Standard Operating Procedure (SOP), and Preventative Maintenance (PM) documentation to determine if modifications are needed.
- 5. Respond to complainant with a report of actions taken.

Once construction begins, the Proponent will have a complaint log system set up on their website. This system will:

- 1. Allow individuals to lodge a complaint (by name or anonymously)
- 2. Allow the public to view past complaints, if any.
- 3. Allow public to review any mitigative measures that the Proponent has and/or will take with respect to any particular complaint.

#### Size of the Facility (H)

# Introduction The following section discusses the characteristics and logistics of the proposed Facility and details how the Facility has been designed to adequately handle up to 1,500 TPD of solid waste (MSW and C&D) material and meet the Size of Facility criterion at 310 CMR 16.40(4)(h). This section includes information regarding the following:

- Size of the Facility
- Access Roads (Material Ingress & Egress)
- Vehicle Queuing Areas
- Tipping, Waste Consolidation, and Loading Operations
- Comparison with Existing Facilities
- Waste Tipping Capacity Factors
- Setbacks of Waste Handling Areas from property boundaries
- **Size of Facility** The size of the proposed Site is sufficient to properly operate and maintain the Facility. The proposed Facility includes the construction of an approximately 65,317-square foot building addition (the Tipping Building) as well as a rail yard, scales, scale house, associated tarmac areas, underground utilities, site grading, paving, and stormwater controls. A portion of an existing building will be used for processing MSW to extract recyclable materials (the MSW Processing Area). The proposed Facility will be located on 71 acres of land. The area to be site assigned within these parcels will be 25.4 acres and is depicted on Inserts 2, 3, 4, and 5.

Waste handling, other than the storage of waste in in loaded railcars or trucks, will occur within the proposed 65,317 square foot tipping building, and approximately 50% of the adjacent existing 92,200 square foot building that will be used for MSW processing. For the purposes of the siting criteria, SCR has conservatively defined the waste handling areas as any areas within the approved site assigned limits. SCR has identified the presently proposed interior waste handling areas, which is depicted as shown on the plans within Inserts 5 and the Interior Layout Plan presented as Insert 6. No solid waste will be stored outside of the buildings unless it is stored within a railcar or truck.

Access Roads – Material Ingress and Egress	The following describes traffic and waste delivery flow on-site.
	1. Vehicular ingress and egress will be from/to Route 140 to the north and east of the subject property.
	2. The ingress traffic pattern follows along an existing paved driveway. The paved driveways are designed for one-way traffic around the perimeter of the site. These internal roadways provide for queuing, two scales, and a bypass lane to ensure there is no queuing of trucks off of the subject site. Scale house personnel will be able to monitor inbound and outbound traffic patterns.
	3. From the inbound scale, delivering waste vehicles would proceed to the tipping building. The vehicle will back into one of the four proposed inbound off-loading doorways. A fifth doorway in the northwest corner is reserved for railcars or outbound live floor tractor trailers. Please see the plans in Insert 6 which depict the exterior Facility layout and interior building layout, respectively.
	4. Once in the building, the inbound waste vehicles will tip their loads and exit out of the tipping door in which they entered located along the western side of the waste handling building.
	5. Exiting vehicles would proceed from the waste handling building to the outbound scale before exiting the site.
	Continued on next page

Vehicle Queueing	The Site provides a significant amount of space for inbound vehicle queuing which is approximately 1,600 feet from the closest residential receptors.		
Building Size, Elevations and Doorways	The proposed "Tipping" Building is 65,317 square feet in size. The building's footprint allows for several coupled railcars to be in the loadout bay of the tipping building at one time. The building is sized to include the following areas within the building:		
	<ol> <li>The waste tipping and inspection areas</li> <li>Temporary waste storage area</li> <li>Baled waste storage area</li> <li>The rail car loading area</li> <li>The MSW processing food between loading area</li> </ol>		
	5. The MSW processing feed hopper loading area The MSW processing building is an existing 92,200 square foot building. Approximately half (or 50,000+/- square feet) of this building is intended to be used for MSW processing. Such processing would consist of extracting recyclable material from the MSW and then the remaining residual waste will be staged for outbound transport (or baled prior to). The Facility intends to utilize a series of conveyors, magnets, eddy current separators, air classifiers, and picking lines to remove recyclable materials. The draft layout and equipment list has been provided within Attachment 8.		
MSW/C&D Tipping Overview	The Facility's operational protocols will require personnel to inspect and oversee solid waste (MSW and C&D) tipping activities. The following table butlines SCR's proposed procedure, subject to revision as operations are inalized during subsequent operational permitting with MassDEP.		
	Step Action		
	1 An incoming driver is prompted to back his/her vehicle up and onto the concrete tipping area inside the Tipping Building.		
	2 Facility personnel will direct the driver to tip the waste in one of several designated areas.		
	3 The load is inspected by trained Facility personnel for unacceptable materials (e.g., visible waste ban materials).		
	4 Pending an acceptable inspection, the vehicle exits the waste handling area within the building and heads towards the outbound scale.		

MSW/C&D Waste Consolidation	The following table outlines SCR's proposed procedure for MSW and C&D consolidation within the waste handling building, subject to revision as operations are finalized and during subsequent operational permitting with
	MassDEP.

Step	Action
1	Pending an acceptable inspection and safe vehicle exit, the tipped waste
	materials may be pushed to the waste staging area located within the
	southern area of the tipping building.
2	The MSW will be loaded into the feed hopper of the processing system by
	a front-end loader and/or excavator.
3	After processing to extract recyclable material, the non- recycled fraction
	may be baled or loaded loose onto awaiting railcars or transfer trailers.

The buildings have been sized to allow sufficient space for material tipping, processing, and loading outbound rail cars. The draft specifications of the equipment to be provided to extract recyclable materials from MSW are included in Attachment 8.

#### Railcar or Live Floor Loading Operations

The following table outlines SCR's procedure for railcar or truck loading within the building, subject to revision as operations are finalized and during subsequent operational permitting with MassDEP.

Step	Action
1	A front-end loader and/or excavator will load MSW from the tipping
	floor in to a feed hopper for the MSW processing system.
2	Loose, baled and/or wrapped residual material will be moved from the
	MSW processing area back into the tipping building for loadout.
3	The baled material will be directly loaded into a live floor trailer and/or
	rail car located in the proposed outbound loadout and railcar staging
	area. Rail cars may also be topped off with Category 2 C&D residuals as
	required by the Railroad. (Actual process of loading out rail cars will be
	adjusted to comply with then-applicable CSX requirements)
4	The rail cars and/or trailers will be covered with an appropriate cover for
	subsequent staging and transport to the final disposal destination.

Comparison with Existing Facilities	The proposed 65,317-square foot waste Tipping Building (exclusive of the MSW Processing Area) provides greater operational area than the following solid waste facilities:
	• Allied Waste System Fall River transfer station [1,000 TPD, 20,700 sf]

- Braintree transfer station [1,600 TPD, 23,600 sf]
- Allied Peabody transfer station [1,000 TPD, 23,400]
- New England Waste Disposal transfer station [2,000 TPD, 50,000 sf]
- Western Recycling transfer station [2,000 TPD, 46,000 sf]

Note that the Facility square footage presented above includes the tipping and loadout area and does not include the area where it is intended that the processing equipment will be constructed. Collectively, the cumulative size will be greater than 115,000 sf as approximately 50,000 sf of the existing building is intended to be used to house the proposed MSW processing line. Additionally, it appears this Facility will exceed many the aforementioned facilities with respect to queueing areas, internal storage capabilities, rail car storage, etc.

Waste Tipping<br/>Capacity FactorsThe table presented below has been prepared to outline the doorway<br/>capacities as it relates to tonnage based on various delivery scenarios. Note<br/>the calculations below are for four tipping doors although the Facility has the<br/>ability to construct five tipping doors.

SCR Four Door Peak Factor Calculations							
	All 9-Ton	50% Packers/Roll-	100% Live Floor				
	Packer/Roll-off	off & 50% Live Floor	Trailers by Weight				
	Vehicles	Trailers by Weight					
Average Tons Per Vehicle	9	18.5	28				
Inbound Trucks Per Day							
Based on Weight							
Assumptions	167	81	54				
Tons Received Per Day at							
Facility	1500	1500	1500				
Hourly Tonnage if Averaged							
Over 13 Operational Hours							
(9 hours Saturday)	115 ( <i>167</i> )	115 ( <i>167</i> )	115( <i>167</i> )				
Operational Hours Per Day							
for Tipping Waste	13 ( <i>9</i> )	13 ( <i>9</i> )	13 ( <i>9</i> )				
Number of Doorways Used	4	4	4				
Time to Tip Per Vehicle							
(Minutes Averaged)	10	12	15				
Trucks Per Hour Per							
Doorway	6	5	4				
Tons Per Hour Per Doorway	54	93	112				
Tons Per Hour - 4 Doorways	216	372	448				
Peak Capacity Factor							
4 Doorways Utilized	1.87 ( <i>1.29</i> )	3.22 (2.23)	3.88 (2.69)				

Notes:

1. Packers/Roll-off weights averaged based on anticipated volumes and assume to carry 9-tons per vehicle.

2. Live floor trailers assumed to carry 28 tons per vehicle.

3. Tipping time for packers/roll-off is 10 minutes (generally tipping is less than 5 minutes).

4. Tipping time for live floor trailers is 15 minutes.

- 5. Columns 2 and 3 assume that tonnage average is by weight. For example, if deliveries are 50% packers/roll-offs and 50% live floor trailers, then each vehicle type delivers 500 TPD.
- 6. Column 3 has assumed 100% live floor trailers.

7. Figures have been rounded up when necessary.

8. Based upon hours of operation Monday-Friday 6am-7pm, 13 operational hours. Values in italics and parenthesis represent Saturday operations of 7am-4pm, 9 operational hours.

### Waste HandlingThe table below presents various setbacks from the waste handling buildingSetbacks(Tipping Building and MSW Processing Area combined), tipping doors and<br/>rail side tracks:

Setback	Distance
Handling Building to closest	240 feet to closest property line (south
property line	property line)
Handling Building to closest	1,210 feet to closest occupied dwelling
occupied residential dwelling	(east)
Rail storage side track to closest	490 feet to closest property line (east)
property line	
Rail side track to closest occupied	610 feet to closest occupied dwelling
residential dwelling	(east)
Handling Building tipping doors to	1,580 feet to closest occupied dwelling
closest occupied residential	(east)
dwelling	
Handling Building to closest	170 feet to closest Riverfront Area
Riverfront Area	(northeast)

Note: Refer to the Priority Resource and Land Use sections of this narrative and Inserts 2 and 3 that depict setbacks from other various features that are located off-site. Based on the regulations set forth in 310 CMR 16.40, all of the required minimum setbacks have been met.

**Conclusion** Based on the size of the Site, the design of the handling building, associated paved surfaces, the available space for queuing of trucks, and the analysis of the interior operations, the size of the proposed Site is sufficient to properly operate and maintain the proposed Facility.

The Site complies with the requirements of 310 CMR 16.40(4) (h).

#### Areas Previously Used for Solid Waste Disposal (I)

Introduction	The following section discusses areas previously used for solid waste disposal and demonstrates compliance with 310 CMR 16.40(4) (i).						
Abutting Properties	Based on GSE's research, no former solid waste landfill disposal activities were identified on abutting properties.						
Proposed Site	No portion of the Site has been previously used for solid waste disposal as listed on the MassDEP Solid Waste Facilities Master List.						
Conclusion	<ol> <li>No prior solid waste facility operated on any area adjacent to the proposed Facility.</li> <li>GSE is unaware of any solid waste activities or contamination that would</li> </ol>						
	The Site complies with the requirements of 310 CMR 16.40(4) (i).						

#### **Existing Disposal Facilities (J)**

Introduction	The following section discusses existing disposal facilities in the vicinity of the proposed Site.						
Active Disposal Facilities	MassDEP and the local Board of Health shall give preferential consideration to sites located in municipalities in which no existing landfill or solid waste combustion facilities are located, a preference that will be applied only to new facilities that will not be for the exclusive use of the municipality in which the Site is located. The proposed Facility does not meet these requirements and is therefore not entitled to a preference.						
	The Crapo Hill Landfill is located in North Dartmouth but with the address of 300 Samuel Barnet Boulevard, New Bedford, as it is accessed through New Bedford and is used for disposal by the City of New Bedford and the Town of Dartmouth. The City of New Bedford and the Town of Dartmouth are not expected to utilize the proposed Facility for MSW disposal. However, the Host Community Agreement with the City of New Bedford does allow for the Facility to give "favored/lowest" pricing to the City should they use it in the future.						
Project Need	The proposed project is being developed to fill a need in the Commonwealth for processing and economical transfer of generated solid waste materials to out of state disposal sites. Massachusetts solid waste disposal capacity is currently impacted by the closures of in-state landfills and the fact that no new landfills or incinerators are being constructed. The Fall River landfill has recently closed, the Bourne landfill has become an ash landfill for asl generated at SEMASS, and the Crapo Hill Landfill is largely limited to member towns. The Taunton Landfill closed in 2020, the Southbridge Landfill closed a the end of 2018 and the Chicopee Landfill is presently closed. Additionally two incinerators that had reached their useful life were shut down in 2022 further reducing in-state disposal capacity and increasing reliance on transfer and rail.						
	<ul> <li>The Massachusetts 2030 Solid Waste Master Plan reports:</li> <li>Landfill capacity for municipal solid waste and construction and demolition debris (C&amp;D) is projected to decline to virtually zero by the end of the next decade.</li> </ul>						

#### Existing Disposal Facilities (J), Continued

 Project Need, continued
 Massachusetts has extensive waste transfer capacity; however, most waste transfer facilities do not increase overall waste management capacity because they are not able to deliver waste beyond Massachusetts and our neighboring states, where disposal capacity is also limited. Some facilities are investing in capacity to transfer waste out of the region by rail, though those facilities face logistical challenges arranging rail shipments and ensuring an adequate supply of the right type of railcars.

By providing additional annual capacity of 468,000 tons to the region, this Facility will complement local and regional need for disposal capacity as well as recycling/diversion. Additionally, should the City of New Bedford utilize this Facility in the future (post Crapo Hill Landfill Closure), it could satisfy the City's need for a long-term waste disposal outlet. The Proponent acknowledges in the hierarchy of solid waste that diversion and recycling is of the utmost importance. The Proponent's investment in MSW processing infrastructure to promote recycling and diversion is a sign of their commitment to these objectives.

Presently, a significant amount of MSW is being transported out of state for disposal due to a lack of in-state disposal sites and capacity. Recent landfill closures in Massachusetts have resulted in limited disposal options that are within economical trucking distances. The proposed Facility with its rail access will provide economical disposal options for southeastern Massachusetts.

The proposed project is intended to include the construction of a state-ofthe-art facility for extracting recyclable materials from MSW (20+%), which is in line with the goals and initiatives set forth within the Massachusetts Solid Waste Master Plan.

#### Other Sources of Contamination or Pollution (K)

Introduction The Facility includes environmental controls for stormwater, contact water, dust, odors, vectors, bird hazards, and noise. The Facility will not pose a threat to public health, safety, or the environment taking into consideration the impacts of existing sources of pollution or contamination pursuant to 310 CMR 16.40(4)(k).

Consideration<br/>of OtherOther sources of contamination or pollution could be emissions from<br/>construction. The Facility will incorporate the proper controls, protocols, and<br/>procedures to reduce emissions, which will be addressed in future MassDEP<br/>and City permitting endeavors. This will also hold true for the environmental<br/>controls that will be incorporated into the facility design.

The Facility as proposed coupled with the solar installation will create an overall reduction in  $CO_2$  emissions annually. It is documented by CSX that moving freight (waste) by rail is approximately 4 times more fuel efficient than moving freight on the highway. 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.

Consolidating waste and incorporating rail efficiencies can result in significant reductions to  $CO_2$  emissions, which follows the goals and initiatives of the Massachusetts Environmental Policy Act (MEPA), M.G.L. c. 30, ss. 61-621 and within 301 CMR 11.00.

Additionally, based on the enhanced air quality analyses prepared by Epsilon during the MEPA review process, the proposed operations have been properly assessed while taking into the facility location, surrounding populations and other related receptors.

The proposed Project complies with the requirements of 310 CMR 16.40(4) (k).

#### **Regional Participation (L)**

# Regional<br/>Participation &<br/>NeedMassDEP and the Board of Health shall give preferential consideration to sites<br/>located in municipalities not already participating in a regional disposal Facility<br/>pursuant to 310 CMR 16.40(4) (I). The City of New Bedford is a member of the<br/>Greater New Bedford Refuse District, which is served by the Crapo Hill Landfill.<br/>As such, the City is not a preferred municipality under M.G.L. c. 111, § 150A½<br/>(15) and (16).

The proposed Facility's maximum capacity and annualized capacity will support regional need within the surrounding area(s). By having a facility in close proximity to major roadway networks coupled with access to rail, the Facility is designed around regional participation. The Facility serves a disposal need created by insufficient disposal options in Massachusetts and in other states that can be economically serviced by truck transport. At this time, volume and waste percentage to be accepted by the Facility that is generated within the City of New Bedford cannot be estimated as no contracts or volume obligations have been exercised or executed between SCR and potential clients.

See Section I, Part A that includes a description of how the Facility incorporates recycling and waste diversion.

#### Section IV. Integrated Solid Waste Management (A-D)

Introduction Section IV is applicable to Landfills and Combustion facilities only.

#### **Section V. Waivers**

Waiver The Facility is not requesting any waivers under 310 CMR 16.40.

APPENDIX F

AQ FORM





Important: When filling out forms on

the computer, use only the tab key to move your cursor -

do not use the

return key.

#### Massachusetts Department of Environmental Protection

Bureau of Waste Prevention – Air Quality

#### **BWP AQ Sound**

Submit alone and/or with Form CPA-FUEL and/or CPA-PPROCESS whenever the construction or alteration of stationary equipment (e.g. electrical generating equipment, motors, fans, process handling equipment or similar sources of sound) has the potential to cause noise, or in response to a MassDEP enforcement action citing noise as a condition of air pollution.

Transmittal Number

Facility ID (if known)

#### Introduction

When proposing sound suppression/mitigation measures, similar to the traditional "top-down" BACT process, the "top case" sound suppression/mitigation measures which deliver the lowest sound level increase above background are required to be implemented, unless these measures can be eliminated based upon technological or economic infeasibility. An applicant cannot "model out" of the use of the "top case" sound suppression/ mitigation measures by simply demonstrating that predicted sound levels at the property line when employing a less stringent sound suppression/mitigation strategy will result in a sound level increase of less than or equal to the 10 dBA (decibel, A –Weighted) above background sound level increase criteria contained in the MassDEP Noise Policy. A 10 dBA increase is the maximum increase allowed by MassDEP; it is not the sound level increase upon which the design of sound suppression/mitigation strategies and techniques should be based. Also, take into consideration that the city or town that the project is located in may have a noise ordinance (or similar) that may be more stringent than the criteria in the MassDEP Noise Policy.

#### A. Sound Emission Sources & Abatement Equipment/Mitigation Measures

1. Provide a description of the source(s) of sound emissions and associated sound abatement equipment and/or mitigation measures. Also include details of sound emission mitigation measures to be taken during construction activities.

Sound sources are described in Section 7.0 of the Sound Level Assessment Report dated January 16, 2023. Mitigation measures are described in Section 7.0 and Section 11.0.

Construction mitigation will include: working only during daytime hours and ensuring that all equipment is in good working order and fitted with mufflers and enclosed engine compartments.

#### B. Manufacturer's Sound Emission Profiles & Sound Abatement Equipment

Please attach to this form the manufacturer's sound generation data for the equipment being proposed for installation, or the existing equipment as applicable. This data must specify the sound pressure levels for a complete 360° circumference of the equipment and at given distance from the equipment. Also attach information provided by the sound abatement manufacturer detailing the expected sound suppression to be provided by the proposed sound suppression equipment.

Attached

#### C. Plot Plan

Provide a plot plan and aerial photo(s) (e.g. GIS) that defines: the specific location of the proposed or existing source(s) of sound emissions; the distances from the source(s) to the property lines; the location, distances and use of all inhabited buildings (residences, commercial, industrial, etc) beyond the property lines; identify any areas of possible future construction beyond the property line; and sound monitoring locations used to assess noise impact on the surrounding community. All information provided in the sound survey shall contain sufficient data and detail to adequately assess any sound impacts to the surrounding community, including elevated receptors as applicable, not necessarily receptors immediately outside the facility's property line.

The sound sources are shown over an aerial of the facility in Figure 7-1 of the Sound Level Assessment Report. Sound level measurement locations and the nearby residential areas are shown in Figure 6-1.

Continue to Next Page ►



#### Massachusetts Department of Environmental Protection

Bureau of Waste Prevention – Air Quality

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#### D. Community Sound Level Criteria

Approval of the proposed new equipment or proposed corrective measures will **not** be granted if the installation:

- 1. Increases off-site broadband sound levels by more than 10 dBA.above "ambient" sound levels. Ambient is defined as the lowest one-hour background A-weighted sound pressure level that is exceeded 90 percent of the time measured during equipment operating hours. Ambient may also be established by other means with the consent of MassDEP.
- Produces off-site a "pure tone" condition. "Pure tone" is defined as when any octave band center frequency sound pressure level exceeds the two adjacent frequency sound pressure levels by 3 decibels or more.
- 3. Creates a potential condition of air pollution as defined in 310 CMR 7.01 and the MassDEP Noise Policy.

Note: These criteria are measured both at the property line and at the nearest inhabited building.

For equipment that operates, or will be operated intermittently, the ambient or background noise measurements shall be performed during the hours that the equipment will operate and at the quietest times of the day. The quietest time of the day is usually between 1:00 a.m. and 4:00 a.m. on weekend nights. The nighttime sound measurements must be conducted at a time that represents the lowest ambient sound level expected during all seasons of the year.

For equipment that operates, or will operate, continuously and is a significant source of sound, such as a proposed power plant, background shall be established via a minimum of seven consecutive days of continuous monitoring at multiple locations with the dBA L 90 data and pure tone data reduced to one-hour averages.

In any case, consult with the appropriate MassDEP Regional Office before commencing noise monitoring in order to establish a sound monitoring protocol that will be acceptable to MassDEP.

#### E. Full Octave Band Analysis

The following community sound profiles will require the use of sound pressure level measuring equipment in the neighborhood of the installation. An ANSI S1.4 Type 1 sound monitor or equivalent shall be use for all sound measurements. A detailed description of sound monitor calibration methodology shall be included with any sound survey.

1. Lowest ambient sound pressure levels during operating hours of the equipment.

	A-Weighted	31.5	63.0	125	250	500	1K	2K	4K	8K	16K
L90 dBA, All Hours	29	48	42	32	31	27	22	18	18	19	23
ANS-Weighted L90 dBA, All Hours	28	48	42	32	31	27	22	-	-	-	-
L90 dBA, 5 am - 9 pm	37	57	50	40	38	35	33	28	23	20	23
ANS-Weighted L90 dBA, 5 am - 9 pm	37	57	50	40	38	35	33	-	-	-	-

#### a. At property line:


# Massachusetts Department of Environmental Protection

Bureau of Waste Prevention – Air Quality

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**Transmittal Number** 

Facility ID (if known)

# E. Full Octave Band Analysis (continued)

b. At the nearest inhabited building and if applicable at buildings at higher elevation:

A- Weighted	31.5	63.0	125	250	500	1K	2K	4K	8K	16K
Ambient levels shown in 1.a were determined to be representative of the nearby residences.										
		-								

Note: You are required to complete sound profiles 2a and 2b only if you are submitting this form in response to a MassDEP enforcement action citing a noise nuisance condition. If this is an application for new equipment, Skip to 3. 2. Neighborhood sound pressure levels with source operating without sound abatement equipment.

a. At property line:

I	A- Weighted	31.5	63.0	125	250	500	1K	2K	4K	8K	16K
n It											

b. At the nearest inhabited building and if applicable at buildings at higher elevation:

A- Weighted	31.5	63.0	125	250	500	1K	2К	4K	8K	16K

Continue to Next Page ►



#### Massachusetts Department of Environmental Protection

Bureau of Waste Prevention – Air Quality

#### **BWP AQ Sound**

Submit alone and/or with Form CPA-FUEL and/or CPA-PPROCESS whenever the construction or alteration of stationary equipment (e.g. electrical generating equipment, motors, fans, process handling equipment or similar sources of sound) has the potential to cause noise, or in response to a MassDEP enforcement action citing noise as a condition of air pollution.

Transmittal Number

Facility ID (if known)

# E. Full Octave Band Analysis (continued)

3. Expected neighborhood sound pressure levels after installation of sound abatement equipment.

A-Weighted 31.5 63.0 125 250 500 1K 2K 4K 8K 16K Modeled sound level due 36 48 48 44 36 32 32 24 9 -26 to continuous sources at residential property line receptor RES-5, Leg dBA

a. At property line:

b. At nearest inhabited building and if applicable at buildings at higher elevations:

	A- Weighted	31.5	63.0	125	250	500	1K	2K	4K	8K	16K
Modeled sound level due to continuous sources at the closest residential structure near receptor	36	49	48	43	36	32	31	23	8	-29	-
RES-5, Leq dBA											

Note: MassDEP may request that actual measurements be taken after the installation of the noise abatement equipment to verify compliance at all off-site locations.

#### F. Professional Engineers Stamp

The seal or stamp and signature of a Massachusetts Registered Professional Engineer (P.E.) must be entered below. Both the seal or stamp impression and the P.E. signature must be original. This is to certify that the information contained in this Form has been checked for accuracy, and that the design represents good air pollution control engineering practice.

P.E. Name (Type or Print)

P.E. Signature

Position/Title

Company

Date (MM/DD/YYYY)

P.E. Number





#### Massachusetts Department of Environmental Protection

Bureau of Waste Prevention – Air Quality

#### **BWP AQ Sound**

Submit alone and/or with Form CPA-FUEL and/or CPA-PPROCESS whenever the construction or alteration of stationary equipment (e.g. electrical generating equipment, motors, fans, process handling equipment or similar sources of sound) has the potential to cause noise, or in response to a MassDEP enforcement action citing noise as a condition of air pollution.

Transmittal Number

Facility ID (if known)

#### G. Certification by Responsible Official

The signature below provides the affirmative demonstration pursuant to 310 CMR 7.02(5)(c)8 that any facility(ies) in Massachusetts, owned or operated by the proponent for this project (or by an entity controlling, controlled by or under common control with such proponent) that is subject to 310 CMR 7.00, et seq., is in compliance with, or on a MassDEP approved compliance schedule to meet, all provisions of 310 CMR 7.00, et seq., and any plan approval, order, notice of noncompliance or permit issued thereunder. This Form must be signed by a Responsible Official working at the location of the proposed new or modified facility. Even if an agent has been designated to fill out this Form, the Responsible Official must sign it. (Refer to the definition given in 310 CMR 7.00.)

I certify that I have personally examined the foregoing and am familiar with the information contained in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment.

Responsible Official Name (Type or Print)

Responsible Official Signature

Responsible Official Title

Responsible Official Company/Organization Name

Date (MM/DD/YYYY)

This Space Reserved for MassDEP Approval Stamp.

APPENDIX G

COMPILED TRAFFIC IMPACT STUDY





# **Updated Traffic Impact Study**

# South Coast Renewables

100 Duchaine Boulevard New Bedford, MA

Prepared by McMahon, a Bowman company 350 Myles Standish Boulevard, Suite 103 Taunton, MA 02780 508.823.2245 Prepared for Green Seal Environmental, Inc.

July 2018 Revised April 2023

Transportation Solutions Building Better Communities

bowman.com

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# INTRODUCTION

McMahon, a Bowman company (McMahon), has reviewed the existing traffic operations and potential traffic impacts associated with the proposed expansion of the existing South Coast Renewables (SCR, formerly Parallel Products) solid waste facility at 100 Duchaine Boulevard in New Bedford, Massachusetts, as shown in Figure 1. The purpose of this revised study was to reevaluate existing and projected traffic operational and safety conditions in the vicinity of the site and identify mitigating measures to offset potential project-related traffic impacts on the surrounding roadways, if determined to be necessary based on safety and/or operational conditions. In summary, this study has determined that the proposed project, when developed and operational, will allow for safe and efficient access to and from the facility.

Our assessment is based on a review of current traffic volumes and crash data collected for this study, a review of readily accessible traffic analyses, and the anticipated traffic generating characteristics of the proposed development. This study examines existing and projected traffic operations (both with and without the proposed project) at key intersections in the vicinity of the project site. The study area was chosen based on a review of the surrounding roadway network and anticipated traffic generating characteristics of the proposed project. It provides a detailed analysis of traffic operations during the weekday morning, weekday afternoon school dismissal, and weekday afternoon commuter peak hours, when the combination of adjacent roadway volumes and potential traffic increases associated with the project would be greatest.

Based on the analysis presented in this study, McMahon concludes that the projected traffic increases associated with both the background traffic growth and the project-related traffic generated by the proposed facility do not result in a significant impact to the operations of the surrounding roadway network. To mitigate existing congestion at the all-way stop sign controlled Braley Road at Phillips Road/Theodore Rice Boulevard intersection, which meets traffic signal warrants under existing conditions, SCR proposes to provide funding for a fully actuated traffic signal subject to approval by the City of New Bedford. In addition, SCR proposes to contribute up to \$5,000 toward a Heavy Commercial Vehicle Exclusion (HCVE) study should the City of New Bedford choose to pursue a HCVE along Phillips Road between Route 140 and Braley Road.

This report documents our findings and recommendations. It should be noted that these conclusions conservatively assume all inbound and outbound materials will be transported via truck without incorporating alternative modes or methods of waste disposal such as the use of rail or the use of backhaul, which is a common and accepted practice in this industry. Additionally, this analysis does not account for reduction in vehicular trips due to the Transportation Demand Management (TDM) measures proposed by SCR described in this study. This study also incorporated revisions from the April 2022 revised Traffic Impact Study (TIS) filed with the Supplemental Final Environmental Impact Report (SFEIR) filing, including the removal of the traffic associated with the biosolids facility as the biosolids component is no longer being proposed. This study also takes into consideration a reduction in peak hour trips transporting outbound material in response to MassDOT comments to the SFEIR.

# **Project Description**

The project site is bounded by a rail line to the west, Phillips Road to the east with residential neighborhoods beyond, industrial properties to the north and property owned by Eversource to the south. The project is expected to be completed in two phases. Phase 1 includes the construction of glass processing facilities, construction of 1.9MW of rooftop and canopy solar power installation and the construction of a rail sidetrack to service the site. This portion of the project was completed in early 2022. Phase 2 includes the constructing of a solid waste handling and processing facility that will accept municipal solid waste (MSW) and construction and demolition (C&D) materials for handling at a proposed maximum of 1,500 tons per day (tpd). As noted in the SFEIR for the proposed project, the site previously proposed to process an additional 400 tpd of biosolids. As mentioned in the introduction above, the biosolids component has since been removed from the proposed expansion.

Access to the proposed site would be provided by one full-access driveway from Duchaine Boulevard, which leads to an internal one-way loop roadway surrounding the proposed facility which also provides access to Eversource, Farland Construction, and the City's wastewater pumping station. To date, Phase 1 of the project is partially completed, with glass processing operations currently taking place at the site, in accordance with a waiver issued on February 20, 2019 as part of the Massachusetts Environmental Policy Act (MEPA) review for this project. Glass beneficiating and the installation of the rail spur is allowed in Phase 1 under the MEPA waiver. All solid waste handling operations (e.g. handling of MSW and C&D) will be implemented in Phase 2.

# Study Methodology

This study reevaluates existing and projected traffic operations at study area intersections for the weekday morning, weekday afternoon school dismissal, and weekday afternoon commuter peak hour traffic conditions when the combination of adjacent roadway volumes and potential traffic increases associated with the project would be greatest.

The study was conducted in three steps. The first step involved an inventory of existing traffic conditions in the vicinity of the site. As part of this inventory, traffic counts were collected at key intersections during the weekday morning and weekday afternoon peak periods and adjusted to reflect the Base 2021 conditions prior to the completion of Phase 1 of the project, and to reflect the Existing 2021 conditions with Phase 1 included. Crash data was obtained from the Massachusetts Department of Transportation (MassDOT) to evaluate existing safety conditions within the study area.

The second step of the study builds upon data collected in the first phase and establishes the basis for evaluating the transportation impacts associated with future conditions. In this step, the Existing 2021 traffic volumes were projected to 2028 No Build (without Phase 2 of the project) conditions and 2028 Build (with Phase 2 of the project) conditions. In this phase, the projected traffic demands of other future developments that could influence traffic volumes at the study area intersections were also assessed.

The final step identifies measures, if necessary, to improve existing and future traffic operations and safety, minimize potential traffic impacts, and provide safe and efficient access to the project site.

#### Study Area Intersections

The area identified for detailed analysis in this study was determined based on a review of the anticipated traffic generating characteristics of the proposed project and a review of the surrounding roadway network serving the project site. The study area intersections include the following:

- Route 140 Northbound on/off-ramp at Braley Road
- Route 140 Southbound on/off-ramp at Braley Road
- Braley Road/Theodore Rice Boulevard at Phillips Road
- Theodore Rice Boulevard at Duchaine Boulevard
- Duchaine Boulevard at Samuel Barnet Boulevard
- Phillips Road at Samuel Barnet Boulevard
- Duchaine Boulevard at Site Driveway





Figure 1 Study Intersections South Coast Renewables New Bedford, Massachusetts

# **EXISTING CONDITIONS**

Effective evaluation of potential traffic impacts associated with the proposed development requires a thorough understanding of the existing traffic conditions on the roadways and intersections serving the project site. The assessment of existing conditions consists of an inventory of the roadway and intersection geometries including off-ramps and traffic control devices, collection of peak-period traffic volumes, and a review of recent crash history. A discussion of this information is presented below.

#### Roadway Network

The project site benefits from access via the local and regional roadway systems. A brief description of the principal roadways serving or surrounding the project site is presented below.

#### Alfred Bessette Memorial Highway (Route 140)

Alfred Bessette Memorial Highway (Route 140) is a limited access roadway that is classified as an urban principal arterial under MassDOT jurisdiction. Route 140 runs in the north-south direction throughout southeastern Massachusetts, providing two lanes of travel in each direction separated by a grass median. Route 140 has exits adjacent to the study area at Philips Road (Exit 5) and Braley Road (Exit 7). Route 140 northbound and southbound ramps are under two-way stop sign control with both Philips Road and Braley Road.

#### Braley Road

Braley Road is classified as an urban minor arterial under City of New Bedford jurisdiction within the study area, and primarily provides access to residential and industrial properties, Casimir Pulaski Elementary School, and to Route 140 via a diamond interchange. Braley Road generally runs in the east-west direction between Acushnet Avenue to the east and Phillips Road to the west, providing a single travel lane measuring 12 feet in width and a bicycle lane measuring 6.5 feet in width in each direction. At its intersection with Phillips Road and Theodore Rice Boulevard, Braley Road continues to the north toward the Freetown Town Line. North of the Phillips Road/Theodore Rice Boulevard intersection, Braley Road is approximately 40 feet in width with a double yellow center line and no striped travel lanes or shoulders. A cement concrete sidewalk is provided along the south side of Braley Road east of the Phillips Road/Theodore Rice Boulevard intersection.

#### Theodore Rice Boulevard

Theodore Rice Boulevard continues west from the intersection of Braley Road and Phillips Road as the east-west connection between Route 140 and Philips Road to the east and Duchaine Boulevard to the west, which provides access to industrial and commercial land uses within the New Bedford Business Park. Theodore Rice Boulevard is classified as a local roadway under City of New Bedford jurisdiction and provides a 20-foot-wide travel lane in each direction, separated by a 12-foot wide raised, grass median. There are no sidewalks provided on either side of the roadway. The posted speed limit on Theodore Rice Boulevard is 30 mph, which does not appear to be supported by an approved Special Speed Regulation.

# Phillips Road

Phillips Road is classified as an urban collector under City of New Bedford jurisdiction and runs in the north-south direction between Braley Road/Theodore Rice Boulevard to the north and Church Street to the south. Phillips Road is a two lane, two-way roadway, providing a 15-footwide travel lane and 5-foot-wide bicycle lane in each direction. Within the study area, a fourfoot-wide cement concrete sidewalk is provided on the east side of the roadway. The posted speed limit on Phillips Road is 30 mph; however, according to MassDOT Special Speed Regulation No. 4044, the approved speed limit is 25 mph northbound approaching the Braley Road/Theodore Rice Boulevard intersection, and otherwise 40 mph between Braley Road and Church Street.

#### Duchaine Boulevard

Duchaine Boulevard is classified as a local roadway under City of New Bedford jurisdiction and provides access to industrial and commercial land uses within the New Bedford Business Park. Duchaine Boulevard runs in the north-south direction and provides two 14-foot-wide travel lanes in each direction separated by a grass median. Shoulders measuring 11 feet in width are provided on both sides of the roadway. Since the roadway is median divided, there are multiple u-turn locations along the corridor. The posted speed limit on Duchaine Boulevard is 30 mph, which does not appear to be supported by an approved Special Speed Regulation.

#### Samuel Barnet Boulevard

Samuel Barnet Boulevard is a local roadway under City of New Bedford jurisdiction and runs in the east-west direction, providing a connection between Phillips Road to the east and Duchaine Boulevard to the west. Samuel Barnet Boulevard provides access to industrial and commercial land uses and serves the New Bedford Business Park. Samuel Barnet Boulevard is a two-way, two-lane roadway generally providing a 13-foot-wide travel lane in each direction, with seven-foot-wide shoulders on either side of the roadway. The posted speed limit on Samuel Barnet Boulevard is 30 mph, which does not appear to be supported by an approved Special Speed Regulation.

#### Existing Traffic Volumes

#### Existing Peak Hour Traffic Volumes

Manual turning movement counts (MTMC) were collected at the study area intersections on Saturday, April 10 and Tuesday, April 13, 2021. The MTMCs were collected while public schools, including the nearby Casimir Pulaski School, were in session and had returned to full in-person learning following the COVID-19 pandemic guidelines. The MTMCs were conducted from 6:00 AM to 7:00 PM. The traffic counts are summarized in 15-minute intervals and are provided in Appendix A of this report.

The four highest consecutive 15-minute intervals of combined traffic within the study area during the peak periods constitutes as the peak hour for the study area network. Based on the count data, the weekday morning peak hour was identified to occur from 6:30 AM to 7:30 AM. Due to a high volume of traffic activity at the Casimir Pulaski Elementary School following dismissal at 3:00 PM, separate weekday afternoon school dismissal peak (3:15 PM to 4:15 PM) and commuter peak (4:00 PM to 5:00 PM) hours were identified.

#### Saturday Traffic Volumes

To determine if Saturday traffic analysis was warranted, peak hour traffic volumes collected on Saturday, April 10, 2021 were compared with traffic volumes collected on Tuesday, April 13, 2021. The peak hour of Saturday traffic was determined to occur between 10:15 a.m. and 11:15 a.m. Based on the April 2021 MTMCs, the Saturday midday peak hour and daily volumes were found to be significantly lower than weekday peak hour volumes. To illustrate this comparison, the two-way peak hour and daily traffic volumes collected along Braley Road between Phillips Road and the Route 140 Southbound Ramps on Saturday, April 10 and Tuesday, April 13, 2021 are shown in Table 1 below.

	Saturday, April 10, 2021	Tuesday, April 13, 2021								
			Afternoon	Afternoon						
Peak Hour	Midday	Morning	School	Commuter						
Peak Hour Traffic Volume	658	886	1,066	969						
Daily Traffic Volume	5,543		10,082							

#### Table 1: Weekday vs. Saturday Traffic Volumes

As shown in Table 1 above, Saturday midday peak hour and daily volumes are significantly lower than the weekday morning peak hour and daily volumes. As the weekday peak hour analysis presents an assessment of traffic conditions under more conservative baseline volumes, a Saturday midday peak hour analysis is not required.

#### Seasonal Variation

In order to determine seasonal variation in the area of the project, 2019 MassDOT weekday seasonal adjustment factors were referenced in accordance with the April 2020 MassDOT *Guidance on Traffic Count Data*. Based on the published seasonal adjustment factors, traffic volumes in the month of April on urban principal arterials such as Route 140, urban minor arterials

such as Braley Road, urban collectors such as Phillips Road, and local roadways such as Theodore Rice Boulevard, Duchaine Boulevard, and Samuel Barnet Boulevard are higher than an average month. To present a conservative analysis, traffic volumes were not adjusted downward to represent an average month.

#### COVID Traffic Volume Adjustment

Due to COVID-19 conditions traffic volumes are not considered to be normal at this time. To adjust the April 2021 traffic volume counts previously collected to pre-COVID conditions, MTMCs were supplemented with MassDOT permanent count station data obtained from the MassDOT Mobility Dashboard<sup>1</sup>, which continuously monitors the impacts of the COVID-19 pandemic on the State's transportation network. The Mobility Dashboard presents average weekly traffic volumes in 2019, 2020, and 2021, as well as percent change from 2019 to 2020, 2020 to 2021, and 2019 to 2021.

For this study, the percent change in traffic volumes on an average weekday during April 2019 and April 2021 at MassDOT Count Station #38 I-195 in New Bedford, the closest count station to the project site, were referenced to determine an adjustment factor to estimate traffic volumes prior to the COVID-19 pandemic using the April 2021 MTMCs. The 2019 traffic counts were selected as it is considered to represent Existing pre-COVID conditions without additional adjustment, per the April 2020 MassDOT *Guidance on Traffic Count Data*. MTMCs were collected on April 13, 2021. Traffic volumes for the same week in 2019 were not available on the Mobility Dashboard. Data from the week prior indicate that 2021 weekday traffic volumes are 4.83 percent higher than the same week in 2019, while data from the following week indicate that traffic volumes in 2021 are 4.31 percent lower than the same week in 2019. To conservatively estimate the impact of the COVID-19 pandemic, the April 2021 MTMCs were increased by 5 percent to account for possible reduced volume in the study area network in April 2021 compared with pre-COVID conditions.

The MassDOT Mobility Dashboard data sets are included in Appendix B.

<sup>&</sup>lt;sup>1</sup> https://mobility-massdot.hub.arcgis.com/

#### Automatic Traffic Recorder Data

A 48-hour automatic traffic recorder (ATR) count including speed and vehicle classification was conducted on Duchaine Boulevard on Wednesday, June 13, 2018 and Thursday, June 14, 2018. The results of the counts are tabulated in 15-minute periods and are provided in Appendix C of this report. The four highest consecutive 15-minute intervals during the weekday morning and weekday afternoon peak periods constitutes as the peak hours for Duchaine Boulevard.

In accordance with the April 2020 MassDOT *Guidance on Traffic Count Data*, historic traffic data may be adjusted based on published yearly adjustment factors to 2019 to represent pre-COVID baseline conditions. However, as the MassDOT adjustment factors indicate that traffic on local roadways such as Duchaine Boulevard decreased 0.4% from 2018 to 2019, no adjustment was applied to present a conservative analysis. The resulting 2018 ATR data on Duchaine Boulevard are summarized in Table 2 below.

	<u>ADT<sup>1</sup></u>	<u>HV%²</u>	<u>85th Percentile</u> Speed <sup>3</sup> (mph)
Duchaine Boulevard			
North of Samuel Barnet Boulevard			
Northbound	2,010	25.0	37
Southbound	<u>2,130</u>	<u>24.0</u>	<u>36</u>
TOTAL	4,140	24.5	37

#### Table 2: Duchaine Boulevard 2018 ATR Summary

<sup>1</sup> ADT - Average Daily Traffic (Vehicles per Day)

<sup>2</sup> HV% - Percentage of Heavy Vehicles based on TMC completed on June 13, 2018

<sup>3</sup> Based on Field Speed Study completed July 13, 2018

<sup>4</sup> Based on 2018 data, the AM peak hour occurred between 7:00 AM and 8:00 AM

 $^{\rm 5}$  Based on 2018 data, the PM peak hour occurred between 3:00 PM and 4:00 PM

#### 2021 Base Traffic Volumes

To reflect the 2021 Base conditions prior to the glass operations currently occupying the site under the Phase 1 waiver, the traffic associated with the glass operations was removed from the 2021 Existing traffic volumes to calculate the 2021 Base traffic conditions. The 2021 Base traffic volumes would reflect the operations of the site prior to the Phase 1 waiver, which includes the removal of the trips associated with the trucking facility previously on site, and the addition of the glass operations previously operating at the former Parallel Products facility at 969 Shawmut Avenue in New Bedford. MTMCs collected at the site driveway were utilized to determine the trips associated with the existing glass operations. These trips were then removed from the 2020 Existing traffic volumes to determine the 2021 Base traffic volumes. Employee trips associated with the glass operations were also removed. The facility currently employs 75 daily employees, operating in three 8-hour shifts each consisting of 25 employees. The shifts are scheduled to run from 6:00 AM to 2:30 PM, 2:00 PM to 10:30 PM, and 10:00 PM to 6:30 AM. Based on these shifts, it is expected that all employees will be arriving to the site outside of the peak hour. However, as employees may not depart the site precisely at the end of the assigned shifts, to present a conservative analysis it was assumed that the employees from 10:00 AM to 6:30 AM shift would leave the site during the weekday morning peak hour, and employees from the 6:00 AM to 2:30 PM shift would leave the site during the weekday afternoon school peak hour.

Although the Phase 1 waiver permits expanded glass operations with additional employees, the expansion was assumed to occur with Phase 2 of the project. The data collected at the facility used to determine the trips associated with Phase 1 of the project are provided in Table 3 below.

				-			-		-			
		Weekd	lay	Weekday AMWeekday PMPeak HourSchool Peak Hour			Weekday PM Commuter Peak Hour					
Description	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
SCR Existing Truck Trips	45	45	90	4	4	8	4	4	8	4	4	8
NWD Trucking	-38	-38	-76	-3	-3	-6	-3	-3	-6	-3	-3	-6
Net Change vs Baseline	7	7	14	1	1	2	1	1	2	1	1	2
SCR Existing Employee Trips	75	75	150	0	25	25	0	25	25	0	0	0

<b>Table 3: Vehicular</b>	Trip	Generation,	Existing	Site	Operations
---------------------------	------	-------------	----------	------	------------

The resulting 2021 Base traffic conditions for the weekday morning peak hour, weekday afternoon school peak hour, and weekday afternoon commuter peak hour are presented in Figures 2, 3, and 4 respectively. The 2021 Existing traffic peak hour traffic volumes are presented in Figures 4, 5, and 6 for the weekday morning peak hour, weekday afternoon school peak hour, and weekday afternoon commuter peak hour, respectively.

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	Duchaine Blvd	Braley Road	Route 140 SB	Route 140 NB	SCHEMATIC- NOT TO SCALE
Theodore		$ \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $		94 87 <b>★</b> 72 <b>←</b> 580	Braley Road
Rice Blvd	<sup>6</sup> 104 ↓	$\begin{array}{c} 4 \stackrel{\frown}{\longrightarrow} \\ 128 \stackrel{\frown}{\longrightarrow} \\ 28 \stackrel{\frown}{\longrightarrow} \\ \end{array} \begin{array}{c} \uparrow \uparrow \uparrow \\ \uparrow \uparrow \uparrow \\ \uparrow \uparrow \uparrow \uparrow \\ \uparrow \uparrow \uparrow \uparrow \uparrow \\ \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \uparrow \\ \uparrow	$\begin{array}{c} 146 \longrightarrow \\ 219 \longrightarrow \end{array}$	68 <b>1</b> 97 <b>1</b> 105 <b>1</b> 105	
Samuel		↓ 1 1 2 8			
Barnet Blvd	$\begin{array}{c} 70 - 1 \\ 75 - 1 \\ 75 - 1 \end{array} \qquad	4 <b>→</b> 87 <b>→</b> 900 000 000			
		hillips Roa			
	0> SITE	£,∎			
	a <b>Bowman</b> compar	J		Weekday N 2021 Bas South	Figure 2 Iorning Peak Hour se Traffic Volumes Coast Renewables

New Bedford, Massachusetts

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New Bedford, Massachusetts

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	ichaine Blvd	Braley Road	ute 140 SB	oute 140 NB	SCHEMATIC-
	$\begin{array}{c} D \\ D \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$	$\begin{array}{c} 0.00\\$	$\begin{array}{c} & \overset{\vee}{\mathbf{M}} \\ & 66 \\ &$	4 7 7 7 7 7 7 2 72 72 72 72 72	NOT TO SCALE
Theodore Rice Blvd		$4 \xrightarrow{4} 152 \xrightarrow{6} 9 \xrightarrow{6} 9 \xrightarrow{6} 152$	$160 \longrightarrow 229 \longrightarrow$	$\begin{array}{c}7\\82 \\ 97 \\ \hline \\ 106 \\ 106 \\ \hline 106 \\ \hline \\ 106 \\ \hline 106 \\ $	Braley Road
Samuel	<sup>5</sup> <sup>9</sup> <sup>1</sup>	↓ 11 11 8			
Barnet Blvd	$\begin{array}{c} 70 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \end{array} \begin{array}{c} \uparrow \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \\ 75 \\ $	4 <b>→</b> 300 <b>↑</b> 118 118 <b>↑</b>			
	0 <b>→</b> SITE	Phillips Rc			
Figure 5 Weekday Morning Peak Hour 2021 Existing Traffic Volumes South Coast Renewables					

New Bedford, Massachusetts

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	Duchaine Blvd	Braley Road	Route 140 SB	Route 140 NB	SCHEMATIC- NOT TO SCALE
Theodore	$ \overset{6}{\downarrow} \overset{79}{\downarrow} \overset{\bullet}{} \overset{18}{} \overset{18}{} \overset{64}{} $			$\begin{array}{c}10\\08\end{array} \qquad  44\\  435\end{array}$	Braley Road
Rice Blvd	<sup>231</sup> ↓	$\begin{array}{c} 21 \\ 313 \\ 36 \\ 36 \\ \end{array} \begin{array}{c} \uparrow \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\$	$301 \longrightarrow 311 \longrightarrow$	$\begin{array}{c}104 \\ 248 \\ \end{array} \begin{array}{c}104 \\ 100 \\ $	
Samuel		↑ <sup>2</sup> 196			
Barnet Blvd	176 <b>1</b> 75 <b>1</b>	$4 \xrightarrow{4}_{202} \xrightarrow{7}_{pg} 1 \xrightarrow{1}_{1} \xrightarrow{6}_{9}$			
		Phillips Ro			
	0 I SITE				
Figure 7 Weekday Afternoon Commuter Peak Hour 2021 Existing Traffic Volumes South Coast Renewables					

New Bedford, Massachusetts

# **Crash Summary**

Crash data for the study area intersections was obtained from MassDOT for the most recent fiveyear period available. This data includes complete yearly crash summaries for 2016, 2017, 2018, 2019, and 2020. The MassDOT Crash Rate Worksheet was 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. The calculated rate was then compared to the average rate for unsignalized intersections statewide and within MassDOT District 5. For unsignalized intersections, the Statewide and MassDOT District 5 average crash rates are 0.57 crashes per million entering vehicles (C/MEV).

The crash data is summarized in Figure 8 below by crash type, and a detailed summary is provided in Appendix D.



Figure 8: Crash Summary

Over the five-year period analyzed, the unsignalized intersection of the Route 140 Northbound on/off ramps at Braley Road had a total of 12 reported crashes, resulting in a crash rate of 0.33 C/MEV, which is lower than the Statewide and District 5 average crash rate of 0.57 C/MEV. The reported crashes were angle, rear-end, sideswipe, and single vehicle crashes with 5 of the reported crashes resulting in personal injury.

The unsignalized intersection of the Route 140 Southbound on/off ramps at Braley Road had a total of 6 reported crashes, resulting in a crash rate of 0.17 C/MEV, which is lower than the Statewide and District 5 average of 0.57 C/MEV. Reported crashes included angle, rear-end, sideswipe, and single vehicle crashes. All crashes resulted in property damage only.

The unsignalized intersection of Braley Road/Theodore Rice Boulevard at Phillips Road had a total of 20 reported crashes over the five-year period analyzed, resulting in a crash rate of 0.64C/MEV, which is slightly higher than the Statewide and District 5 average of 0.57 C/MEV. 11 of the 20 reported crashes were angle crashes, while the remainder were rear-end, head-on, and single vehicle crashes. One crash involved a pedestrian, and 8 crashes resulted in personal injury. The higher than average crash experience may be attributed to the all-way STOP sign control and oversaturated conditions, which may cause driver confusion as to which approach has the right of way.

The unsignalized intersection of Theodore Rice Boulevard at Duchaine Boulevard had a total of 4 reported crashes over the five-year period analyzed, resulting in a crash rate of 0.39 C/MEV, which is lower than the Statewide and District 5 average of 0.57 C.MEV. Reported crashes included angle, rear-end, head-on, and single vehicle crashes. In addition, a fatal crash occurred at the intersection of Theodore Rice Boulevard at Duchaine Boulevard in 2014, prior to the five-year study analyzed. Based on reports, speed was a prominent factor in this fatal crash. It was suspected that the operator of the vehicle was street racing, and the fatal crash was believed to be an isolated incident. One crash during the five-year study resulted in personal injury, and the remaining 3 crashes were property damage only.

The intersection of Duchaine Boulevard at Samuel Barnet Boulevard had a total of 4 reported crashes over the five-year period analyzed, resulting in a crash rate of 0.23 C/MEV, which is lower than both the Statewide and District 5 average crash rate. Reported crashes included angle, rearend, and single vehicle crashes. All reported crashes resulted in property damage only.

The intersection of Phillips Road at Samuel Barnet Boulevard had a total of 3 reported crashes over the five-year period analyzed, resulting in a crash rate of 0.20 C/MEV, which is lower than both the Statewide and District 5 average crash rate. Reported crashes included rear-end and single vehicle crashes. 2 crashes resulted in property damage only, and the severity of the remaining crash is unknown.

#### **Public Transportation**

The Southeastern Regional Transit Agency (SRTA) operates two routes within the study area. An extension of Route 4-Ashley Boulevard operates two weekday morning trips within the New Bedford Business Park between 6:05 AM and 6:49 AM, and one weekday afternoon trip within the New Bedford Business Park between 4:10 PM and 4:17 PM. Route 21-North End Shuttle operates via westbound Braley Road and southbound Phillips Road every 40 minutes from approximately 9:30 AM to 4:45 PM Monday through Saturday. The SRTA New Bedford system map and schedules for Routes 4 and 21 are included in Appendix E of this report.

# **FUTURE CONDITIONS**

To analyze the traffic impacts associated with the proposed project, MassDOT standards state that future year traffic volumes should be projected based on a seven-year project horizon. The 2021 Existing traffic volumes were projected to the future year 2028, when the both phases of the development are expected to be fully built and occupied. Independent of the proposed project, traffic volumes on the roadways in 2028 are assumed to include existing traffic, as well as new traffic resulting from general growth in the study area and from other planned development projects. The potential background traffic growth unrelated to the proposed project was considered in the development of the 2028 No Build (without project) peak hour traffic volumes. The anticipated traffic increases associated with the proposed development were then added to the 2028 No Build volumes to reflect the 2028 Build (with project) traffic conditions. A more detailed description of the development of the 2028 No Build and 2028 Build traffic volume networks follows.

#### Future Roadway Improvements

Planned roadway improvement projects can affect area travel patterns and future traffic operations. There are no planned roadway improvements that would impact traffic on the study area roadways.

# Background Traffic Growth

Traffic growth is primarily a function of changes in motor vehicle use and expected land redevelopment in the region. To predict a rate at which traffic on the roadways in the vicinity of the site can be expected to grow during the seven-year forecast period (2021 to 2028), both historic traffic growth and planned area redevelopments were examined.

#### Historic Traffic Growth

A background growth rate of one percent per year was confirmed with the Southeastern Regional Planning and Economic Development District (SPREDD) in order to forecast increases in general traffic volumes on the study area roadways and intersections for our future analysis. This rate captures growth associated with general changes in population and accounts for other small developments in the vicinity of the study area.

#### Site-Specific Growth

There are no known planned/permitted developments adjacent to the project study area to be added as site specific growth.

#### 2028 No-Build Traffic Volumes

The 2021 Existing peak hour traffic volumes were grown by one percent per year over the sevenyear study horizon (2021 to 2028) to establish the 2028 base future traffic volumes. The 2028 No Build weekday morning peak hour, weekday afternoon school peak hour, and weekday afternoon commuter peak hour traffic volume networks are illustrated in Figures 9 through 11, and are documented in the traffic projection model presented in Appendix F of this report. \\bosfs\dept\Analysis\Green Seal Environmental\New Bedford\Report\Graphics\New Bedford\_THS Schematic 2021-09-22.dwg 01/12/22

	Duchaine Blvd	Braley Road	Route 140 SB	Route 140 NB	SCHEMATIC- NOT TO SCALE
Theodore	$^{\infty}_{\downarrow} \overbrace{\downarrow}^{\smile}_{\checkmark} \overbrace{}^{113}_{\checkmark}$	$\begin{array}{c} \begin{array}{c} & & & \\ & & & \\ & & \\ & & \\ & & & \\ & & \\ & & \\ & & & \\ & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ $	→ 106 → 20	-528 -414 ← 77 ← 620	Braley Road
Rice Blvd	<sup>10</sup> ↓	$\begin{array}{c} 4 \stackrel{\bullet}{\longrightarrow} \\ 162 \stackrel{\bullet}{\longrightarrow} \\ 30 \stackrel{\bullet}{\longrightarrow} \end{array} \begin{array}{c} \uparrow \uparrow \uparrow \\ \mathfrak{S} \stackrel{\bullet}{\otimes} \\ \mathfrak{S} \stackrel{\bullet}{\otimes} \end{array}$	$\begin{array}{c} 171 \longrightarrow \\ 244 \longrightarrow \end{array}$	$\begin{array}{c} 103 \\ 502 \\ 503 \\ 502 \\ 502 \\ 501 \\$	
Samuel		<b>↑</b> <sup>9</sup> 119	I	I	
Barnet Blvd	$\begin{array}{c} 75 \\ 80 \\ \hline 97 \\ 97 \\ 66 \end{array}$	4 <b>↑ 1</b> 95 <b>↑ 1</b> 332 <b>↑ 1</b> 95 <b>• 1</b>			
	40 م <sup>2</sup> ل	Phillips Ro			
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#### Site-Generated Traffic

#### **Daily Trip Generation**

The site proposes to receive a maximum of 1,500 tpd of solid waste (MSW and C&D) as part of Phase 2 of the project. To estimate the trip generation for the proposed site, data provided by the proponent on the allowable material tonnage and the maximum capacities of delivery vehicles were utilized. Based on information provided by SCR, the inbound MSW to the proposed site includes approximately 1,065 tons per day in transfer trailers (approximately 28 tons per load), and 295 tons per day in packer trucks (approximately 9 tons per load). Inbound C&D to the proposed site includes approximately 140 tons per day, all of which will be transported in transfer trailers (approximately 28 tons per load). Inbound MSW and C&D is expected to generate an estimated 152 daily truck trips (76 entering and 76 exiting).

The facility will be served by rail, and it is expected that the majority of outbound materials will be transported from the site via rail. However, to present a conservative analysis, the trip generation and level-of-service analysis presented in the April 2022 revised TIS and SFEIR assumed all outbound materials 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, 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.

Trip generation for outbound material is based on 1,500 tpd of MSW and C&D transported in transfer trailers (approximately 28 tons per truck). With the rail in operation, it is estimated that 100 percent of outbound C&D and 75 percent of outbound MSW would be transported by rail. Based on these assumptions, the transportation of outbound materials would generate 26 one-way truck trips per day (13 entering, 13 exiting) with rail in operation, and 108 one-way truck trips per day (54 entering, 54 exiting) assuming no rail service.

In addition to the 1,500 tpd of solid waste (MSW and C&D), the analysis presented in the April 2022 revised TIS and SFEIR included trips associated with processing of up to 400 tpd of biosolids, expected to consist of 280 wet tons per day of biosolids slurry and 120 wet tons per day of biosolids cake. This material would be processed into approximately 50 dry tons per day, which was projected to be transported from the site mixed with processed MSW and C&D. The biosolids facility is no longer being proposed, and the estimated project-generated trips associated with biosolids processing have been removed from the analysis. The removal of biosolids processing represents a reduction of 48 daily one-way truck trips per day compared with the April 2022 revised TIS and SFEIR, including 46 one-way truck trips associated with delivering 400 tpd of inbound biosolids (23 entering, 23 exiting), and 4 one-way truck trips associated with transporting 50 tpd of outbound dried biosolids (2 entering, 2 exiting).

As previously noted, the proposed facility expansion also includes expanded glass recycling operations already approved under the Phase 1 waiver for the project. The expansion would allow for an additional 20,000 tons of glass processing annually, or approximately 80 tons per day based on an annual operating schedule of 250 operating days. This additional glass would be transported to the site in dump trailers typically carrying 13 to 15 tons per truck. Based on an average capacity of 13.5 tons per truck, the expanded glass operations would result in an additional 6 daily inbound truck trips, which would then depart the site empty. Processed glass would typically depart the site via rail; however, as a conservative measure, it can be assumed that material may depart the site via 28-ton dump trailers. This results in an additional 3 daily outbound truckloads, which would arrive at the site empty. In total, the expanded glass processing operation is estimated to generate an additional 18 daily truck trips (9 entering, 9 exiting) assuming the rail is not in operation.

Employment at the facility is proposed to increase from 75 to approximately 150 daily employees, operating in three 8-hour shifts each consisting of 50 employees. The shifts are scheduled to run from 6:00 AM to 2:30 PM, 2:00 PM to 10:30 PM, and 10:00 PM to 6:30 AM. Based on these shifts, it is expected that all employees will be arriving to the site outside of the peak hour. However, as employees may not depart the site precisely at the end of the assigned shifts, to present a conservative analysis it was assumed that the employees from the 10:00 PM to 6:30 AM shift would leave the site during the weekday morning peak hour, and employees from the 6:00 AM to 2:30 PM shift would leave the site during the weekday afternoon school peak hour. No employee trips are anticipated during the weekday commuter peak hour.

Table 4 below presents the revised estimated trip generation for the proposed facility expansion with the removal of biosolids. As shown in Table 4, the proposed expanded facility is projected to generate a total of 190 new daily one-way truck trips with the rail in operation, a reduction of 138 truck trips compared with the 328 new daily one-way truck trips projected in the SFEIR. Assuming no rail service, the proposed expanded facility is projected to generate an additional 278 new daily one-way truck trips assuming no rail service, or 50 trips fewer than projected in the SFEIR. The total number of daily vehicle trips projected to be generated by the proposed project does not exceed the MEPA threshold for transportation review. Detailed trip generation calculations for Phases 1 and 2 of the project are provided in Appendix G of this report.

	Weekday Daily Trips (SFEIR)			Weekday Daily Trips (with rail, no biosolids)			Weekday Daily Trips (without rail, no biosolids)		
Description	In	Out	Total	In	Out	Total	In	Out	Total
Inbound MSW/C&D Trips									
Packer	33	33	66	33	33	66	33	33	66
Transfer Trailer	43	43	86	43	43	86	43	43	86
Inbound Biosolid Trips	23	23	46	0	0	0	0	0	0
Outbound Material	56	56	112	13	13	26	54	54	108
Truck Trip Total (Phase 2 Expansion)	155	155	310	89	89	178	130	130	260
Expanded Glass Trips (Approved under Phase 1)	9	9	18	6	6	12	9	9	18
Truck Trip Total	164	164	328	95	95	190	139	139	278
Facility Employees	75	75	150	75	75	150	75	75	150
Total	239	239	478	170	170	340	214	214	428

#### **Table 4: Estimated Daily Trip Generation**

As stated in Table 3, the existing facility generates up to 90 truck trips per day. With addition of up to 18 one-way daily truck trips related to the expansion of glass operations approved under Phase 1 and the addition of up to 260 one-way daily truck trips related to MSW and C&D processing under Phase 2, the facility is estimated to generate a maximum of up to 368 one-way daily truck trips. Per MassDEP, the maximum daily **truck trip** generation of the facility will not exceed 368 one-way trips, which SCR is willing having as a limitation/condition of the Site Assignment for the expanded facility. The total number of maximum daily one-way truck trips is summarized in **Error! Reference source not found.**5 below. However, SCR will base the limitation on an aggregate of 368 gross trips in regardless of how trips are estimated in the table presented below. For example, if glass trips exceed the estimate presented in Table 5, SCR would have to reduce the number of solid waste trips to ensure that the aggregate remains below 368 truck trips. It should also be noted that scalehouse operations can verify and track all inbound and outbound truck trips, and this data can be tabulated and reviewed by the MassDEP and/or the City at any given time.

#### Table 5: Maximum Daily One-Way Truck Trips

	Existing	Phase 1 Glass	Phase 2	Total One-Way
	Operations	Processing	Expansion	Truck Trips
One-Way Truck Trips	90	18	260	368

#### Hourly Trip Generation

The facility has revised their operating hours and is now proposing to accept truck deliveries between 6:00 AM and 7:00 PM on weekdays and between 7:00 AM and 4:00 PM on Saturday. The facility will not accept waste on Sundays. Data from two comparable sites, Covanta Southeastern Massachusetts Resource Recovery (SEMASS) at 141 Cranberry Highway, Rochester, MA and WIN Waste Innovations, formerly New England Waste Disposal (NEWD), at 101 Prince Henry Drive, Taunton, MA were utilized to determine the hourly distribution of truck traffic entering the site. Generally, outbound materials would only depart from the facility by truck in the event that the rail line was not in operation. The hourly distribution pattern at NEWD was also considered in developing the estimated hourly distribution of truck trips at SCR in response to MassDEP comments requesting additional supporting the estimated hourly distribution of truck trips used in the DEIR.

The hourly distribution of truck trips at the SEMASS and NEWD sites are provided in Table 6 below. The two distributions were averaged to determine the estimated hourly distribution for SCR, also shown in Table 6. To account for shorter tipping hours, truck trips which would otherwise arrive prior to 6:00 AM or later than 7:00 PM based on the NEWD and SEMASS data were combined with the 6:00 AM to 7:00 AM and 6:00 PM to 7:00 PM hours, respectively.

Time	NEWD	SEMASS	Estimated SCR
5-6 AM	0%	8%	0%
6-7 AM	5%	7%	10%
7-8 AM	10%	6%	8%
8-9 AM	10%	7%	8%
9-10 AM	11%	8%	9%
10-11 AM	11%	10%	10%
11-12 AM	11%	9%	10%
12-1 PM	12%	10%	11%
1-2 PM	12%	8%	10%
2-3 PM	10%	10%	10%
3-4 PM	6%	8%	7%
4-5 PM	1%	5%	3%
5-6 PM	1%	2%	2%
6-7 PM	0%	1%	2%
7-8 PM	0%	1%	0%
8-9 PM	0%	1%	0%

#### Table 6: Hourly Distribution of Truck Trips

As shown in Table 6, the estimated hourly truck distribution ranges from a low of 2 percent of the daily truck volume during the 5:00 PM to 6:00 PM and 6:00 PM to 7:00 PM hours, to a peak of 11 percent of the daily truck volume during the 12:00 PM to 1:00 PM hour.

Per MassDOT's review letter to the SFEIR dated August 22, 2022, MassDOT requested that truck deliveries and departures to be scheduled to occur during off-hours to avoid periods of maximum congestion. As inbound material is transported to the site by independent contractors, SCR is not able to control the schedule of inbound material. In the event SCR refused to accept inbound material during peak hours, the likely result would be trucks idling or circling the area until the time at which deliveries would be accepted. SCR does have the ability to restrict the departure of trucks transporting outbound material and would agree to do so during the weekday morning, weekday afternoon school dismissal, and weekday afternoon commuter peak hours identified in the SFEIR (6:30 AM to 7:30 AM and 3:15 PM to 5:00 PM). To estimate the hourly distribution of truck traffic, it was assumed that trips transporting outbound material previously assumed to depart the site during peak hours would instead depart the site during the following hour. Outbound material transported from the site via backhaul would not be held, as the material would be transported by an inbound truck which would otherwise be departing the site empty. McMahon and SCR have received concurrence from MassDOT that the proposed restricted hours for departing truck trips is acceptable. Correspondence from MassDOT is provided in Appendix H of this report.

Table 7 on the following page summarizes projected hourly truck volumes both with and without rail service, compared with the number of hourly truck trips estimated in the April 2022 revised TIS and SFEIR. As shown in Table 7, with the removal of biosolids processing and with rail in operation, the number of truck trips projected to be generated by the proposed facility expansion is reduced during each hour compared with the SFEIR. On days without rail in operation and the site operating at full capacity, the projected number of truck trips each hour would be reduced or remain the same compared with the SFEIR, with the exception of the 5:00 PM to 6:00 PM hour due to trucks transporting outbound material being held until after the weekday afternoon school dismissal and commuter peak hours.

Time	Total One-Way Truck Trips (SFEIR) <sup>1,2</sup>	Hourly distribution of truck trips (%) - Inbound Material	Total One- Way Truck Trips - Inbound Material	Hourly distribution of truck trips (%) - Outbound Material	Total One-Way Truck Trips - Outbound Material (with rail) <sup>3</sup>	Revised Total One-Way Truck Trips (with rail) <sup>3</sup>	Total One-Way Truck Trips - Outbound Material (without rail) <sup>2</sup>	Revised Total One-Way Truck Trips (without rail) <sup>2</sup>
6-7 AM	32	10%	16	5% <sup>4</sup>	24	<b>18</b> <sup>4</sup>	64	22 <sup>4</sup>
7-8 AM	24	8%	12	<b>9%</b> <sup>5</sup>	2 <sup>5</sup>	14 <sup>5</sup>	10 <sup>5</sup>	22 <sup>5</sup>
8-9 AM	24	8%	12	12%	4	16	14	26
9-10 AM	28	9%	14	9%	2	16	10	24
10-11 AM	32	10%	16	10%	2	18	10	26
11-12 AM	32	10%	16	10%	2	18	10	26
12-1 PM	32	11%	16	11%	2	18	12	28
1-2 PM	32	10%	16	10%	2	18	10	26
2-3 PM	32	10%	16	10%	2	18	10	26
3-4 PM	22	7%	10	2% <sup>6</sup>	2 <sup>6</sup>	12	2 <sup>6</sup>	12
4-5 PM	8	3%	4	0%	0	4	0	4
5-6 PM	6	2%	2	10%	2	4	12	14
6-7 PM	6	2%	2	2%	2	4	2	4
	310	100%	152	100%	26	178	108	260

# **Table 7: Projected Hourly Truck Volumes**

<sup>1</sup> Includes biosolids processing.

<sup>2</sup> Assumes 100% of outbound material is transported by truck.

<sup>3</sup> Assumes 75% of outbound MSW and 100% of outbound C&D is transported by rail.

 $^{4}$  6:00 AM to 6:30 AM only. No outbound truck trips from 6:30 AM to 7:30 AM.

<sup>5</sup> 7:30 AM to 8:00 AM only. No outbound truck trips from 6:30 AM to 7:30 AM.

<sup>6</sup> 3:00 PM to 3:15 PM only. No outbound truck trips from 3:15 PM to 5:00 PM.
To present a conservative analysis and account for hourly fluctuation in deliveries throughout a given day, it was assumed that the peak hour of site generated truck traffic, 11%, which is projected to typically occur between 12:00 PM and 1:00 PM as shown in Table 6, would occur during all three surrounding roadway network peak hours. However, as transportation of outbound materials would be restricted during these peak hours, only the 16 one-way truck trips generated by trucks transporting inbound materials (8 trips inbound loaded, 8 trips outbound empty) were assumed to occur during the peak hours. Consistent with the assumptions in the SFEIR, the expanded glass operations previously approved under Phase 1 are estimated to generate 2 one-way truck trips (1 entering, 1 exiting) during each peak hour, and an estimated 25 outbound passenger-car trips are estimated to be generated during the weekday morning and weekday afternoon school dismissal peak hours due to employees leaving the facility following 6:30 AM and 2:30 PM shift changes.

Table 8 below summarizes the total truck and employee trips which were previously estimated to be generated by the proposed facility expansion during the weekday morning, weekday afternoon school dismissal, and weekday afternoon commuter peak hours in the April 2022 revised TIS and SFEIR, while Table 9 summarizes the revised estimated peak hour truck and employee trip generation with the removal of biosolids processing and the restriction of outbound material transportation by truck during the weekday peak hours.

	Week Peal	day Mo ( Hour	orning Trips	Weeko Scho Peal	day Aft ool Disn k Hour	ernoon nissal Trips	Weekday Afternoon Commuter Peak Hour Trips			
Description	In	Out	Total	In	Out	Total	In	Out	Total	
Inbound MSW/C&D Trips										
Packer	4	4	8	4	4	8	4	4	8	
Transfer Trailer	4	4	8	4	4	8	4	4	8	
Inbound Biosolid Trips	2	2	4	2	2	2	4	2	4	
Outbound MSW/C&D/Biosolids	6	6	12	6	6	12	6	6	12	
Truck Trip Total (MSW, C&D, and Biosolids)	16	16	32	16	16	32	16	16	32	
Expanded Glass Trips (Approved under Phase 1)	1	1	2	1	1	2	1	1	2	
Truck Trip Total	17	17	34	17	17	34	17	17	34	
Facility Employees	0	25	25	0	25	25	0	0	0	
Total Vehicle Trips	17	42	59	17	42	59	17	17	34	

## Table 8: Pek Hour Trip Generation (SFEIR)

	Weel Pea	day Mo k Hour	orning Trips	Week Scho Pea	day Afte ool Disn k Hour	ernoon nissal Trips	Weekday Afternoon Commuter Peak Hour Trips				
Description	In	Out	Total	In	Out	Total	In	Out	Total		
Inbound MSW/C&D Trips											
Packer	4	4	8	4	4	8	4	4	8		
Transfer Trailer	4	4	8	4	4	8	4	4	8		
Inbound Biosolid Trips	0	0	0	0	0	0	0	0	0		
Outbound MSW and C&D	0	0	0	0	0	0	0	0	0		
Truck Trip Total (MSW and C&D)	8	8	16	8	8	16	8	8	16		
Expanded Glass Trips (Approved under Phase 1)	1	1	2	1	1	2	1	1	2		
Truck Trip Total	9	9	18	9	9	18	9	9	18		
Change from SFEIR	-8	-8	-16	-8	-8	-16	-8	-8	-16		
Facility Employees	0	25	25	0	25	25	0	0	0		
Total Vehicle Trips	9	34	43	9	34	43	9	9	18		

### Table 9: Peak Hour Project Trip Generation (Revised)

As shown in Table 9, Phase 2 of the proposed facility, including trips associated with expanded glass operations previously approved under the Phase 1 waiver, is expected to generate a total of 43 vehicle trips (9 entering and 34 exiting) during the weekday morning peak hour, 43 vehicle trips (9 entering and 34 exiting) during the weekday afternoon school dismissal peak hour, and 18 vehicle trips (9 entering and 9 exiting) during the weekday afternoon commuter peak hour. This represents a reduction of 16 trips (8 entering, 8 exiting) during each peak hour compared with the April 2022 revised TIS and SFEIR due to the elimination of proposed biosolids processing and scheduling of truck trips transporting outbound material to off-peak hours in response to MassDOT comments to the SFEIR.

### **Project Trip Distribution and Assignment**

The traffic expected to be generated by the proposed development was distributed onto the study area roadways and intersections based on expected access to and from the site.

### Truck Trips

All truck traffic traveling to and from the site will utilize Route 140 to Braley Road, Theodore Rice Boulevard, and Duchaine Boulevard. SCR will prohibit all trucks delivering solid waste or removing solid waste from using Phillips Road. The prohibition on trucks from using Phillips Road will be included in all contracts with customers of the facility. The contracts will include financial penalties if trucks utilize Phillips Road, including a ban from using the facility for repeat offenders.

## Employee Trips

90 percent of employee trips were assumed to access the site from Route 140 via Braley Road, Theodore Rice Boulevard, and Duchaine Boulevard. The remaining 10 percent of employee trips were assumed to originate to the south, utilizing Phillips Road and Samuel Barnet Boulevard.

The resulting arrival and departure patterns are presented in Figure 12. The resulting distributed new project trips during the weekday morning peak hour, weekday afternoon school peak hour, and weekday afternoon commute peak hour are shown in Figures 13, 14, and 15, respectively.

## 2028 Future Build Peak Hour Traffic Volumes

To establish the 2028 Build peak hour traffic volumes, the project-related traffic was assigned to the surrounding roadway network based on the project distribution patterns discussed above. These project trips were then added to the 2028 No Build peak hour traffic volumes to reflect the 2028 Build peak hour traffic volumes. The resulting 2028 Build weekday morning peak hour, weekday afternoon school peak hour, and weekday afternoon commuter peak hour traffic volumes for the proposed project are presented in Figures 16, 17, and 18, respectively.





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a Bowman company



Weekday Morning Peak Hour 2028 Build Traffic Volumes South Coast Renewables New Bedford, Massachusetts \bosfs\dept\analysis\Green Seal Environmental\New Bedford\Report\Graphics\New Bedford\_TIS Schematic 2021-09-22.dwg 01/12/22



Weekday Afternoon School Dismissal Peak Hour 2028 Build Traffic Volumes South Coast Renewables New Bedford, Massachusetts



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**EMCMAHON** a **Bowman** company Figure 18 Weekday Afternoon Commuter Peak Hour 2028 Build Traffic Volumes South Coast Renewables New Bedford, Massachusetts

## TRAFFIC OPERATIONS ANALYSIS

In previous sections of this report, the quantity of traffic on the study area roadways was described. The following section describes the quality of traffic flow at the study area intersections for the given travel demands. As a basis for this assessment, intersection capacity analyses were conducted using Synchro capacity analysis software for the study area intersections under the 2021 Base, 2021 Existing, 2028 No Build, and 2028 Build peak hour traffic conditions. The weekday morning, weekday afternoon school peak, and weekday afternoon commuter peak hours were analyzed for the study area intersections under the three conditions. This analysis is based on procedures contained in the *Highway Capacity Manual* (HCM) which are summarized in Appendix I. A discussion of the evaluation criteria and a summary of the results of the capacity analyses are presented below.

## Level-of-Service Criteria

Operating levels of service (LOS) are reported on a scale of A to F with A representing the best conditions (with little or no delay) and F representing the worst operating conditions (long delays).

# Capacity Analysis

Intersection capacity analyses were conducted for the study area intersections to evaluate the 2021 Base, 2021 Existing, 2028 No Build, and 2028 Build peak hour traffic conditions. Based on the analysis, the network peak hour of the adjacent street traffic occurs between 6:30 AM and 7:30 AM for the weekday morning peak, between 3:15 PM and 4:15 PM for the weekday afternoon school dismissal peak, and between 4:00 PM and 5:00 PM for the weekday afternoon commuter peak.

As previously noted, the 2028 Build conditions analysis assumes all inbound and outbound material will be transported by truck. In practice, the majority of outbound MSW and C&D will be transported from the site by rail. As a result, the 2028 Build analysis presented conservatively estimates the effect of project generated trips on the surrounding roadway network. In addition, 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.

# Traffic Model Calibration

The traffic analysis model was calibrated to reflect observed field conditions under raw counted 2021 traffic volumes. Critical gap times for the unsignalized approaches at the intersections of Braley Road at the Route 140 Northbound Ramps, Braley Road at the Route 140 Southbound Ramps, and Braley Road at Phillips Road/Theodore Rice Boulevard intersections were adjusted based on measured accepted gap times and observed vehicle queues. Traffic volumes were then adjusted to estimated pre-COVID conditions based on the methodology previously discussed in this report.

Peak hour factors (PHFs)<sup>2</sup> were applied to all hourly traffic volumes to account for traffic flow during the peak 15 minutes of the hour. Due to uses with concentrated activity such as arrival and dismissal at Casmir Pulaski elementary school and shift changes in the New Bedford Business Park, very low PHFs were calculated on several intersection approaches in the study area. As a result, applying PHFs on an approach-by-approach basis in accordance with typical MassDOT practice would result in peak flow rates on intersecting approaches that do not normally occur simultaneously. Therefore, PHFs for 2021 Base and 2021 Existing conditions were calculated on an overall intersection basis rather than on an approach-by-approach basis to more accurately reflect typical peak hour conditions in the study area. In accordance with *MassDOT Traffic and Safety Engineering 25% Design Submission Guidelines*, all PHFs were assumed to be 0.92 under 2028 No-Build and 2028 Build conditions. As a result of increases in PHF under future conditions at selected locations, there may be movements which show a reduction in delay under 2028 No-Build conditions when compared with 2021 Existing conditions.

# **Capacity Analysis Results**

The capacity analysis results for the 2021 Base, 2021 Existing, 2028 No Build, and 2028 Build conditions are presented in Appendix J, Appendix K, Appendix L, and Appendix M, respectively. The results of the unsignalized intersection capacity analyses for the critical approaches are presented in Table 10 below. 2028 Build operations presented in Table 10 include the removal of trips associated with the previously proposed biosolids processing, and scheduling of truck trips transporting outbound material to off-peak hours in response to MassDOT comments to the SFEIR. Detailed capacity analysis results, including comparison with the 2028 Build results previously reported in the April 2022 revised TIS and SFEIR, are included in Appendix N. The projected queue lengths at the intersections of Braley Road at the Route 140 Northbound Ramps, Braley Road at the Route 140 Southbound Ramps, Braley Road/Theodore Rice Boulevard at Phillips Road, and Theodore Rice Boulevard at Duchaine Boulevard are presented graphically in Figures 19A through 19L. The specific capacity analysis results of the study area intersections are discussed following Figure 19L.

 $<sup>^{2}</sup>$  PHF = Total hourly volume / (4 x Peak 15-minute volume). The hourly volume is divided by the PHF to express the flow rate during the peak 15 minutes as an hourly flow rate.

Traffic Impact Study South Coast Renewables New Bedford, Massachusetts

						Tabl	le 10: Ca	pacity	Analys	is Res	ults								
					2021	Base			2021 E	kisting			2028	No Bui	ild		2028	Build	
Intersection	Mov	ement	Period	LOS <sup>1</sup>	Delay <sup>2</sup>	V/C <sup>3</sup>	Queue <sup>4</sup>	LOS	Delay	V/C	Queue	LOS	Delay	V/C	Queue	LOS	Delay	V/C	Queue
Route 140 Northbound	NB	L	AM	D	28.7	0.69	128	D	32.1	0.72	140	F	61.3	0.92	243	F	79.7	0.99	283
Ramps at Braley Road			School	F	69.8	0.90	203	F	83.2	0.95	223	F	147.3	1.15	313	F	192.5	1.26	360
			PM	Е	45.7	0.73	130	Е	46.5	0.73	130	F	59.8	0.82	160	F	67.4	0.86	175
		R	AM	А	9.8	0.21	20	А	9.8	0.21	20	В	10.1	0.24	23	В	10.1	0.24	23
			School	В	14.1	0.49	70	В	14.1	0.49	70	С	15.4	0.55	85	С	15.4	0.55	85
			PM	С	16.1	0.58	95	С	16.1	0.58	95	С	17.2	0.62	108	С	17.2	0.62	108
Route 140 Southbound	SB	L	AM	F	56.8	0.24	23	F	60.8	0.26	23	F	60.5	0.25	23	F	66.0	0.27	25
Ramps at Braley Road			School	F	213.5	0.97	118	F	235.1	1.02	123	F	381.0	1.34	150	F	443.3	1.46	158
			PM	F	205.4	0.96	118	F	211.9	0.97	118	F	135.3	0.77	93	F	138.8	0.78	95
		R	AM	В	14.3	0.23	23	В	14.3	0.23	23	В	14.3	0.23	23	С	14.6	0.24	23
			School	В	12.0	0.17	15	В	12.0	0.18	15	В	12.3	0.19	18	В	12.6	0.20	18
			PM	В	11.8	0.18	18	В	11.8	0.18	18	В	11.5	0.17	15	В	11.7	0.18	18
Braley Road/	EB	LT	AM	В	14.1	0.33	33	С	15.2	0.39	43	С	15.2	0.39	43	С	16.9	0.47	58
Theodore Rice Boulevard			School	Е	39.4	0.85	200	Е	48.8	0.92	240	F	59.0	0.98	273	F	76.7	1.07	328
at Phillips Road			PM	F	57.4	0.95	265	F	58.3	0.96	268	Е	40.5	0.83	210	Е	44.8	0.86	228
		R	AM	А	10.0	0.06	5	А	10.0	0.06	5	А	10.0	0.06	5	В	10.2	0.06	5
			School	В	10.9	0.13	10	В	11.0	0.13	10	В	11.4	0.13	10	В	11.5	0.14	10
			PM	В	11.2	0.10	8	В	11.2	0.10	8	В	10.5	0.08	8	В	10.7	0.08	8
	WB	LTR	AM	F	108.7	1.14	563	F	116.5	1.16	585	F	116.5	1.16	585	F	134.2	1.21	638
			School	F	85.3	1.05	408	F	92.5	1.06	428	F	113.9	1.14	483	F	127.2	1.18	515
			PM	F	93.3	1.07	410	F	95.0	1.08	415	F	55.5	0.94	295	F	62.0	0.96	320
	NB	LTR	AM	В	13.9	0.36	38	В	14.2	0.36	38	В	14.2	0.36	38	В	14.7	0.37	38
			School	С	17.8	0.46	55	С	18.4	0.47	58	С	19.7	0.50	63	С	20.4	0.52	63
			PM	С	21.7	0.55	73	С	21.8	0.55	75	С	18.7	0.47	63	С	19.0	0.48	63
	SB	LTR	AM	С	16.8	0.51	65	С	17.3	0.52	65	С	17.3	0.52	65	С	18.0	0.53	68
			School	С	25.0	0.66	108	D	26.0	0.68	113	D	28.9	0.72	125	D	30.0	0.74	128
			PM	D	31.9	0.75	143	D	32.2	0.75	143	D	25.4	0.65	115	D	26.3	0.66	118
	Ov	erall	AM	F	64.5	n/a		F	67.8	n/a		F	67.7	n/a		F	76.2	n/a	
			School	Ε	49.2	n/a		F	54.5	n/a		F	65.7	n/a		F	76.0	n/a	
			PM	F	57.7	n/a		F	58.6	n/a		Ε	38.4	n/a		Ε	42.2	n/a	

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					2021	Base			2021 Ex	isting			2028	No Buil	d		2028	Build	
Intersection	Mov	ement	Period	LOS	Delay	V/C	Queue	LOS	Delay	V/C	Queue	LOS	Delay	V/C		LOS	Delay	V/C	Queue
Theodore Rice Boulevard	NB	TR	AM	Α	0.0	0.04	3	А	0.0	0.04	3	А	0.0	0.03	3	А	0.0	0.03	3
at Duchaine Boulevard			School	А	0.0	0.01	0	А	0.0	0.01	0	А	0.0	0.01	0	А	0.0	0.01	0
			PM	А	0.0	0.01	0	А	0.0	0.01	0	А	0.0	0.01	0	А	0.0	0.00	0
	SB	L	AM	Е	44.4	0.49	60	Е	44.8	0.50	60	D	31.6	0.36	40	D	33.0	0.38	40
			School	В	12.1	0.26	25	В	12.1	0.26	25	В	11.5	0.22	20	В	11.8	0.23	23
			PM	В	10.9	0.14	13	В	10.9	0.14	13	В	10.3	0.11	8	В	10.5	0.11	10
		Т	AM	D	26.7	0.06	5	D	26.8	0.06	5	С	22.8	0.05	3	С	23.4	0.05	3
			School	В	11.3	0.02	3	В	11.4	0.02	3	В	11.1	0.02	0	В	11.3	0.02	0
			PM	В	10.7	0.01	0	В	10.7	0.01	0	В	10.4	0.01	0	В	10.6	0.01	0
Duchaine Boulevard at	EB	L	AM	С	21.4	0.29	30	С	23.1	0.31	33	С	20.0	0.25	25	С	22.0	0.28	28
Samuel Barnet Boulevard			School	В	13.3	0.38	45	В	14.2	0.41	50	В	11.9	0.29	30	В	12.7	0.31	33
			PM	В	11.7	0.35	40	В	11.8	0.35	40	В	10.4	0.24	23	В	10.6	0.24	25
		R	AM	В	11.7	0.15	13	В	11.7	0.15	13	В	11.3	0.13	13	В	11.3	0.13	13
			School	В	11.3	0.37	43	В	11.3	0.37	43	В	10.3	0.27	28	В	10.3	0.28	28
			PM	В	10.2	0.29	30	В	10.2	0.29	30	А	9.5	0.20	20	А	9.5	0.20	20
Phillips Road at	EB	LR	AM	В	10.2	0.13	10	В	10.2	0.13	13	В	10.2	0.14	13	В	10.2	0.14	13
Samuel Barnet Boulevard			School	С	15.2	0.51	73	С	15.2	0.52	75	В	13.5	0.44	58	В	13.6	0.45	58
			PM	В	12.6	0.38	45	В	13.3	0.46	63	В	11.3	0.30	30	В	11.3	0.30	30
Duchaine Boulevard at	WB	R	AM	А	8.6	0.02	1	А	8.7	0.05	4	А	8.8	0.08	6	А	9.1	0.14	12
Site Driveway			School	А	8.5	0.04	3	А	8.6	0.08	6	А	8.6	0.06	5	А	8.8	0.09	8
-			PM	А	8.5	0.03	2	А	8.5	0.03	2	А	8.5	0.03	2	А	8.8	0.04	3

 Table 10: Capacity Analysis Results (Continued)

<sup>1</sup> Level-of-Service

<sup>2</sup> Average vehicle delay in seconds

<sup>3</sup> Volume to capacity ratio

<sup>4</sup> 95<sup>th</sup> percentile queue length in feet

n/a Not applicable

























## Route 140 Northbound on/off-ramp at Braley Road

As shown in Table 7, the stop-controlled northbound left turn movement at the Route 140 Northbound off-ramp operates at LOS D during the weekday morning peak hour, LOS F during the weekday afternoon school dismissal peak hour, and LOS E during the weekday afternoon commuter peak hour under 2021 Base and Existing conditions. The stop-controlled northbound right -turn movement operates at LOS C or better during all three peak periods reviewed.

Under 2028 No-Build conditions the northbound left-turn movement is projected to operate at LOS F during all three peak periods reviewed, indicating congestion would be present for this movement due to background growth in traffic volumes, independent of the proposed project. The northbound right-turn movement is projected to operate at LOS B during the weekday morning peak hour and LOS C during the weekday afternoon school dismissal and commuter peak hours.

Under 2028 Build conditions, the northbound left-turn movement is projected to continue to operate at LOS F under all three peak period analyzed with incremental increases in average delay. The northbound right-turn movement is projected to continue to operate at LOS B during the weekday morning peak hour and LOS C during the weekday afternoon school and commuter peak hours. The 95<sup>th</sup> percentile queue length along the Route 140 northbound off-ramp is projected to increase by 40 feet (approximately one packer truck) during the weekday morning peak hour as shown in Figure 19A, by 47 feet (approximately two packer trucks or one transfer trailer) during the weekday afternoon school dismissal peak hour as shown in Figure 19E, and by 15 feet (less than one packer truck) during the weekday afternoon commuter peak hour as shown in Figure 19I.

### Route 140 Southbound on/off-ramp at Braley Road

The capacity analysis results show that under the 2021 Base and Existing conditions, the stopcontrolled southbound left-turn movement at the Route 140 southbound off-ramp operates at LOS F during all three peak hours analyzed, indicating congestion is present for this movement independent of the proposed project. The southbound right-turn movement is shown to operate at LOS B during all three peak hours reviewed under 2021 Existing and Base conditions.

Under 2028 No-Build conditions, the southbound left-turn movement is projected to continue to operate at LOS F during all three peak periods reviewed due to background growth in traffic volumes, independent of the proposed project. The southbound right-turn movement is projected to operate at LOS B during all three peak hours reviewed under 2028 No-Build conditions.

Under 2028 Build conditions, left-turn movement is projected to continue to operate at LOS F under all three peak period analyzed with incremental increases in average delay. The southbound right-turn movement is projected to operate at LOS C during the weekday morning peak hour due to an increase in average delay of 0.3 seconds per vehicle. During the weekday afternoon school dismissal and commuter peak hours, the southbound right-turn movement is projected to continue to operate at LOS B. The Route 140 southbound off-ramp is projected to experience a

negligible increase in queues as a result of project generated trips. The 95<sup>th</sup> percentile queue length is projected to increase by 2 feet during the weekday morning peak hour and weekday afternoon school dismissal peak hour as shown in Figures 19B and 19F, respectively, and by 8 feet during the weekday afternoon commuter peak hour as shown in Figure 19I.

#### Braley Road/Theodore Rice Boulevard at Phillips Road

The intersection of Braley Road/Theodore Rice Boulevard at Phillips Road operates under all-way stop sign control. Under 2021 Base and Existing conditions, congestion is experienced on the eastbound Theodore Rice Boulevard and westbound Braley Road approaches during one or more of the peak periods analyzed. The left-turn/through lane on the eastbound approach is shown to operate at acceptable LOS B during the weekday morning peak hour under 2021 Base conditions and LOS C under Existing conditions, but experiences delays during the weekday afternoon school and commuter peaks, operating at LOS E during the weekday afternoon school peak under both 2021 Base and Existing conditions, and LOS F during the weekday afternoon commuter peak hour under both 2021 Base and Existing conditions. The eastbound Theodore Rice Boulevard right-turn movement operates at LOS B or better under both 2021 Base and Existing conditions during all three peak hours reviewed. The westbound Braley Road approach is shown to operate at LOS F during all three peak hours reviewed under both 2021 Base and Existing conditions, indicating existing congestion independent of the proposed project. The northbound Phillips Road and southbound Braley Road approaches operate at LOS D or better during all three peak hours reviewed under under both 2021 Base and Existing conditions, indicating operations with acceptable levels of delay.

Under 2028 No Build conditions, the eastbound Theodore Rice Boulevard left-turn/though movement operates at LOS C during the weekday morning peak hour as under 2021 Existing conditions, but experiences congestion in the afternoon. During the weekday afternoon school dismissal peak hour, the eastbound left-turn/through movement degrades from LOS E under 2021 Existing conditions to LOS F under 2028 No-Build conditions. During the weekday afternoon commuter peak hour, the eastbound left-turn/through movement shows a minor improvement from LOS F under 2021 Existing conditions to LOS E under 2028 No-Build conditions due to the increase in peak hour factor (PHF) used in the analysis of forecasted conditions discussed previously. The westbound Braley Road approach is shown to continue to operate at LOS F during all three peak hours reviewed. Similarly, the northbound Phillips Road and southbound Braley Road approaches and the eastbound Theodore Rice Boulevard right-turn movement are expected to continue to operate at the same LOS as 2021 Existing conditions with acceptable levels of delay (LOS D or better).

Under 2028 Build conditions, the left-turn/through movement along the eastbound Theodore Rice Boulevard approach is projected to continue to operate at LOS F during the weekday afternoon school dismissal peak hour and LOS E during the weekday afternoon commuter peak hour due to existing congestion independent of the proposed project, with incremental increases in delay due the addition of project-generated trips. Similarly, the westbound Braley Road approach is projected to continue to operate at LOS F during all three peak hours reviewed. All other movements at the Braley Road/Theodore Rice Boulevard at Phillips Road intersection are projected to operate at LOS D or better with acceptable levels of delay under 2028 Build conditions during all three peak hours reviewed. The 95<sup>th</sup> percentile queue lengths are projected to increase by 15 feet (less than one packer truck) along the eastbound Theodore Rice Boulevard approach and by 53 feet (approximately two packer trucks or one transfer trailer) along the westbound Braley Road approach during the weekday morning peak hour as shown in Figure 19C; by 55 feet (approximately two packer trucks or one transfer trailer) along the westbound Braley Road approach and by 32 feet (approximately one packer truck) along the westbound Braley Road approach during the weekday afternoon school dismissal peak hour as shown in Figure 19G; and by 18 feet (less than one packer truck) along the eastbound Theodore Rice Boulevard approach and by 25 feet (approximately one packer truck) along the westbound Braley Road approach during the weekday afternoon school dismissal peak hour as shown in Figure 19G; and by 18 feet (less than one packer truck) along the westbound Braley Road approach and by 25 feet (approximately one packer truck) along the westbound Braley Road approach and by 25 feet (approximately one packer truck) along the westbound Braley Road approach during the weekday afternoon school dismissal peak hour as shown in Figure 19G; and by 18 feet (less than one packer truck) along the westbound Braley Road approach and by 25 feet (approximately one packer truck) along the westbound Braley Road approach during the weekday afternoon commuter peak hour as shown in Figure 19K.

### Theodore Rice Boulevard at Duchaine Boulevard

The stop-controlled northbound approach at the intersection of Theodore Rice Boulevard at Duchaine Boulevard is shown to operate at LOS A during all three peak hours analyzed under the 2021 Base and Existing conditions. The southbound left-turn movement is shown to operate at LOS E during the weekday morning peak hour and LOS B during the weekday afternoon school dismissal and commuter peak hours during both 2021 Base and Existing conditions, while the southbound through movement is shown to operate at LOS D during the weekday morning peak hour and LOS B during the weekday morning peak hour and LOS B during the weekday afternoon school and commuter peak hours. LOS B during the weekday afternoon school and commuter peak hours. LOS B during the weekday afternoon school and commuter peak hours. LOS D during the weekday afternoon school dismissal and commuter peak hours during both 2021 Base and Existing conditions, while the southbound through movement is shown to operate at LOS D during and Existing conditions, while the southbound through movement is shown to operate at LOS D during and Existing conditions, while the southbound through movement is shown to operate at LOS D during the weekday afternoon school dismissal and commuter peak hours and LOS B during both through movement is shown to operate at LOS D during the weekday morning peak hour and LOS B during both the weekday afternoon school dismissal and commuter peak hours at LOS D during the weekday morning peak hour and LOS B during both the weekday afternoon school dismissal and commuter peak hours at LOS D during the weekday morning peak hour and LOS B during both the weekday afternoon school dismissal and commuter peak hours under 2021 Base and Existing conditions.

Under the 2028 No Build conditions, the stop-controlled northbound approach is projected to continue to operate at LOS A during all three peak hours reviewed. The southbound left-turn movement is shown to operate at LOS D during the weekday morning peak hour, with reduced delay compared with 2021 Existing conditions due to the increase in PHF used in the analysis of forecasted conditions discussed previously. During the weekday afternoon school dismissal and commuter peak hours, the southbound left-turn movement is projected to continue to operate at LOS B. Similarly, the southbound through movement is projected to operate at LOS C during the weekday morning peak hour with a reduction in delay compared with 2021 Existing conditions due to the increase in PHF assumed under forecasted conditions, and is projected to continue to operate at LOS B during the weekday afternoon school dismissal and commuter peak hours.

Under 2028 Build conditions, all movements are projected to operate at equivalent LOS with minor incremental increases in delay of 1.4 seconds or less compared with 2028 No Build conditions during all three peak hours reviewed. Similarly, 95<sup>th</sup> percentile queue lengths are projected to remain largely unchanged from No-Build conditions during the weekday morning, weekday afternoon school dismissal, and weekday afternoon commuter peak hours, as shown in Figures 19D, 19H, and 19L, respectively.

#### Duchaine Boulevard at Samuel Barnet Boulevard

Under the 2021 Base and Existing conditions, the left-turn and right-turn movements along the stop-controlled eastbound Samuel Barnet Boulevard approach are shown to operate at LOS C or better during all three peak hours reviewed, and are projected to continue to operate at LOS C or better under both 2028 No Build and 2028 Build conditions.

#### Phillips Road at Samuel Barnet Boulevard

The stop-controlled eastbound Samuel Barnet Boulevard approach is shown to operate at LOS C or better during all three peak hours reviewed under 2021 Base and Existing conditions.

Under the 2028 No Build conditions, the stop controlled eastbound approach is expected to operate at LOS B during all three peak hours reviewed, with slight reductions in delay compared with 2021 Existing conditions due to the increase in PHF assumed under forecasted conditions. With the addition of project-generated trips under 2028 Build conditions, all movements are projected to continue to operate at LOS B during all three peak hours reviewed.

#### Duchaine Boulevard at Site Driveway

The stop-controlled westbound approach is shown to operate at LOS A during all three peak hours reviewed under 2021 Base and Existing conditions, and is projected to continue to operate at LOS A under both 2028 No Build and Build conditions.

# MITIGATION

Potential measures were analyzed to evaluate mitigation to the study area intersections. Mitigation alternatives analyzed included signalizing the intersection of Braley Road at Phillips Road/Theodore Rice Boulevard if approved by the City. To determine if signalization is appropriate, a signal warrant analysis was completed for this intersection. In addition, PPNE will consider Transportation Demand Management (TDM) measures and will allocate up to \$5,000 toward a Heavy Commercial Vehicle Exclusion study for Phillips Road from Route 140 to Braley Road should the City of New Bedford choose to pursue a HCVE through MassDOT.

MassDOT has been contacted to request a meeting, but the meeting has not yet been scheduled. Although the proposed project does not meet the MEPA threshold for transportation review, MassDOT provided a comment letter to the Expanded Environmental Notification Form (EENF) dated March 19, 2019. The MassDOT comment letter moted that "The additional traffic volumes associated with the project is not expected to significantly impact safety" and "2025 Build conditions experience slightly increased delays compared to the 2025 No-Build conditions, but the delays were not significant enough to impact LOS in most cases." Mitigation recommended in the MassDOT comment letter was limited to providing a Transportation Demand Management program, which is discussed below. The MassDOT EENF comment letter is included in Appendix H of this report. In addition, MassDOT provided a review letter to the SFEIR dated August 22, 2022, requesting that truck deliveries and departures to be scheduled to occur during off-hours to avoid periods of maximum congestion. As inbound material is transported to the site by independent contractors, South Coast Renewables is not able to control the schedule of inbound material. In the event South Coast Renewables refused to accept inbound material during peak hours, the likely result would be trucks idling or circling the area until the time at which deliveries would be accepted. South Coast Renewables does have the ability to restrict the departure of trucks transporting outbound material and would agree to do so during the weekday morning, weekday afternoon school dismissal, and weekday afternoon commuter peak hours identified in the SFEIR (6:30 AM to 7:30 AM and 3:15 PM to 5:00 PM). To estimate the hourly distribution of truck traffic, it was assumed that trips transporting outbound material previously assumed to depart the site during peak hours would instead depart the site during the following hour. Outbound material transported from the site via backhaul would not be held, as the material would be transported by an inbound truck which would otherwise be departing the site empty. Concurrence from MassDOT that the proposed restricted hours for departing truck trips is also provided in Appendix H.

# Traffic Signal Warrant Analysis

A traffic signal warrant analysis was performed for the study area intersection of Braley Road at Phillips Road/Theodore Rice Boulevard analysis was based on procedures outlined in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) as amended. The MUTCD establishes nine criteria, referred to as warrants, for the installation of traffic signals. The warrants are based upon traffic volumes, existing roadway conditions, crash history, pedestrian volumes, and proximity to schools. The manual states that satisfaction of these warrants does not in itself

require the installation of a traffic signal. However, a traffic signal should not be installed unless one or more of the warrants is met.

The analyses performed are based on the criteria for Warrant 1 (Eight-Hour), Warrant 2 (Four-Hour) and Warrant 3 (Peak Hour) volume warrants. The following warrants were not applicable to this project: Warrant 4 (Pedestrian Volumes), Warrant 5 (School Crossing), Warrant 6 (Coordinated Signal System), Warrant 7 (Crash Experience), Warrant 8 (Roadway Network), and Warrant 9 (Intersection Near a Grade Crossing).

The Warrant 1 (Eight-Hour) and Warrant 2 (Four-Hour) vehicular volume signal warrants are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing traffic signal control at an intersection. Warrant 1 is separated into Conditions A and B. According to the MUTCD, "the Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersection traffic is the principal reason to consider installing a traffic control signal." The MUTCD also sets forth guidelines for Condition B, stating "the Interruption of Continuous Traffic, Condition B is intended for application at locations where Condition A is not satisfied and where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street. In order for this warrant to be met, minimum vehicular volumes for the major street and minor street, found in Table 4C-1 of the MUTCD, must be exceeded. If any one condition is satisfied, Warrant 1 is met.

To satisfy Warrant 2, the plotted points representing the hourly volumes on the major street and minor street intersection approaches during any four hours of an average weekday must fall above the applicable curve in Figure 4C-2 of the MUTCD.

The Warrant 3 (Peak Hour) vehicular volume signal warrant is intended for use at a location where traffic conditions are such that for a minimum of one hour of an average day, the minor-street traffic experiences undue delay when entering or crossing the major street. Warrant 3 is satisfied when the plotted point representing the total hourly traffic volume of both approaches on the major street and the corresponding hourly volume of the higher-volume minor street approach for one hour of an average day falls above the applicable curve in Figure 4C-4 of the MUTCD.

Analyses for Warrants 1, 2, and 3 were performed using the adjusted 2021 Existing, 2028 No Build, and 2028 Build traffic volumes at the intersection of Braley Road at Phillips Road/Theodore Rice Boulevard. The results of the signal warrant analysis are provided in Appendix O, and a summary of the results of the signal warrant analysis is shown in Table 11.

Braley Road at Phillips Road/Theodore Rice Boulevard	Warrant 1: Eight-Hour	Warrant 2: Four-Hour	Warrant 3: Peak Hour
2021 Existing	$\checkmark$		
2028 No Build	$\checkmark$	$\checkmark$	
2028 Build	V	V	

**Table 11: Traffic Signal Warrant Summary** 

According to the warrant analysis results, the intersection of Braley Road at Phillips Road/Theodore Rice Boulevard warrants the installation of a traffic signal based on Warrants 1 and 2 under 2028 No Build conditions, *independent of the proposed project*.

Subject to approval by the City of New Bedford, PPNE proposes to construct a fully actuated traffic signal at the intersection of Braley Road at Phillips Road/Theodore Rice Boulevard to mitigate congestion. It is anticipated that the signal will operate with three phases: one vehicle phase for eastbound Theodore Rice Boulevard and westbound Braley Road, one vehicle phase for northbound Phillips Road and southbound Braley Road, and an exclusive pedestrian phase. It is anticipated that marked crosswalks will be provided across the northern and eastern Braley Road legs of the intersection, as there is no sidewalk on the southwest corner of the intersection. The results of the signalized intersection capacity analyses for the intersection of Braley Road at Phillips Road at Phillips Road are presented in Table 12 below and in Appendix P.

			Peak		2028	Build		2028 Build with Mitigation							
Intersection	Movement		Period	LOS <sup>1</sup>	Delay <sup>2</sup>	V/C <sup>3</sup>	Queue <sup>4</sup>	LOS	Delay	V/C	Queue				
Braley Road/	EB	LT	AM	С	16.9	0.47	58	А	8.2	0.26	103				
Theodore Rice Boulevard			School	F	76.7	1.07	328	В	13.6	0.47	296				
at Phillips Road			PM	Е	44.8	0.86	228	В	12.8	0.42	249				
		R	AM	В	10.2	0.06	5	А	1.2	0.04	6				
			School	В	11.5	0.14	10	А	3.8	0.07	22				
			PM	В	10.7	0.08	8	А	2.4	0.05	12				
	WB	LTR	AM	F	134.2	1.21	638	В	18.8	0.81	447				
			School	F	127.2	1.18	515	D	47.1	0.96	581				
			PM	F	62.0	0.96	320	С	22.2	0.74	440				
	NB	LTR	AM	В	14.7	0.37	38	С	21.6	0.41	176				
			School	С	20.4	0.52	63	В	17.0	0.41	129				
			PM	С	19.0	0.48	63	В	15.9	0.38	122				
	SB	LTR	AM	С	18.0	0.53	68	D	46.4	0.81	360				
			School	D	30.0	0.74	128	Е	78.4	0.98	375				
			PM	D	26.3	0.66	118	Е	78.7	0.98	368				
	Ov	erall	AM	F	76.2	n/a		С	22.2	0.81					
			School	F	76.0	n/a		D	37.7	0.91					
			PM	Ε	42.2	n/a		С	29.6	0.84					

#### **Table 12: Capacity Analysis Results with Mitigation**

<sup>1</sup> Level-of-Service

<sup>2</sup> Average vehicle delay in seconds

<sup>3</sup> Volume to capacity ratio

<sup>4</sup> 95<sup>th</sup> percentile queue length in feet

n/a Not applicable

The intersection of Braley Road/Theodore Rice Boulevard at Phillips Road is currently unsignalized, but is proposed to be signalized as potential mitigation for the proposed project. As shown in Table 12, operations for the eastbound Theodore Rice Boulevard left-turn/through movement are projected to improve from LOS F to LOS B during the weekday school dismissal peak hour and from LOS E to LOS B during the weekday afternoon commuter peak hour. The westbound Braley Road approach is projected to improve from LOS F during all three peak hours reviewed to LOS B during the weekday afternoon commuter peak hour. Operations along the northbound Phillips Road approach are projected to operate at LOS C or better during all three peak hours reviewed. Operations along the southbound Braley Road approach are projected to worsen compared with unsignalized conditions, operating at LOS D during the weekday morning peak hours. The degradation in LOS for the southbound approach is primarily due to the change from all-way

STOP control, where each approach is given equal priority, to traffic signal control, where the higher-volume eastbound and westbound approaches are given more green time. Overall intersection operations are projected to improve from LOS F during the weekday morning and afternoon school dismissal peak hours and LOS E during the weekday afternoon commuter peak hour under unsignalized conditions to LOS C during the weekday morning peak hour, LOS D during the weekday afternoon school dismissal peak hour under signalized conditions. Additionally, the proposed signalization is anticipated to mitigate crashes at the intersection, which presently has a crash rate of 0.64 crashes per million entering vehicles (C/MEV), slightly higher than the Statewide and MassDOT District 5 average of 0.57 C/MEV for unsignalized intersections. Based on the analyses presented, signalization mitigates project generated impacts to the greatest extent feasible and satisfies the MassDOT Traffic Impact Assessment Guidelines.

#### Braley Road at Route 140 Ramps

As indicated in the Traffic Operations Analysis section above, the addition of project generated trips at the intersections of Braley Road at the Route 140 Northbound and Southbound Ramps increases average vehicle delay and v/c ratios on the STOP-controlled ramp movements, which already operate at LOS F under existing conditions. 95<sup>th</sup> percentile queues on the ramps are projected to increase by a maximum of 72 feet (approximately two packer trucks or one transfer trailer) on the Route 140 northbound ramp, and a maximum of 3 feet on the Route 140 southbound ramp with the addition of project generated trips. As the incremental impact on the Route 140 ramps due to the proposed project is minimal and the installation of traffic signals at the intersections of Braley Road with the Route 140 ramps would adversely impact currently uncontrolled traffic on the eastbound and westbound Braley Road approaches, there is no feasible mitigation to reduce project generated impacts at the Route 140 ramp intersections.

### **Transportation Demand Management**

A Transportation Demand management (TDM) plan is proposed to further mitigate the project's traffic impacts to the surrounding roadway network. These measures are anticipated to reduce single occupancy vehicle (SOV) trips among employees, and to encourage the use of alternative modes of transportation to the site, the project proponent is proposing to apply the following TDM measures:

- Providing opportunities for employees to participate in transit subsidy or reimbursement programs.
- Informing employees of nearby transit stops and bicycle and pedestrian amenities.
- Coordinate with SRTA to consider revising existing transit service to better service the project site.
- Implementing a carpool system among employees.
- Direct deposit offered to employees.
- Providing preferential parking for carpools and vanpools.
- Providing incentives to encourage bicycle ridership to the site, such as bike racks and other storage facilities on site.
- Subject to request and subsequent approval by the City of New Bedford and New Bedford Business Park, providing striped bicycle lanes along Duchaine Boulevard and shared bicycle markings along Theodore Rice Boulevard to provide connectivity to the existing bicycle amenities along Braley Road.
# SITE SUITABILITY – TRAFFIC AND ACCESS TO THE SITE (310 CMR 16.40(4)(b))

MassDEP Site Suitability criteria for propose or expanded solid waste facilities are detailed in Title 310 of the Code of Massachusetts Regulations (310 CMR), Section 16.40. Relative to Traffic and Access to the Site, 310 CMR 16.40(4)(b) states "No site shall be determined to be suitable or be assigned as a solid waste management facility where traffic impacts from the facility operation would constitute a danger to the public health, safety, or the environment taking into consideration the following factors:

- 1. traffic congestion;
- 2. pedestrian and vehicular safety;
- 3. road configurations;
- 4. alternate routes; and
- 5. vehicle emissions.

Based on the analyses presented in this report, it is McMahon's opinion that the proposed facility does not constitute a danger to the public health, safety, or the environment.

## Traffic Congestion

As discussed in this report, the addition of project generated trips to the study area road network would add minimal additional delay as detailed in Table 10. Queues along study area roadway approaches are estimated to increase a maximum of 55 feet, or approximately the length of two packer trucks or one transfer trailer, during peak hours. To mitigate congestion at the all-way STOP sign controlled intersection of Braley Road with Phillips Road and Theodore Rice Boulevard, which exists under 2021 Existing and 2028 No-Build conditions without the facility expansion, SCR proposed to install a fully actuated traffic signal which would improve overall intersection operations from LOS E/F during weekday peak periods to LOS C/D as detailed in Table 12. To further mitigate peak hour roadway impacts, SCR proposes to restrict the departure of trucks transporting outbound material in accordance with MassDOT's August 22, 2022 SFEIR comment letter.

# Pedestrian and Vehicular Safety

As noted by MassDOT in its comment letter to the EENF, included in Appendix H of this report, "The additional traffic volumes associated with the project is not expected to significantly impact safety." In addition, the study area intersection of Braley Road at Phillips Road/Theodore Rice Boulevard presently has a crash rate of 0.64 crashes per million entering vehicles (C/MEV), slightly higher than the Statewide and MassDOT District 5 average of 0.57 C/MEV for unsignalized intersections. Signalization of this intersection under the proposed mitigation is anticipated to reduce crashes and would provide signalized pedestrian accommodations at the intersection.

# Road Configurations

The SCR facility is located within the New Bedford Business Park. Sight distance at the intersection of the site driveway with Duchaine Boulevard is unobstructed, and the Business Park internal roadways, including Duchaine Boulevard and Theodore Rice Boulevard, are designed to

accommodate heavy truck traffic. All truck trips to and from the SCR facility will be restricted to the assigned truck route between the New Bedford Business Park and Route 140 via Braley Road.

# Alternate Routes

All truck traffic traveling to and from the site will utilize Route 140 to Braley Road, Theodore Rice Boulevard, and Duchaine Boulevard. SCR will prohibit all trucks delivering solid waste or removing solid waste from using Phillips Road. The prohibition on trucks from using Phillips Road will be included in all contracts with customers of the facility. The contracts will include financial penalties if trucks utilize Phillips Road, including a ban from using the facility for repeat offenders. In addition, to deter existing truck traffic from Phillips Road south of Braley Road, SCR is amenable to allocating up to \$5,000 toward a Heavy Commercial Vehicle Exclusion (HCVE) study for Phillips Road from Route 140 to Braley Road should the City of New Bedford choose to pursue a HCVE through MassDOT.

# Vehicle Emissions

An Environmental Justice (EJ) Analysis and Greenhouse Gas (GHG) Analysis were prepared separately by Epsilon Associates and were submitted as Attachments 10 and 11, respectively, of the Site Suitability Application. The EJ Analysis stated, "Because the proposed facility will serve existing needs for material handling at a location that is closer to the sources of the materials, the project avoids transportation-related impacts currently associated with sending the materials farther by truck...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.'"

As previously noted, the majority of outbound material will be transported by rail. Based on the GHG analysis, transport via rail results in an approximately 60 percent reduction in greenhouse gas emissions compared with on-road long haul trucks, as shown in Table 13 below.

	MSW/B	liosolids	Gl	ass
	Truck	Rail	Truck	Rail
GHG (lb/day)	154,426	63,247	19,289	7,441
GHG (tpy)	28,183	11,543	3,520	1,358
Difference (tpy)	( <b>19</b> 6)	-16,640	-	-2,162
Difference (%)	15 <b>7</b> 5	-59%	-	-61%

# Table 13: GHG Comparison of Rail Haul vs. On-Road Haul

Source: Massachusetts Environmental Policy Act Greenhouse Gas Analysis, Parallel Products of New England, Epsilon Associates, September 20, 2019.

# CONCLUSION AND RECOMMENDATIONS

Phase 2 of the proposed project consists of expanding the existing SCR facility at 100 Duchaine Boulevard to accommodate a receiving capacity of approximately 1,500 tons per day (tpd) of MSW and C&D. The site is currently utilizing the existing buildings on the site to process plastic, aluminum, and recyclable glass as part of Phase 1 of the project. The site is proposed to be accessed via the existing site driveway on Duchaine Boulevard, which leads to an internal one-way loop roadway surrounding the proposed facility.

The estimated trip generation for Phase 2 incorporated several assumptions to present a conservative analysis, including no reduction in trips for backhauls or outbound material being transported by rail. Based on these assumptions, Phase 2 of the proposed project is expected to generate a total of 43 vehicle trips (9 entering and 34 exiting) during the weekday morning peak hour, 43 vehicle trips (9 entering and 34 exiting) during the weekday afternoon school dismissal peak hour, and 18 vehicle trips (9 entering and 9 exiting) during the weekday afternoon commuter peak hour. Over the course of an average weekday, Phase 2 of the proposed project is estimated to result in up to 410 new daily one-way vehicle trips (205 entering and 205 exiting), including 260 new one-way truck trips (130 entering and 130 exiting) and 150 new one-way employee trips (75 entering, 75 exiting) during a typical weekday. When added to 90 daily one-way truck trips generated by existing operations and up to 18 daily one-way truck trips associated with expanded glass recycling operations previously approved under Phase 1, the expanded facility is estimated to generate a maximum of up to 368 one-way daily truck trips. Per MassDEP, the maximum daily **truck trip** generation of the facility will not exceed 368 one-way trips, which SCR is amenable to having as a condition of the Site Assignment for the expanded facility.

Based on the capacity analysis results, the approaches under stop control at the Route 140 off-ramps onto Braley Road and at the intersection of Braley Road at Phillips Road/Theodore Rice Boulevard operate over capacity and with high delays under the 2021 Base conditions. These movements carry a majority of the traffic accessing the industrial park on Duchaine Boulevard during the peak hours. The proposed project would result in minor increases in delay on these over-capacity movements within the study area.

Based on the MUTCD traffic signal warrant analysis, the installation of a traffic signal at the intersection of Braley Road at Phillips Road/Theodore Rice Boulevard is warranted under 2021 Existing traffic volumes independent of the project, as a result of existing development in the area. Subject to approval by the City of New Bedford, PPNE proposes to construct a fully actuated traffic signal at the intersection of Braley Road at Phillips Road/Theodore Rice Boulevard to mitigate congestion experienced under existing conditions. With the installation of a traffic signal, overall intersection operations are projected to improve from LOS F to LOS C during the weekday morning peak hour, from LOS F to LOS D during the weekday afternoon school dismissal peak hour, and from LOS E to LOS C during the weekday afternoon commuter peak hour. In addition, PPNE will consider Transportation Demand Management (TDM) measures and will allocate up to \$5,000 toward a Heavy Commercial Vehicle Exclusion study for Phillips Road from Route 140 to Braley Road should the City of New Bedford choose to pursue a HCVE through MassDOT.

Based on the analyses presented, the proposed mitigation measures mitigate project generated impacts to the greatest extent feasible and satisfies the MassDOT Traffic Impact Assessment Guidelines. Additionally, it is our opinion that the traffic impacts of the proposed development of this solid waste facility located at 100 Duchaine Boulevard 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).

# APPENDIX A

Manual Turning Movement Count Data



Michael Pompili 693\_010\_MM Location 1 New Bedford, MA Braley Road Route 140 NB On/Off Ramps 4/10/2021 Saturday Mostly Sunny, 65°F



										~ ~ ~ ~						
	Deute		h a	D	David	PASSEN	IGER CAL	RS & HEA	AVY VEHI	CLES CC	MBINED			Dealer	Deed	
	Route	e 140 North	bound Off I	Ramp	Route	e 140 Nortr	bound On i	Ramp		Braley	Road			Braiey	Road	
Start Time	LI-Turn	Left	Thru	Right	LI-Turn	Left	Thru	Right	LI-Turn	Left	Thru	Right	LI-Turn	Left	Thru	Right
6:00 AM	0	8	0	q	0	0	0	0	0	4	q	0	0	0	25	q
6:15 AM	0	18	0	8	0	0	0	0	0	5	10	0	0	0	34	7
6:30 AM	0	27	0	17	0	0	0	0	0	9	10	0	0	0	36	10
6:45 AM	0	26	0 0	29	0	0	0	0	0	2	12	0 0	0	0	50	5
7:00 AM	0	18	0	28	0	0	0	0	0	3	18	0	0	0	44	10
7:15 AM	0	16	0	26	0	0	0	0	0	6	17	0	0	0	51	10
7:30 AM	0	18	0	25	0	0	0	0	0	6	22	0	0	0	75	11
7:45 AM	0	17	0	20	0	0	0	0	0	9	15	0	0	0	74	6
8:00 AM	0	21	0	30	0	0	0	0	0	13	22	0	0	0	78	4
8:15 AM	0	10	0	37	0	0	0	0	0	9	29	0	0	0	75	13
8:30 AM	0	13	0	35	0	0	0	0	0	13	22	0	0	0	92	10
8:45 AM	0	25	0	37	0	0	0	0	0	11	20	0	0	0	87	8
9:00 AM	0	18	0	32	0	0	0	0	0	14	24	0	0	0	84	9
9:15 AM	0	15	0	42	0	0	0	0	0	13	28	0	0	0	94	15
9:30 AM	0	18	0	56	0	0	0	0	0	7	29	0	0	0	88	10
9:45 AM	0	35	0	42	0	0	0	0	0	7	36	0	0	0	88	12
10:00 AM	0	26	0	58	0	0	0	0	0	17	43	0	0	0	123	11
10:15 AM	0	32	1	59	0	0	0	0	0	10	40	0	0	0	101	9
10:30 AM	0	48	0	60	0	0	0	0	0	10	37	0	0	0	99	16
10:45 AM	0	43	0	68	0	0	0	0	0	10	35	0	0	0	89	6
11:00 AM	0	24	0	60	0	0	0	0	0	18	44	0	0	0	80	13
11:15 AM	0	28	0	77	0	0	0	0	0	9	42	0	0	0	92	8
11:30 AM	0	42	0	76	0	0	0	0	0	10	37	0	0	0	77	14
11:45 AM	0	33	0	67	0	0	0	0	0	8	46	0	0	0	67	8
12:00 PM	0	25	0	66	0	0	0	0	0	8	56	0	0	0	91	9
12:15 PM	0	26	0	78	0	0	0	0	0	5	29	0	0	0	87	6
12:30 PM	0	20	0	85	0	0	0	0	0	11	38	0	0	0	70	13
12:45 PM	0	38	0	59	0	0	0	0	0	11	35	0	0	0	66	16
1:00 PM	0	25	0	60	0	0	0	0	0	5	39	0	0	0	88	10
1:15 PM	0	29	0	72	0	0	0	0	0	/	32	0	0	0	79	10
1:30 PM	0	35	0	81	0	0	0	0	0	3	41	0	0	0	65	/
1:45 PM	0	23	0	80	0	0	0	0	0	10	34	0	0	0	71	9
2:00 PIVI	0	20	0	74 97	0	0	0	0	0	0	40	0	0	0	70	10
2:10 FW	0	22	0	61	0	0	0	0	0	6	23	0	0	0	95	0
2:30 F M	0	30	0	77	0	0	0	0	0	5	30	0	0	0	61	7
3:00 PM	0	31	Ő	70	0	0	0	0	0	8	35	0	0	0	59	13
3:15 PM	0	25	Ő	75	0	0	0	0	0	10	35	0	0	0	59	11
3:30 PM	Ő	22	Ő	64	0	0	0	0	0	6	39	0	0	0	88	9
3:45 PM	õ	28	Ő	60	0	Ő	0	õ	õ	7	42	Ő	õ	0	61	5
4:00 PM	0	33	0	59	0	0	0	0	0	4	36	0	0	0	50	10
4:15 PM	0	24	0	74	0	0	0	0	0	5	32	0	0	0	50	8
4:30 PM	0	19	1	62	0	0	0	0	0	3	28	0	0	0	51	11
4:45 PM	0	17	0	50	0	0	0	0	0	6	40	0	0	0	78	6
5:00 PM	0	19	0	81	0	0	0	0	0	3	33	0	0	0	52	10
5:15 PM	0	26	0	58	0	0	0	0	0	2	39	0	0	0	54	8
5:30 PM	0	24	0	56	0	0	0	0	0	9	26	0	0	0	69	6
5:45 PM	0	15	0	66	0	0	0	0	0	2	30	0	0	0	74	10
6:00 PM	0	20	0	41	0	0	0	0	0	3	27	0	0	0	45	18
6:15 PM	0	34	0	62	0	0	0	0	0	4	39	0	0	0	44	23
6:30 PM	0	25	0	61	0	0	0	0	0	5	32	0	0	0	39	4
6:45 PM	0	18	0	72	0	0	0	0	0	5	27	0	0	0	29	6

AM PEAK HOUR 9:00 AM	Route	e 140 North North	bound Off I	Ramp	Route	e 140 North South	bound On F	Ramp		Braley Easth	Road			Braley West	/ Road	
to	U-Turn	U-Turn Left Thru Righ				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
10:00 AM	0	86	0	172	0	0	0	0	0	41	117	0	0	0	354	46
PHF		0.	84			0.	00			0.	92			0.	92	
HV %	0.0%	3.5%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	7.3%	0.9%	0.0%	0.0%	0.0%	1.1%	0.0%

MID PEAK HOUR	Route	e 140 North	bound Off I	Ramp	Route	e 140 North	bound On I	Ramp		Braley	Road			Braley	Road	
10:00 AM		North	bound			South	bound			Easth	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:00 AM	0	1/0	1	245	0	0	0	•	0	47	455	•	•	0	44.0	42
11.00 AW	U	143		24J	U	0	U	U	U	4/	155	U	U	U	412	42
PHF	U	0.	89	24J	Ū	0.	00	U	0	47	84	U	U	0.	41 <u>2</u> 85	42
PHF HV %	0.0%	2.7%	89 0.0%	1.2%	0.0%	0.0%	00 0.0%	0.0%	0.0%	47 0. 6.4%	135 84 1.3%	0.0%	0.0%	0.0%	412 85 1.0%	4.8%
PHF HV %	0.0%	0. 2.7%	89 0.0%	1.2%	0.0%	0.0%	00 0.0%	0.0%	0.0%	47 0. 6.4%	135 84 1.3%	0.0%	0.0%	0.0%	412 85 1.0%	42

HV %	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	1.8%	0.0%
PHF		0.	90			0.	00			0.	91			0.	86	
3:00 PM	0	117	0	299	0	0	0	0	0	29	152	0	0	0	280	41
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
2:00 PM		North	bound			South	bound			Eastb	ound			West	ound	
PM PEAK HOUR	Route	e 140 North	bound Off F	Ramp	Rout	e 140 North	bound On F	Ramp		Braley	Road			Braley	Road	

Michael Pompili 693\_010\_MM Location 1 New Bedford, MA Braley Road Route 140 NB On/Off Ramps 4/10/2021 Saturday Mostly Sunny, 65°F



# HEAVY VEHICLES Ramo Braley Road Braley Road

	Rout	e 140 North	bound Off I	Ramp	Route	e 140 North	bound On F	Ramp	ENICLES	Braley	Road			Braley	Road	
		North	bound	51.1.1		South	bound			East	bound			West	bound	
Start Time	U-Turn	Left	Ihru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Ihru	Right
6:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0
6.15 AIVI	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0
6:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	2	0	2	0	0	0	0	0	0	2	0	0	0	0	0
7:30 AM	0	1	0	1	0	0	0	0	0	2	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
8:00 AM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0
8:15 AM	0	1	0	0	0	0	0	0	0	2	1	0	0	0	1	0
8:30 AM	0	3	0	2	0	0	0	0	0	0	1	0	0	0	1	1
8:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0
9:00 AM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0
9:15 AM	0	0	0	2	0	0	0	0	0	1	1	0	0	0	2	0
9:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0
10:00 AM	0	0	0	1	0	0	0	0	0	1	1	0	0	0	2	0
10:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10:30 AM	0	2	0	1	0	0	0	0	0	1	0	0	0	0	0	0
10:45 AM	0	1	0	1	0	0	0	0	0	1	1	0	0	0	2	0
11:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0
11:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
11:45 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
12:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0
12:30 PM	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
12.45 PIVI	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0
1:15 PM	0	1	0	0	0	0	0	0	0	1	1	0	0	0	2	1
1:30 PM	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	0
2:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
2:45 PM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0
3:00 PM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	2	0
3:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
3:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
4:30 PM	0	1	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	2	0
5:00 PM	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
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
5:45 PIVI 6:00 PM	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	1	0
6:30 PM	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	1
0.101101	0	0	U U		0	0	0	0			U U	U U	0	0	U	
AM PEAK HOUR	Rout	e 140 North	bound Off I	Ramp	Route	e 140 North	bound On F	Ramp		Braley	/ Road			Braley	/ Road	
8:30 AM		North	bound	-		South	bound			East	pound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
9:30 AM	0	6	0	5	0	0	0	0	0	2	2	0	0	0	6	1
PHF	<u> </u>	0.	.55			0.	00			0.	50			0.	88	

MID PEAK HOUR	Rout	e 140 North	bound Off I	Ramp	Route	e 140 North	bound On I	Ramp		Braley	Road			Braley	/ Road	
10:00 AM		North	bound			South	bound			East	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:00 AM	0	4	0	3	0	0	0	0	0	3	2	0	0	0	4	2
PHF		0.	.58			0.	00			0.	63			0.	75	
PM PEAK HOUR	Rout	e 140 North	bound Off I	Ramp	Route	e 140 North	bound On F	Ramp		Bralev	Road			Bralev	/ Road	

	PM PEAK HOUR	Rout	e 140 North	nbound Off	Ramp	Route	e 140 North	ibound On F	Ramp		Braley	/ Road			Braley	Road	
	2:30 PM		North	bound			South	bound			Eastb	bound			West	bound	
	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	3:30 PM	0	6	0	0	0	0	0	0	0	0	2	0	0	0	5	1
Ĩ	PHF		0.	.75			0.	00			0.	50			0.	75	

Michael Pompili 693\_010\_MM Location 1 New Bedford, MA Braley Road Route 140 NB On/Off Ramps 4/10/2021 Saturday Mostly Sunny, 65°F



							PEDI	STRIAN	S&BICY	CLES						
	Rout	e 140 North	bound Off I	Ramp	Route	e 140 North	bound On I	Ramp		Braley	/ Road			Braley	/ Road	
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	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
6:30 AM	0	0	0	1	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
7:00 AM	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
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AIVI 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0	0
8:30 AM	0	Ő	Ő	0	0	0	0	0	0	2	Ő	Ő	ů 0	0	Ő	Ő
8:45 AM	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	1	0	0	0	0	0	0
9:15 AM	0	0	0	1	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
9:45 AM	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
10:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	1	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
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0
12:10 PM	0	0	0	0	0	0	0	9	0	0	0	0	0	1	0	0
12:45 PM	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	1	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
1:30 PM	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
2:00 PM	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
2:30 PM 2:45 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0
3:00 PM	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
3:30 PM	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
4:00 PM	0	0	0	1	0	0	0	2	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
4.30 PIVI	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
5:15 PM	Ő	0	Ő	0	0	0	0	0	0	Ŭ Ŭ	Ő	Ő	0	0	0	0
5:30 PM	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
6:00 PM	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
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:45 PIVI	U	U	U	U	U	U	U	U	U	U	U	U	U	0	U	U
AM PEAK HOUR	Rout	e 140 North	bound Off I	Ramp	Rout	e 140 North	bound On I	Ramp		Braley	/ Road			Braley	Road	
9:00 AM	l oft	North	DOUND Right	PED	Loft	South	Right	PED	l oft	East	Right	PED	Loft	West	Right	PED
to 10:00 AM		niru 0	r ignt	1	O	niru 0	Right 0	0	Lent 0	1	r ignt		Leit	niru 0	Right	0 PED
10.00 AW									0	<u> </u>		U	U			U
MID PEAK HOUR	Rout	e 140 North	bound Off I	катр	Rout	e 140 North	bound On I	≺amp		Braley	/ Koad			Braley	/ Koad	
10:00 AM	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	⊑astt Thru	Right	PED	Left	Thru	Right	PED
11:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0
11.001.001	Ŭ	. ~	. v	. ~	, v	Ň	Ň	-	, v	. ~			Ň		Ň	Ŭ
PM PEAK HOUR 2:00 PM	Rout	e 140 North North	bound Off I bound	Ramp	Rout	e 140 North South	ibound On l bound	Ramp		Braley Eastt	/ Road			Braley West	/ Road bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
3:00 PM	0	0	0	2	0	0	0	1	0	0	0	0	0	2	0	0

 Image: text of the second se

#### Michael Pompili 693\_010\_MM Location 1 New Bedford, MA Braley Road Route 140 NB On/Off Ramps 4/13/2021 Tuesday Clouds & Sun, 60°F



				-		PASSEN	IGER CA	RS & HEA	AVY VEHI	CLES CC	MBINED					
	Route	e 140 North	bound Off	Ramp	Rout	e 140 North	bound On I	Ramp		Braley	Road			Braley	Road	
Start Time	LI-Turn	Left	Thru	Right	LI-Turn	Left	Thru	Right	LI-Turn	Left	Thru	Right	LI-Turn	Left	Thru	Right
6:00 AM	0	38	0	12	0-1011	0	0	0	0-1011	11	q	n ngin	0-1411	0	49	17
6:15 AM	0	57	0	29	0	0	0	0	0	8	20	0	0	0	63	16
6:30 AM	0	79	0	34	0	0	0	0	0	20	23	0	0	0	124	19
6:45 AM	0	88	Ő	45	0 0	0	0	0	0	15	16	Ő	0	0	139	10
7:00 AM	0	59	0	29	0	0	0	0	0	26	35	0	0	0	138	21
7:15 AM	0	61	0	53	0	0	0	0	0	17	18	0	0	0	151	19
7:30 AM	0	74	0	56	0	0	0	0	0	11	34	0	0	0	131	15
7:45 AM	0	80	0	64	0	0	0	0	0	11	41	0	0	0	138	17
8:00 AM	0	58	0	53	0	0	0	0	0	15	44	0	0	0	95	18
8:15 AM	0	64	0	69	0	0	0	0	0	18	40	0	0	0	102	8
8:30 AM	0	50	0	99	0	0	0	0	0	13	52	0	0	0	141	10
8:45 AM	0	53	0	58	0	0	0	0	0	6	28	0	0	0	167	18
9:00 AM	0	57	0	41	0	0	0	0	0	19	35	0	0	0	116	14
9:15 AM	0	33	0	49	0	0	0	0	0	14	35	0	0	0	83	16
9:30 AM	0	39	0	33	0	0	0	0	0	11	26	0	0	0	89	8
9:45 AM	0	38	0	37	0	0	0	0	0	11	32	0	0	0	83	10
10:00 AM	0	36	0	41	0	0	0	0	0	13	16	0	0	0	68	10
10:15 AM	0	44	0	29	0	0	0	0	0	17	24	0	0	0	66	6
10:30 AM	0	35	0	43	0	0	0	0	0	11	28	0	0	0	68	9
10:45 AM	0	41	0	47	0	0	0	0	0	12	29	0	0	0	69	9
11:00 AM	0	33	1	42	0	0	0	0	0	16	30	0	0	0	59	8
11:15 AM	0	44	0	54	0	0	0	0	0	11	13	0	0	0	65	7
11:30 AM	0	40	0	50	0	0	0	0	0	10	29	0	0	0	79	4
11:45 AM	0	60	0	50	0	0	0	0	0	10	25	0	0	0	71	4
12:00 PM	0	43	0	49	0	0	0	0	0	19	03	0	0	0	01	12
12.15 PIVI	0	20	0	44 52	0	0	0	0	0	10	29	0	0	0	91 79	7
12:30 FW	0	50	0	57	0	0	0	0	0	11	27	0	0	0	70	6
12.45 FM	0	47	0	41	0	0	0	0	0	10	41	0	0	0	70	6
1:15 PM	0	42	1	43	0	0	0	0	0	14	24	0	0	0	85	8
1:30 PM	0	56	0	52	0	0	0	0	0	10	35	0	0	0	84	10
1:45 PM	0	56	Ő	51	0	0	0	0	0	18	18	Ő	0	0	69	6
2:00 PM	0	52	0	69	0	0	0	0	0	22	39	0	0	0	79	10
2:15 PM	0	74	0	81	0	0	0	0	0	16	45	0	0	0	75	7
2:30 PM	0	83	0	94	0	0	0	0	0	21	42	0	0	0	114	11
2:45 PM	0	75	1	79	0	0	0	0	0	20	34	0	0	0	165	17
3:00 PM	0	51	0	83	0	0	0	0	0	26	74	0	0	0	117	8
3:15 PM	0	57	0	88	0	0	0	0	0	13	59	0	0	0	123	15
3:30 PM	0	47	0	78	0	0	0	0	0	27	57	0	0	0	113	15
3:45 PM	0	62	0	77	0	0	0	0	0	21	50	0	0	0	104	11
4:00 PM	0	58	0	93	0	0	0	0	0	29	69	0	0	0	113	10
4:15 PM	0	47	0	96	0	0	0	0	0	19	65	0	0	0	112	10
4:30 PM	0	40	0	95	0	0	0	0	0	29	54	0	0	0	96	13
4:45 PM	0	29	0	94	0	0	0	0	0	22	48	0	0	0	93	9
5:00 PM	0	59	0	87	0	0	0	0	0	36	45	0	0	0	98	8
5:15 PM	0	29	0	89	0	0	0	0	0	20	47	0	0	0	78	4
5:30 PM	0	40	0	74	0	0	0	0	0	11	45	0	0	0	67	6
5:45 PM	U	34	0	66	0	0	0	0	0	10	35	0	0	0	59	10
6:00 PM	U	32	0	60	0	0	0	0	0	12	41	0	0	0	61	5
6:15 PIVI	0	20	0	50	0	0	0	0	0	12	33	0	0	0	60 54	4
6:45 PM	0	∠ŏ 28	0	00	0	0	0	0	0	5	20	0	0	0	38	9
0.40 F W	U	20	v	04	U	U	U	U	U	5	10	v	U	U	50	4

AM PEAK HOUR	Rout	e 140 North	bound Off I	Ramp	Rout	e 140 North	bound On F	Ramp		Braley	Road			Braley	/ Road	
7:45 AM		North	bound			South	bound			Eastb	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:45 AM	0	252	0	285	0	0	0	0	0	57	177	0	0	0	476	53
PHF		0.	90			0.	00			0.	90			0.	85	
HV %	0.0%	8.3%	0.0%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	15.8%	5.1%	0.0%	0.0%	0.0%	5.3%	1.9%

MID PEAK HOUR	Route	e 140 North	bound Off I	Ramp	Rout	e 140 North	bound On I	Ramp		Braley	Road			Braley	Road	
12:00 PM		North	bound			South	bound			Eastb	ound			West	bound	
to	U-Turn	U-Turn Left Thru Righ				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
1:00 PM	0	183	0	203	0	0	0	0	0	51	162	0	0	0	310	38
PHF		0.	84			0.	00			0.	65			0.	84	
HV %	0.0%	8.2%	0.0%	4.4%	0.0%	0.0%	0.0%	0.0%	0.0%	21.6%	4.9%	0.0%	0.0%	0.0%	2.6%	10.5%

PM PEAK HOUR	Rout	e 140 North	bound Off F	Ramp	Rout	e 140 North	bound On F	Ramp		Braley	Road			Braley	Road	
2:30 PM		North	bound	-		South	bound			East	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	U-Turn Left Thru Right I				Left	Thru	Right	U-Turn	Left	Thru	Right
3:30 PM	0	266	1	344	0	0 0 0 0 0				80	209	0	0	0	519	51
PHF		0.	86			0.	00			0.	72			0.	78	
						0.00					1.00/					

#### 4/18/2021, 6:21 PM, 693\_TMC\_1 (April 13)

#### Michael Pompili 693\_010\_MM Location 1 New Bedford, MA Braley Road Route 140 NB On/Off Ramps 4/13/2021 Tuesday Clouds & Sun, 60°F

Route 140 Northbound Off Ramp



					Dootonnounopa
HEAVY V	EHICLES				
Route 140 Northbound On Ramp		Braley	Road		Braley Road
Southbound		Eastb	ound		Westbound

		North	bound			South	bound			East	bound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	1
6:15 AM	0	3	0	1	0	0	0	0	0	1	0	0	0	0	0	1
6:30 AM	0	2	0	2	0	0	0	0	0	0	2	0	0	0	4	0
6:45 AM	0	4	0	2	0	0	0	0	0	3	2	0	0	0	0	0
7:00 AM	0	5	0	2	0	0	0	0	0	4	0	0	0	0	0	0
7:15 AM	0	8	0	6	0	0	0	0	0	3	2	0	0	0	1	1
7:30 AM	0	7	0	1	0	0	0	0	0	2	3	0	0	0	1	0
7:45 AM	0	3	0	0	0	0	0	0	0	1	1	0	0	0	5	0
8:00 AM	0	4	0	3	0	0	0	0	0	3	4	0	0	0	3	0
8:15 AM	0	7	0	4	0	0	0	0	0	3	3	0	0	0	3	1
8:30 AM	0	7	0	7	0	0	0	0	0	2	1	0	0	0	14	0
8:45 AM	0	8	0	1	0	0	0	0	0	4	2	0	0	0	5	0
9:00 AM	0	10	0	3	0	0	0	0	0	9	1	0	0	0	3	0
9:15 AM	0	6	0	3	0	0	0	0	0	3	0	0	0	0	7	2
9:30 AM	0	10	0	4	0	0	0	0	0	4	2	0	0	0	2	0
9:45 AM	0	4	0	2	0	0	0	0	0	4	3	0	0	0	3	1
10:00 AM	0	8	0	4	0	0	0	0	0	6	0	0	0	0	2	0
10:15 AM	0	6	0	0	0	0	0	0	0	2	1	0	0	0	3	1
10:30 AM	0	2	0	2	0	0	0	0	0	0	1	0	0	0	1	1
10:45 AM	0	5	0	2	0	0	0	0	0	2	0	0	0	0	2	1
11:00 AM	0	6	0	0	0	0	0	0	0	3	2	0	0	0	1	1
11:15 AM	0	13	0	2	0	0	0	0	0	1	0	0	0	0	2	0
11:30 AM	0	6	0	0	0	0	0	0	0	4	0	0	0	0	3	1
11:45 AM	0	/ 	0	1	0	0	0	0	0	3	1	0	0	0	1	0
12:00 PM	0	5	0	2	0	0	0	0	0	1	5	0	0	0	1	1
12:15 PM	0	3	0	0	0	0	0	0	0	3	0	0	0	0	1	2
12.30 PIVI	0	5	0	4	0	0	0	0	0	4	2	0	0	0	Z	1
12.45 FW	0	2	0	2	0	0	0	0	0	2	2	0	0	0	4	1
1:15 PM	0	4	1	1	0	0	0	0	0	2	0	0	0	0	2	1
1:30 PM	0	7	0	0	0	0	0	0	0	3	0	0	0	0	0	0
1:45 PM	0	6	0	2	0	0	0	0	0	3	0	0	0	0	3	0
2:00 PM	0	3	0	2	0	0	0	0	0	2	1	0	0	0	1	1
2:15 PM	0	5	0	7	0	0	0	0	0	0	2	0	0	0	2	0
2:30 PM	0	3	0	2	0	0	0	0	0	3	3	0	0	0	8	0
2:45 PM	0	10	0	3	0	0	0	0	0	1	1	0	0	0	2	0
3:00 PM	0	9	0	0	0	0	0	0	0	3	3	0	0	0	0	0
3:15 PM	0	7	0	3	0	0	0	0	0	0	3	0	0	0	7	1
3:30 PM	0	5	0	1	0	0	0	0	0	1	0	0	0	0	2	1
3:45 PM	0	4	0	0	0	0	0	0	0	0	1	0	0	0	3	1
4:00 PM	0	8	0	0	0	0	0	0	0	0	0	0	0	0	6	0
4:15 PM	0	3	0	2	0	0	0	0	0	2	1	0	0	0	0	0
4:30 PM	0	2	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	1	0	0	0	0	5	0
5:00 PM	0	4	0	1	0	0	0	0	0	3	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
5:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0
6:00 PM	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0
6:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
6:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
6:45 PM	U	2	U	1	U	U	U	U	U	U	U	U	U	U	U	U
	_															

AM PEAK HOUR	Route	e 140 North	bound Off	Ramp	Route	e 140 North	bound On I	Ramp		Braley	/ Road			Braley	/ Road	
8:15 AM		North	bound	-		South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
9:15 AM	0	32	0	15	0	0	0	0	0	18	7	0	0	0	25	1
PHF		0.	.84			0.	00			0.	63			0.	46	

1						<b>D</b> (	440 11 11				D. I.I.	<b>D</b>			D	DIAL	
	MID PEAK HOUR	Route	e 140 North	bound Off I	Ramp	Route	e 140 North	ibouna On I	kamp		Braley	Road			Braley	Road	
	11:15 AM		North	bound			South	bound			East	ound			West	bound	
	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	12.15 PM	0	31	0	5	0	0	Ô	0	0	0	6	0	0	0	7	2
	12.131111	•	51	0	5	•	0		0	•	3	0	0	•	U		-
	PHF	v	0.	60	J	Ū	0.	00	U	v	0.	63	U	•	0.	56	
	PHF	Ū	0.	60	3	Ů	<u> </u>	00	Ŭ	Ū	0.	63	Ŭ	Ū	0.	56	2
l	PHF PM PEAK HOUR	Route	0. e 140 North	60 bound Off I	Ramp	Route	<b>0.</b> e 140 North	00 bound On F	Ramp	0	0. Braley	63 / Road	Ū		0. Braley	56 Road	L

PM PEAK HOUK	Roule	3 140 NOTU		капр	Roui	a 140 North		Kamp		Dialey	Roau			Dialey	Roau	
2:30 PM		North	bound			South	bound			Easth	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:30 PM	0	29	0	8	0	0	0	0	0	7	10	0	0	0	17	1
PHF		0.	71			0.	00			0.	71			0.	56	

#### Michael Pompili 693\_010\_MM Location 1 New Bedford, MA Braley Road Route 140 NB On/Off Ramps 4/13/2021 Tuesday Clouds & Sun, 60°F



							PEDI	ESTRIAN	S & BICY	CLES						
	Rout	e 140 North	bound Off	Ramp	Rout	e 140 North	bound On I	Ramp		Braley	Road			Braley	/ Road	
		North	bound			South	bound			East	bound			West	bound	
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	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
6:45 AM	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0
7:00 AM	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	0	1	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
7:45 AM	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
8:15 AM	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	1	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
9:15 AM	0	0	0	0	0	0	0	2	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
9:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
10:30 AM	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
11:15 AM	0	0	0	1	0	0	0	1	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
11:45 AM	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
12:15 PM	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
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
1:15 PM	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
1:45 PM	0	0	0	0	0	Ő	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
2:15 PM	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
2:45 PM	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
3:15 PIVI 3:30 PM	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
4:00 PM	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	1	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
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
5:00 PM	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
5:30 PM	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
6:15 PM	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	1	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-																
AM PEAK HOUR	Rout	e 140 North	bound Off I	Ramp	Rout	e 140 North	bound On I	Ramp		Braley	Road			Braley	Road	
7:45 AM	1.64	North	bound		14	South	bound	DED	-4	East	ound		بلي ا	West	bound	DED
to	Lett	Inru	Right	PED	Lett	Inru	Right	PED	Lett	Inru	Right	PED	Lett	Inru	Right	PED
6:43 AM	U	U	U	U	U	U	0		U	U	U	U	U	0	U	U
MID PEAK HOUR	Rout	e 140 North	hound Off	Ramp	Rout	e 140 North	bound On I	Ramp		Brales	Road			Brales	Road	
12:00 PM		North	bound	h		South	bound	p		Easth	bound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
1:00 PM	0	0	Ō	0	0	0	Ō	0	0	0	Ō	0	0	1	Ō	0
				_												
PM PEAK HOUR	Rout	e 140 North	bound Off I	Ramp	Rout	e 140 North	bound On I	Ramp		Braley	Road			Braley	Road	
2:30 PM	64	North	Dound Diaht	DED	1.04	South	Dound	DED	1.04	East	Dound	DED	l off	West	Dound	DED
10 3-30 PM		nru	right 0		Leit	niru	Right		Leit	nru	Right		Leit	niru	Right	n PED

Michael Pompili 693\_010\_MM Location 2 New Bedford, MA Theodore Rice Blvd & Braley Road Route 140 SB On/Off Ramps 4/10/2021 Saturday Mostly Sunny, 65°F



		-														
						PASSEN	IGER CAI	RS & HEA	AVY VEHI	CLES CC	OMBINED					
	Route	e 140 South	nbound On	Ramp	Route	e 140 South	hbound Off	Ramp		Theodore	Rice Blvd			Braley	/ Road	
		North	bound			South	bound			East	bound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	0	0	0	0	0	0	0	13	12	0	20	13	0
6:15 AM	0	0	0	0	0	7	0	3	0	0	8	5	0	22	30	0
6:30 AM	0	0	0	0	0	2	0	1	0	0	17	16	0	26	37	0
6:45 AM	0	0	0	0	0	6	0	5	0	0	8	16	0	28	48	0
7:00 AM	0	0	0	0	0	2	0	4	0	0	19	39	0	34	28	0
7:15 AM	0	Ő	ő	Ő	0	4	Ő	4	0	0	19	20	Ő	34	33	Ő
7:10 AM	0	0	0	0	0		0	5	0	0	25	20	0	54	20	0
7.45 AM	0	0	0	0	0	6	0	5	0	0	10	17	0	59	33	0
7.45 AIVI 9:00 AM	0	0	0	0	0	7	0	5	0	0	10	17	0	30	53	0
0.00 AIVI	0	0	0	0	0	1	0	0	0	0	20	30	0	40	33	0
8:15 AM	0	0	0	0	0	4	0	3	0	0	34	26	0	52	33	0
8:30 AM	0	0	0	0	0	2	0	5	0	0	33	28	0	64	41	0
8:45 AM	0	0	0	0	0	1	0	5	0	0	30	24	0	70	42	0
9:00 AM	0	0	0	0	0	3	0	5	0	0	35	41	0	5/	45	0
9:15 AM	0	0	0	0	0	5	0	5	0	0	36	29	0	55	54	0
9:30 AM	0	0	0	0	0	5	0	8	0	0	31	27	0	60	46	0
9:45 AM	0	0	0	0	0	12	0	3	0	0	31	37	0	63	60	0
10:00 AM	0	0	0	0	0	7	0	7	0	0	53	44	0	84	65	0
10:15 AM	0	0	0	0	0	7	0	8	0	0	43	42	0	67	66	0
10:30 AM	0	0	0	0	0	6	1	10	0	0	41	27	0	59	88	0
10:45 AM	0	0	0	0	0	7	0	6	0	0	38	28	0	62	70	0
11:00 AM	0	0	0	0	0	7	0	4	0	0	55	96	0	68	36	0
11:15 AM	0	0	0	0	0	7	0	8	0	0	44	48	0	79	41	0
11:30 AM	0	0	0	0	0	11	0	12	0	0	36	35	0	63	56	0
11:45 AM	0	0	0	0	0	9	0	6	0	0	45	42	0	56	44	0
12:00 PM	0	0	0	0	0	10	0	11	0	0	54	51	0	71	45	0
12:15 PM	0	0	0	0	0	6	0	12	0	0	28	32	0	71	42	0
12:30 PM	0	0	0	0	0	7	0	12	0	0	42	32	0	60	30	0
12:45 PM	0	0	0	0	0	7	0	10	0	0	39	29	0	52	52	0
1:00 PM	0	0	0	0	0	11	0	9	0	0	33	32	0	77	36	0
1:15 PM	0	0	0	0	0	15	0	6	0	0	24	32	0	73	35	0
1:30 PM	0	0	0	0	0	16	0	6	0	0	28	46	0	53	47	0
1:45 PM	0	0	0	0	0	5	0	6	0	0	45	18	0	59	35	0
2:00 PM	0	0	0	0	0	9	0	4	0	0	41	27	0	70	34	0
2:15 PM	0	0	0	0	0	7	0	6	0	0	30	35	0	56	20	0
2:30 PM	0	0	0	0	0	12	0	17	0	0	38	20	0	76	41	0
2:45 PM	0	0	0	0	0	14	0	10	0	0	30	23	0	60	40	0
3:00 PM	0	0	0	0	0	9	0	11	0	0	34	38	0	55	35	0
3:15 PM	0	0	0	0	0	8	0	13	0	0	37	24	0	53	31	0
3:30 PM	0	Ő	õ	Ő	0	10	0	9	õ	0	35	22	Ő	78	32	0
3:45 PM	0	0	Ő	0	0	14	0	14	0	0	35	26	0	58	31	0
4:00 PM	0	0	0	0	0	8	0	13	0	0	32	32	0	58	25	0
4:15 PM	0	0	0	0	0	13	0	11	1	0	24	24	0	44	30	0
4:30 PM	0	0	0	0	0	8	0	11	0	0	24	40	0	54	16	0
4:45 DM	0	0	0	0	0	4	0	5	0	0	42	40	0	64	21	0
5:00 PM	0	0	0	0	0	6	0	9	0	0	4Z 30	26	0	50	21	0
5:15 DM	0	0	0	0	0	12	0	5	0	0	20	19	0	52	21	0
5.10 FW	0	0	0	0	0	10	1	7	0	0	23	21	1	50	20	0
5:45 DM	0	0	0	0	0	0	0	0	0	0	24	22	0	59	20	0
5.45 PIVI	0	0	0	0	0	0	0	9	0	0	24	23	0	50	20	0
6:15 PM	0	0	0	0	0	12	0	10	0	0	19	20	0	50	15	0
0.10 PIVI	0	0	0	0	0	12	0	13	0	0	31	10	0	37	21	0
0:30 PIVI	0	0	0	0	0	10	0	ŏ 12	0	0	21	10	0	42	22	0
6:45 PM	U	U	U	U	0	6	0	13	U	U	26	15	0	28	19	0

	AM PEAK HOUR 9:00 AM	Route	e 140 South North	bound On bound	Ramp	Rout	e 140 South South	bound Off I bound	Ramp		Theodore Eastt	Rice Blvd			Braley West	/ Road bound	
	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	10:00 AM	0	0	0	0	0	25	0	21	0	0	133	134	0	235	205	0
Î	PHF		0.	00			0.	77			0.	88			0.	89	
	HV %	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	4.8%	0.0%	0.0%	2.3%	6.0%	0.0%	0.9%	2.4%	0.0%

MID PEAK HOUR	Route	e 140 South	nbound On	Ramp	Route	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	Road	
10:15 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:15 AM	0	0	0	0	0	27	1	28	0	0	177	193	0	256	260	0
PHF	0.00					0.	82			0.	.61			0.	88	
HV %	0.0%	0.0%	0.0%	0.0%	0.82 0.0% 3.7% 0.0% 7. <sup>-</sup>				0.0%	0.0%	1.1%	1.0%	0.0%	0.4%	2.3%	0.0%
-																
PM PEAK HOUR	Route	e 140 South	nbound On	Ramp	Route	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	Road	
2:30 PM		North	bound	-		South	bound	-		East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:30 PM	0	0	0	0	0	43	0	51	0	0	139	105	0	244	147	0

to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:30 PM	0	0	0	0	0	43	0	51	0	0	139	105	0	244	147	0
PHF		0.	00			0.	81			0.	85			0.	84	
	0.00/	0.00/	0.00/	0.00/	0.00/	2 20/	0.00/	0.0%	0.0%	0.0%	0 7%	1 0.0/	0.0%	0.00/	6 1 9/	0.0%
HV %	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0 /0	0.0 /0	0.0 /0	0.7 /0	1.9 /0	0.0 /0	0.070	0.1/0	0.0 /0

Michael Pompili 693\_010\_MM Location 2 New Bedford, MA Theodore Rice Blvd & Braley Road Route 140 SB On/Off Ramps 4/10/2021 Saturday Mostly Sunny, 65°F



								HEAVY V	EHICLES	5						
	Rout	e 140 South North	nbound On	Ramp	Route	e 140 South South	bound Off	Ramp		Theodore Fasth	Rice Blvd			Braley West	/ Road	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0
6:15 AM	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	2	0	0	0	2	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
7:15 AM	0	0	0	0	0	2	0	0	0	0	0	2	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	4	0	0	1	0
7:45 AM	0	0	0	0	0	1	0	2	0	0	0	1	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	1	4	0	1	2	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	3	1	0	1	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	2	0	1	3	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0
9:00 AM	0	0	0	0	0	0	0	1	0	0	1	2	0	2	2	0
9:15 AM	0	0	0	0	0	1	0	0	0	0	1	2	0	0	2	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
9:45 AIVI	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0
10:15 AM	0	0	0	0	0	2	0	1	0	0	0	1	0	0	1	0
10:20 AM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0
10:35 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	1	2	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	0
11:30 AM	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
12:00 PM	0	0	0	0	0	0	Ő	0	0	0	0	0	0	1	1	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
12:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	2	0
1:15 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	1	2	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	2	2	0
2:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
2:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	3	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0
4.30 F M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
6:00 PM	0	0	ñ	0	0	0	0	0	ñ	0	0	0	0	0	0	0
6:15 PM	0	Ő	ŏ	Ő	0	0	Ő	Ő	ŏ	Ő	ŏ	0	0	1	õ	Ő
6:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	Ō	0	Ō	0	0	0	0	0
AM PEAK HOUR	Rout	e 140 South		Ramp	Route	a 140 South	bound Off	Ramp		Theodore	Rice Blvd			Brales	/ Road	

AM PEAK HOUR	Route	e 140 South	nbound On	Ramp	Route	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	/ Road	
7:30 AM		North	bound	-		South	bound	-		East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:30 AM	0	0	0	0	0	1	0	3	0	0	6	10	0	3	4	0
PHF		0.	.00			0.	.33			0.	.67			0.	58	

MID PEAK HOUR	Route	e 140 South	bound On	Ramp	Route	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	/ Road	
10:45 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:45 AM	0	0	0	0	0	1	0	1	0	0	1	6	0	2	10	0
PHF		0.	00			0.	50			0.	58			0.	75	
PM PEAK HOUR	Route	e 140 South	bound On	Ramp	Route	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	/ Road	
2:30 PM		North	bound	-		South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:30 PM	0	0	0	0	0	1	0	0	0	0	1	2	0	2	9	0
PHF		0.	00			0.	25			0.	38			0.	69	

Michael Pompili 693\_010\_MM Location 2 New Bedford, MA Theodore Rice Blvd & Braley Road Route 140 SB On/Off Ramps 4/10/2021 Saturday Mostly Sunny, 65°F



							PEDE	ESTRIAN	S & BICY	CLES						
	Rout	e 140 South North	nbound On F bound	Ramp	Route	e 140 South South	bound Off	Ramp		Theodore Eastb	Rice Blvd			Braley West	Road	
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	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
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	1	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
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AIVI	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
8:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0	Ő	2	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
9:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
9:15 AM	0	0	0	1	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
9:45 AM	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
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
10:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	1	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
11:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	9	0	0	0	0	0	1	0	0
12:45 PM	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	1	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
1:30 PM	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
2:00 PIVI 2:15 PM	0	0	0	0	0	0	0	1	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
2:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0
3:00 PM	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
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	1	0	0	0	2	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
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.45 PIVI 5:00 PM	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
5:30 PM	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
6:00 PM	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
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
					<b>D</b> 4		1			<b>T</b> I	D' DI I			D I.	DIII	
AM PEAK HOUR	Rout	e 140 South	ibound On H	kamp	Rout	e 140 South	bound Off I	катр		i neodore	KICE BIVD			Braley	r Koad	
9.00 AM	Left	Thru	Right	PED	l eft	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
10:00 AM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0
10.0011.01	Ű	, v	, v	·		Ŭ		Ŭ			, v	Ű	Ŭ	<u> </u>	, v	<u> </u>
MID PEAK HOUR	Rout	e 140 South	bound On F	Ramp	Rout	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	Road	
10:15 AM		North	bound			South	bound			Eastb	ound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
11:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0
DI / DE	_			_	-	110.0				-	D			<b>P</b> 1		
PM PEAK HOUR	Rout	e 140 South	bound On F	Ramp	Rout	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	Road	
2:30 PM	l off	North	bound Dight	DED	l off	South	bound Dight	DED	l off	Eastb	Dound	DED	l oft	West	Dound	DED
10 2 20 DM	Leit	inru	Right	PED	Leit	inru	Right	PED	Len	inru	Right	PED	Leit	niru	Right	PED

3:30 PM 0 0 0 0 0 2 NOTE: Peak hour summaries here correspond to peak hours identified for passenger car and heavy vehicles combined.

Michael Pompili 693\_010\_MM Location 2 New Bedford, MA Theodore Rice Blvd & Braley Road Route 140 SB On/Off Ramps 4/13/2021 Tuesday Clouds & Sun, 60°F



			,													
						D40054				~ ~ ~ ~						
				-		PASSEN	IGER CA	RS & HEA	AVY VEHI	CLES CC	MBINED					
	Route	e 140 South	hbound On	Ramp	Route	e 140 South	hbound Off	Ramp		Theodore	Rice Blvd			Braley	Road	
Otant Times	LI Turr	North	bound	Disht	LL Trues	South	bound	Diskt	LI Ture	East	Dound	Diskt	LI Turn	West	bound	Diskt
Start Time	0-Turn	Len	Inru	Right	0-Turn	Len	Thru	Right	0-Tum	Len	Thru 40	Right	0-Turn	Leit	I nru 40	Right
6:00 AM	0	0	0	0	0	2	0	14	0	0	18	22	0	39	48	0
6.15 AIVI	0	0	0	0	0	5	0	13	0	0	20	20	0	50	127	0
6:45 AM	0	0	0	0	0	3	0	22	0	0	30	21	0	80	1.17	0
7:00 AM	0	0	0	0	0	5	0	32	0	0	20	105	0	100	07	0
7:00 AIVI	0	0	0	0	0	0	0	19	0	0	21	F0	0	100	97	0
7.13 AM	0	0	0	0	0	4	0	20	0	0	20	54	0	102	102	0
7:45 AM	0	0	0	0	0	7	0	24	0	0	45	45	0	103	102	0
8:00 AM	0	0	0	0	0	8	0	25	0	0	4J 51	40	0	66	87	0
8:15 AM	0	0	0	0	0	5	0	10	0	0	53	12	0	70	90	0
8:30 AM	0	0	0	0	0	7	0	31	0	0	58	48	0	100	91	0
8:45 AM	0	0	0	0	0	5	0	24	0	0	29	40	0	111	109	0
9:00 AM	0	0	0	0	0	6	0	23	0	0	48	46	0	75	98	0
9:15 AM	0	0	0	0	0	5	0	13	0	0	40	37	0	54	62	0
9:30 AM	0	0	ő	0	0	6	0	15	0	0	31	45	0	56	72	0
9:45 AM	0	0	Ő	0	0	3	0	14	0	0	40	40	0	56	65	0
10:00 AM	Ő	0	Ő	0	0	2	0 0	22	Ő	0	27	36	0	42	62	0
10:15 AM	0	0	0	0	0	2	0	12	0	0	39	40	0	49	61	0
10:30 AM	Ő	0	Ő	0	0	6	0 0	19	Ő	0	33	52	0	43	60	0
10:45 AM	Ő	0	Ő	0	0	4	0	15	Ő	0	37	42	0	45	65	0
11:00 AM	0	0	0	0	0	6	0	15	0	0	40	38	0	36	56	0
11:15 AM	0	0	0	0	0	2	0	12	0	0	22	49	0	40	69	0
11:30 AM	0	0	0	0	0	7	0	14	0	0	32	51	0	51	68	0
11:45 AM	0	0	0	0	0	7	0	11	0	0	28	49	0	39	92	0
12:00 PM	0	0	0	0	0	7	1	13	0	0	75	64	0	49	65	0
12:15 PM	0	0	0	0	0	7	1	18	0	0	38	41	0	53	82	0
12:30 PM	0	0	0	0	0	11	0	13	0	0	37	43	0	53	63	0
12:45 PM	0	0	0	0	0	7	0	18	0	0	31	47	0	43	85	0
1:00 PM	0	0	0	0	0	5	0	11	0	0	46	50	0	49	73	0
1:15 PM	0	0	0	0	0	4	0	10	0	0	34	54	0	53	74	0
1:30 PM	0	0	0	0	0	2	0	15	0	0	43	55	0	64	76	0
1:45 PM	0	0	0	0	0	4	1	18	0	0	32	40	0	44	81	0
2:00 PM	0	0	0	0	0	5	0	17	0	0	56	48	0	57	74	0
2:15 PM	0	0	0	0	0	9	0	19	0	0	52	43	0	47	102	0
2:30 PM	0	0	0	0	0	11	0	22	0	0	52	58	0	66	131	0
2:45 PM	0	0	0	0	0	5	0	18	0	0	49	46	0	97	143	0
3:00 PM	0	0	0	0	0	19	0	27	0	0	81	102	0	88	80	0
3:15 PM	0	0	0	0	0	12	0	23	0	0	60	74	0	93	87	0
3:30 PM	0	0	0	0	0	17	0	18	0	0	67	110	0	77	83	0
3:45 PM	0	0	0	0	0	11	0	23	0	0	60	55	0	67	99	0
4:00 PM	0	0	0	0	0	12	0	29	0	0	86	101	0	80	91	0
4:15 PM	0	0	0	0	0	21	0	18	0	0	63	75	0	86	73	0
4:30 PM	0	0	0	0	0	8	0	19	0	0	75	62	0	59	77	0
4:45 PM	0	0	0	0	0	8	0	26	0	0	62	58	0	68	54	0
5:00 PM	0	0	0	0	0	5	0	14	0	0	76	102	0	71	86	0
5:15 PM	0	0	0	0	0	10	0	10	0	0	57	69	0	47	60	0
5:30 PM	0	0	0	0	0	15	0	16	0	0	41	44	0	43	64	0
5:45 PM	0	0	0	0	0	16	0	14	0	0	29	40	0	42	51	0
6:00 PM	0	0	0	0	0	21	0	13	0	0	32	32	0	43	50	0
6:15 PM	0	0	0	0	0	11	0	13	0	0	34	29	0	43	50	0
6:30 PM	0	0	0	0	0	7	0	13	0	0	29	33	0	36	46	0
6:45 PM	0	0	0	0	0	6	0	11	0	0	15	27	0	33	33	0

AM PEAK HOUR	Route	e 140 South	nbound On	Ramp	Route	e 140 South	bound Off I	Ramp		Theodore	Rice Blvd			Braley	Road	
7:00 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:00 AM	0	0	0	0	0	24	0	103	0	0	169	254	0	433	399	0
PHF		0.	00			0.	77			0.	66			0.	95	
HV %	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	7.8%	0.0%	0.0%	7.7%	9.1%	0.0%	2.1%	5.3%	0.0%

		440.0			<b>D</b> 1	4 40 0 4		<b>D</b>		<b>T</b> 1				D. I.I.	D	
MID PEAK HOUR	Route	e 140 South	ibound On I	катр	Route	e 140 South	ibound Off	катр		Ineodore	RICE BIVD			Braley	Road	
12:00 PM		North	bound			South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
1:00 PM	0	0	0	0	0	32	2	62	0	0	181	195	0	198	295	0
PHF		0.	00			0.	92			0.	68			0.	91	
PHF HV %	0.0%	0. 0.0%	00 0.0%	0.0%	0.0%	0. 3.1%	92 0.0%	21.0%	0.0%	0. 0.0%	68 9.4%	10.8%	0.0%	0. 3.5%	91 5.4%	0.0%
PHF HV %	0.0%	0. 0.0%	00 0.0%	0.0%	0.0%	0. 3.1%	92 0.0%	21.0%	0.0%	0. 0.0%	68 9.4%	10.8%	0.0%	0. 3.5%	91 5.4%	0.0%

L	2:45 PM		North	bound			South	bound			Eastb	ound			West	bound	
L	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
L	3:45 PM	0 0 0 0				0	53	0	86	0	0	257	332	0	355	393	0
	PHF		0.	00			0.1	76			0.	80			0.	78	
	HV %	0.0%	0.0%	0.0%	0.0%	0.0%	9.4%	0.0%	15.1%	0.0%	0.0%	2.7%	5.4%	0.0%	3.7%	7.4%	0.0%

Michael Pompili 693\_010\_MM Location 2 New Bedford, MA Theodore Rice Blvd & Braley Road Route 140 SB On/Off Ramps 4/13/2021 Tuesday Clouds & Sun, 60°F



								HEAVY V	EHICLES	;						
	Route	e 140 South	bound On	Ramp	Route	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	Road	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	1	2	0
6:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0
6:30 AM	0	0	0	0	0	1	0	2	0	0	1	4	0	3	3	0
6:45 AM	0	0	0	0	0	2	0	3	0	0	3	1	0	1	3	0
7:00 AM	0	0	0	0	0	1	0	2	0	0	3	3	0	1	4	0
7:15 AM	0	0	0	0	0	2	0	3	0	0	3	4	0	1	8	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	5	6	0	3	5	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	2	10	0	4	4	0
8:00 AM	0	0	0	0	0	0	0	3	0	0	7	8	0	2	5	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	6	5	0	4	6	0
8:30 AM	0	0	0	0	0	2	0	3	0	0	1	6	0	13	8	0
8:45 AM	0	0	0	0	0	1	0	3	0	0	5	5	0	5	8	0
9:00 AM	0	0	0	0	0	1	0	5	0	0	9	11	0	4	9	0
9:15 AM	0	0	0	0	0	0	0	4	0	0	2	3	0	5	8	0
9:30 AM	0	0	0	0	0	2	0	1	0	0	4	2	0	4	8	0
9:45 AM	0	0	0	0	0	2	0	4	0	0	5	8	0	2	5	0
10:00 AM	0	0	0	0	0	0	0	6	0	0	6	4	0	1	9	0
10:15 AM	0	0	0	0	0	0	0	4	0	0	3	10	0	4	5	0
10:30 AIVI	0	0	0	0	0	0	0	2	0	0	1	9	0	0	Z 7	0
11:00 AM	0	0	0	0	0	2	0	6	0	0	2	0	0	2	5	0
11:15 AM	0	0	0	0	0	0	0	2	0	0	1	9	0	1	1/	0
11:30 AM	0	0	0	0	0	0	0	3	0	0	4	5	0	2	7	0
11:45 AM	0	0	0	0	0	1	0	1	0	0	3	10	0	2	6	0
12:00 PM	0	0	0	0	0	0	Ő	0	0	0	6	3	0	1	5	0
12:15 PM	0	0	0	0	0	0	0	6	0	0	2	5	0	0	4	0
12:30 PM	0	0	0	0	0	0	0	5	0	0	6	5	0	2	5	0
12:45 PM	0	0	0	0	0	1	0	2	0	0	3	8	0	4	2	0
1:00 PM	0	0	0	0	0	0	0	5	0	0	4	4	0	1	6	0
1:15 PM	0	0	0	0	0	0	0	2	0	0	2	7	0	1	5	0
1:30 PM	0	0	0	0	0	0	0	1	0	0	3	4	0	1	6	0
1:45 PM	0	0	0	0	0	0	0	2	0	0	3	3	0	1	8	0
2:00 PM	0	0	0	0	0	0	0	3	0	0	3	5	0	0	4	0
2:15 PM	0	0	0	0	0	1	0	5	0	0	1	5	0	2	5	0
2:30 PM	0	0	0	0	0	0	0	2	0	0	6	4	0	7	4	0
2:45 PM	0	0	0	0	0	0	0	2	0	0	2	3	0	2	10	0
3:00 PM	0	0	0	0	0	4	0	8	0	0	2	2	0	2	/	0
3:15 PIVI 2:20 PM	0	0	0	0	0	1	0	1	0	0	3	8 5	0	2	5	0
3:45 PM	0	0	0	0	0	0	0	1	0	0	1	5 1	0	1	6	0
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	7	0	4	10	0
4:15 PM	0	0	0	0	0	1	0	4	0	0	2	5	0	1	2	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	3	0	1	1	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	1	3	0	4	1	0
5:00 PM	Ō	0	0	0	0	0	0	0	0	0	3	2	0	0	3	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0
6:00 PM	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3	0
6:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0
6:30 PM	0	0	0	0	0	0	0	1	0	0	0	3	0	0	1	0
6:45 PM	0	0	0	0	0	0	0	1	0	0	0	2	0	0	2	0

AM PEAK HOUR	Route	e 140 South	nbound On	Ramp	Route	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	/ Road	
8:15 AM		North	bound	-		South	bound	-		East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
9:15 AM	0	0	0	0	0	4	0	12	0	0	21	27	0	26	31	0
PHF		0.	.00			0.	.67			0.	.60			0.	.68	

MID PEAK HOUR	Route	e 140 South	bound On	Ramp	Route	e 140 South	bound Off	Ramp		Theodore	Rice Blvd			Braley	/ Road	
11:00 AM		North	bound			South	bound			East	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
12:00 PM	0	0	0	0	0	3	0	12	0	0	11	33	0	7	32	0
									•	•			•			-
PHF	•	0.	00	, i		0.	47			0.	85			. 0.	65	-
PHF	•	0.	00	•		0.	47			0.	85		•	. 0.	65	-
PHF PM PEAK HOUR	Route	0. e 140 South	00 bound On	Ramp	Route	0. e 140 South	47	Ramp		0. Theodore	85 Rice Blvd			O. Braley	65 / Road	-

I MILLING HOUR	noun	5 140 00uu	ibound on	ramp	rtout	5 140 00uu	ibound on	itamp		meduore	THE DIVE			Dialoy	nouu	
2:30 PM		North	bound			South	bound			Easth	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:30 PM	0	0	0	0	0	4	0	14	0	0	13	17	0	18	28	0
PHF		0.	.00			0.	38			0.	68			0.	82	

Michael Pompili 693\_010\_MM Location 2 New Bedford, MA Theodore Rice Blvd & Braley Road Route 140 SB On/Off Ramps 4/13/2021 Tuesday Clouds & Sun, 60°F



							PEDE	STRIAN	S & BICY	CLES						
	Route	e 140 South North	nbound On F bound	Ramp	Route	e 140 South South	bound Off I bound	Ramp		Theodore Eastb	Rice Blvd			Braley West	Road	
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	0	0	0	1	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
6:30 AM	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
7:00 AM	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0
7:15 AM	0	0	0	1	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
7:45 AM	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
0.15 AIVI	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	1	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
9:30 AM	0	0	0	0	0	0	0	2	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
10:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
10:30 AM	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
11:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	1	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
11:45 AIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PIVI 12:15 PM	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
12:45 PM	0	0 0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
1:00 PM	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
1:30 PM	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
2:00 PM	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
2:30 PM	0	0	0	0	0	0	0	1	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
3:00 PM	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
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	Ő	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	1	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
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
5:00 PM	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
5:30 PM	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
6:00 PM	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
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.40110	0	Ū	0	Ū	Ū	0	Ū	0	0	0	0	0	0	0	Ū	0
AM PEAK HOUR 7:00 AM	Rout	e 140 South North	nbound On F bound	Ramp	Rout	e 140 South South	bound Off I bound	Ramp		Theodore Eastb	Rice Blvd			Braley West	Road	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
8:00 AM	0	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0
MID PEAK HOUR	Route	e 140 South	bound On F	Ramp	Route	e 140 South South	bound Off I	Ramp		Theodore	Rice Blvd			Braley	Road	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
PM PEAK HOUR	Route	e 140 South	bound On F	Ramp	Route	e 140 South	bound Off I	Ramp	-	Theodore	Rice Blvd	-		Braley	Road	-
2:45 PM	1.64	North	bound		1 64	South	bound	DED	1.64	Eastb	Dickt		1.64	West	Dickt	DED
to	Lett	inru	Right	PED	Len	inru	Right	PED	Lett	inru	Right	PED	Lett	inru	Right	PED

Michael Pompili 693\_010\_MM Location 3 New Bedford, MA Theodore Rice Blvd Phillips Road 4/10/2021 Saturday Mostly Sunny, 65°F



						PASSEN	IGER CA	RS & HEA	AVY VEHI	CLES CO	MBINED					
		Phillips	s Road			Phillips	s Road	10 0 112		Theodore	Rice Blvd			Theodore	Rice Blvd	
		North	bound			South	bound			East	ound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	7	7	0	11	2	1	0	0	7	0	0	0	7	6
6:15 AM	0	1	4	4	0	6	1	0	0	0	3	0	0	4	14	15
6:30 AM	0	2	3	6	0	19	2	3	0	0	8	0	0	4	26	8
6:45 AM	0	1	3	5	0	14	2	2	0	0	5	1	0	8	27	18
7:00 AM	0	1	7	6	0	12	3	1	0	0	40	2	0	4	14	14
7:15 AM	0	1	8	13	0	21	4	1	0	1	5	4	0	6	12	19
7:30 AM	0	1	10	14	0	24	6	4	0	1	9	1	0	7	16	21
7:45 AM	0	2	12	11	0	21	9	1	0	3	3	1	0	10	7	21
8:00 AM	0	1	8	20	0	31	7	2	0	0	13	0	0	27	11	23
8:15 AM	0	0	8	12	0	40	3	0	0	0	8	1	0	14	6	16
8:30 AM	0	0	9	13	0	33	7	1	0	3	14	0	1	16	9	20
8:45 AM	0	0	13	17	0	29	13	0	0	0	8	2	0	12	10	25
9:00 AM	0	1	6	20	1	41	8	2	0	1	15	6	0	13	6	31
9:15 AM	0	1	14	21	0	34	8	0	0	1	10	0	0	18	13	28
9:30 AM	0	1	7	14	0	35	9	0	0	0	9	0	0	23	5	26
9:45 AM	0	2	16	24	0	29	10	1	0	3	15	1	0	21	11	31
10:00 AM	0	1	8	27	0	42	7	0	0	2	28	6	0	22	13	37
10:15 AM	0	2	12	26	0	45	8	1	0	0	13	3	1	20	18	35
10:30 AM	0	5	11	30	0	27	13	1	0	2	11	1	0	28	28	42
10:45 AM	0	2	16	19	0	36	17	4	0	0	11	1	0	21	27	28
11:00 AM	0	1	17	28	0	37	15	0	0	5	86	23	0	31	5	4
11:15 AM	0	1	13	36	0	38	10	0	0	1	18	2	0	28	10	11
11:30 AM	0	3	15	23	0	39	12	2	0	4	9	3	0	28	20	20
11:45 AM	0	1	10	25	0	49	14	2	0	1	13	9	0	29	11	10
12:00 PM	0	2	16	29	0	40	10	1	0	6	36	3	0	38	9	9
12:15 PM	0	2	11	20	0	22	10	1	0	1	18	6	0	30	12	12
12:30 PM	0	/	23	24	0	37	15	2	0	0	13	6	0	25	(	10
12:45 PM	0	3	16	29	0	30	15	1	0	3	9	2	0	32	15	15
1:00 PM	1	0	29	21	0	33	8	0	0	3	11	2	0	27	9	9
1:15 PM	0	3	11	16	0	28	18	1	0	0	12	9	0	23	9	9
1:30 PM	0	1	11	26	0	41	6	0	0	0	1	4	0	27	13	13
1:45 PM	0	2	12	27	0	32	1	0	0	1	4	1	0	26	8	7
2:00 PM	0	4	13	26	0	25	12	5	0	1	17	1	0	24	7	1
2:15 PM	0	2	15	18	0	34	14	0	0	1	13	3	0	17	5	4
2.30 PIVI 2:45 PM	0	2	7	20	0	21	0 12	1	0	0	0	2	0	31	13	14
2.40 F W	0	2	10	24	0	20	12	0	0	2	17		0	20	0	0
3:15 PM	0	ے 1	0	24	0	24	11	1	0	0	10	0	0	27	8	9
3:30 PM	0	0	9	20	0	24	7	0	0	1	6	2	1	25	0	9
3:45 PM	0	0	19	20	0	30	9	2	0	0	8	2	0	20	7	7
4:00 PM	0	2	0	25	0	20	9	2	0	0	10	1	0	31	1	3
4:00 F M	0	2 1		17	0	25	8	1	0	2	7	4	0	24	10	8
4.13 FW	0	1	8	13	0	43	7	0	0	2	7	4	0	18	10	5
4.50 F W	0	1	6	15	0	45	3	0	0	ے 1	3	1	0	21	7	8
5:00 PM	0	2	q	17	0	30	10	0	0	0	9	0	0	21	4	4
5:15 PM	0	2	8	16	0	26	12	0	0	0	5	1	0	25	4	4
5:30 PM	0	1	8	21	0	10	9	0	0	1	5	1	0	20	9	10
5:45 DM	0	1	7	19	0	26	8	0	0	0	2	2	0	21	3	3
6:00 PM	0	6	13	8	0	20	3	0	0	4	10	1	0	21	2	2
6:15 PM	0	4	5	22	0	22	11	1	0	0	3	1	0	30	2	2
6:30 PM	0	1	7	22	0	17	13	0	0	1	4	2	0	21	5	4
6:45 PM	0	1	13	18	0	22	5	0	0	0	1	1	0	22	5	5
0.101.11					, v		, v	, v	. v	, v			U U		, v	

AM PEAK HOUR		Phillips	s Road			Phillips	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
9:00 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
10:00 AM	0	5	43	79	1	139	35	3	0	5	49	7	0	75	35	116
PHF		0.	76			0.	86			0.	69			0.	90	
HV %	0.0%	0.0%	0.0%	1.3%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	0.0%	1.3%	5.7%	2.6%

MID PEAK HOUR		Phillip	s Road			Phillips	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
10:15 AM		North	bound			South	bound			Eastb	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:15 AM	0	10	56	103	0	145	53	6	0	7	121	28	1	100	78	109
PHF		0.	92			0.	89			0.	34			0.	73	
HV %	0.0%	10.0%	0.0%	0.0%	0.0%	1.4%	1.9%	16.7%	0.0%	14.3%	1.7%	0.0%	0.0%	1.0%	6.4%	1.8%

PM PEAK HOUR		Phillips	3 Road			Phillips	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
2:30 PM		North	bound			South	bound			East	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:30 PM	0	5	52	90	0	108	42	3	0	2	46	8	0	114	40	44
3:30 PM PHF	0	5 0.	52 82	90	0	108 0.	42 87	3	0	2	46 78	8	0	114 0.5	40 85	44

Michael Pompili 693\_010\_MM Location 3 New Bedford, MA Theodore Rice Blvd Phillips Road 4/10/2021 Saturday Mostly Sunny, 65°F



### HEAVY VEHICLES

		Phillip	s Road			Phillips	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
		North	bound			South	lbound			East	bound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	Ö
6:15 AM	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	Ő	0	0	0	1	0	0	0	2	0
0.30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
0.45 AIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	1	0
7:30 AM	0	0	0	1	0	1	0	0	0	0	4	0	0	0	1	0
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	1	0	0	2	0	0	0	0	3	0	0	1	2	0
8:15 AM	0	0	0	0	0	2	0	0	0	0	2	0	0	0	1	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	2	1
8:45 AM	0	0	0	0	0	0	Ő	0	0	0	1	0	0	0	1	0
0:00 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	2
9.00 AM	0	0	0	0	0	3	0	0	0	0	0	0	0	0	4	2
9:15 AIVI	0	0	0	U	0	2	0	0	0	0	1	0	0	1	1	0
9:30 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0
9:45 AM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1
10:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
10:15 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1
10:30 AM	0	1	0	0	0	1	0	1	0	0	0	0	0	0	3	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1
11:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0
11:15 AM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	1	2
11:30 AM	0	0	0	0	0	3	0	1	0	0	0	0	0	1	2	2
11:45 AM	0	0	0	0	0	1	0	0	0	0	1	2	0	0	1	0
12:00 PM	Ő	0	0	Ő	0	0	Ő	0	0	0	0	0	0	1	0	0
12:15 PM	0	0	0	0	0	0	Ő	0	0	0	0	0	0	0	1	1
12:30 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
12:00 P M	0	1	0	1	0	0	1	0	0	1	0	0	0	1	0	0
12.45 F M	0	0	0	1	0	0	0	0	0	0	0	0	0		1	1
1.00 F M	0	0	0	1	0	2	0	0	0	0	0	0	0	0	4	1
1:15 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
1:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0
2:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	1	1	1
2:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0
2:30 PM	0	0	0	0	0	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	1	1	1
3:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	0	1	1	1
3:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
4.15 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 F M	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5.00 F IVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	U	0	0	0	U	0	0	0	0	1	U	0	U	0	0	1
5:45 PM	0	0	0	0	0	1	1	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
6:15 PM	0	0	0	0	0	0	0	1	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	1	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AM PEAK HOUR	1	Phillip	s Road			Phillips	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
7:30 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:30 AM	0	0	1	1	0	6	0	0	0	0	9	0	0	2	4	1
PHF		0.	.50			0.	75			0.	.56			0.	58	

MID PEAK HOUR		Phillip	s Road			Phillip	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
11:00 AM		North	bound			South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
12:00 PM	0	0	1	0	0	4	0	1	0	1	4	2	0	1	5	4
PHF		0.	.25			0.	31			0.	58			0.	50	

PM PEAK HOUR	1	Phillip	s Road			Phillip	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
2:45 PM		North	bound			South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:45 PM	0	0	0	1	0	1	0	0	0	0	2	0	0	3	3	3
PHF		0.	.25			0.	.25			0.	50			0.	75	

Michael Pompili 693\_010\_MM Location 3 New Bedford, MA Theodore Rice Blvd Phillips Road 4/10/2021 Saturday Mostly Sunny, 65°F



		Phillip	s Road			Phillip	s Road		0 0 0.01	Theodore	Rice Blvd			Theodore	Rice Blvd	
Start Time	Loft	North	Dound	DED	Loft	South	Dound Right	DED	Loft	East	Dound	DED	Loft	Thru	Dound	DED
Start Time	Leit	niiu	Right	PED	Leit	niiu	Right	PED	Leit	Thiru	Right	PED	Leit	niiu	Right	PED
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
7:00 AM	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
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
8:30 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	Ő
9:15 AM	0	0 0	Ő	0	0	0	0	0	0	Ő	0	Ő	Ő	0	0	0
9:30 AM	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	Ő	0	0	Ő	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
10:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
10:30 AM	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
11:00 AM	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
11:30 AM	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	1	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 T M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:10 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
12:30 FIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12.45 FW	0	5	0	0	0	0	0	1	0	0	0	0	0	0	0	0
1:15 DM	0	2	0	0	0	0	0	0	0	0	5	0	0	0	0	0
1.13 FW	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1:45 DM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1.45 PIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PIVI 2:15 PM	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0
2:10 FW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PIVI 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
2:40 FM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
3.00 FIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.15 PIVI	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
3.30 F IVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.45 PIVI	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
4:00 FIVI	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
4.13 FIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.30 F M	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
5.15 DM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5.30 DM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	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
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:20 PM	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
0.45 F IVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM PEAK HOUR		Phillip	s Road			Phillip	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
5.00 Alvi	l eft	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
10.00 AM	0	0	n	0	1	0	n	0	0	0	n n	0	0	0	n	0
10.00 AW	0	U	U	U		0	0	0	U	U	U	U	U	U	0	0
MID DEAK HOUD	1	Dhillio	Dood			Dhillin	o Dood			Theodore	Dian Dlud			Theodore	Dian Dlud	
10:15 AM		Month	s rituau bound			Fiilip	bound			Theodore				Mart		
10:15 AM	1.04	INUITIN	Dodha	DED	1.04	South	Diabt	DED	1.04	East	Diaht	DED	1.04	Thru	Dound	DED
to	Leit	i nru 1	Right	PED	Leit	Inru	Right	PED	Len	Inru	Right	PED	Leit	Inru	Right	PED
11:15 AM	U	1	U	U	U	0	0	U	U	U	U	U	0	0	1	0
DW DEAK HOUD	1	Phillip	Road			Phillin	e Road			Theodoro	Rice Plud			Theodoro	Rice Plud	
2,20 DM		Month	s rituau bound			Fiilip	bound			Theodore				Mart		
2.30 PM	l oft	Thru	Right	PED	Loft	Thru	Right	PED	L oft	Thru	Right	PED	Loft	Thru	Right	PED

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#### Michael Pompili 693\_010\_MM Location 3 New Bedford, MA Theodore Rice Blvd Phillips Road 4/13/2021 Tuesday Clouds & Sun, 60°F



						PASSEN	GER CAI	RS & HEA	AVY VEHI	CLES CO	MBINED					
		Phillip	s Road			Phillips	Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
		North	bound			South	bound			Eastb	ound			West	oound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	4	7	7	0	26	1	0	0	0	7	2	0	4	30	28
6:15 AM	0	7	12	16	0	27	7	2	0	0	8	2	0	9	56	32
6:30 AM	0	9	12	15	0	41	7	7	0	0	9	1	0	8	120	26
6:45 AM	0	12	17	12	0	37	6	9	0	0	15	3	0	4	151	24
7:00 AM	0	3	4	25	0	33	3	7	0	3	102	23	0	9	67	40
7:15 AM	0	4	11	21	0	41	10	6	0	1	19	0	0	24	55	36
7:30 AM	0	5	12	25	0	48	6	8	0	2	19	3	0	10	79	37
7:45 AM	0	2	10	20	0	49	4	8	0	6	21	2	0	17	98	30
8:00 AM	0	3	19	28	0	36	10	7	0	1	39	5	0	16	55	41
8:15 AM	0	6	7	37	0	43	16	6	0	1	15	4	0	16	72	27
8:30 AM	0	3	7	32	0	49	9	5	0	3	25	5	0	23	64	35
8:45 AM	0	4	12	17	0	33	12	6	0	1	22	5	0	35	53	45
9:00 AM	0	1	8	20	0	41	11	2	0	3	33	5	0	24	56	41
9:15 AM	0	4	8	18	0	31	13	2	0	3	32	6	0	19	35	21
9:30 AM	0	2	10	22	0	27	6	4	0	2	27	2	0	29	38	20
9:45 AM	0	5	6	26	0	25	9	1	0	2	29	7	0	17	42	20
10:00 AM	0	4	11	10	0	23	10	3	0	1	30	3	0	19	42	23
10:15 AM	0	1	8	25	0	22	6	2	0	1	32	4	0	14	38	21
10:30 AM	0	7	8	25	0	32	9	2	0	2	28	3	0	23	40	16
10:45 AM	0	1	g	23	0	23	6	4	0	3	33	4	0	15	39	26
11:00 AM	0	0	6	13	0	26	11	2	0	0	39	3	0	20	22	29
11:15 AM	0	3	12	15	0	21	13	3	0	5	35	13	0	19	37	25
11:30 AM	0	/	10	20	0	27	15	0	0	2	35	/	1	18	40	23
11:45 AM	0	2	g	22	0	20	1	3	0	5	35	9	0	20	51	32
12:00 PM	0	4	8	31	0	33	10	2	0	3	75	14	0	18	42	18
12:15 PM	0	3	12	16	0	24	13	2	0	2	39	12	0	29	44	27
12:30 PM	0	8	9	21	0	24	8	1	0	1	35	2	0	18	40	18
12:45 PIVI	0	3	14	22	0	10	10	3	0	1	40	6	0	20	57	20
1:15 DM	0	5	10	27	0	31	9	1	0	3	30	9	0	13	40	31
1.13 PM	0	2	°	19	0	20	0		0		41	5	2	14	41	27
1:45 PM	0	2	9	20	0	17	0	2	0	4	40	4	0	20	40	29
2:00 PM	0	5	10	20	0	20	9	2	0	4	33	7	0	20	47	32
2:00 FIM	0	7	6	30	0	24	14	5	0	2	20	0	0	24	60	27
2:30 PM	0	7	11	31	0	24	14	3	0	2	50	5	0	20	80	33
2:45 PM	0	3	20	26	0	23	13	6	0	2	46	6	0	44	70	47
3:00 PM	0	3	16	32	0	44	15	2	0	4	107	54	0	42	29	36
3:15 PM	0	12	11	31	0	41	13	2	0	3	62	6	0	30	38	33
3:30 PM	0	2	14	22	0	36	16	2	0	6	119	27	0	32	27	42
3:45 PM	0	0	15	21	0	42	18	0	0	1	52	5	0	30	28	64
4:00 PM	0	2	9	29	0	55	18	1	0	3	103	14	0	43	35	42
4:15 PM	0	5	14	30	0	53	15	1	0	2	55	7	0	28	17	46
4:30 PM	Ő	2	14	24	0	39	12	0	Ő	10	74	10	0	32	20	44
4:45 PM	0	1	14	21	0	34	7	1	0	5	65	3	0	28	14	38
5:00 PM	0	0	16	26	0	47	13	0	0	6	105	16	0	32	13	55
5:15 PM	0	2	6	27	0	34	12	1	0	1	65	5	0	34	5	31
5:30 PM	0	1	13	17	0	31	9	0	0	2	37	2	0	32	12	36
5:45 PM	0	1	5	20	0	27	9	0	0	2	22	2	0	27	15	23
6:00 PM	0	0	8	15	0	26	12	0	0	1	23	2	0	23	9	31
6:15 PM	0	3	8	21	0	27	6	1	0	1	15	3	0	34	7	22
6:30 PM	0	1	11	21	0	24	5	0	0	1	17	0	0	20	13	26
6:45 PM	0	1	6	10	0	23	6	0	0	1	9	1	0	10	10	24

AM PEAK HOUR	1	Phillip	s Road			Phillips	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
7:00 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:00 AM	0	14	37	91	0	171	23	29	0	12	161	28	0	60	299	143
PHF		0.	85			0.	90			0.	.39			0.	87	

MID PEAK HOUR 11:30 AM		Phillips	s Road			Phillips South	Road			Theodore Easth	Rice Blvd			Theodore West	Rice Blvd	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
12:30 PM	0	16	39	89	0	104	45	7	0	12	184	42	1	85	177	100
PHF		0.	84			0.	87			0.	65			0.	88	
HV %	0.0%	6.3%	0.0%	5.6%	0.0%	6.7%	4.4%	14.3%	0.0%	16.7%	14.1%	0.0%	0.0%	2.4%	15.3%	3.0%
PM PEAK HOUR 2:45 PM		Phillips	s Road			Phillips	Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
			oouna			Couli	Journa			Easic	ouna			wesu	Jouria	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
to 3:45 PM	U-Turn 0	Left 20	Thru 61	Right 111	U-Turn 0	Left 144	Thru 57	Right 12	U-Turn 0	Left 15	Thru 334	Right 93	U-Turn 0	Left 157	Thru 164	Right 158
to 3:45 PM <i>PHF</i>	U-Turn 0	Left 20 0.	Thru 61 89	Right 111	U-Turn 0	Left 144 0.4	Thru 57 87	Right 12	U-Turn 0	Left 15 0.	Thru 334 67	Right 93	U-Turn 0	Left 157 0.	Thru 164 74	Right 158

#### Michael Pompili 693\_010\_MM Location 3 New Bedford, MA Theodore Rice Blvd Phillips Road 4/13/2021 Tuesday Clouds & Sun, 60°F



HEAVY VEHICLES

		Phillip	s Road			Phillips	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
		North	bound			South	bound			East	ound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	1	1
6:15 AM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2	2
6:30 AM	0	1	0	2	0	0	1	0	0	0	3	0	0	2	2	1
6:45 AM	0	0	1	0	0	2	1	1	0	0	2	1	0	0	4	2
7:00 AM	0	0	0	0	0	0	0	0	0	1	6	0	0	0	3	3
7:15 AM	0	0	1	0	0	1	2	0	0	0	6	0	0	4	6	1
7:30 AM	0	0	0	2	0	2	1	1	0	2	7	0	0	1	5	0
7:45 AM	0	0	0	1	0	2	0	1	0	1	9	0	0	2	4	0
8:00 AM	0	1	3	2	0	4	2	0	0	0	9	1	0	2	6	0
8:15 AM	0	1	0	4	0	1	0	2	0	0	6	2	0	0	6	1
8:30 AM	0	0	0	0	0	2	0	0	0	1	5	1	0	0	9	2
8:45 AM	0	1	0	0	0	3	1	1	0	0	7	0	0	1	9	1
9:00 AM	0	0	0	0	0	3	0	0	0	1	17	0	0	0	13	1
9:15 AM	0	0	1	0	0	1	0	0	0	0	4	1	0	2	8	2
9:30 AM	0	0	0	0	0	1	0	3	0	0	5	0	0	0	6	3
9:45 AM	0	0	0	0	0	5	0	0	0	0	8	0	0	0	8	1
10:00 AM	0	0	0	0	0	0	0	1	0	0	10	0	0	2	12	1
10:15 AM	0	0	0	2	0	0	0	1	0	0	11	0	0	0	9	0
10:30 AM	0	1	0	2	0	2	2	1	0	0	6	0	0	0	4	0
10:45 AM	0	0	0	0	0	0	0	0	0	2	8	0	0	1	4	4
11:00 AM	0	0	1	0	0	4	0	1	0	0	8	2	0	0	8	3
11:15 AM	0	0	1	2	0	1	0	1	0	1	6	2	0	1	15	0
11:30 AM	0	1	0	1	0	1	1	0	0	1	7	0	0	0	9	1
11:45 AM	0	0	0	0	0	4	0	0	0	0	9	0	0	0	5	2
12:00 PM	0	0	0	2	0	2	0	1	0	1	5	0	0	1	4	0
12:15 PM	0	0	0	2	0	0	1	0	0	0	5	0	0	1	9	0
12:30 PM	0	1	1	1	0	1	0	0	0	0	9	0	0	0	9	1
12:45 PM	0	0	0	1	0	1	1	1	0	0	9	0	0	2	2	0
1:00 PM	0	0	0	2	0	1	0	0	0	0	5	1	0	0	8	3
1:15 PM	0	0	0	0	0	3	0	1	0	2	5	0	0	1	5	1
1:30 PM	0	0	0	1	0	3	0	0	0	1	3	0	0	0	7	0
1:45 PM	0	0	0	0	0	0	0	0	0	1	6	0	0	1	7	2
2:00 PM	0	1	0	2	0	1	2	1	0	0	5	2	0	2	3	2
2:15 PM	0	0	0	1	0	0	1	2	0	1	5	1	0	0	9	1
2:30 PM	0	0	0	2	0	1	2	0	0	1	7	0	0	0	6	0
2:45 PM	0	0	3	2	0	2	1	2	0	0	1	0	0	2	10	0
3:00 PM	0	1	1	2	0	1	1	1	0	1	1	0	0	3	9	3
3:15 PM	0	1	2	4	0	4	0	0	0	0	3	0	0	3	6	0
3:30 PM	0	0	2	0	0	1	0	1	0	1	4	1	0	1	3	2
3:45 PM	0	0	0	1	0	0	1	0	0	0	1	0	0	2	3	2
4:00 PM	0	0	1	0	0	2	0	1	0	0	5	0	0	1	8	4
4:15 PM	0	2	1	0	0	2	0	0	0	0	5	0	0	0	6	0
4:30 PM	0	0	1	0	0	1	0	0	0	0	2	1	0	0	0	1
4:45 PM	0	0	0	0	0	2	0	1	0	0	1	0	0	1	2	0
5:00 PM	0	0	0	1	0	1	0	0	0	0	3	0	0	0	3	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0
6:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
6:30 PM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	1	1
6:45 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	1
AM DEAK HOUD		Phillip	e Road			Philling	Road			Theodore	Rice Blvd			Theodore	Rice Blud	

AM PEAK HOUR		Phillip	s Road			Phillip	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
8:15 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
9:15 AM	0	2	0	4	0	9	1	3	0	2	35	3	0	1	37	5
PHF		0.	.30			0.	.65			0.	.56			0.	.77	

MID PEAK HOUR	1	Phillip	s Road			Phillip	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
11:00 AM		North	bound			South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
12:00 PM	0	1	2	3	0	10	1	2	0	2	30	4	0	1	37	6
PHF		0.	.50			0.	65			0.	90			0.	69	

PM F	PEAK HOUR		Phillip	s Road			Phillips	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
	2:30 PM		North	bound			South	bound			East	oound			West	bound	
	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	3:30 PM	0	2	6	10	0	8	4	3	0	2	12	0	0	8	31	3
	PHF		0	.64			0.	75			0.	44			0.	70	

Michael Pompili 693\_010\_MM Location 3 New Bedford, MA Theodore Rice Blvd Phillips Road 4/13/2021 Tuesday Clouds & Sun, 60°F



							PEDE	ESTRIAN	S & BIC Y	CLES						
		Phillip	s Road			Phillip	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
		North	bound			South	bound			East	bound			West	bound	-
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	0	0	0	1	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
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
7:45 AM	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
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0:00 AM	0	0	0	0	0	0	0	1	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
9.15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	1	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	Ő	2	0	0	1	0
10:30 AM	0	0	0	Ő	0	ů 0	0	0	0	0	Ő	0	0	0	0	0
10:45 AM	0	0 0	0 0	Ő	0	0	0	0	0	0	0	0 0	0	0	0	Ő
11:00 AM	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
11:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	1	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
12:15 PM	0	0	0	4	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
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0
1:00 PM	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0
1:15 PM	0	0	0	1	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
1:45 PM	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
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2:30 PM	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
3:00 PM	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
3:30 PM	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
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	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
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:00 PIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5.10 PIVI	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0
5:45 PM	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0
5.45 FM	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	1
6:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
6:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0.401 10	Ū	Ū	Ū		Ū	0	Ū	Ū	Ū	v	U	0	0	Ŭ	0	
AM PEAK HOUR 7:00 AM		Phillip: North	s Road bound			Phillip South	s Road			Theodore East	Rice Blvd			Theodore West	Rice Blvd	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
8:00 AM	0	0	0	3	0	0	Ő	1	0	1	0	1	0	0	0	0
MID PEAK HOUR		Phillip	s Road			Phillip	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
11:30 AM		North	bound			South	bound			East	bound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
12:30 PM	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
PM PEAK HOUR		Phillip	s Road			Phillip	s Road			Theodore	Rice Blvd			Theodore	Rice Blvd	
2:45 PM		North	bound			South	bound			East	bound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED

Start Time 6:00 AM

6:15 AM

6:30 AM

6:45 AM

7:00 AM

7:15 AM

7:30 AM

7:45 AM

8:00 AM

8:15 AM 8:30 AM

8:45 AM

9:00 AM

9:15 AM

U-Turn

Michael Pompili 693\_010\_MM Location 4 New Bedford, MA Duchaine Blvd Theodore Rice Blvd 4/10/2021 Saturday Mostly Sunny, 65°F

Duchaine Blvd

Northbound

Thru

Left



PASSENGER CARS & HEAVY VEHICLES COMBINED Theodore Rice Blvd Duchaine Blvd Westbound Southbound Eastbound U-Turn Right U-Turn Left Thru Right U-Turn Left Thru Right Left Thru Right 36 Ω 

0.107.001	0	0		0	0	•	<b>U</b>	•	U U	<b>.</b>	0	•	•	0	•	0
9:30 AM	0	0	0	4	0	1	0	0	0	0	0	0	0	1	0	1
9:45 AM	0	0	2	10	0	3	4	0	0	0	0	0	0	2	0	1
10:00 AM	0	0	1	11	0	13	4	0	0	0	0	0	0	7	0	0
10:15 AM	0	0	2	2	0	2	2	0	0	0	0	0	0	13	0	4
10:30 AM	0	0	1	8	0	1	3	0	0	0	0	0	0	24	0	3
10:45 AM	0	0	2	6	0	1	7	0	0	0	0	0	0	27	0	3
11:00 AM	0	0	3	78	0	45	1	0	0	0	0	0	0	5	0	0
11:15 AM	0	0	1	14	0	2	1	0	0	0	0	0	0	6	0	3
11:30 AM	0	0	1	8	0	1	1	0	0	0	0	0	0	12	0	2
11:45 AM	0	0	3	6	0	7	2	0	0	0	0	0	0	10	0	3
12:00 PM	0	0	1	26	0	7	3	0	0	0	0	0	0	1	0	1
12:15 PM	0	0	0	14	0	2	1	0	0	0	0	0	0	4	0	2
12:30 PM	0	0	2	8	0	3	3	0	0	0	0	0	0	4	0	2
12:45 PM	0	0	1	6	0	3	5	0	0	0	0	0	0	6	0	3
1:00 PM	0	0	2	4	0	4	2	0	0	0	0	0	0	3	0	2
1:15 PM	0	0	1	5	0	1	1	0	0	0	0	0	0	4	0	4
1:30 PM	0	0	0	5	0	1	1	0	0	0	0	0	0	8	0	2
1:45 PM	0	0	1	4	0	1	2	0	0	0	0	0	0	4	0	1
2:00 PM	0	0	5	11	0	5	10	0	0	0	0	0	0	7	0	3
2:15 PM	0	0	2	14	0	0	4	0	0	0	0	0	0	2	0	1
2:30 PM	0	0	0	5	0	3	2	0	0	0	0	0	0	8	0	2
2:45 PM	0	0	2	7	0	1	3	0	0	0	0	0	0	8	0	1
3:00 PM	0	0	1	14	0	8	1	0	0	0	0	0	0	3	0	0
3:15 PM	0	0	0	4	0	0	2	0	0	0	0	0	0	5	0	1
3:30 PM	0	0	1	4	0	0	0	0	0	0	0	0	0	3	0	0
3:45 PM	0	0	0	3	0	0	2	0	0	0	0	0	0	4	0	0
4:00 PM	0	0	0	3	0	4	1	0	0	0	0	0	0	5	0	1
4:15 PM	0	0	0	5	0	0	0	0	0	0	0	0	0	6	0	0
4:30 PM	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM	0	0	3	2	0	2	2	0	0	0	0	0	0	3	0	1
5:00 PM	0	0	2	8	0	0	2	0	0	0	0	0	0	3	0	1
5:15 PM	0	0	0	4	0	1	1	0	0	0	0	0	0	3	0	2
5:30 PM	0	0	1	3	0	1	1	0	0	0	0	0	0	2	0	1
5:45 PM	0	0	0	2	0	0	1	0	0	0	0	0	1	1	0	0
6:00 PM	0	0	0	11	0	2	0	0	0	0	0	0	1	4	0	1
6:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	2
6:30 PM	0	0	1	7	0	2	2	0	0	0	0	0	0	3	0	3
6:45 PM	0	0	1	0	0	2	1	0	0	0	0	0	0	2	0	1

I	AM PEAK HOUR 7:00 AM		Duchai North	ne Blvd bound			Duchai South	ne Blvd bound			Eastb	ound			Theodore West	Rice Blvd	
	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	8:00 AM	0	0	3	48	0	11	9	0	0	0	0	0	0	47	0	11
Ĩ	PHF		0.	41			0.	45			0.	00			0.	69	
	LIV 0/	0.0%	0.00/	66 70/	46 70/	0.09/	0.09/	AA 40/	0.09/	0.09/	0.0%	0.0%	0.0%	0.0%	4 20/	0.09/	0.0%

MID PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
10:30 AM		North	bound			South	bound			Eastb	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:30 AM	0	0	7	106	0	49	12	0	0	0	0	0	0	62	0	9
DITE		0	<b>0F</b>			•	~~				<u></u>			<b>^</b>	50	
PHF		υ.	35			0.	33			0.	.00			0.	59	
PHF HV %	0.0%	0.0%	35 0.0%	2.8%	0.0%	2.0%	33 8.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0. 6.5%	59 0.0%	11.1%
HV %	0.0%	0.0%	35 0.0%	2.8%	0.0%	0. 2.0%	33 8.3%	0.0%	0.0%	0. 0.0%	0.0%	0.0%	0.0%	0. 6.5%	0.0%	11.1%
PHF HV % PM PEAK HOUR	0.0%	0.0%	<b>0.0%</b> ne Blvd	2.8%	0.0%	0. 2.0% Duchai	<b>8.3%</b> ne Blvd	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.5% Theodore	0.0%	11.1%

2.00 FIVI		NUTUT	bound			South	Journa			Lasii	Jouriu			vvesu	Jouriu	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:00 PM	0	0	9	37	0	9	19	0	0	0	0	0	0	25	0	7
PHF		0.	72			0.4	47			0.	00			0.	80	
HV %	0.0%	0.0%	44.4%	2.7%	0.0%	0.0%	36.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.0%	0.0%	0.0%

Michael Pompili 693\_010\_MM Location 4 New Bedford, MA Duchaine Blvd Theodore Rice Blvd 4/10/2021 Saturday Mostly Sunny, 65°F



HEAVY VEHICLES

		Duchai	ine Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
		North	bound			South	bound			East	ound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
6:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
7:00 AM	Ő	0	Ő	Ő	0	0	Ő	0	0	0	0	0	0	0	0	Ő
7:15 AM	0	0	1	2	0	0	2	0	0	0	0	0	0	0	0	0
7.13 AM	0	0	1	2	0	0	2	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	6	0	0	2	0	0	0	0	0	0	2	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	2	0	1	0	0	0	0	0	0	0	2	0	0
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
9:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
10:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0
11:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
11:45 AM	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	1
12:00 PM	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
12:30 PM	Ő	Ő	Ő	Ő	0	0	1 1	0	0	0	Ő	0	0	2	0	1 1
12:45 PM	Ő	Ő	Ő	1	0	0	0	0	0	0	Ő	0	0	0	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
1:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1:30 DM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
1:45 DM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1.45 PIVI	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	1
2:00 PM	0	0	3	0	0	0	6	0	0	0	0	0	0	2	0	0
2:15 PM	0	0	1	1	0	0	1	0	0	0	0	0	0	1	0	0
2:30 PM	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	U	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	1	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
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
5:30 PM	0	0	0	1	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
6:00 PM	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	1	0	0
6:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
6:45 PM	õ	õ	õ	0	Ő	0	Ő	Ő	õ	õ	õ	õ	Ő	0	Ő	Ő
0.101.11	. v	. v	. v	, v	v	v	, v	Ŭ	, v	i v	, v	, v	Ň	Ũ	Ŭ	, v

AM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
7:15 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:15 AM	0	0	2	10	0	1	4	0	0	0	0	0	0	4	0	0
PHF		0.	.43			0.	63			0.	.00			0.	50	

MID PEAK HOUR		Duchai	ine Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
11:00 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
12:00 PM	0	0	1	4	0	2	2	0	0	0	0	0	0	2	0	2
PHF		0.	.63			0.	50			0.	.00			1.	00	
PM PEAK HOUR		Duchai	ine Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	

PM PEAK HOUK		Duchaine Bivu				Duchai	ne bivu							Theodore	RICE DIVU	
2:00 PM		North	bound			South	bound			Easth	oound			West	bound	
to	U-Turn	U-Turn Left Thru Right			U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:00 PM	0 0 4 1			1	0	0	7	0	0	0	0	0	0	3	0	0
PHF	0.42					0.	29			0.	00			0.	38	

Michael Pompili 693\_010\_MM Location 4 New Bedford, MA Duchaine Blvd Theodore Rice Blvd 4/10/2021 Saturday Mostly Sunny, 65°F



#### PEDESTRIANS & BICYCLES

		Duchai	ne Blvd			Duchai	ne Blvd			Footh	ound			Theodore	Rice Blvd	
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	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
6:30 AM	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
7:00 AM	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
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.45 AIVI 8:00 AM	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
8:30 AM	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
9:00 AM	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
9:30 AM	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	1
10:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	1	0	1	0	2	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	1
11:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	2	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	1
12:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
12:45 PIVI 1:00 PM	0	0	0	0	0	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	0	0	0	0
1:30 PM	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	2
2:00 PM	0	1	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	1
2:30 PM	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	2
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM 3:30 PM	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
4:00 PM	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
4:30 PM	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
5:00 PM	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
5:30 PM	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
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	Ő	Ő	Ő	0	Ő	0	0	Ő	Ő	Ő	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
AM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd			_				Theodore	Rice Blvd	
7:00 AM	1	North	bound	DED	1.0	South	bound	DED	1.2	East	bound	DED	1.0	West	bound	DED
to	Lett	Inru	Right	PED	Len	Inru	Right	PED	Lett	Inru	Right	PED	Lett	Inru	Right	PED
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MID PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
10:30 AM		North	bound			South	bound			Easth	ound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
11:30 AM	0	3	Ő	2	0	2	Ő	0	0	0	Ő	0	0	0	0	4
PM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
2:00 PM		North	bound	055		South	bound	050	1.6	East	bound	DED	1.6	West	bound	DED
to	Left	I hru ⊿	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
3:00 PM	U		U	U	U	U	0	U	U	U	U	U	0	0	U	4

NOTE: Peak hour summaries here correspond to peak hours identified for passenger car and heavy vehicles combined.

#### Michael Pompili 693\_010\_MM Location 4 New Bedford, MA Duchaine Blvd Theodore Rice Blvd 4/13/2021 Tuesday Clouds & Sun, 60°F



PO BOX 1723, Framingham, MA 01701 Office: 978-746-1259 DataRequest@BostonTrafficData.com www.BostonTrafficData.com

		Duchai	ine Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
		North	bound			South	bound			East	oound			West	oound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	5	0	0	2	0	0	0	0	0	0	34	0	8
6:15 AM	0	0	0	4	0	1	2	0	0	0	0	0	1	51	0	14
6:30 AM	0	0	2	8	0	0	5	0	0	0	0	0	0	102	0	35
6:45 AM	0	0	1	13	0	4	3	0	0	0	0	0	0	132	0	43
7:00 AM	0	0	3	83	0	49	3	0	0	0	0	0	0	63	0	13
7:15 AM	0	0	3	18	0	1	5	0	0	0	0	0	0	56	0	10
7:30 AM	0	0	1	19	0	4	1	0	0	0	0	0	0	73	0	21
7:45 AM	0	0	2	23	0	2	2	0	0	0	0	0	0	77	0	22
8:00 AM	0	0	2	30	0	10	1	0	0	0	0	0	0	45	0	12
8:15 AM	0	0	0	17	0	3	2	0	0	0	0	0	0	56	0	7
8:30 AM	0	0	1	15	0	8	2	0	0	0	0	0	0	40	0	5
8:45 AM	0	0	3	23	0	1	1	0	0	0	0	0	0	32	0	3
9:00 AM	0	Ő	1	32	0	8	2	0	0	Ő	Ő	0	0	37	0	8
0:15 AM	0	0	1	16	0	3	4	0	0	0	0	0	0	32	0	5
0:20 AM	0	0	2	10	0	0	4	0	0	0	0	0	0	21	0	3
9.30 AIVI	0	0	3	14	0	4	4	0	0	0	0	0	0	20	0	3
9.45 AIVI	0	0	2	14	0	4	5	0	0	0	0	0	0	20	0	4
10:00 AM	0	0	1	19	0	2	2	0	0	0	0	0	0	25	0	5
10.15 AlVi	0	0	2	10	0	6	3	0	0	0	0	0	0	21	0	6
10:30 AM	0	0	4	19	0	2	2	0	0	0	0	0	0	24	0	2
10:45 AM	0	0	2	26	0	5	/	0	0	0	0	0	0	15	0	11
11:00 AM	0	0	3	20	0	11	5	0	0	0	0	0	0	11	0	9
11:15 AM	0	0	2	31	0	8	1	0	0	0	0	0	0	22	0	5
11:30 AM	0	0	4	24	0	15	3	0	0	0	0	0	0	29	0	9
11:45 AM	0	0	6	27	0	7	3	0	0	0	0	0	0	30	0	8
12:00 PM	0	0	3	58	0	25	5	0	0	0	0	0	0	25	0	8
12:15 PM	0	0	6	31	0	11	6	0	0	0	0	0	0	41	0	10
12:30 PM	0	0	4	38	0	8	3	0	0	0	0	0	0	36	0	14
12:45 PM	0	0	4	30	0	7	5	0	0	0	0	0	0	41	0	10
1:00 PM	0	0	1	30	0	5	4	0	0	0	0	0	0	32	0	2
1:15 PM	0	0	0	36	0	4	5	0	0	0	0	0	0	24	0	9
1:30 PM	0	0	3	29	0	10	3	0	0	0	0	0	0	32	0	12
1:45 PM	0	0	0	28	0	6	3	0	0	0	0	0	0	31	0	1
2:00 PM	0	0	4	40	0	8	0	0	0	0	0	0	0	31	0	8
2:15 PM	0	0	1	25	0	7	3	0	0	0	0	0	0	66	0	15
2:30 PM	0	0	2	32	0	11	9	0	0	0	0	0	0	83	0	14
2:45 PM	0	0	1	32	0	8	7	0	0	0	0	0	0	55	0	12
3:00 PM	0	0	1	119	0	49	4	0	0	0	0	0	0	29	0	8
3.15 PM	0	0	3	41	0	28	4	0	0	0	0	0	0	26	0	13
3:30 PM	0	Ő	3	68	0	61	6	0	0	0	Ő	0	0	12	0	9
3:45 PM	0	Ő	1	43	0	8	2	0	0	0	0	0	0	16	0	5
4:00 PM	0	n	3	81	0	24	2	0	ñ	ñ	n	ñ	0	19	0	5
4:15 PM	0	0	2	36	0	10	2	0	0	0	0	0	0	14	0	7
4.30 PM	0	0	∠ ∩	55	0	17	2	0	0	0	0	0	0	19	0	2
	0	0	1	10	0	10	4	0	0	0	0	0	0	0	0	2
4.43 PIVI	0	0		40	0	10	4	0	0	0	0	0	0	9	0	2
5.00 PIVI	0	0	2	52	0	40	10	0	0	0	0	0	0	10	0	0
5.13 PIVI	0	0	2	34	0	01	4	0	0	0	0	0	0	0	0	0
5:30 PIVI	0	0	0	30	0	9		0	0	0	0	0	0	10	0	2
5:45 PIVI	0	0	1	1/	0	0	1	0	0	0	0	0	0	10	0	1
6:00 PM	U	0	2	18	0	8	1	0	0	0	0	0	0	9	0	1
6:15 PM	0	0	1	14	0	2	2	0	U	0	0	Û	U	4	0	4
6:30 PM	0	0	0	20	0	2	2	0	0	0	0	0	0	9	0	1
6:45 PM	0	0	0	6	0	3	2	0	0	0	0	0	0	11	0	3
AM PEAK HOUR Duchaine Blvd						Duchai	ne Blvd							Theodore	Rice Blvd	
7:00 AM Northbound						South	bound			East	pound			West	oound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:00 AM	0	0	9	143	0	56	11	0	0	0	0	0	0	269	0	66
PHF		0.	.44			0.	32			0.	00			0.	85	
HV %	0.0%	0.0%	44.4%	26.6%	0.0%	5.4%	27.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	4.5%
MID PEAK HOUR		Duchai	ine Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
MID PEAK HOUR Duchaine Blvd						0	le a con al				· · ·			10/	a a constal	

PASSENGER CARS & HEA	VY VEHICLES COMBINED
Duchaine Blvd	

11 V /0	0.076	0.0 /0	44.4 /0	20.0 /0	0.0 /0	J.4 /0	21.3/0	0.0 /0	0.0 /0	0.0 /0	0.0 /0	0.0 /0	0.0 /0	3.1 /0	0.0 /0	4.J /0
MID PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
12:00 PM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
1:00 PM	0	0	17	157	0	51	19	Ō	0	0	0	Ō	0	143	0	42
PHF	PHF         0.71           HV %         0.0%         0.0%         64.7%         15.3					0.	58			0.	00			0.	91	
HV %	0.0%	0.0%	64.7%	15.3%	0.0%	13.7%	63.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	15.4%	0.0%	21.4%
-																
PM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
2:45 PM	2:45 PM Northbound					South	bound			East	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:45 PM	0	0	8	260	0	146	21	0	0	0	0	0	0	122	0	42
<i>PHF</i> 0.56																
rnr		0.	56			0.	62			0.	00			0.	61	

Michael Pompili 693\_010\_MM Location 4 New Bedford, MA Duchaine Blvd Theodore Rice Blvd 4/13/2021 Tuesday Clouds & Sun, 60°F



HEAVY VEHICLES

		Duchai	ne Blvd							Theodore	Rice Blvd					
		North	bound			South	bound			East	pound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	1	0	0	2	0	0	0	0	0	0	2	0	1
6:15 AM	0	0	0	3	0	0	1	0	0	0	0	0	0	2	0	2
6:30 AM	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	1
6:45 AM	0	0	0	4	0	0	0	0	0	0	0	0	0	2	0	1
7:00 AM	0	0	0	8	0	0	0	0	0	0	0	0	0	1	0	0
7:15 AM	Ő	0	2	8	0	Ő	ĭ	0	Ő	Ő	0	Ő	Ő	3	ő	2
7:20 AM	0	0	1	0	0	2	1	0	0	0	0	0	0	5	0	1
7.30 AN	0	0	1	3	0	2	1	0	0	0	0	0	0		0	1
7:45 AM	0	0	1	13	0	1	1	0	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	9	0	1	0	0	0	0	0	0	0	5	0	1
8:15 AM	0	0	0	6	0	0	0	0	0	0	0	0	0	8	0	1
8:30 AM	0	0	0	6	0	1	0	0	0	0	0	0	0	8	0	0
8:45 AM	0	0	2	9	0	1	0	0	0	0	0	0	0	6	0	2
9:00 AM	0	0	0	16	0	2	0	0	0	0	0	0	0	12	0	1
9:15 AM	0	0	1	4	0	1	3	0	0	0	0	0	0	9	0	1
9:30 AM	0	0	3	6	0	0	2	0	0	0	0	0	0	6	0	2
9:45 AM	0	0	2	7	0	1	2	0	0	0	0	0	0	9	0	0
10:00 AM	0	0	0	8	0	1	0	0	0	0	0	0	0	12	0	2
10:15 AM	Ő	0	Ő	10	0	2	Ő	0	0	0	0	0	ő	7	0	- 3
10:30 AM	0	0	3 3	6	0	1	1	0	0	0	0	0	ů Ň	5	0	0
10:45 AM	0	0	2	12	0	2	2	0	0	0	0	0	0	5	0	1
11:00 AM	0	0	3	7	0	1	1	0	0	0	0	0	0	7	0	2
11:15 AM	0	0	3	7	0	2	0	0	0	0	0	0	0	12	0	2
11.15 AIVI	0	0	0	0 E	0	3	0	0	0	0	0	0	0	10	0	4
11.30 Alvi	0	0	1	5	0	3	1	0	0	0	0	0	0	10	0	
11:45 AM	0	0	3	9	0	0	2	0	0	0	0	0	0	5	0	1
12:00 PM	0	0	3	6	0	1	4	0	0	0	0	0	0	4	0	3
12:15 PM	0	0	3	5	0	2	2	0	0	0	0	0	0	9	0	2
12:30 PM	0	0	3	/	0	2	2	0	0	0	0	0	0	6	0	3
12:45 PM	0	0	2	6	0	2	4	0	0	0	0	0	0	3	0	1
1:00 PM	0	0	1	7	0	1	1	0	0	0	0	0	0	8	0	0
1:15 PM	0	0	0	7	0	1	1	0	0	0	0	0	0	6	0	1
1:30 PM	0	0	3	5	0	1	0	0	0	0	0	0	0	7	0	0
1:45 PM	0	0	0	10	0	1	1	0	0	0	0	0	0	8	0	0
2:00 PM	0	0	3	7	0	0	0	0	0	0	0	0	0	2	0	2
2:15 PM	0	0	0	5	0	4	1	0	0	0	0	0	0	11	0	4
2:30 PM	0	0	0	9	0	1	1	0	0	0	0	0	0	6	0	0
2:45 PM	0	0	1	1	0	0	2	0	0	0	0	0	0	9	0	3
3:00 PM	0	0	0	3	0	1	0	0	0	0	0	0	0	10	0	3
3:15 PM	0	0	2	2	0	1	3	0	0	0	0	0	0	6	0	2
3:30 PM	Ō	0	2	3	0	3	3	0	0	0	0	0	0	2	0	2
3:45 PM	0	0	1	3	0	0	1	0	0	0	0	0	0	4	0	0
4:00 PM	0	0	0	7	0	3	0	0	0	0	0	0	0	5	0	3
4:15 PM	0	0	2	5	0	0	1	0	0	0	0	0	0	6	0	4
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	1
4:45 DM	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	1
4.45 PIVI	0	0	0	2	0	1	6	0	0	0	0	0	0	2	0	2
5.00 PW	0	0	0	3	0	1	0	0	0	0	0	0	0	2	0	2
5:15 PM	0	0	0	1	0	1	1	0	0	U	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
5:45 PM	U	0	1	1	0	0	0	0	0	0	0	0	0	2	0	0
6:00 PM	0	0	1	1	0	1	0	0	0	0	0	0	0	6	0	0
6:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0
6:30 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0
6:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0

AM PEAK HOUR		Duchaine Blvd				Duchai	ne Blvd							Theodore	Rice Blvd	
9:00 AM		Northbound				South	bound			East	bound			West	bound	
to	U-Turn	U-Turn Left Thru Right				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
10:00 AM	0 0 6 33			33	0	4	7	0	0	0	0	0	0	36	0	4
PHF	0.61					0.	69			0.	.00			0.	77	

MID PEAK HOUR		Duchaine Blvd				Duchai	ine Blvd							Theodore	Rice Blvd	
10:45 AM		North	bound			South	bound			East	oound			West	bound	
to	U-Turn	U-Turn Left Thru Right			U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:45 AM	0	0 0 6 32			0	9	4	0	0	0	0	0	0	35	0	8
PHF	0.68				0.	.81			0.	00			0.	63		
DM DEAK HOUD	Duchaine Blvd				Duchoi	no Plud							Thoodoro	Dico Blud		

PM PEAK HOUR		Duchaine Blvd				Duchai	ne Blvd							Theodore	Rice Blvd	
2:15 PM		Northbound				South	ibound			Eastb	ound			West	bound	
to	U-Turn	U-Turn Left Thru Right				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:15 PM	0	0	1	18	0	6	4	0	0	0	0	0	0	36	0	10
PHF		0.53				0.	50			0.	00			0.	77	

#### Michael Pompili 693\_010\_MM Location 4 New Bedford, MA Duchaine Blvd Theodore Rice Blvd 4/13/2021 Tuesday Clouds & Sun, 60°F



#### PEDESTRIANS & BICYCLES

		Duchai	ne Blvd			Duchai	ne Blvd			Footh	ound			Theodore	Rice Blvd	
Start Time	Loft	Thru	Douna Right	PED	Loft	Thru	Right	PED	Loft	Thru	Right	PED	Loft	Thru	Right	PED
	0	0		FED 0		0			Leit 0	0		FED 0	Leit 0	0		
6:15 AM	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
6:45 AM	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
7:15 AM	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
7:45 AM	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
8:15 AM	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
8:45 AM	0	0	1	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
9.15 AIVI	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
10:00 AM	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
10:30 AM	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
11:00 AM	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	2
11:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
11:45 AM	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	4
12:15 PM	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	0	0	0	0	1
12.45 PIVI 1:00 PM	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	3
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	Ő	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
2:15 PM	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
2:45 PM	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
3:15 PM	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
3.45 PIVI 4:00 PM	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
4:30 PM	0	0	1	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
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	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
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
6:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1
0.45 F IVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
7:00 AM		North	bound			South	bound			East	ound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MID PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd							Theodore	Rice Blvd	
12:00 PM		North	bound			South	bound			East	ound			West	ound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
DM DEAF HOUR		Duch-	no Plud			Duch-	no Plud							Thoodore	Dioo Dive	
2.45 DM		North				South	hound			Eacth	ound			Moot	NUCE BIVD	
2:45 PW	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	⊏astt Thru	Right	PED	Left	Thru	Right	PED
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
· ···	-		,	~	~	-				. ~	. <u> </u>	,			-	-

NOTE: Peak hour summaries here correspond to peak hours identified for passenger car and heavy vehicles combined.

Duchaine Blvd

Client:

Project #: BTD #:

Location: Street 1: Street 2: Count Date: Day of Week:

Weather:



PO BOX 1723, Framingham, MA 01701 Office: 978-746-1259 DataRequest@BostonTrafficData.com www.BostonTrafficData.com Samuel Barnet Blvd

#### PASSENGER CARS & HEAVY VEHICLES COMBINED Duchaine Blvd Samuel Barnet Blvd

		North	bound			South	ibouna			East	oouna			vvest	bouna	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	13	1	0	2	8	0	7	0	13	0	0	0	5
6:15 AM	0	0	1	3	0	0	5	13	0	6	0	3	0	0	0	8
6:30 AM	0	0	3	4	0	0	4	38	0	4	0	4	0	0	0	29
6:45 AM	Ő	Ő	0	5	0	0	10	60	0	3	Ő		0	0	0	45
7:00 AM	0	0	0	10	0	0	5	12	0	10	0	16	0	0	0	7
7.00 AM	0	0	0	19	0	0	5	12	0	19	0	10	0	0	0	1
7.15 AW	0	0	2	6	0	0	0	13	0	1	0	1	0	0	0	4
7:30 AIVI	0	0	9	5	0	0	/	16	0	3	0	1	0	0	0	5
7:45 AIVI	0	0	0	6	0	0	4	12	0	3	0	0	0	0	0	4
8:00 AM	0	0	1	4	0	0	1	10	0	4	0	3	0	0	0	3
8:15 AM	0	0	1	5	0	0	0	10	0	2	0	2	0	0	0	/
8:30 AM	0	0	2	5	0	0	1	5	0	7	0	4	0	0	0	3
8:45 AM	0	0	1	6	0	0	1	6	0	7	0	3	0	0	0	3
9:00 AM	0	0	0	5	0	0	0	7	0	6	0	5	0	0	0	4
9:15 AM	0	0	0	5	0	0	5	7	0	1	0	1	0	0	0	4
9:30 AM	0	0	0	1	0	0	1	3	0	4	0	0	0	0	0	2
9:45 AM	0	0	0	8	0	0	2	7	0	9	0	5	0	0	0	6
10:00 AM	0	0	2	14	0	0	2	8	0	7	0	17	0	0	0	5
10:15 AM	0	0	3	10	0	0	5	14	0	1	0	6	0	0	0	9
10:30 AM	0	0	3	7	0	0	3	6	0	7	0	6	0	0	0	3
10:45 AM	0	0	1	4	0	0	2	21	0	2	0	4	0	0	0	17
11:00 AM	0	0	3	71	0	0	7	8	0	43	0	67	0	0	0	5
11:15 AM	0	0	3	11	0	0	1	9	0	7	0	12	0	0	0	7
11:30 AM	0	0	1	17	0	0	4	20	0	8	0	17	0	0	0	9
11:45 AM	0	0	2	10	0	0	2	16	0	4	0	8	0	0	0	8
12:00 PM	0	0	2	60	1	0	5	6	0	24	0	59	0	0	0	8
12:15 PM	0	0	2	8	0	0	3	5	0	11	0	8	0	0	0	4
12:30 PM	0	0	3	2	0	0	3	2	0	4	0	3	0	0	0	1
12:45 PM	0	0	3	3	0	0	4	1	0	5	0	2	0	0	0	0
1:00 PM	0	0	5	3	0	0	4	4	0	0	0	4	0	0	0	1
1:15 PM	0	0	3	7	0	0	4	2	0	2	0	5	0	0	0	3
1:30 PM	0	0	1	4	0	0	6	6	0	2	0	3	0	0	0	6
1:45 PM	0	0	1	1	0	0	4	4	0	2	0	0	0	0	0	2
2:00 PM	0	0	7	8	1	0	12	2	0	6	0	2	0	0	0	2
2:15 PM	0	0	6	9	0	0	5	4	0	9	0	7	0	0	0	6
2:30 PM	0	0	1	7	0	0	2	2	0	2	0	3	0	0	0	5
2:45 PM	0	0	6	2	0	0	1	5	0	2	0	3	0	0	0	1
3:00 PM	0	0	2	1	0	0	3	2	0	2	0	1	0	0	0	2
3:15 PM	0	0	0	2	0	0	4	4	0	2	0	0	0	0	0	1
3:30 PM	0	0	5	2	0	0	2	3	0	1	0	3	0	0	0	0
3:45 PM	0	0	2	1	1	0	1	4	0	1	0	0	0	0	0	1
4:00 PM	0	0	1	4	0	0	3	4	0	2	0	2	0	0	0	3
4:15 PM	0	0	0	0	1	0	3	4	0	2	0	0	0	0	0	3
4:30 PM	0	0	2	8	0	0	0	2	0	2	0	8	0	0	0	3
4:45 PM	Ő	Ő	2	3	0	0	6	2	Ő	1	Ő	Ő	0	0	0	2
5:00 PM	Ő	õ	3	14	1	0	5	1	0	7	Ő	12	0	0	0	0
5:15 PM	Ő	Ő	4	0	0	0	5	1	Ő	3	Ő	0	0	0	0	1
5:30 PM	0	0	1	4	0	0	2	1	0	2	0	3	0	0	0	1
5:45 PM	0	0	1	2	0	0	1	0	0	0	0	1	0	0	0	2
6:00 PM	0	0	1	15	0	0	0	4	0	7	0	15	0	0	0	0
6:15 PM	0	0	0	7	0	0	3	3	0	1	0	10	0	0	0	1
6:30 PM	0	0	3	5	0	0	2	3	0	3	0	3	0	0	0	2
6:45 PM	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0
0.43 PIVI	U	U	U		U	U	U		U	U	U		U	U	U	U

AM PEAK HOUR	Duchaine Blvd					Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
7:00 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn Left Thru Right			Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:00 AM	0 0 11 36			36	0	0	22	53	0	26	0	18	0	0	0	20
PHF	0.62					0.	82			0.	.31			0.	71	
HV %	0.0% 0.0% 81.8% 16.7%			0.0%	0.0%	22.7%	7.5%	0.0%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	

ſ	MID PEAK HOUR 10:45 AM		Duchai North	ne Blvd bound			Duchair South	ne Blvd bound			Samuel B Eastt	arnet Blvd oound			Samuel B West	arnet Blvd bound	
	to	U-Turn	J-Turn Left Thru Right				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	11:45 AM	0	0	8	103	0	0	14	58	0	60	0	100	0	0	0	38
	PHF	0.38					0.1	75			0.	36			0.	56	
	HV %	0.0%	0.0%	25.0%	1.0%	0.0%	0.0%	7.1%	8.6%	0.0%	3.3%	0.0%	1.0%	0.0%	0.0%	0.0%	0.0%

PM PEAK HOUR	1	Duchai	ine Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
2:00 PM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	U-Turn Left Thru Right				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:00 PM	0	0 0 20 26			1	0	20	13	0	19	0	15	0	0	0	14
PHF		0.77				0.	57			0.	53			0.	58	
HV %	0.0%	0.0% 0.0% 25.0% 0.0%				0.0%	55.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Michael Pompili 693\_010\_MM Location 5 New Bedford, MA Duchaine Blvd Samuel Barnet Blvd 4/10/2021 Saturday Mostly Sunny, 65°F



### HEAVY VEHICLES

		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
		North	bound			South	bound			East	pound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
7:15 AM	0	0	2	2	0	0	2	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	7	2	0	0	2	2	0	1	0	0	0	0	0	1
7:45 AM	0	0	0	2	0	0	1	2	0	0	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	3	0	1	0	0	0	0	0	1
8:15 AM	0	0	0	2	0	0	0	0	0	1	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2	0	2	0	1	0	0	0	1
8:45 AM	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0
9:00 AM	Ő	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	1
0:20 AM	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	1
9:45 AM	0	0	0	1	0	0	0	1	0	1	0	1	0	0	0	1
3.40 AW	0	0	1	2	0	0	0	2	0	0	0	2	0	0	0	1
10:00 AIVI	0	0	0	2	0	0	0	2	0	1	0	0	0	0	0	0
10.15 AW	0	0	0	1	0	0	1	2 1	0	0	0	1	0	0	0	0
10:30 AM	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0
10:45 AM	0	0	0	1	0	0	0	3	0	0	0	1	0	0	0	0
11:00 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
11:30 AM	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0
11:45 AM	0	0	2	0	0	0	0	1	0	0	0	1	0	0	0	0
12:00 PM	0	0	0	0	0	0	1	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
12:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
1:15 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1
1:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1
1:45 PM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	1
2:00 PM	0	0	3	0	0	0	8	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	2	0	0	0	3	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
2:45 PM	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	1	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5:00 PM	õ	õ	õ	õ	õ	Ő	1	õ	õ	õ	õ	õ	Ő	Ő	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	Ő	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	1	ő	0	0	0	0	0	0	ő	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
6:20 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
6:45 DM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.43 FIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AM PEAK HOUR		Duchai	ine Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
7:15 AM		Northbound				South	bound			East	oound			West	bound	
to	U-Turn	U-Turn Left Thru Right				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:15 AM	0 0 10 6				0	0	5	7	0	2	0	0	0	0	0	3
PHF	0.44					0.	75			0.	50			0.	75	

MID PEAK HOUR	1	Ducha	ine Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
10:00 AM		Northbound				South	bound			East	bound			West	bound	
to	U-Turn	U-Turn Left Thru Right				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:00 AM	0	0 0 1 4				0	1	8	0	1	0	5	0	0	0	1
PHF	0.42					0.	.75			0.	.50			0.	25	

PM PEAK HOUR	1	Duchai	ine Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
2:00 PM		Northbound				South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:00 PM	0	0	5	0	0	0	11	0	0	0	0	0	0	0	0	0
PHF		0.42				0.	34			0.	00			0.	00	

to

#### Michael Pompili 693\_010\_MM Location 5 New Bedford, MA Duchaine Blvd Samuel Barnet Blvd 4/10/2021 Saturday Mostly Sunny, 65°F



#### PEDESTRIANS & BICYCLES Duchaine Blvd Samuel Barnet Blvd Duchaine Blvd Samuel Barnet Blvd Northbound Eastbound Westbound Southbound PED Thru PED Start Time Left Thru Right Left Thru Right PED Left Right PED Left Thru Right 6:00 AM 6:15 AM 6:30 AM Λ 6:45 AM 7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 8:15 AM 8:30 AM 8:45 AM 9:00 AM 9:15 AM 9:30 AM 9:45 AM 10:00 AM <u>0</u> 10:15 AM 10:30 AM 10:45 AM 11:00 AM 11:15 AM 11:30 AM 11:45 AM 12:00 PM 12:15 PM 12:30 PM 12:45 PM 1:00 PM 1:15 PM 1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 3:00 PM 3:15 PM 3:30 PM 3:45 PM 4:00 PM Ω 4:15 PM 4:30 PM 4.45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 6:15 PM 6:30 PN 6.45 PM AM PEAK HOUR Duchaine Blvd Duchaine Blvd Samuel Barnet Blvd Samuel Barnet Blvd 7:00 AM Northbound Southbound Eastbound Westbound PED PED PED PED Left Thru Left Left Thru Right Left Thru Right Right Thru Right 8:00 AM

MID PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
10:45 AM		North	bound			South	bound			East	bound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
11:45 AM	0 0 0 0				0	0	0	0	0	0	0	0	0	0	0	0
PM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
2:00 PM		North	bound			South	bound			East	ound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOTE: DL L			to month to see		f			a secolation of								

NOTE: Peak hour summaries here correspond to peak hours identified for passenger car and heavy vehicles combined.

#### 4/19/2021, 1:43 PM, 693\_TMC\_5 (April 10)

6:45 PM

#### Michael Pompili 693\_010\_MM Location 5 New Bedford, MA Duchaine Blvd Samuel Barnet Blvd 4/13/2021 Tuesday Clouds & Sun, 60°F



PASSENGER CARS & HEAVY VEHICLES COMBINED Samuel Barnet Blvd Duchaine Blvd Duchaine Blvd Samuel Barnet Blvd Northbound Eastbound Westbound Southbound Start Time U-Turn Left Thru Right U-Turn Left Thru Right U-Turn l eft Thru Right U-Turn Left Thru Right 6:00 AM 6:15 AM 6:30 AM 171 115 Λ л Λ . 10 6:45 AM 7:00 AM 7:15 AM 7:30 AM 7:45 AM 8:00 AM 25 8:15 AM 42 8:30 AM 8:45 AM 9:00 AM 9:15 AM 9:30 AM 10 9:45 AM 10:00 AM 17 10 10:15 AM 10:30 AM 10:45 AM 11:00 AM 11:15 AM 11:30 AM 11:45 AM 12:00 PM 12:15 PM 12:30 PM 12:45 PM 1:00 PM 1:15 PM 1:30 PM 1:45 PM 2:00 PM 2:15 PM 2:30 PM 2:45 PM 15 23 57 31 3:00 PM 3:15 PM 3:30 PM 17 3:45 PM 4:00 PM Ω 46 45 40 4:15 PM 4:30 PM 4.45 PM 5:00 PM 5:15 PM 5:30 PM 5:45 PM 6:00 PM 6:15 PM 6:30 PN 

AM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
7:00 AM		Northbound				South	bound			East	oound			West	oound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:00 AM	0	0	33	103	3	0	76	337	0	78	0	65	0	0	0	172
PHF	0.55					0.	91			0.	42			0.	86	
HV %	0.0%	0.0% 60.6% 16.5%		0.0%	0.0%	9.2%	6.5%	0.0%	24.4%	0.0%	4.6%	0.0%	0.0%	0.0%	2.9%	

Δ

	MID PEAK HOUR 11:45 AM		Duchai North	ne Blvd bound			Duchai South	ne Blvd bound			Samuel B Eastb	arnet Blvd oound			Samuel B West	arnet Blvd bound	
	to	U-Turn	U-Turn Left Thru Right 0 0 36 98				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	12:45 PM	0 0 36 98				1	0	54	146	0	122	0	74	0	0	0	68
	PHF	0.88				0.	84			0.	70			0.	89		
	HV %	0.0% 0.0% 50.0% 10.2%			0.0%	0.0%	25.9%	17.8%	0.0%	18.0%	0.0%	10.8%	0.0%	0.0%	0.0%	14.7%	
_			D d d d D d														

PM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
2:45 PM		North	bound			South	bound			Eastb	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:45 PM	0	0	26	279	1	0	63	150	0	147	0	216	0	0	0	93
PHF	0.61				0.	76			0.	59			0.	75		
TTT / 0/	0.00/	0.00/	7 70/	0 50/	0.00/	0.00/	22.20/	45 20/	0.00/	C 40/	0.00/	4 00/	0.00/	0.00/	0.00/	40 40/

#### Michael Pompili 693\_010\_MM Location 5 New Bedford, MA Duchaine Blvd Samuel Barnet Blvd 4/13/2021 Tuesday Clouds & Sun, 60°F



#### HEAVY VEHICLES

		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
		North	bound			South	bound			East	bound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	1	0	0	0	1	3	0	1	0	1	0	0	0	0
6:15 AM	0	0	2	1	0	0	1	4	0	1	0	1	0	0	0	2
6:30 AM	0	0	0	0	0	0	1	2	0	3	0	1	0	0	0	3
6:45 AM	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	1
7:00 AM	0	0	4	2	0	0	3	4	0	3	0	1	0	0	0	1
7:15 AM	0	0	6	3	0	0	3	3	0	5	0	1	0	0	0	1
7:30 AM	0	0	4	8	0	0	1	9	0	5	0	0	0	0	0	1
7:45 AM	0	0	6	4	0	0	0	6	0	6	0	1	0	0	0	2
8:00 AM	0	0	4	6	0	0	2	6	0	3	0	1	0	0	0	2
8.15 AM	0	0	1	4	0	0	1	5	0	5	0	1	0	0	0	0
8:30 AM	0	0	2	3	0	0	4	5	0	3	0	2	0	0	0	1
8:45 AM	0	0	2	1	0	0	3	3	0	7	0	0	0	0	0	0
9:00 AM	0	0	5	2	0	0	8	5	0	10	0	1	0	0	0	2
0:15 AM	0	0	1	2	0	0	6	7	0	10	0	0	0	0	0	5
0.20 AM	0	0	2	2	0	0	2	7	0	4	0	2	0	0	0	1
9.30 AM	0	0	3	2	0	0	5	10	0	7	0	5	0	0	0	1
3.40 AW	0	0	4	2	0	0	4	10	0	1	0	2	0	0	0	2
10:00 AIVI	0	0	3	1	0	0	4	10	0	4	0	2	0	0	0	2
10.15 AW	0	0	3	4	0	0	3	/	0	9	0	2	0	0	0	2
10:30 AM	0	0	4	4	0	0	2	8	0	4	0	2	0	0	0	6
10:45 AM	0	0	0	0	0	0	1	4	0	1	0	1	0	0	0	1
11:00 AM	0	0	4	2	0	0	4	/	0	4	0	3	0	0	0	6
11:15 AM	0	0	4	5	0	0	5	8	0	2	0	4	0	0	0	2
11:30 AM	0	0	4	5	0	0	2	13	0	1	0	/	0	0	0	3
11:45 AM	0	0	6	1	0	0	3	8	0		0	2	0	0	0	5
12:00 PM	0	0	3	3	0	0	4	5	0	5	0	1	0	0	0	1
12:15 PM	0	0	5	2	0	0	6	7	0	3	0	3	0	0	0	3
12:30 PM	0	0	4	4	0	0	1	6	0	7	0	2	0	0	0	1
12:45 PM	0	0	3	1	0	0	2	3	0	4	0	3	0	0	0	3
1:00 PM	0	0	5	5	0	0	2	10	0	4	0	5	0	0	0	2
1:15 PM	0	0	2	1	0	0	0	6	0	4	0	1	0	0	0	1
1:30 PM	0	0	0	2	0	0	1	7	0	8	0	2	0	0	0	3
1:45 PM	0	0	1	1	0	0	1	10	0	9	0	2	0	0	0	2
2:00 PM	0	0	0	3	0	0	2	2	0	6	0	3	0	0	0	3
2:15 PM	0	0	1	1	0	0	7	7	0	6	0	0	0	0	0	1
2:30 PM	0	0	2	3	0	0	2	4	0	2	0	2	0	0	0	2
2:45 PM	0	0	0	3	0	0	5	8	0	2	0	3	0	0	0	2
3:00 PM	0	0	0	2	0	0	8	4	0	1	0	2	0	0	0	5
3:15 PM	0	0	2	2	0	0	6	8	0	2	0	3	0	0	0	6
3:30 PM	0	0	0	0	0	0	2	3	0	4	0	1	0	0	0	2
3:45 PM	0	0	3	2	0	0	3	5	0	1	0	1	0	0	0	3
4:00 PM	0	0	1	0	0	0	2	4	0	4	0	0	0	0	0	1
4:15 PM	0	0	0	1	0	0	2	4	0	7	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	2	2	0	0	0	1	0	0	0	2
4:45 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	1	0	0	4	2	0	1	0	1	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0
6:00 PM	0	0	1	0	0	0	2	3	0	1	0	0	0	0	0	0
6:15 PM	õ	õ	. 1	1	Ő	Ő	0	3	õ	0	õ	Ő	Ő	Ő	0	õ
6:30 PM	õ	Ő	0	0	0	0	0	0	õ	1	Ő	0	0	0	0	0
6:45 PM	Ő	0	Ő	Ő	0	0	1	2	õ	1	Ő	0	0	0	0	0
0.101.01						<b>.</b>		-					· ·	•		

AM PEAK HOUR	1	Duchai	ine Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
9:00 AM		Northbound				South	bound			East	bound			West	bound	
to	U-Turn	U-Turn Left Thru Right				Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
10:00 AM	0 0 13 10				0	0	21	29	0	27	0	8	0	0	0	9
PHF	0.82					0.	83			0.	.73			0.	45	

MID PEAK HOUR	Duchaine Blvd				Duchaine Blvd				Samuel Barnet Blvd				Samuel Barnet Blvd			
11:00 AM	Northbound				Southbound				Eastbound				Westbound			
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
12:00 PM	0	0	18	13	0	0	14	36	0	14	0	16	0	0	0	16
PHF	0.86				0.83				0.83				0.67			

PM PEAK HOUR	Duchaine Blvd				Duchaine Blvd				Samuel Barnet Blvd				Samuel Barnet Blvd			
2:30 PM	Northbound				Southbound				Eastbound				Westbound			
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:30 PM	0	0	4	10	0	0	21	24	0	7	0	10	0	0	0	15
PHF	0.70				0.80				0.85				0.63			
#### Michael Pompili 693\_010\_MM Location 5 New Bedford, MA Duchaine Blvd Samuel Barnet Blvd 4/13/2021 Tuesday Clouds & Sun, 60°F



#### PEDESTRIANS & BICYCLES

		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
Start Time	Loft	Thru	Right	PED	Loft	Thru	Right	PED	l oft	Thru	Right	PED	Loft	Thru	Right	PED
	0	0		FED 0	Leit	0		FED 0	Len 0	0		FED 0	Leit 0	0		
6:15 AM	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
6:45 AM	0	0	0	0	0	0	0	0	0	Ő	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
7:15 AM	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
7:45 AM	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
8:15 AM	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
8:45 AM	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
9:15 AM	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
9:45 AM	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
10.15 AW	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
11:00 AM	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	õ	0	Ő	0	0	0	0
11:30 AM	Ő	Ő	Ő	Ő	Ő	Ő	Ő	Ő	Ő	ŏ	Ő	Ő	Ő	Ő	Ő	Ő
11:45 AM	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
12:15 PM	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
12:45 PM	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
1:15 PM	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
1:45 PM	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
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PIVI 2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.45 FM	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
3:30 PM	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
4:00 PM	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
4:30 PM	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
5:00 PM	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
5:30 PM	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
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:20 PM	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
0.45 F W	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel R	arnet Blvd	
7:00 AM		North	bound			South	bound			East	bound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MID PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
11:45 AM		North	bound			South	bound			East	bound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PEAK HOUR		Duchai	ne Blvd			Duchai	ne Blvd			Samuel B	arnet Blvd			Samuel B	arnet Blvd	
2:45 PM		North	bound	055	1.6	South	bound	055	1.6	East	bound	055	1.6	West	bound	DES
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
3:45 PM	U	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTE: Peak hour summaries here correspond to peak hours identified for passenger car and heavy vehicles combined.

Michael Pompili 693\_010\_MM Location 6 New Bedford, MA Phillips Road Samuel Barnet Blvd 4/10/2021 Saturday Mostly Sunny, 65°F



		PASSEN Phillip	<b>IGER CA</b> s Road	RS & HEA	AVY VEHI	CLES CC Samuel B	<b>MBINED</b> arnet Blvd									
		North	bound			South	bound			East	ound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	5	10	0	0	0	4	0	0	0	0	13	0	0	0	0
6:15 AM	0	8	9	0	0	0	6	0	0	0	0	3	0	0	0	0
6:30 AM	0	28	10	0	0	0	6	0	0	0	0	4	0	0	0	0
6:45 AM	0	44	4	0	0	0	11	1	0	0	0	4	0	0	0	0
7:00 AM	0	7	9	0	0	0	13	0	0	1	0	18	0	0	0	0
7:15 AM	0	4	13	0	0	0	10	0	0	0	0	6	0	0	0	0
7:30 AM	0	5	21	0	0	0	15	0	0	0	0	5	0	0	0	0
7:45 AM	0	5	20	0	0	0	22	0	0	1	0	5	0	0	0	0
8:00 AM	0	3	17	0	0	0	27	0	0	0	0	4	0	0	0	0
8:15 AM	0	7	17	0	0	0	20	0	0	0	0	5	0	0	0	0
8:30 AM	0	3	14	0	0	0	24	0	0	1	0	3	0	0	0	0
8:45 AM	0	3	23	0	0	0	19	0	0	1	0	5	0	0	0	0
9:00 AM	0	4	17	0	0	0	27	0	0	0	0	6	0	0	0	0
9:15 AM	0	4	30	0	0	0	23	0	0	0	0	5	0	0	0	0
9:30 AM	0	2	18	0	0	0	31	0	0	0	0	1	0	0	0	0
9:45 AM	0	6	30	0	0	0	25	0	0	0	0	8	0	0	0	0
10:00 AM	0	4	26	0	0	0	27	0	0	0	0	13	0	0	0	0
10:15 AM	0	9	26	0	0	0	26	0	0	1	0	7	0	0	0	0
10:30 AM	0	5	29	0	0	0	36	0	0	1	0	8	0	0	0	0
10:45 AM	0	16	35	0	0	0	37	2	0	0	0	4	0	0	0	0
11:00 AM	0	5	25	0	0	0	53	0	0	2	0	71	0	0	0	0
11:15 AM	0	6	40	0	0	0	42	1	0	2	0	7	0	0	0	0
11:30 AM	0	9	34	0	0	0	35	0	0	0	0	20	0	0	0	0
11:45 AM	0	9	32	0	0	0	41	0	0	2	0	7	0	0	0	0
12:00 PM	0	6	35	0	0	0	45	2	0	1	0	60	0	0	0	0
12:15 PM	0	4	35	0	0	0	37	0	0	0	0	7	0	0	0	0
12:30 PM	0	0	45	0	0	0	43	1	0	0	0	4	0	0	0	0
12:45 PM	0	0	38	0	0	0	43	0	0	0	0	3	0	0	0	0
1:00 PM	0	1	42	0	0	0	32	0	0	0	0	4	0	0	0	0
1:15 PM	0	3	24	0	0	0	42	0	0	0	0	5	0	0	0	0
1:30 PM	0	6	32	0	0	0	32	0	0	0	0	6	0	0	0	0
1:45 PM	0	2	36	0	0	0	27	0	0	0	0	1	0	0	0	0
2:00 PM	0	3	28	0	0	0	29	0	0	1	0	7	0	0	0	0
2:15 PM	0	6	78	0	0	0	27	0	0	0	0	7	0	0	0	0
2:30 PM	0	5	33	0	0	0	40	0	0	0	0	10	0	0	0	0
2:45 PM	0	1	25	0	0	0	36	0	0	0	0	2	0	0	0	0
3:00 PM	0	2	38	0	0	0	35	0	0	0	0	1	0	0	0	0
3:15 PM	0	1	36	0	0	0	34	0	0	0	0	2	0	0	0	0
3:30 PM	0	0	25	0	0	0	28	0	0	0	0	2	0	0	0	0
3:45 PM	0	1	33	0	0	0	37	0	0	0	0	1	0	0	0	0
4:00 PM	0	3	28	0	0	0	34	0	0	0	0	4	0	0	0	0
4:15 PM	0	3	31	0	0	0	34	0	0	0	0	1	0	0	0	0
4:30 PM	0	4	17	0	0	0	20	1	0	1	0	6	0	0	0	0
4:45 PM	0	0	18	0	0	0	26	0	0	2	0	2	0	0	0	0
5:00 PM	0	0	30	0	0	0	26	0	0	0	0	14	0	0	0	0
5:15 PM	0	1	25	0	0	0	34	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	33	0	0	0	31	0	0	0	0	4	0	0	0	0
5:45 PM	0	2	20	0	0	0	33	0	0	0	0	2	0	0	0	0
6:00 PM	0	0	25	0	0	0	22	0	0	0	0	14	0	0	0	0
6:15 PM	0	1	26	0	0	0	34	0	0	3	0	4	0	0	0	0
6:30 PM	0	2	24	0	0	0	31	0	0	1	0	4	0	0	0	0
CIAE DM	0	0	24	0	0	0	20	0	0	0	0	1	0	0	0	0

	AM PEAK HOUR 9:00 AM		Phillip: North	s Road bound			Phillip: South	s Road bound			Samuel B Eastt	arnet Blvd bound			West	bound	
l	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
l	10:00 AM	0	16	95	0	0	0	106	0	0	0	0	20	0	0	0	0
Ĩ	PHF		0.	77			0.	85			0.	.63			0.	.00	
	HV %	0.0%	56 3%	1 1 0/	0.0%	0.0%	0.0%	0.09/	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%

MID PEAK HOUR	1	Phillips	s Road			Phillips	s Road			Samuel B	arnet Blvd					
10:45 AM		North	bound			South	bound			Eastb	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:45 AM	0	36	134	0	0	0	167	3	0	4	0	102	0	0	0	Ō
11:45 AM PHF	0	36 0.	134 83	0	0	0	167 80	3	0	4 0.	0 36	102	0	0	0	Ō

PM PEAK HOUR 2:15 PM		Phillip: North	s Road bound			Phillips South	s Road bound			Samuel B Eastt	arnet Blvd oound			West	oound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:15 PM	0	14	174	0	0	0	138	0	0	0	0	20	0	0	0	0
PHF		0.	56			0.	86			0.	50			0.	00	
HV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%

#### 4/19/2021, 2:10 PM, 693\_TMC\_6 (April 10)

#### Michael Pompili 693\_010\_MM Location 6 New Bedford, MA Phillips Road Samuel Barnet Blvd 4/10/2021 Saturday Mostly Sunny, 65°F



#### HEAVY VEHICLES

		Phillip	s Road			Phillip	s Road			Samuel B	arnet Blvd					
		North	bound			South	bound			Easth	pound	-		West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	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
6:30 AM	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
7:00 AM	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	2	0	0	0	0
7:30 AM	0	1	2	0	0	0	0	0	0	0	0	2	0	0	0	0
7:45 AM	0	1	0	0	0	0	1	0	0	0	0	2	0	0	0	0
8.00 AM	0	1	1	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	2	0	0	0	0
8:30 AM	Ő	1	0	0	0	0	1 1	0	0	0	0	0	ő	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	ů 0	0	0	0
0.45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0:15 AM	0	7	0	0	0	0	1	0	0	0	0	0	0	0	0	0
0.20 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.30 AIVI	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0
9.45 AIVI	0	1	0	0	0	0	1	0	0	0	0	2	0	0	0	0
10:00 AIVI	0	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0
10.15 AW	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0
10.30 AIVI	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0
10.45 AW	0	0	0	0	0	0	2	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
11:15 AM	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	1	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
12:00 PM	0	1	0	0	0	0	1	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
12:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
1:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2:00 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	1	0	0	0	1	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
3:45 PM	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	1	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
4:30 PM	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	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
5:15 PM	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
5:45 PM	0	0	0	0	0	0	1	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
6:15 PM	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
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

AM PEAK HOUR		Phillip	s Road			Phillip	s Road			Samuel B	arnet Blvd					
7:15 AM		North	bound			South	bound			East	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:15 AM	0	3	3	0	0	0	1	0	0	0	0	6	0	0	0	0
PHF		0.	.50			0.	.25			0.	.75			0.	00	

MID PEAK HOUR		Phillip	s Road			Phillip	s Road			Samuel B	arnet Blvd					
10:00 AM		North	bound			South	bound			Eastb	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
11:00 AM	0	1	1	0	0	0	5	0	0	0	0	4	0	0	0	0
PHF		0.	.50			0.	63			0.	50			0.	00	

PM PEAK HOUR		Phillip	s Road			Phillip	s Road			Samuel B	arnet Blvd			10/		
2:00 PM		North	bound			South	bound			East	bound			west	souna	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:00 PM	0	1	1	0	0	0	3	0	0	0	0	1	0	0	0	0
PHF		0.	.25			0.	75			0.	25			0.	00	

#### Michael Pompili 693\_010\_MM Location 6 New Bedford, MA Phillips Road Samuel Barnet Blvd 4/10/2021 Saturday Mostly Sunny, 65°F



PEDESTRIANS & BIO	CYCLES
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		Phillips	s Road			Phillips	s Road			Samuel B	arnet Blvd					
		North	bound			South	bound	1		East	bound	1		West	ound	
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	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
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.15 AIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.30 AIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.45 AIVI 9:00 AM	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
8:30 AM	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
9:00 AM	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
9:30 AM	0	Ő	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 AM	0	Ő	0	0	0	0	0	0	0	ő	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
10:15 AM	0	1	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
10:45 AM	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
11:15 AM	0	0	0	0	0	0	0	0	0	ŏ	0	0	0	0	0	0
11:30 AM	0	Ő	0	0	0	0	0	0	0	ő	0	0	0	0	0	0
11:45 AM	0	1	0	ő	0	0	0	0	0	ñ	ñ	0	0	0	0	0
12:00 PM	0	0	Ő	ő	0	0	0	Ő	0	Ő	0	0	Ő	0	Ő	0
12:15 PM	0	Ő	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	Ő	0	0	0	1	Ő	0	0	Ő	0	0	0	0	0	0
12:45 PM	0	Ő	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	1 1	0	0	0	0	0	0	0	Ő	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
1:30 PM	0	Ő	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	Ő	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
2:15 PM	0	Ő	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
2:45 PM	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
3:15 PM	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
3:45 PM	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
4:15 PM	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
4:45 PM	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
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	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
6:00 PM	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
6:30 PM	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
AM PEAK HOUR		Phillips	s Road			Phillips	s Road			Samuel B	arnet Blvd					
9:00 AM		North	bound			South	bound			East	bound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MID PEAK HOUR		Phillips	s Road			Phillips	s Road			Samuel B	arnet Blvd					
10:45 AM		North	bound			South	bound			Easth	bound			West	oound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PEAK HOUR		Phillips	s Road			Phillips	s Road			Samuel B	arnet Blvd					
2:15 PM		North	bound			South	bound			East	ound			West	oound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTE: Peak hour summaries here correspond to peak hours identified for passenger car and heavy vehicles combined.

#### Michael Pompili 693\_010\_MM Location 6 New Bedford, MA Phillips Road Samuel Barnet Blvd 4/13/2021 Tuesday Clouds & Sun, 60°F



		Phillips	s Road			PASSEN Phillip South	IGER CA	RS & HEA	AVY VEHI	CLES CO Samuel B	DMBINED arnet Blvd			West	bound	
Stort Time	LI Turo	Loft	Thru	Pight	LI Turo	Loft	Thru	Pight	LI Turn	Lasu	Thru	Pight	LI Turo	Loft	Thru	Pight
Gion AM	0-1011	10	14	Right	0-1011	Leit			0-1011		11IIU	Right	0-1011	Leit	11110	Right
6.00 AM	0	19	14	0	0	0	5	1	0	1	0	3	0	0	0	0
0.15 AM	0	39	19	0	0	0	14	0	0	0	0	7	0	0	0	0
6:30 AM	0	100	30	0	0	0	20	2	0	0	0	/	0	0	0	0
6:45 AM	0	108	36	0	0	0	15	3	0	1	0	8	0	0	0	0
7:00 AM	0	36	20	0	0	0	39	0	0	3	0	53	0	0	0	0
7:15 AM	0	43	26	0	0	0	32	3	0	0	0	17	0	0	0	0
7:30 AM	0	38	32	0	0	0	21	1	0	1	0	18	0	0	0	0
7:45 AM	0	44	26	0	0	0	19	2	0	0	0	11	0	0	0	0
8:00 AM	0	33	35	0	0	0	23	0	0	2	0	30	0	0	0	0
8:15 AM	0	21	42	0	0	0	32	1	0	2	0	16	0	0	0	0
8:30 AM	0	20	27	0	0	0	32	5	0	1	0	13	0	0	0	0
8:45 AM	0	10	22	0	0	0	39	2	0	0	0	9	0	0	0	0
9:00 AM	0	20	19	0	0	0	34	0	0	0	0	18	0	0	0	0
9:15 AM	0	16	23	0	0	0	31	2	0	1	0	6	0	0	0	0
9:30 AM	0	9	18	0	0	0	19	1	0	0	0	8	0	0	0	0
9:45 AM	0	5	19	0	0	0	22	1	0	3	0	7	0	0	0	0
10:00 AM	0	11	18	0	0	0	29	0	0	0	0	8	0	0	0	0
10:15 AM	0	8	21	0	0	0	23	0	0	2	0	15	0	0	0	0
10:30 AM	0	11	31	Ő	0	0	26	2	0 0	2	0	10	0	0	0	Ő
10:45 AM	0	12	24	0	0	0	16	0	0	1	0	7	0	0	0	0
11:00 AM	0	11	14	0	0	0	35	0	0	0	0	17	0	0	0	0
11:15 AM	0	15	10	0	0	0	41	0	0	6	0	12	0	0	0	0
11:20 AM	0	14	24	0	0	0	21	1	0	2	0	15	0	0	0	0
11.30 AM	0	14	34	0	0	0	31	1	0	3	0	15	0	0	0	0
11:45 AM	0	18	20	0	0	0	34	1	0	0	0	23	0	0	0	0
12:00 PM	0	13	28	0	0	0	38	1	0	4	0	29	0	0	0	0
12:15 PM	0	18	25	0	0	0	44	1	0	1	0	20	0	0	0	0
12:30 PM	0	14	37	0	0	0	30	2	0	3	0	19	0	0	0	0
12:45 PM	0	15	40	0	0	0	25	1	0	1	0	12	0	0	0	0
1:00 PM	0	22	35	0	0	0	28	2	0	2	0	18	0	0	0	0
1:15 PM	0	14	18	0	0	0	28	2	0	2	0	11	0	0	0	0
1:30 PM	0	15	26	0	0	0	20	2	0	2	0	33	0	0	0	0
1:45 PM	0	17	25	0	0	0	23	0	0	1	0	18	0	0	0	0
2:00 PM	0	16	36	0	0	0	43	1	0	4	0	39	0	0	0	0
2:15 PM	0	18	31	0	0	0	26	1	0	1	0	10	0	0	0	0
2:30 PM	0	33	41	0	0	0	40	3	0	1	0	30	0	0	0	0
2:45 PM	0	31	41	0	0	0	49	0	0	0	0	22	0	0	0	0
3:00 PM	0	15	47	0	0	0	96	0	0	5	0	100	0	0	0	0
3:15 PM	0	27	34	0	0	0	45	1	0	2	0	30	0	0	0	0
3:30 PM	0	19	28	0	0	0	59	0	0	7	0	111	0	0	0	0
3:45 PM	0	16	33	0	0	0	55	1	0	0	0	34	0	0	0	0
4:00 PM	0	3	43	0	0	0	57	0	0	1	0	86	0	0	0	0
4:15 PM	0	2	44	0	0	0	40	0	0	1	0	26	0	0	0	0
4:30 PM	Ō	2	28	Ō	0	0	52	2	0	2	0	44	Ö	0	0	0
4:45 PM	0	3	37	0	0	0	38	0	0	0	0	36	0	0	0	0
5:00 PM	õ	3	39	Ő	Ő	Ő	45	Ő	Ő	3	Ő	42	õ	0	0	Ő
5:15 PM	õ	5	27	Ő	0	0	41	0	Ő	1	0	41	ů ř	0	0	0
5:30 PM	0	5	32	ŏ	0	0	34	2	Ő	3	0	10	0	0	0	0
5:45 PM	0	2	26	0	0	0	25	0	0	0	0	12	0	0	0	0
6:00 PM	0	1	10	0	0	0	20	0	0	1	0	12	0	0	0	0
6:15 DM	0	1	19	0	0	0	33	1	0	0	0	10	0	0	0	0
0.13 PIVI	0	3	20	0	0	0	40		0	0	0	12	0	0	0	0
0:30 PIVI	U	4	20	U	0	0	20	0	0	0	0	3	0	0	0	0

AM PEAK HOUR 7:00 AM		Phillip	s Road			Phillips	s Road			Samuel Basth	arnet Blvd			West	hound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8.00 AM	0	161	104	0	0	0	444	6	0	4	0	00	•	•	•	0
0.0011111	•	101	104	0		U		0	U	4	U	33	U	U	U	U
PHF	, v	0.	95	U	U	0.	75	0	U	4 0.4	46	33	U	0.0.0	00	U

i																	
	MID PEAK HOUR		Phillips	s Road			Phillips	s Road			Samuel Ba	arnet Blvd					
	11:45 AM		North	bound			South	bound			Eastb	ound			West	bound	
	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	12:45 PM	0	63	110	0	0	0	146	5	0	8	0	91	0	0	0	0
	PHF		0.	85			0.	84			0.	75			0.	00	
	HV %	0.0%	17.5%	0.9%	0.0%	0.0%	0.84				50.0%	0.0%	6.6%	0.0%	0.0%	0.0%	0.0%

PM PEAK HOUR 2:45 PM		Phillips	s Road			Phillips	s Road			Samuel B Fasth	arnet Blvd			West	hound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:45 PM	0	92	150	0	0	0	249	1	0	14	0	263	0	0	0	0
PHF		0.	84			0.	65			0.	59			0.	00	
HV %	0.0%	16.3%	10.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.0%	7.1%	0.0%	2.3%	0.0%	0.0%	0.0%	0.0%

#### Michael Pompili 693\_010\_MM Location 6 New Bedford, MA Phillips Road Samuel Barnet Blvd 4/13/2021 Tuesday Clouds & Sun, 60°F



#### HEAVY VEHICLES

		Phillip	s Road			Phillips	s Road			Samuel B	arnet Blvd					
		North	bound			South	bound			East	bound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	1	1	0	0	0	1	0	0	0	0	1	0	0	0	0
6:30 AM	0	1	3	0	0	0	2	2	0	0	0	0	0	0	0	0
6:45 AM	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0
7:15 AM	0	1	1	0	0	0	6	0	0	0	0	3	0	0	0	0
7:30 AM	0	1	1	0	0	0	2	0	0	0	0	8	0	0	0	0
7:45 AM	0	2	2	0	0	0	1	0	0	0	0	2	0	0	0	0
8:00 AM	0	2	2	0	0	0	4	0	0	1	0	6	0	0	0	0
8:15 AM	0	0	4	0	0	0	1	0	0	1	0	2	0	0	0	0
8:30 AM	0	1	0	0	0	0	1	0	0	0	0	3	0	0	Ő	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0:00 AM	0	2	1	0	0	0	1	0	0	0	0	2	0	0	0	0
0:15 AM	0		1	0	0	0	2	1	0	0	0	2	0	0	0	0
9.10 AW	0	4	0	0	0	0	1	0	0	0	0	2	0	0	0	0
9.30 AIVI	0	1	0	0	0	0	1	0	0	1	0	3	0	0	0	0
9.45 AIVI	0	2	0	0	0	0	1	0	0		0	2	0	0	0	0
10:00 AW	0	2	1	0	0	0	0	0	0	0	0	2	0	0	0	0
10.15 AW	0	2	2	0	0	0	0	0	0	1	0	1	0	0	0	0
10:30 AIVI	0	2	2	0	0	0	2	0	0	0	0	2	0	0	0	0
10.45 AIVI	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0
11:00 AM	0	5	1	0	0	0	2	0	0	0	0	2	0	0	0	0
11:15 AM	0	2	0	0	0	0	3	0	0	2	0	3	0	0	0	0
11:30 AM	0	3	0	0	0	0	1	0	0	1	0	4	0	0	0	0
11:45 AM	0	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0
12:00 PM	0	1	0	0	0	0	1	0	0	2	0	1	0	0	0	0
12:15 PM	0	4	1	0	0	0	2	0	0	1	0	1	0	0	0	0
12:30 PM	0	1	0	0	0	0	0	0	0	1	0	3	0	0	0	0
12:45 PM	0	3	1	0	0	0	2	0	0	0	0	1	0	0	0	0
1:00 PM	0	3	0	0	0	0	1	0	0	1	0	4	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0
1:30 PM	0	3	0	0	0	0	0	1	0	1	0	1	0	0	0	0
1:45 PM	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0
2:00 PM	0	4	5	0	0	0	6	0	0	1	0	2	0	0	0	0
2:15 PM	0	1	3	0	0	0	0	0	0	0	0	1	0	0	0	0
2:30 PM	0	2	1	0	0	0	3	0	0	1	0	2	0	0	0	0
2:45 PM	0	2	5	0	0	0	3	0	0	0	0	3	0	0	0	0
3:00 PM	0	5	3	0	0	0	2	0	0	1	0	1	0	0	0	0
3:15 PM	0	6	5	0	0	0	3	0	0	0	0	2	0	0	0	0
3:30 PM	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0
3:45 PM	0	4	1	0	0	0	2	0	0	0	0	2	0	0	0	0
4:00 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0
4:30 PM	0	2	0	0	0	0	1	0	0	1	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5:30 PM	0	1	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
6:00 PM	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	1	0	0	0	0	1	0	0	0	0
6:30 PM	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	0	0	0	0	0	0	0

AM PEAK HOUR		Phillip	s Road			Phillips	s Road			Samuel B	arnet Blvd					
7:15 AM		North	bound			South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:15 AM	0	6	6	0	0	0	13	0	0	1	0	19	0	0	0	0
PHF		0.	.75			0.	54			0.	63			0.	00	

N	MID PEAK HOUR		Phillip	s Road			Phillip	s Road			Samuel B	arnet Blvd					
	10:30 AM		North	bound			South	bound			East	ound			West	oound	
	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	11:30 AM	0	15	3	0	0	0	8	0	0	3	0	7	0	0	0	0
	PHF		0.	.56			0.	67			0.	50			0.	00	

1	PM PEAK HOUR		Phillip	s Road			Phillips	s Road			Samuel B	arnet Blvd					
	2:30 PM		North	bound			South	bound			Eastb	oound			West	bound	
	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	3:30 PM	0	15	14	0	0	0	11	0	0	2	0	8	0	0	0	0
	PHF		0.	.66			0.	92			0.	83			0.	00	

#### Michael Pompili 693\_010\_MM Location 6 New Bedford, MA Phillips Road Samuel Barnet Blvd 4/13/2021 Tuesday Clouds & Sun, 60°F



#### PEDESTRIANS & BICYCLES

		Phillips	s Road			Phillips	s Road			Samuel B	arnet Blvd			Weet	hound	
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	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
6:30 AM	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
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.15 AIVI 7.20 AM	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
8:00 AM	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
8:30 AM	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
9:00 AM	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
9:30 AM	0	0	0	0	0	1	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
10:15 AM	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
10:45 AM	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
11:15 AM	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
11:45 AIVI 12:00 PM	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
12:30 PM	0	0	0	0	0	0	0	0	0	Ő	0	0	0	0	ů 0	0
12:45 PM	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
1:15 PM	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
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PW	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
2:45 PM	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
3:15 PM	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
3:45 PM	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
4:30 PM	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
5:00 PM	0	0	0	0	0	1	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
5:30 PM	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
6:00 PM	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
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM PEAK HOUR		Phillips	s Road			Phillips	s Road			Samuel B	arnet Blvd					
7:00 AM		North	bound	55-		South	bound	55-		East	ound	55-		West	bound	0.55
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
8:00 AM	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	0
MID PEAK HOUR		Philling	s Road			Phillin	s Road			Samuel R	arnet Blvd					
11:45 AM		North	bound			South	bound			Fast	ound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
12:45 PM	0	0	Ő	0	0	0	Ő	0	0	0	Ő	0	0	0	Ő	0
PM PEAK HOUR		Phillips	s Road			Phillips	s Road			Samuel B	arnet Blvd					
2:45 PM	64	North	bound Bight	DED	1.04	South	Dound	DED	64	East	Dound	DED	L off	West	Dound	DED
10 3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
J.TJ 1 1V1	5				0	5	0	5						5	0	0

NOTE: Peak hour summaries here correspond to peak hours identified for passenger car and heavy vehicles combined.

Michael Pompili 693\_010\_MM Location 7 New Bedford, MA Duchaine Blvd Site Drive 4/10/2021 Saturday Mostly Sunny, 65°F



						PASSEN	IGER CA	RS & HEA	VY VEHI	CLES CO	MBINED					
		North	bound			Duchai South	ne Blvd bound			Site Easth	Drive			Site West	Drive	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1
6:30 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1
6:45 AM	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	5
7:30 AM	0	0	0	0	3	0	0	5	0	0	0	0	0	0	0	10
7:45 AM	0	0	0	0	0	0	0	3	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	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
10:00 AM	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	1
10:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
10:30 AM	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	2	0	0	0	0 0	0	0	0	0
11:00 AM	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1
1:00 PM	0	0	0	0	3	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	3
1:30 PM	0	0	0	0	1	0	0	/	0	0	0	0	0	0	0	1
1.45 PIVI	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
2:00 PIVI 2:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6
2:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	6
2:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
3:00 PM	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	1	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	2
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:00 PIVI 6:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1
6:30 PM	0	0	0	0	3	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
0.1011	. ~	, v	, v	, v	v	~	, v	, v	. v	, v	. ~	· ·		v	Ŭ	, v

AM PEAK HOUR	1					Duchai	ne Blvd			Site	Drive			Site I	Drive	
7:00 AM	1	North	bound			South	bound			Eastb	ound			West	oound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:00 AM	0	0	0	0	4	0	0	15	0	0	0	0	0	0	0	21
PHF	1	0.	00			0.	59			0.	00			0.	53	

MID PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
1:00 PM		North	bound			South	bound			Eastb	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
2:00 PM	0	0	0	0	8	0	0	12	0	0	0	0	0	0	0	5
PHF		0.	00			0.	63			0.	00			0.	42	
HV %	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	75.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PM PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
2:00 PM		North	bound			South	bound			Eastb	bound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:00 PM	0	0	0	0	7	0	0	14	0	0	0	0	0	0	0	21
PHF		0.	00				0.	00			0.	88				
HV %	0.0%	0.0%	0.0%	0.0%	57.1%	0.0%	0.0%	14.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Michael Pompili 693\_010\_MM Location 7 New Bedford, MA Duchaine Blvd Site Drive 4/10/2021 Saturday Mostly Sunny, 65°F

0.00



#### HEAVY VEHICLES

						Duchai	ne Blvd		LINOLLO	Site	Drive			Site	Drive	
0. · · · ·		North	bound			South	bound			East	bound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	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	1
6:30 AM	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
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	7
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
8:00 AM	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	0	0	0	0	0
8:30 AM	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
9:00 AM	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
9:30 AM	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
10:00 AM	0	0	0	0	0	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
10:30 AM	0	0	0	0	0	0	0	1	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
11:00 AM	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	1	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	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	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	3	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
12:45 PM	0	0	0	0	0	0	0	0	0	0	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
1:15 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	2	0	0	5	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	2	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
2:45 PM	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
3:15 PM	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
3:45 PM	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
4:15 PM	0	0	0	0	0	0	0	2	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	1
4:45 PM	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
5:15 PM	0	0	0	0	0	0	0	1	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	1
5:45 PM	Ũ	Ő	Õ	Ũ	0	Ő	Ő	Ő	Ő	Ő	ŏ	Ő	Ő	Ő	Ő	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	Ő	õ	0	0	Ő	õ	1	Ő	õ	õ	Õ	0	Ő	Ő	õ
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6:45 PM	Ő	Ő	õ	0	0	Ő	õ	õ	Ő	õ	õ	Ő	Ő	Ő	Ő	0
		-		-	-							-				
AM PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	

AM PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site I	Drive	
7:15 AM		North	bound			South	bound			Easth	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
8:15 AM	0	0	0	0	3	0	0	2	0	0	0	0	0	0	0	13
PHF		0.	00			0.	42			0.	00			0.	46	

MID PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
1:00 PM		North	bound			South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
2:00 PM	0	0	0	0	2	0	0	9	0	0	0	0	0	0	0	0
PHF		0	.00			0.	39			0.	00			0.	00	
PM PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
2:00 PM		North	bound			South	bound			East	oound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
3:00 PM	0	0	0	0	4	0	0	2	0	0	0	0	0	0	0	0
PHF		0	.00			0.	38			0.	00			0.	00	

Michael Pompili 693\_010\_MM Location 7 New Bedford, MA Duchaine Blvd Site Drive 4/10/2021 Saturday Mostly Sunny, 65°F



#### PEDESTRIANS & BICYCLES

		North	bound			Duchai	ne Blvd			Site	Drive			Site	Drive	
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	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
6:30 AM	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
7:00 AM	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
7:45 AM	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
8:15 AM	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
8:45 AM	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
9.15 AM	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
10:00 AM	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
10:30 AM	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
11:00 AM	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
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	Ő	Ő	Ő	Ő	Ő	Ő	Ő	Ő	Ő	Õ	Ő	Ő	Ő	0	Ő	0
12:15 PM	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
12:45 PM	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
1:15 PM 1:30 PM	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
2:00 PM	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
2:30 PM	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
3:00 PM	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
3:45 PM	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
4:15 PM	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
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.00 PIVI 5:15 PM	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
5:45 PM	Ő	Ő	Ő	Ő	Ő	Ő	Ő	Ő	Ő	Õ	Ő	Ő	Ő	Ő	Ő	Ő
6:00 PM	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
6:30 PM	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
AM PEAK HOUD						Duchoi	ne Blvd			Sito	Drive			Sito	Drive	
7:00 AM		North	bound			South	bound			Easth	bound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MID PEAK HOUR		NI. 21				Duchai	ne Blvd			Site	Drive			Site	Drive	
1:00 PM	Loft	North	bound Bight	DED	Loft	South	bound Bight	DED	Loft	East	Dound	DED	Loft	West	bound Right	DED
10 2:00 PM	0	n		0	Leit 0	0	Right 0	0		n		0	Leit 0	0	Right 0	0
2.001 191	5	0	5	5	0	5	0	5	5	0	5	5	0	5	0	5
PM PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
2:00 PM		North	bound			South	bound			East	ound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NOTE: Peak hour summaries here correspond to peak hours identified for passenger car and heavy vehicles combined.

Start Time 6:00 AM

6:15 AM

6:30 AM

6:45 AM

7:00 AM

7:15 AM

7:30 AM

7:45 AM

8:00 AM

8:15 AM 8:30 AM

8:45 AM

F

U-Turn

#### Michael Pompili 693\_010\_MM Location 7 New Bedford, MA Duchaine Blvd Site Drive 4/13/2021 Tuesday Clouds & Sun, 60°F

Northbound

Left



#### PASSENGER CARS & HEAVY VEHICLES COMBINED Duchaine Blvd Site Drive Site Drive Westbound Southbound Eastbound U-Turn U-Turn Thru Right Left Thru Right U-Turn l eft Thru Right Left Thru Right Δ 17 17 14 0

9:00 AM	0	0	0	0	3	0	0	14	0	0	0	0	0	0	1	12
9:15 AM	0	0	0	0	3	0	0	11	0	0	0	0	0	0	0	5
9:30 AM	0	0	0	0	3	0	0	2	0	0	0	0	0	0	2	6
9:45 AM	0	0	0	0	4	0	0	10	0	0	0	0	0	0	1	4
10:00 AM	0	0	0	0	7	0	0	9	0	0	0	0	0	0	1	6
10:15 AM	0	0	0	0	3	0	0	9	0	0	0	0	0	0	0	13
10:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	8
10:45 AM	0	0	0	0	1	0	0	5	0	0	0	0	0	0	0	4
11:00 AM	0	0	0	0	1	0	0	6	0	0	0	0	0	0	1	9
11:15 AM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	1	10
11:30 AM	0	0	0	0	2	0	0	9	0	0	0	0	0	0	1	10
11:45 AM	0	0	0	0	4	0	0	8	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	4	0	0	5	0	0	0	0	0	0	0	6
12:15 PM	0	0	0	0	11	0	0	7	0	0	0	0	0	0	0	12
12:30 PM	0	0	0	0	6	0	0	1	0	0	0	0	0	0	0	7
12:45 PM	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0	3
1:00 PM	0	0	0	0	0	0	0	10	0	0	0	0	0	0	1	5
1:15 PM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
1:30 PM	0	0	0	0	2	0	0	4	0	0	0	0	0	0	0	4
1:45 PM	0	0	0	0	1	0	0	8	0	0	0	0	0	0	0	7
2:00 PM	0	0	0	0	1	0	0	11	0	0	0	0	0	0	0	5
2:15 PM	0	0	0	0	1	0	0	17	0	0	0	0	0	0	0	3
2:30 PM	0	0	0	0	1	0	0	10	0	0	0	0	0	0	0	12
2:45 PM	0	0	0	0	2	0	0	12	0	0	0	0	0	0	1	14
3:00 PM	0	0	0	0	2	0	0	15	0	0	0	0	0	0	1	23
3:15 PM	0	0	0	0	2	0	0	10	0	0	0	0	0	0	2	8
3:30 PM	0	0	0	0	3	0	0	6	0	0	0	0	0	0	2	23
3:45 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	16
4:00 PM	0	0	0	0	0	0	0	7	0	0	0	0	0	0	1	7
4:15 PM	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0	7
4:30 PM	0	0	0	0	2	0	0	3	0	0	0	0	0	0	1	8
4:45 PM	0	0	0	0	5	0	0	3	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	1	0	0	12	0	0	0	0	0	0	1	7
5:15 PM	0	0	0	0	2	0	0	6	0	0	0	0	0	0	0	7
5:30 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	4
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	7
6:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1
6:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2

AM PEAK HO	DUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
7:00 AM			North	bound			South	bound			East	bound			West	oound	
to	U	J-Turn	Left	Thru	Right	U-Turn	U-Turn Left Thru Right I				Left	Thru	Right	U-Turn	Left	Thru	Right
8:00 AM		0	0	0	0	2	0	0	57	0	0	0	0	0	0	6	74
PHF			0.	00			0.	57			0.	.00			0.	65	
HV %	0	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	12.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	83.3%	28.4%

MID PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site I	Drive	
11:30 AM		North	bound			South	bound			Eastb	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
12:30 PM	0	0	0	Ō	21	21 0 0 29				0	0	Ō	0	0	1	30
PHF		0.	00			0.	69			0.	00			0.	65	
HV %	0.0%	0.0%	0.0%	0.0%	38 1%	0.69 38.1% 0.0% 0.0% 41.4%				0.09/	0.00/	0.00/	0.00/	0.00/	0.0%	40.0%
			0.070	0.070	30.170	0.070	0.0 /0	41.4/0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.076	40.0 /0
			01070	0.070	30.178	0.078	0.0 /8	41.4 /0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0 /8	40.0 /8
PM PEAK HOUR		,	01070	01070	50.170	Duchai	ne Blvd	41.470	0.0%	Site	Drive	0.0%	0.0%	Site I	Drive	40.078
PM PEAK HOUR 2:45 PM		North	bound	01070	30.178	Duchai South	ne Blvd bound	41.476	0.0%	Site Eastb	Drive ound	0.0%	0.0%	Site I Westt	Drive Dound	40.078
PM PEAK HOUR 2:45 PM to	U-Turn	North Left	bound Thru	Right	U-Turn	Duchai South Left	ne Blvd bound Thru	Right	U-Turn	Site   Eastb	Drive ound Thru	Right	U-Turn	Site I Westt	Drive pound Thru	Right

:45 PM		North	bound			South	bound			Eastb	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
:45 PM	0	0	0	0	9	0	0	43	0	0	0	0	0	0	6	68
PHF		0.	00			0.	76			0.	00			0.	74	
HV %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	46.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	1.5%

Michael Pompili 693\_010\_MM Location 7 New Bedford, MA Duchaine Blvd Site Drive 4/13/2021 Tuesday Clouds & Sun, 60°F



#### HEAVY VEHICLES

						Duchai	ne Blvd			Site	Drive			Site	Drive	
		North	bound			South	bound			East	ound			West	bound	
Start Time	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
6:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	0
6:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
6:45 AM	0	0	Ő	Ő	0	0	Ő	0	Ő	0	0	0	ő	Ő	1	4
7:00 AM	0	0	Ő	Ő	0	0	Ő	4	0	0	0	0	ů 0	0	2	2
7.00 AIVI	0	0	0	0	0	0	0	4	0	0	0	0	0	0	2	2
7.15 AIVI	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	10
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6
8:00 AM	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	10
8:15 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	1
9:00 AM	0	0	0	0	2	0	0	1	0	0	0	0	0	0	1	5
9:15 AM	0	0	0	0	2	0	0	5	0	0	0	0	0	0	0	1
9:30 AM	0	0	0	0	2	0	0	4	0	0	0	0	0	0	2	1
9:45 AM	0	0	Ő	0	1	0	0	0	0	0	0	0	0	0	1	1
10:00 AM	0	0	0	0	0	0	0	6	0	0	0	0	0	0	1	2
10:00 AM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	3
10.15 AIVI	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	4
10:30 AM	U	U	U	0	U	0	0	4	U	U	U	U	0	0	0	5
10:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	1	0	0	2	0	0	0	0	0	0	1	5
11:15 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	1	5
11:30 AM	0	0	0	0	1	0	0	4	0	0	0	0	0	0	0	5
11:45 AM	0	0	0	0	2	0	0	5	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	3	0	0	2	0	0	0	0	0	0	0	3
12:15 PM	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	2
12:30 PM	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	2
12:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	0	0	Ő	Ő	0	0	Ő	1	Ő	0	0	0	ő	Ő	1	5
1:15 DM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1
1.13 FIVI	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1
1.30 PIVI	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	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	1
2:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3
2:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
3:00 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	1	0
3:15 PM	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	7	0	0	0	0	0	0	1	0
3:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1
4.15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
4.43 PIVI	0	0	0	0	0	0	0	2 1	0	0	0	0	0	0	0	1
5.00 PIVI	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	1
5:15 PM	U	U	U	U	0	0	0	6	U	U	U	U	0	0	0	U
5:30 PM	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	7	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
6:15 PM	0	0	0	0	0	0	0	1	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
6:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
AM PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	

Ĩ	PHF		0	00			0	56			0	00			0	60	
	8:30 AM	0	0	0	0	2	0	0	7	0	0	0	0	0	0	3	28
	to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
	7:30 AM		North	bound			South	bound			East	bound			West	bound	
	AM PEAK HOUK						Ducha	ne Biva			Site	Drive			Site	Drive	

MID PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
11:00 AM		North	bound			South	bound			East	ound			West	bound	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
12:00 PM	0	0	0	0	4	0	0	15	0	0	0	0	0	0	2	17
PHF		0.	00			0.	68			0.	00			0.	79	
PM PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
3:00 PM		North	hound			South	hound			Eacth	ound			Weet	hound	
		140101	bound			South	bound			Lasu	Jouria			11631	Journa	
to	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right
to 4:00 PM	U-Turn 0	Left	Thru 0	Right 0	U-Turn 0	Left	Thru 0	Right 21	U-Turn 0	Left 0	Thru 0	Right 0	U-Turn 0	Left	Thru 2	Right 3

Michael Pompili 693\_010\_MM Location 7 New Bedford, MA Duchaine Blvd Site Drive 4/13/2021 Tuesday Clouds & Sun, 60°F



#### PEDESTRIANS & BICYCLES

		North	bound			Duchai	ne Blvd			Site	Drive			Site	Drive	
Start Time	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
6:00 AM	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
6:30 AM	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
7:00 AM	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
7:45 AM	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
8:15 AM	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
8:45 AM	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
9:30 AM	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
10:00 AM	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
10:30 AM	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
11:00 AM	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
11:45 AM	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
12:15 PM	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
12:45 PM	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
1:30 PM	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
2:00 PM	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
2:30 PM	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
3:00 PIVI 2:15 PM	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
3:45 PM	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
4:15 PM	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
4:45 PM	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
5:30 PM	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
6:00 PM	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
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PIVI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
7:00 AM		North	bound			South	bound			East	bound			West	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MID DEAK HOUD						Duck -	no Divid			0:+-	Drive			0:+-	Drive	
11:30 AM		North	bound			South	hound			Site	ound			Site Wast	bound	
to	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED	Left	Thru	Right	PED
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM PEAK HOUR						Duchai	ne Blvd			Site	Drive			Site	Drive	
2:45 PM	1.64	North	bound		1.64	South	bound	DED	1.64	East	ound Direct		-4	West	bound	DED
to 3:45 PM	Lett	i nru 0	Right		Len	nru	Right	PED		i nru 0	Right		Lett	nru	Right	PED
J.4J I WI	U	U	U	v	U	U	U	U	U	U	U	v	U	U	U	U

NOTE: Peak hour summaries here correspond to peak hours identified for passenger car and heavy vehicles combined.

## **APPENDIX B**

MassDOT Mobility Dashboard Data



2019 @2020 @2021 \_\_\_\_% Change 2020 vs 2019 \_\_\_\_% Change 2021 vs 2019 .....% Change 2021 vs 2020



Week Sterl Date







Week Sterl Date

## **APPENDIX C**

Automatic Traffic Recorder Data

## **Transportation Data Corporation**

Mario Perone, mperone l@verizon.net tel (781) 587-0086 cell (781) 439-4999

Duchaine Boulevard north of U-turn, north of Sam Barnet Boulevard City, State: New Bedford, MA Client: McM/S. Hawkins

	40 1 40				0.0							0.5		
Start	13-Jun-18		NB		SB	Co	ombined	14-Ji	un	NB		SB	Combi	ned
Time	Wed	A.M.	. P.M	I. A.M	. P.M	. A.M	. P.N	1. Thu	J A.N	1. P.N	1. A.N	I. P.M	. A.M.	P.M.
12:00		16	57	4	41	20	98		16	69	1	50	17	119
12:15		2	29	0	48	2	77		2	46	3	49	5	95
12:30		0	38	2	44	2	82		0	30	0	31	0	61
12:45		4	44	0	47	4	91		1	34	0	64	1	98
01:00		2	39	1	37	3	76		1	43	1	46	2	89
01:15		1	22	0	27	1	49		1	37	0	36	1	73
01:30		1	26	2	59	3	85		3	35	3	29	6	64
01:45		2	44	2	25	4	69		1	33	0	54	1	87
02:00		1	30	0	48	1	78		6	40	1	37	7	77
02:15		4	46	2	35	6	81		1	36	0	27	1	63
02:10		1	34	2	43	4	77		1	30	2	20	3	78
02:00		4	30	2	51	6	81		0	25	2	40	2	65
02:40		2	66	1	20	1	05		1	56	2	36	2	00
03.00		1	54	0	23	4	95		6	40	2	25	11	92
03.15		1	54	0	21	9	00		0	40	5 5	20	10	00 70
03:30		2	51	2	31	4	82		5	42	5	37	10	79
03:45		9	31	1	30	16	61		13	40	3	28	16	68
04:00		9	75	2	16	11	91		3	77	6	25	9	102
04:15		10	36	5	12	15	48		8	36	5	20	13	56
04:30		2	44	16	19	18	63		6	43	14	23	20	66
04:45		14	42	25	16	39	58		5	39	27	20	32	59
05:00		23	49	12	13	35	62		26	59	20	13	46	72
05:15		10	29	10	16	20	45		17	34	23	13	40	47
05:30		19	29	35	12	54	41		8	31	30	21	38	52
05:45		11	16	31	13	42	29		19	19	36	27	55	46
06:00		9	16	17	13	26	29		5	24	18	9	23	33
06:15		16	17	35	4	51	21		9	16	27	8	36	24
06:30		28	8	59	5	87	13		24	18	57	7	81	25
06.45		24	13	84	10	108	23		25	6	92	15	117	21
07:00		44	9	55	8	99	17		32	g	54	10	86	19
07:00		23	5	48	15	71	20		10	17	46	12	65	20
07:10		23	14	05	5	122	10		16	9	68	7	84	15
07.30		12	14	71	10	142	10		24	10	00	7	107	17
07.43		42	9	67	10	04	19		10	10	93	1	70	17
00.00		21	5	07 57	2	94	2		19	0	60 54	2	79	10
08:15		10	3	57	0	13	3		23	3	54	1	70	10
08:30		15	2	31	5	46	1		15	10	55	6	70	16
08:45		41	2	51	4	92	6		49	4	34	5	83	9
09:00		32	1	39	2	/1	3		30	2	37	6	67	8
09:15		17	3	27	3	44	6		27	4	22	2	49	6
09:30		32	6	28	6	60	12		26	10	32	5	58	15
09:45		27	12	25	4	52	16		25	2	30	7	55	9
10:00		35	19	28	4	63	23		34	4	24	1	58	5
10:15		28	3	38	6	66	9		22	4	25	6	47	10
10:30		31	10	25	14	56	24		13	7	31	19	44	26
10:45		19	10	30	22	49	32		26	8	31	18	57	26
11:00		43	24	37	9	80	33		42	25	29	14	71	39
11:15		27	6	35	1	62	7		28	2	35	0	63	2
11:30		49	3	35	2	84	5		24	1	20	6	44	7
11:45		42	4	44	3	86	7		48	6	43	5	91	11
Total		845	1165	1233	900	2078	2065		765	1189	1206	974	1971	2163
Day Tota	J	20	1100	2.00	133	2010	143		1 1	954	200	180	4134	2100
% Total	" 2	0.4%	28 1%	20.8%	21 7%	-	140		18 5%	28.8%	20.2%	23.6%	+10+	
70 T UIdl	2	U. <del>-</del> 70	20.170	23.0 /0	ZI.1 /0				10.070	20.070	23.270	20.070		
Dock		11.00	02.1F	07.20	12.00	07.00	12.00		11.00	02.15	07.20	12.00	07.20	12.00
reak	-	164	03.15	07.30	12.00	01.00 ADE	12.00	-	11.00	400	01.30	12.00	07.30	12.00
	-	101	211	290	100	405	348	-	142	199	215	194	JO/	3/3
P.H.F.	(	J.821	0.703	0.763	0.938	0.830	0.888		0.740	0.046	0.739	0.758	0.722	0.784
	* 5 -	4 4 0 0		T 4 400										
ADT	ADI 4	4,138	AAD	1 4,138										

05063Avolume Site Code: Y-18215.11

## Transportation Data Corporation

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

Duchaine Boulevard north of *tel* U-turn, north of Sam Barnet Boulevard City, State: New Bedford, MA Client: McM/S. Hawkins

Start	13-Jun-18	Ν	IB	Hour	Totals	S	BB	Hour	Totals	Combin	ed Totals
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12.00	mou	16	57	morning	7 (100110011	4	41	morning	7	mornig	7 (10) 110 011
12:15		2	29			0	48				
12:30		0	38			2	44				
12:45		4	44	22	168	0	47	6	180	28	348
01:00		2	39		100	1	37	Ū	100	20	010
01.15		1	22			0	27				
01:30		1	26			2	59				
01:45		2	44	6	131	2	25	5	148	11	279
02:00		1	30	Ū	101	0	48	Ū	1.10	••	2.0
02:15		4	46			2	35				
02:30		1	34			3	43				
02:45		4	30	10	140	2	51	7	177	17	317
03:00		3	66			1	29	•			0.1
03:15		1	54			8	31				
03:30		2	51			2	31				
03:45		9	31	15	202	7	30	18	121	33	323
04.00		9	75	10	202	2	16	10		00	020
04:15		10	36			5	12				
04:30		2	44			16	19				
04:45		14	42	35	197	25	16	48	63	83	260
05:00		23	49			12	13				200
05:15		10	29			10	16				
05:30		19	29			35	12				
05:45		11	16	63	123	31	13	88	54	151	177
06:00		9	16			17	13				
06:15		16	17			35	4				
06:30		28	8			59	5				
06:45		24	13	77	54	84	10	195	32	272	86
07:00		44	9			55	8				
07:15		23	5			48	15				
07:30		27	14			95	5				
07:45		42	9	136	37	71	10	269	38	405	75
08:00		27	5			67	2				
08:15		16	3			57	0				
08:30		15	2			31	5				
08:45		41	2	99	12	51	4	206	11	305	23
09:00		32	1			39	2				
09:15		17	3			27	3				
09:30		32	6			28	6				
09:45		27	12	108	22	25	4	119	15	227	37
10:00		35	19			28	4				
10:15		28	3			38	6				
10:30		31	10			25	14				
10:45		19	10	113	42	30	22	121	46	234	88
11:00		43	24			37	9				
11:15		27	6			35	1				
11:30		49	3			35	2				
11:45		42	4	161	37	44	3	151	15	312	52
Total		845	1165			1233	900			2078	2065
Combined		20	10			21	33			41	43
Iotal											

Percentag e

0.0%

05063Avolume Site Code: Y-18215.11

Page 1

## Transportation Data Corporation

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

Duchaine Boulevard north of *tel* U-turn, north of Sam Barnet Boulevard City, State: New Bedford, MA Client: McM/S. Hawkins

Start	14-Jun-18	N	B	Hour	Totals	S	В	Hour	Totals	Combine	ed Totals
Time	Thu	Mornina	Afternoon	Mornina	Afternoon	Morning	Afternoon	Mornina	Afternoon	Mornina	Afternoon
12:00		16	69			1	50				
12:15		2	46			3	49				
12:30		0	30			0	31				
12:45		1	34	19	179	0	64	4	194	23	373
01:00		1	43			1	46				
01:15		1	37			0	36				
01:30		3	35			3	29				
01:45		1	33	6	148	0	54	4	165	10	313
02:00		6	40			1	37				
02:15		1	36			0	27				
02:30		1	39			2	39				
02:45		0	25	8	140	2	40	5	143	13	283
03:00		1	56			2	36				
03:15		6	40			5	25				
03:30		5	42			5	37				
03:45		13	40	25	178	3	28	15	126	40	304
04:00		3	77			6	25				
04:15		8	36			5	20				
04:30		6	43			14	23				
04:45		5	39	22	195	27	20	52	88	74	283
05:00		26	59			20	13				
05:15		17	34			23	13				
05:30		8	31			30	21				
05:45		19	19	70	143	36	27	109	74	179	217
06:00		5	24			18	9				
06:15		9	16			27	8				
06:30		24	18			57	7				
06:45		25	6	63	64	92	15	194	39	257	103
07:00		32	9		-	54	10				
07:15		19	17			46	12				
07:30		16	8			68	7				
07:45		34	10	101	44	93	7	261	36	362	80
08:00		19	6			60	2				
08:15		23	3			54	7				
08:30		15	10			55	6				
08:45		49	4	106	23	34	5	203	20	309	43
09:00		30	2			37	6				
09:15		27	4			22	2				
09:30		26	10			32	5				
09:45		25	2	108	18	30	7	121	20	229	38
10:00		34	4			24	1				
10:15		22	4			25	6				
10:30		13	7			31	19				
10:45		26	8	95	23	31	18	111	44	206	67
11:00		42	25			29	14				
11:15		28	2			35	0				
11:30		24	1			20	6				
11:45		48	6	142	34	43	5	127	25	269	59
Total		765	1189			1206	974			1971	2163
Combined		10	54			040	20			11	24
Total		19	04			218	0			41.	54
Percentag	0.00/										
e	0.0%										
Total		1610	2354			2439	1874			4049	4228
Percent		40.6%	59.4%			56.5%	43.5%			48.9%	51.1%
ADT	A	ADT 4,138	A	ADT 4,138							

05063Avolume Site Code: Y-18215.11

### APPENDIX D

Crash Summary

## **CRASH ANALYSIS**

#### South Coast Renewables - Expansion New Bedford, MA

	Route 140	Route 140	Braley Road/	Theodore Rice	Duchaine	Dhilling Decelet
	Northbound	Southbound	Theodore Rice	Boulevard at	Boulevard at	
	On/Off-Ramp at	On/Off-Ramp at	Boulevard at	Duchaine	Samuel Barnet	Samuel Barnet
	Braley Road	Braley Road	Phillips Road	Boulevard	Boulevard	Boulevard
Year						
2016	3	3	2	0	1	0
2017	2	0	2	2	0	0
2018	2	2	8	2	2	1
2019	4	0	4	0	0	2
2020	1	1	4	0	1	0
Туре						
Angle	4	2	11	1	1	0
Rear-end	6	2	3	1	2	2
Sideswipe	1	1	0	0	0	0
Head-on	0	0	2	1	0	0
Single Vehicle	1	1	2	1	1	1
Pedestrian	0	0	1	0	0	0
Other/Unknown	0	0	1	0	0	0
Severity						
Property Damage	7	6	12	3	4	2
Personal Injury	5	0	8	1	0	0
Fatality	0	0	0	0	0	0
Unknown	0	0	0	0	0	1
Weather						
Clear	11	6	12	2	4	1
Cloudy	0	0	1	1	0	0
Rain	1	0	5	1	0	2
Snow	0	0	2	0	0	0
Sleet	0	0	0	0	0	0
Fog	0	0	0	0	0	0
Other	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
Time						
7:00 AM to 9:00 AM	0	0	0	1	0	0
9:00 AM to 4:00 PM	4	2	9	1	2	3
4:00 PM to 6:00 PM	6	0	2	0	0	0
6:00 PM to 7:00 AM	2	4	9	2	2	0
Total	12	6	20	4	4	3
Crash Rate	0.33	0.17	0.64	0.39	0.23	0.20
State Average	0.57	0.57	0.57	0.57	0.57	0.57
District 5 Average	0.57	0.57	0.57	0.57	0.57	0.57

Source: MassDOT

## **APPENDIX E**

SRTA Map and Schedules





## **Ashley Blvd** Route 4

1

\$0.60

Weekday Outbound



#### New Bedford Route

#### Map on reverse side

Α SRTA

Termina

6:46 AMNB

7:11 AMNB 7:33 AM

7:58 AM

8:28 AM

8:58 AM

9:27 AM

9:57 AM

10:27 AM

10:57 AM

11:27 AM

11:57 AM

12:27 PM

12:57 PM

1:27 PM

1:57 PM

2:27 PM

2:57 PM

3:27 PM

3:57 PM

4:27 PM

4:41 PM

4:57 PM

5:27 PM

5:57 PM

6:27 PM

6:57 PM

7:27 PM

7:57 PM

8:27 PM

8:57 PM

#### Fares Cash CharlieCard\*\* Regular \$1.50 \$1.25

• Children age five and younger ride for free. Up to two free children are allowed with each adult.

\$0.75

Reduced\*

- Free transfers are valid for 90 minutes from time of boarding first bus to time of boarding second bus.
- \* To find out if you qualify for a reduced fare, and for more information on fares, go to <u>www.srtabus.com</u>.
- \*\* One two-hour transfer from any bus to any bus, in any direction.

#### Information



All buses are wheelchair accessible

### **Rules of Riding**

- · No smoking on buses.
- No eating or drinking on buses.
- SRTA reserves the right to refuse transportation to anyone under the influence of drugs or alcohol, who is incapable of taking care of themselves, or who is behaving in a way that will make them objectionable to passengers.
- Please keep your conversations quiet to not bother passengers or the driver.





SRTA 700 Pleasant St, Suite 530 New Bedford, MA 02740 508-999-5211 www.srtabus.com

Α	В	с	D	D	С	В
SRTA Terminal	Ashley Blvd & Sawyer St	Ashely Blvd & Daniel St	Trucchi's	Trucchi's	Ashley Blvd & Tarkiln Hill Rd	Ashley Blvd & Holly St
:40 AM <sup>NB</sup>	5:46 AM <sup>NB</sup>	5:51 AM <sup>№</sup>	no stop	6:30 AM <sup>NB</sup>	6:33 AM <sup>NB</sup>	6:38 AM <sup>NB</sup>
:05 AM <sup>NB</sup>	6:11 AM <sup>NB</sup>	6:16 AM <sup>NB</sup>	no stop	6:55 AM <sup>NB</sup>	6:58 AM <sup>NB</sup>	7:03 AM <sup>NB</sup>
6:50 AM	6:58 AM	7:05 AM	7:13 AM	7:15 AM	7:18 AM	7:25 AM
7:15 AM	7:23 AM	7:30 AM	7:38 AM	7:40 AM	7:43 AM	7:50 AM
7:45 AM	7:53 AM	8:00 AM	8:08 AM	8:10 AM	8:13 AM	8:20 AM
8:15 AM	8:23 AM	8:30 AM	8:38 AM	8:40 AM	8:43 AM	8:50 AM
8:45 AM	8:53 AM	9:00 AM	9:08 AM	9:10 AM	9:13 AM	9:20 AM
9:15 AM	9:23 AM	9:30 AM	9:38 AM	9:40 AM	9:43 AM	9:50 AM
9:45 AM	9:53 AM	10:00 AM	10:08 AM	10:10 AM	10:13 AM	10:20 AM
0:15 AM	10:23 AM	10:30 AM	10:38 AM	10:40 AM	10:43 AM	10:50 AM
0:45 AM	10:53 AM	11:00 AM	11:08 AM	11:10 AM	11:13 AM	11:20 AM
1:15 AM	11:23 AM	11:30 AM	11:38 AM	11:40 AM	11:43 AM	11:50 AM
1:45 AM	11:53 AM	12:00 PM	12:08 PM	12:10 PM	12:13 PM	12:20 PM
2:15 PM	12:23 PM	12:30 PM	12:38 PM	12:40 PM	12:43 PM	12:50 PM
2:45 PM	12:53 PM	1:00 PM	1:08 PM	1:10 PM	1:13 PM	1:20 PM
1:15 PM	1:23 PM	1:30 PM	1:38 PM	1:40 PM	1:43 PM	1:50 PM
1:45 PM	1:53 PM	2:00 PM	2:08 PM	2:10 PM	2:13 PM	2:20 PM
2:15 PM	2:23 PM	2:30 PM	2:38 PM	2:40 PM	2:43 PM	2:50 PM
2:45 PM	2:53 PM	3:00 PM	3:08 PM	3:10 PM	3:13 PM	3:20 PM
3:15 PM	3:23 PM	3:30 PM	3:38 PM	3:40 PM	3:43 PM	3:50 PM
3:45 PM	3:53 PM	4:00 PM	4:08 PM	4:10 PM <sup>1</sup>	4:13 PM <sup>1</sup>	4:20 PM
4:15 PM	4:23 PM	4:30 PM	4:38 PM	4:23 PM	4:26 PM	4:33 PM
4:45 PM	4:53 PM	5:00 PM	5:08 PM	4:40 PM	4:43 PM	4:50 PM
5:15 PM	5:23 PM	5:30 PM	5:38 PM	5:10 PM	5:13 PM	5:20 PM
5:45 PM	5:53 PM	6:00 PM	6:08 PM	5:40 PM	5:43 PM	5:50 PM
6:15 PM	6:23 PM	6:30 PM	6:38 PM	6:10 PM	6:13 PM	6:20 PM
6:45 PM	6:53 PM	7:00 PM	7:08 PM	6:40 PM	6:43 PM	6:50 PM
7:15 PM	7:23 PM	7:30 PM	7:38 PM	7:10 PM	7:13 PM	7:20 PM
7:45 PM	7:53 PM	8:00 PM	8:08 PM	7:40 PM	7:43 PM	7:50 PM
8:15 PM	8:23 PM	8:30 PM	8:38 PM	8:10 PM	8:13 PM	8:20 PM
				8:40 PM	8:43 PM	8:50 PM

<sup>1</sup> Service starts at Acushnet Co. Ball Plant #2 on Samuel Barnett Blvd at 4:10 PM

<sup>NB</sup> Trip serves New Bedford Business Park

Holiday service operates on a Saturday schedule

## Weekday Inbound

Α	В	С	D	
SRTA Terminal	Ashley Blvd & Sawyer St	Ashely Blvd & Daniel St	Trucchi's	
7:45 AM	7:53 AM	8:00 AM	8:08 AM	
8:15 AM	8:23 AM	8:30 AM	8:38 AM	
8:45 AM	8:53 AM	9:00 AM	9:08 AM	
9:15 AM	9:23 AM	9:30 AM	9:38 AM	
9:45 AM	9:53 AM	10:00 AM	10:08 AM	
10:15 AM	10:23 AM	10:30 AM	10:38 AM	
10:45 AM	10:53 AM	11:00 AM	11:08 AM	
11:15 AM	11:23 AM	11:30 AM	11:38 AM	
11:45 AM	11:53 AM	12:00 PM	12:08 PM	
12:15 PM	12:23 PM	12:30 PM	12:38 PM	
12:15 PM 12:45 PM	12:23 PM 12:53 PM	12:30 PM 1:00 PM	12:38 PM 1:08 PM	
12:15 PM 12:45 PM 1:15 PM	12:23 PM 12:53 PM 1:23 PM	12:30 PM 1:00 PM 1:30 PM	12:38 PM 1:08 PM 1:38 PM	
12:15 PM 12:45 PM 1:15 PM 1:45 PM	12:23 PM 12:53 PM 1:23 PM 1:53 PM	12:30 PM 1:00 PM 1:30 PM 2:00 PM	12:38 PM 1:08 PM 1:38 PM 2:08 PM	
12:15 PM 12:45 PM 1:15 PM 1:45 PM 2:15 PM	12:23 PM 12:53 PM 1:23 PM 1:53 PM 2:23 PM	12:30 PM 1:00 PM 1:30 PM 2:00 PM 2:30 PM	12:38 PM 1:08 PM 1:38 PM 2:08 PM 2:38 PM	
12:15 PM 12:45 PM 1:15 PM 1:45 PM 2:15 PM 2:45 PM	12:23 PM 12:53 PM 1:23 PM 1:53 PM 2:23 PM 2:53 PM	12:30 PM 1:00 PM 1:30 PM 2:00 PM 2:30 PM 3:00 PM	12:38 PM 1:08 PM 1:38 PM 2:08 PM 2:38 PM 3:08 PM	
12:15 PM 12:45 PM 1:15 PM 1:45 PM 2:15 PM 2:45 PM 3:15 PM	12:23 PM 12:53 PM 1:23 PM 1:53 PM 2:23 PM 2:53 PM 3:23 PM	12:30 PM 1:00 PM 1:30 PM 2:00 PM 2:30 PM 3:00 PM 3:30 PM	12:38 PM 1:08 PM 1:38 PM 2:08 PM 2:38 PM 3:08 PM 3:38 PM	
12:15 PM 12:45 PM 1:15 PM 1:45 PM 2:15 PM 2:45 PM 3:15 PM 3:45 PM	12:23 PM 12:53 PM 1:23 PM 1:53 PM 2:23 PM 2:53 PM 3:23 PM 3:53 PM	12:30 PM 1:00 PM 1:30 PM 2:00 PM 2:30 PM 3:00 PM 3:30 PM 4:00 PM	12:38 PM 1:08 PM 1:38 PM 2:08 PM 2:38 PM 3:08 PM 3:38 PM 4:08 PM	
12:15 PM 12:45 PM 1:15 PM 2:15 PM 2:45 PM 2:45 PM 3:15 PM 3:45 PM 4:15 PM	12:23 PM 12:53 PM 1:23 PM 2:23 PM 2:53 PM 3:23 PM 3:53 PM 4:23 PM	12:30 PM 1:00 PM 1:30 PM 2:00 PM 2:30 PM 3:00 PM 3:30 PM 4:00 PM	12:38 PM 1:08 PM 1:38 PM 2:08 PM 2:38 PM 3:08 PM 3:38 PM 4:08 PM 4:38 PM	
12:15 PM 12:45 PM 1:15 PM 1:45 PM 2:15 PM 2:45 PM 3:15 PM 3:45 PM 4:15 PM 4:45 PM	12:23 PM 12:53 PM 1:23 PM 2:23 PM 2:53 PM 3:23 PM 3:53 PM 4:23 PM 4:53 PM	12:30 PM 1:00 PM 1:30 PM 2:00 PM 2:30 PM 3:00 PM 3:30 PM 4:00 PM 5:00 PM	12:38 PM 1:08 PM 1:38 PM 2:08 PM 2:38 PM 3:08 PM 3:38 PM 4:08 PM 4:38 PM 5:08 PM	

## Saturday Outbound Saturday Inbound

D	С	В	Α	
Trucchi's	Ashley Blvd & Tarkiln Hill Rd	Ashley Blvd & Holly St	SRTA Terminal	
8:10 AM	8:13 AM	8:20 AM	8:28 AM	
8:40 AM	8:43 AM	8:50 AM	8:58 AM	
9:10 AM	9:13 AM	9:20 AM	9:28 AM	
9:40 AM	9:43 AM	9:50 AM	9:58 AM	
10:10 AM	10:13 AM	10:20 AM	10:28 AM	
10:40 AM	10:43 AM	10:50 AM	10:58 AM	
11:10 AM	11:13 AM	11:20 AM	11:28 AM	
11:40 AM	11:43 AM	11:50 AM	11:58 AM	
10.10.04	10.10.044	10.00.044	12:28 PM	
12:10 PM	12:13 PM	12:20 PM	12:28 PM	
12:10 PM	12:13 PM 12:43 PM	12:20 PM 12:50 PM	12:28 PM 12:58 PM	
12:40 PM 1:10 PM	12:13 PM 12:43 PM 1:13 PM	12:20 PM 12:50 PM 1:20 PM	12:28 PM 12:58 PM 1:28 PM	
12:40 PM 12:40 PM 1:10 PM 1:40 PM	12:43 PM 12:43 PM 1:13 PM 1:43 PM	12:20 PM 12:50 PM 1:20 PM 1:50 PM	12:28 PM 12:58 PM 1:28 PM 1:58 PM	
12:40 PM 12:40 PM 1:10 PM 1:40 PM 2:10 PM	12:13 PM 12:43 PM 1:13 PM 1:43 PM 2:13 PM	12:20 PM 12:50 PM 1:20 PM 1:50 PM 2:20 PM	12:28 PM 12:58 PM 1:28 PM 1:58 PM 2:28 PM	
12:40 PM 1:10 PM 1:40 PM 2:10 PM 2:40 PM	12:13 PM 12:43 PM 1:13 PM 1:43 PM 2:13 PM 2:43 PM	12:20 PM 12:50 PM 1:20 PM 1:50 PM 2:20 PM 2:50 PM	12:28 PM 12:58 PM 1:28 PM 1:58 PM 2:28 PM 2:58 PM	
12:10 PM 12:40 PM 1:10 PM 1:40 PM 2:10 PM 2:40 PM 3:10 PM	12:13 PM 12:43 PM 1:13 PM 1:43 PM 2:13 PM 2:43 PM 3:13 PM	12:20 PM 12:50 PM 1:20 PM 1:50 PM 2:20 PM 2:50 PM 3:20 PM	12:28 PM 12:58 PM 1:28 PM 1:58 PM 2:28 PM 2:58 PM 3:28 PM	
12:10 PM 12:40 PM 1:10 PM 1:40 PM 2:10 PM 2:40 PM 3:10 PM 3:40 PM	12:13 PM 12:43 PM 1:13 PM 1:43 PM 2:13 PM 2:43 PM 3:13 PM 3:43 PM	12:20 PM 12:50 PM 1:20 PM 1:50 PM 2:20 PM 2:50 PM 3:20 PM 3:50 PM	12:28 PM 12:58 PM 1:28 PM 1:58 PM 2:28 PM 2:58 PM 3:28 PM 3:58 PM	
12:10 PM 12:40 PM 1:10 PM 2:10 PM 2:40 PM 3:10 PM 3:40 PM 4:10 PM	12:13 PM 12:43 PM 1:13 PM 1:43 PM 2:13 PM 2:43 PM 3:13 PM 3:43 PM 4:13 PM	12:20 PM 12:50 PM 1:20 PM 2:20 PM 2:50 PM 3:20 PM 3:50 PM 4:20 PM	12:28 PM 12:58 PM 1:28 PM 1:58 PM 2:28 PM 2:58 PM 3:28 PM 3:58 PM 4:28 PM	
12:10 PM 12:40 PM 1:10 PM 2:10 PM 2:40 PM 3:10 PM 3:40 PM 4:10 PM	12:13 PM 12:43 PM 1:13 PM 1:43 PM 2:13 PM 2:43 PM 3:13 PM 3:43 PM 4:13 PM	12:20 PM 12:50 PM 1:20 PM 2:20 PM 2:50 PM 3:20 PM 3:50 PM 4:20 PM 4:50 PM	12:28 PM 12:58 PM 1:28 PM 1:58 PM 2:28 PM 2:58 PM 3:58 PM 4:28 PM 4:58 PM	
12:10 PM 12:40 PM 1:10 PM 2:10 PM 2:40 PM 3:10 PM 3:40 PM 4:10 PM 5:10 PM	12:13 PM 12:43 PM 1:13 PM 1:43 PM 2:13 PM 2:43 PM 3:13 PM 4:13 PM 4:43 PM 5:13 PM	12:20 PM 12:50 PM 1:20 PM 2:20 PM 2:50 PM 3:20 PM 3:50 PM 4:20 PM 4:50 PM 5:20 PM	12:28 PM 12:58 PM 1:28 PM 1:58 PM 2:28 PM 2:58 PM 3:28 PM 3:58 PM 4:28 PM 5:28 PM	

## Visit our website!

Scan this QR code with your mobile device's camera



## Route 4

## Ashley Blvd





Effective 12/19/2022

## **Route 21** North End Shuttle

Weekday Loop

#### New Bedford Route

#### Map on reverse side

Saturday Loop



#### Fares Cash CharlieCard\*\* \$1.50 \$1.25 Regular

• Children age five and younger ride for free. Up to two free children are allowed with each adult.

\$0.75

Reduced\*

\$0.60

- Free transfers are valid for 90 minutes from time of boarding first bus to time of boarding second bus.
- \* To find out if you qualify for a reduced fare, and for more information on fares, go to <u>www.srtabus.com</u>.
- \*\* One two-hour transfer from any bus to any bus, in any direction.

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- No eating or drinking on buses.
- SRTA reserves the right to refuse transportation to anyone under the influence of drugs or alcohol, who is incapable of taking care of themselves, or who is behaving in a way that will make them objectionable to passengers.
- Please keep your conversations quiet to not bother passengers or the driver.





SRTA 700 Pleasant St, Suite 530 New Bedford, MA 02740 508-999-5211 www.srtabus.com

A/D	В	С	A/D	A/D	В	С	A/D
Fieldstone Marketplace	Lund's Corner	Church St and Amanda Ave	Fieldstone Marketplace	Fieldstone Marketplace	Lund's Corner	Church St and Amanda Ave	Fieldstone Marketplac
9:05 AM	9:15 AM	9:36 AM	9:41 AM	9:05 AM	9:13 AM	9:30 AM	9:35 AN
9:45 AM	9:55 AM	10:16 AM	10:21 AM	9:45 AM	9:53 AM	10:10 AM	10:15 AA
10:25 AM	10:35 AM	10:56 AM	11:01 AM	10:25 AM	10:33 AM	10:50 AM	10:55 AM
11:05 AM	11:15 AM	11:36 AM	11:41 AM	11:05 AM	11:13 AM	11:30 AM	11:35 AA
11:45 AM	11:55 AM	12:16 PM	12:21 PM	11:45 AM	11:53 AM	12:10 PM	12:15 PA
12:25 PM	12:35 PM	12:56 PM	1:01 PM	12:25 PM	12:33 PM	12:50 PM	12:55 PN
1:05 PM	1:15 PM	1:36 PM	1:41 PM	1:05 PM	1:13 PM	1:30 PM	1:35 PM
1:45 PM	1:55 PM	2:16 PM	2:21 PM	1:45 PM	1:53 PM	2:10 PM	2:15 PM
2:25 PM	2:35 PM	2:56 PM	3:01 PM	2:25 PM	2:33 PM	2:50 PM	2:55 PM
3:05 PM	3:15 PM	3:36 PM	3:41 PM	3:05 PM	3:13 PM	3:30 PM	3:35 PM
3:45 PM	3:55 PM	4:16 PM	4:21 PM	3:45 PM	3:53 PM	4:10 PM	4:15 PM
4:25 PM	4:35 PM	4:56 PM	5:01 PM	4:25 PM	4:33 PM	4:50 PM	4:55 PM

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# Route 21 North End Shuttle




# **APPENDIX F**

Traffic Projection Model

# TRAFFIC PROJECTION MODEL

## South Coast Renewables Proposed Facility Expansion

## Weekday Morning Peak Hour

New Bedford, MA

			Parallel	NWD Trucking	2021	2021			2021	Background	2028	New Project	New	New Project	New	New Project	New	New Project	New	New	2028
			Products	Trips	Base	Existing	COVID-19	Balancing	Existing	Growth 7 vrs	No-Build	Trucks	Proiect	Trucks	Proiect	Employee	Proiect	Employee	Project	Project	Build
			Existing		Volumes	Counted	Adjustment	Adjustment	Volumes <sup>1</sup>	(at 1%	Volumes	PERCENT	Truck Trips	PERCENT	Truck Trips	PERCENT	Employee Trips	PERCENT	Employee Trips	Trips	Volumes
Intersection	Dir	Turn	Trins			Volumes	,	,		ner vear)		ENTER	ENTER	FXIT	FXIT	ENTER	ENTER	FXIT	FXIT	τοται	
Route 140 Northbound Bamps	FR		15	1	£9	79	4		02		00	ENTER	0	EAT	EXII	ENTER		E/01/	12	17	105
at Bralay Boad	LD	т Т	15	1	08	78	4		02	0	00		0	50%	3		0	50%	12	17	103
at braiey Road		-	0	0	97	92	5		97	6	103		0		0		0		0	0	105
	WB	I	0	0	580	552	28		580	40	620		0		0		0		0	0	620
		R	0	0	72	69	3		72	5	77		0		0		0		0	0	77
	NB	L	2	2	301	287	14		301	21	322	50%	4		0	40%	0		0	4	326
		R	0	0	192	183	9		192	13	205		0		0		0		0	0	205
Route 140 Southbound Ramps	EB	т	15	1	146	152	8		160	11	171		0	50%	5		0	50%	12	17	188
at Braley Road		R	12	2	219	218	11		229	15	244		0	50%	4		0	40%	10	14	258
	WB	I.	0	0	387	369	18		387	27	414		0		0		0		0	0	414
		т	о 2	2	404	470	24		404	27	E 20	E0%	4		0	40%	0		0	4	532
	CD		2	2	494	470	24		494	54	320	50%	4		0	40%	0		0	4	20
	30	L D	0	0	19	18	1		19	1	20		0		0		0		0	0	20
		к	2	1	98	94	5		99	7	106	50%	5		0	50%	0		0	5	111
Braley Road/	EB	L	0	0	4	4	0		4	0	4		0		0		0		0	0	4
Theodore Rice Boulevard at		Т	27	3	128	145	7		152	10	162		0	100%	9		0	90%	22	31	193
Phillips Road		R	0	0	28	27	1		28	2	30		0		0		0		0	0	30
	WB	L	0	0	47	45	2		47	3	50		0		0		0		0	0	50
		т	4	3	412	393	20		413	29	442	100%	9		0	90%	0		0	9	451
		R	0	0	133	126	7		133	9	142		0		0		0		0	0	142
	NB	I.	0	0	29	28	1		200	3	32		0		0		0		0	0	32
	ND	т	0	0	25	28	1		25	2	32		0		0		0		0	0	49
			0	0	40	44	2		40	5	49		0		0		0		0	0	49
		к	0	0	//	/3	4		//	5	82		0		0		0		0	0	82
	SB	L	0	0	160	152	8		160	11	171		0		0		0		0	0	171
		т	0	0	27	26	1		27	2	29		0		0		0		0	0	29
		R	0	0	30	29	1		30	3	33		0		0		0		0	0	33
Theodore Rice Boulevard at	WB	L	4	3	370	353	18		371	25	396	100%	9		0	90%	0		0	9	405
Duchaine Boulevard		R	0	0	106	101	5		106	7	113		0		0		0		0	0	113
	NB	т	0	0	9	9	0		9	1	10		0		0		0		0	0	10
		R	27	3	104	122	6		128	8	136		0	100%	9		0	90%	22	31	167
	SB	1	0	0	57	54	3		57	4	61		0	20070	0		0	5676	0	0	61
	50	т	0	0	17	16	J 1		17	4	10		0		0		0		0	0	18
		1	0	0	17	10	1		17	I	18		0		0		0		0	0	10
Duchaine Boulevard at	EB	L	0	0	70	67	3		70	5	75		0		0		0		0	0	75
Samuel Barnet Boulevard		R	0	0	75	71	4		75	5	80		0		0		0		0	0	80
	WB	R	0	0	314	299	15		314	21	335		0		0	10%	0		0	0	335
	NB	т	27	3	0	23	1		24	2	26		0	100%	9		0	90%	22	31	57
		R	2	0	91	89	4		93	6	99		0		0		0	10%	3	3	102
	SB	U	0	0	2	2	0		2	0	2		0		0		0		0	0	2
		т	4	3	115	110	6		116	8	124	100%	9		0	100%	0		0	9	133
		D	0	0	457	435	22		457	21	188	100/0	0		0	100/0	0		0	0	488
		n	0	0	437	435	22		437	51	400		0		0		0		0	0	-00
Phillips Road at	50		0	0	4	4	0			0			0		0		0		0	0	4
	EB	L	U	U	4	4	U		4	U	4		0		U		U	4.0-1	U	U	4
Samuel Barnet Boulevard		К	2	0	87	85	4		89	6	95		0		0		0	10%	3	3	98
	NB	L	0	0	306	287	14	5	306	21	327		0		0	10%	0		0	0	327
		т	0	0	118	112	6		118	8	126		0		0		0		0	0	126
	SB	т	0	0	111	106	5		111	8	119		0		0		0		0	0	119
		R	0	0	8	8	0		8	1	9		0		0		0		0	0	9
Duchaine Boulevard at	WB	R	29	3	14	38	2		40	0	40		0	100%	9		0	100%	25	34	74
Site Driveway	SB	R	4	3	101	97	5		102	0	102	100%	9		0	100%	0		0	9	111
,	55		, O	0	1	1	0		1	1	202	20070	0		ů.	20070	0		0	0	2
		0	0	0	1	T	0		T	T	2		U		0		U		U	U	2
			U	U	U																

Peak Hour: 6:30 AM - 7:30 AM

1 - Includes volumes associated with Phase 1

# TRAFFIC PROJECTION MODEL

## South Coast Renewables Proposed Facility Expansion

# Weekday School Dismissal Peak Hour

# New Bedford, MA

		Paralle	NWD Trucking	2021	2021			2021	Background	2028	New Project	New	New Project	New	New Project	New	New Project	New	New	2028
		Product	s Trips	Base	Existing	COVID-19	Balancing	Existing	Growth 7 yrs	No-Build	Trucks	Project	Trucks	Project	Employee	Project	Employee	Project	Project	Build
		Existing		Volumes	Counted	Adjustment	Adjustment	Volumes <sup>1</sup>	(at 1%	Volumes	PERCENT	Truck Trips	PERCENT	Truck Trips	PERCENT	Employee Trips	PERCENT	<b>Employee Trips</b>	Trips	Volumes
Intersection	Dir. Tu	rn Trips			Volumes				per year)		ENTER	ENTER	EXIT	EXIT	ENTER	ENTER	EXIT	EXIT	TOTAL	
Route 140 Northbound Ramps	EB L	15	1	81	90	5		95	6	101		0	50%	5		0	50%	12	17	118
at Braley Road	т	0	0	247	235	12		247	17	264		0		0		0		0	0	264
	WB T	0	0	476	453	23		476	33	509		0		0		0		0	0	509
	R	0	0	54	51	3		54	4	58		0		0		0		0	0	58
	NB L	2	2	235	224	11		235	16	251	50%	4		0	40%	0		0	4	255
	R	0	0	353	336	17		353	24	377		0		0		0		0	0	377
Route 140 Southbound Ramps	EB T	15	1	273	273	14		287	19	306		0	50%	5		0	50%	12	17	323
at Braley Road	R	12	2	347	340	17		357	25	382		0	50%	4		0	40%	10	14	396
	WB L	0	0	333	317	16		333	23	356		0		0		0		0	0	356
	Т	2	2	378	360	18		378	26	404	50%	4		0	40%	0		0	4	408
	SB L	0	0	55	52	3		55	4	59		0		0		0		0	0	59
	R	2	1	97	93	5		98	7	105	50%	5		0	50%	0		0	5	110
Braley Road/	EB L	0	0	14	13	1		14	1	15		0		0		0		0	0	15
Theodore Rice Boulevard at	т	27	3	329	336	17		353	24	377		0	100%	9		0	90%	22	31	408
Phillips Road	R	0	0	55	52	3		55	4	59		0		0		0		0	0	59
	WB L	0	0	151	144	7		151	10	161		0		0		0		0	0	161
	т	4	3	133	128	6		134	9	143	100%	9		0	90%	0		0	9	152
	R	0	0	191	181	9	1	191	14	205		0		0		0		0	0	205
	NB L	0	0	17	16	1		17	1	18		0		0		0		0	0	18
	т	0	0	51	49	2		51	4	55		0		0		0		0	0	55
	R	0	0	108	103	5		108	7	115		0		0		0		0	0	115
	SB L	0	0	183	174	9		183	13	196		0		0		0		0	0	196
	т	0	0	68	65	3		68	5	73		0		0		0		0	0	73
	R	0	0	5	5	0		5	0	5		0		0		0		0	0	5
Theodore Rice Boulevard at	WB L	4	3	76	73	4		77	5	82	100%	9		0	90%	0		0	9	91
Duchaine Boulevard	R	0	0	34	32	2		34	2	36		0		0		0		0	0	36
	NB T	0	0	11	10	1		11	1	12		0		0		0		0	0	12
	R	27	3	221	233	12		245	17	262		0	100%	9		0	90%	22	31	293
	SB L	0	0	127	121	6		127	9	136		0		0		0		0	0	136
	т	0	0	15	14	1		15	1	16		0		0		0		0	0	16
Duchaine Boulevard at	EB L	0	0	179	170	9		179	12	191		0		0		0		0	0	191
Samuel Barnet Boulevard	R	0	0	222	211	11		222	15	237		0		0		0		0	0	237
	WB R	0	0	70	66	4		70	5	75		0		0	10%	0		0	0	75
	NB T	27	3	2	25	1		26	2	28		0	100%	9		0	90%	22	31	59
	R	2	0	282	270	14		284	20	304		0		0		0	10%	3	3	307
	SB U	0	0	1	1	0		1	0	1		0		0		0		0	0	1
	Т	4	3	47	46	2		48	3	51	100%	9		0	100%	0		0	9	60
	R	0	0	121	115	6		121	8	129		0		0		0		0	0	129
Phillips Road at	EB L	0	0	11	10	1		11	1	12		0		0		0		0	0	12
Samuel Barnet Boulevard	R	2	0	272	261	13		274	19	293		0		0		0	10%	3	3	296
	NB L	0	0	68	65	3		68	4	72		0		0	10%	0		0	0	72
	Т	0	0	145	138	7		145	10	155		0		0		0		0	0	155
	SB T	0	0	227	216	11		227	16	243		0		0		0		0	0	243
	R	0	0	2	2	0		2	0	2		0		0		0		0	0	2
Duchaine Boulevard at	WB R	29	3	31	54	3		57	0	57		0	100%	9		0	100%	25	34	91
Site Driveway	SB R	4	3	27	27	1		28	0	28	100%	9		0	100%	0		0	9	37
	U	0	0	5	5	0		5	1	6		0		0		0		0	0	6
		0	0	0																

Peak Hour: 3:15 PM - 4:15 PM

1 - Includes volumes associated with Phase 1

# TRAFFIC PROJECTION MODEL

## South Coast Renewables Proposed Facility Expansion

#### Weekday Afternoon Commuter Peak Hour

New Bedford, MA

		Parallel	NWD Trucking	2021	2021			2021	Background	2028	New Project	New	New Project	New	New Project	New	New Project	New	New	2028
		Products	Trips	Base	Existing	COVID-19	Balancing	Existing	Growth 7 yrs	No-Build	Trucks	Project	Trucks	Project	Employee	Project	Employee	Project	Project	Build
		Existing		Volumes	Counted	Adjustment	Adjustment	Volumes <sup>1</sup>	(at 1%	Volumes	PERCENT	Truck Trips	PERCENT	Truck Trips	PERCENT	Employee Trips	PERCENT	<b>Employee Trips</b>	Trips	Volumes
Intersection	Dir.	Turn Trips			Volumes	-	-		per year)		ENTER	ENTER	EXIT	EXIT	ENTER	ENTER	EXIT	EXIT	TOTAL	
Route 140 Northbound Ramps	EB	L 2	1	103	99	5	•	104	7	111		0	50%	5		0	50%	0	5	116
at Braley Road		т о	0	248	236	12		248	18	266		0		0		0		0	0	266
	WB	T O	0	435	414	21		435	30	465		0		0		0		0	0	465
		R O	0	44	42	2		44	3	47		0		0		0		0	0	47
	NB	1 2	2	183	174	9		183	13	196	50%	4		ů O	40%	0		ů O	4	200
	NB	R O	2	207	278	10		307	27	130	5070	4		0	40%	0		0	-	424
		N 0	0	557	578	15		557	27	424		0		0		0		0	0	727
Poute 140 Southbound Pamps	FR	т р	1	200	296	15		201	21	222		0	E 00/	-		0	E 09/	0	-	227
at Pralov Boad	LD	P 2	1	300	200	15		301	21	322		0	50%	3		0	30%	0	3	226
at braiey Road		K 2	2	311	290	15		311	21	332		0	50%	4		0	40%	0	4	220
	VVD		0	308	293	15		308	21	329		0		0		0		0	0	329
	6.0	1 2	2	310	295	15		310	22	332	50%	4		0	40%	0		0	4	336
	SB	L 0	0	51	49	2		51	4	55		0		0		0		0	0	55
		R 2	1	96	92	5		97	7	104	50%	5		0	50%	0		0	5	109
,																				
Braley Road/	EB	L 0	0	21	20	1		21	1	22		0		0		0		0	0	22
Theodore Rice Boulevard at		Т 4	3	312	297	15	1	313	21	334		0	100%	9		0	90%	0	9	343
Phillips Road		R 0	0	36	34	2		36	2	38		0		0		0		0	0	38
	WB	L 0	0	138	131	7		138	10	148		0		0		0		0	0	148
		T 4	3	89	86	4		90	6	96	100%	9		0	90%	0		0	9	105
		R 0	0	179	170	9		179	13	192		0		0		0		0	0	192
	NB	L 0	0	11	10	1		11	1	12		0		0		0		0	0	12
		Т 0	0	54	51	3		54	4	58		0		0		0		0	0	58
		R 0	0	109	104	5		109	8	117		0		0		0		0	0	117
	SB	L 0	0	190	181	9		190	13	203		0		0		0		0	0	203
		т о	0	55	52	3		55	4	59		0		0		0		0	0	59
		R 0	0	3	3	0		3	0	3		0		0		0		0	0	3
Theodore Rice Boulevard at	WB	L 4	3	63	61	3		64	4	68	100%	9		0	90%	0		0	9	77
Duchaine Boulevard		R 0	0	18	17	1		18	1	19		0		0		0		0	0	19
	NB	т 0	0	6	6	0		6	0	6		0		0		0		0	0	6
		R 4	3	230	220	11		231	16	247		0	100%	9		0	90%	0	9	256
	SB	L 0	0	64	61	3		64	4	68		0		0		0		0	0	68
		т о	0	9	9	0		9	1	10		0		0		0		0	0	10
		Ũ	0	5	5	Ũ		5	-	20		C C		Ũ		Ū		ů.	Ũ	
Duchaine Boulevard at	EB	L 0	0	176	168	8		176	12	188		0		0		0		0	0	188
Samuel Barnet Boulevard		R 0	0	175	167	8		175	12	187		0		0		0		0	0	187
	WB	R O	0	13	12	1		13	1	14		0		0	10%	0		0	0	14
	NB	T 4	3	14	14	1		15	1	16		0	100%	9		0	90%	0	9	25
		R 0	0	206	196	10		206	14	220		0	100/0	0		0	10%	0	0	220
	SB	U O	0	0	0	0		0	0	0		0		0		0	10/0	0	0	0
	00	с <sub>0</sub>	2	21	20	2		22	2	24	100%	0		0	100%	0		0	0	43
			0	51	50	2		52	2	54	10078	9		0	10078	0		0	9	63
		K U	0	59	50	5		59	4	03		0		0		0		0	0	03
Phillips Road at	FR	. 0	0	л	4	0		4	0	0		0		0		0		0	0	0
Samuel Barnet Boulevard	ÉD		0	202	4	10		4	14	216		0		0		0	1.0%	0	0	216
	ND		0	202	192	1		202	14	12		0		0	10%	0	10%	0	0	12
	INB		U	11	10	1		11	1	12		U		U	10%	U		U	U	171
		i U	U	160	152	8		160	11	1/1		U		U		U		U	U	1/1
	SB	I 0	0	196	187	9		196	13	209		0		0		0		0	0	209
		к 0	0	2	2	0		2	0	2		0		0		0		0	0	2
			_									-		-		-		-	-	24
Cite Driverueu	WB	к 4	3	24	24	1		25	0	25		0	100%	9	10(	0	100%	U	g	34
Site Driveway	SB	к 4	3	17	17	1		18	0	18	100%	9		0	100%	0		U	g	27
		U 0	0	8	8	0		8	1	9		0		0		0		U	U	9
		0	0	0																

Peak Hour: 4:00 PM - 5:00 PM

1 - Includes volumes associated with Phase 1

# APPENDIX G

Trip Generation Calculations

Truck Type	Tons per day	Truck Weight (tons)	No. of Trucks per day (inbound)
	<u>MSW (1,360</u>	) Tons/Day)	
Packer	295	9	33
Transfer	1,065	28	38
	<u>C &amp; D (140</u>	Tons/Day)	
Transfer	140	28	5
	<u>Biosolids (0</u>	<u>Tons/Day)</u>	
Large	0	28	0
Rolloffs	0	12	0
Small	0	12	0
	Outbound Trailer	s (1,500 Tons/Day)	
Transfer	1,500	26	52

# **APPENDIX H**

MassDOT Comments



Charles D. Baker, Governor Karyn E. Polito, Lieutenant Governor Stephanie Pollack, MassDOT Secretary & CEO



March 29, 2019

Matthew Beaton, Secretary Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Suite 900 Boston, MA 02114-2150

RE: New Bedford – Parallel Products of New England, Inc. - EENF (EEA #15990)

ATTN: MEPA Unit Page Czepiga

Dear Secretary Beaton:

On behalf of the Massachusetts Department of Transportation, I am submitting comments regarding the proposed Parallel Products of New England, Inc project in New Bedford, 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

cc: Jonathan Gulliver, Administrator, Highway Division Astrid Glynn, Administrator, Rail and Transit Patricia Leavenworth, P.E., Chief Engineer, Highway Division Mary-Joe Perry, District 5 Highway Director Neil Boudreau, Assistant Administrator of Traffic and Safety Engineering Planning Department, City of New Bedford Southeastern Regional Transit Authority Southeast Regional Planning and Economic Development District PPDU Files



Charles D. Baker, Governor Karyn E. Polito, Lieutenant Governor Stephanie Pollack, MassDOT Secretary & CEO



# MEMORANDUM

TO:	David Mohler, Executive Director Office of Transportation Planning
FROM:	J. Lionel Lucien, P.E, Manager Public/Private Development Unit

DATE: March 29, 2019

RE: New Bedford: Parallel Products of New England – EENF (EEA #15990)

The Public/Private Development Unit (PPDU) has reviewed the Expanded Environmental Notification Form (EENF) for the Parallel Products of New England, Inc. project in New Bedford. The project entails the construction of a solid waste facility to process municipal solid waste (MSW) and construction and demolition (C&D) of materials. The existing site consists of the NWD Trucking facility located at 100 Duchaine Boulevard and is bounded by a CSX rail line to the east, Phillips Road to the west, industrial properties to the north and undeveloped land to the south. The project is expected to be built over time in two phases. Phase I development consists of building a glass Beneficiation operation and the construction of approximately 1.9 MW of solar power energy generation. Phase II entails the construction of a MSW transfer station and biosolids drying facility. Phase II is expected to be constructed approximately two years after the construction of Phase I.

The project is expected to generate approximately 418 new truck trips per day (209 truck trips entering, 209 truck trips existing) based on empirical data collected from a similar solid waste facility operations. In addition, employees will contribute approximately 150 vehicle trips (75 entering, 75 exiting) for a total of 568 vehicle trips accessing the site on an average weekday.

The project does not exceed any transportation thresholds but exceeds MEPA thresholds for wastewater and solid waste and therefore is required to prepare an Environment Impact Report (EIR). The Proponent has requested a waiver to proceed with the construction of Phase I, pending the completion of the Environment Impact Report (EIR) for the project.

The project does not require a Vehicular Access Permit from MassDOT but has applied for an Industrial Rail Access Program (IRAP) grant in the amount of \$500,000. The grant will be used for the construction of a rail side track along the CSX Transportation line to meet the needs of the glass processing facilities as part of Phase I. The rail side will be expanded in Phase II to meet the needs for transport of solid waste. The Proponent will use the rail side for the outbound shipment of MSW, glass and dried biosolids. The facility, when at full capacity, expects to ship 1200 tons per day (tpd) of MSW residuals, 50 tpd of dried biosolids and 250 tpd of glass. The rail side track at full operations could reduce by up to 110 the number of truck trips in and out of the site.

The EENF includes a Transportation Impact Assessment (TIA) that includes an evaluation of the study area transportation network and presents an analysis of existing and future build conditions for each intersection. The TIA is in general conformance with MassDOT/EOEEA Guidelines for *EIR/EIS Traffic Impact Assessment*.

#### Study Area

The study locations for which traffic analyses were conducted are as follows:

- Route 140 Northbound on/off Ramps/Braley Road intersection;
- Route 140 Southbound on/off Ramps/Braley Road intersection;
- Braley Road/Theodore Rice Boulevard at Phillip Road intersection;
- Theodore Rice Boulevard/Duchaine Road intersection;
- Duchaine Boulevard/Samuel Barner Boulevard intersection;
- Phillips Road/Samuel Barner Boulevard intersection; and
- Duchaine Boulevard/Site Driveway intersection.

The study area is adequate for capturing the traffic impacts of this development.

#### **Trip Distribution**

The project trip distribution on the study area network was based on expected access to/from Route 140. The majority of traffic entering the site is expected to use Route 140 to Braley Road with a small portion of traffic coming from the site expected to use Phillips Road to access the proposed site.

#### Safety

Crash rates for the study area intersection were calculated using MassDOT data for the five-year period from 2011-2015. Based on the data, the crash rates for all study area intersections are below the state and district averages for signalized intersection. Two unsignalized intersections are experienced crash rates slightly higher than the state and district averages. The additional traffic volumes associated with the project is not expected to significantly impact safety at these intersections. There are no Highway Safety Improvement Program (HSIP) high crash cluster intersections in the study area.

#### Traffic Operations

Capacity analyses were conducted for the weekday AM and PM peak hours for 2018 Existing, 2025 No-Build, and 2025 Build (full build) conditions, for the study area intersections.

3/29/19

In the 2025 No-Build, traffic operating conditions at most intersections are expected to experience no significant changes, except for one approach movement where level of service will worsen from B to C. Likewise, 2025 Build conditions experience slightly increased delays compared to the 2025 No-Build conditions, but the delays were not significant enough to impact LOS in most cases.

#### Parking

The project will provide 428 parking spaces to accommodate both trucks and employees on site. The proposed number of parking spaces is a reduction from the current number of existing parking spaces.

#### Multimodal Access and Facilities

Despite the proposed land use primarily oriented towards truck traffic, the Proponent should seek the opportunity to provide multimodal accommodations to access the site. The roadway network in the vicinity of the site provide sufficient shoulder widths to encourage bicycle travel. We note that the Southeastern Regional Transit Authority (SRTA) provides bus service along Duchaine Boulevard and Phillips Road, with bus stops located within walking distance to the site along Duchaine Boulevard and at the intersection of Phillips Road with Heritage Court. Pedestrian accommodations exist along Phillips Boulevard. We encourage the Proponent to design their site drive in accordance to Complete Streets standards to facilitate opportunities to walk and bike to the site.

#### Transportation Demand Management Program

The Proponent should develop a Transportation Demand Management (TDM) program aimed at reducing site trip generation. MassDOT understands that the project primarily generate truck traffic; nevertheless, the following TDM measures are recommended with the goal of reducing vehicle trips by employees of the development:

- Offer direct deposit for payroll transactions;
- Implement off-peak shift start/end times for employees;
- Provide preferential parking for carpools and vanpools;
- Offer onsite employee services such as a cafeteria.
- Provide information on transit options as a mean of travel to the site.

MassDOT does not object to the Proponent's request for a Phase I waiver for the project. The proponent should address the details of the above comments in the SEIR and submit a copy of the MEPA Certificate for this project as part of their grant application for the IRAP funding. If you have any questions regarding these comments, please contact me at (857) 368-8862.

DOT-1

# **Michael Pompili**

From:	Wiemann, Curtis B (DOT) <curtis.b.wiemann@state.ma.us></curtis.b.wiemann@state.ma.us>
Sent:	Monday, December 5, 2022 4:03 PM
То:	Michael Pompili
Cc:	Lucien, Lionel (DOT); Strysky, Alexander (EEA)
Subject:	RE: EEA #15990 - New Bedford 100 Duchaine Blvd SFEIR comments

Good afternoon:

Thank you for this email and I appreciate the commentary on the potential challenges of scheduling inbound truck traffic. I find the proposed limitations placed on outbound traffic both feasible and effective in limiting peak hour impacts on surrounding roadways especially given the focus on avoiding school dismissal.

Please feel free to contact me with any other questions and I otherwise wish you a very pleasant day!

Sincerely, Curtis Wiemann

From: Pompili, Michael <mpompili@mcmahonassociates.com>
Sent: Monday, December 5, 2022 11:42 AM
To: Wiemann, Curtis B. (DOT) <Curtis.B.Wiemann@dot.state.ma.us>
Subject: EEA #15990 - New Bedford 100 Duchaine Blvd SFEIR comments

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.

## Hi Curtis,

I wanted to touch base on PPDU's comments on the SFEIR for the proposed expansion of the South Coast Renewables facility at 100 Duchaine Boulevard in New Bedford (EEA #15990). In the attached comment letter, MassDOT requested that South Coast Renewables schedule truck deliveries and departures during "off hours" to avoid periods of maximum congestion.

We are working on a revised traffic analysis to incorporate this and other SFEIR comments received. Based on discussions with the proponent it would not be possible to schedule arrivals to the site to avoid specific peak hours. Drivers are independent contractors, and if they were to refuse deliveries at certain times the result would be trucks idling or circling until they could access the site. The proponent would agree to restrict trucks transporting outbound material from the site during the weekday morning, afternoon school dismissal, and afternoon commuter peak hours identified in the SFEIR (6:30-7:30 a.m. and 3:15-5:00 p.m.). As a result, the number of new on-way truck trips in each peak hour would be reduced by 12, from 32 trips in the SFEIR to 20 trips. In addition, the biosolids component of the proposed facility expansion is being eliminated, which would result in an additional reduction of 4 one-way truck trips during each peak hour. Therefore the number of peak hour one-way trucks trips would be cut in half compared with the SFEIR, from 32 trips to 16 trips.

Please let me know if this would be acceptable to the PPDU to mitigate project-generated impacts, or if you would like to discuss further.

Thank you,

Michael Pompili | Senior Project Engineer O: (401) 648-7200 | D: (401) 216-7803 14 Breakneck Hill Road, Suite 201 Lincoln, RI 02865 mpompili@mcmahonassociates.com

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As of May 2022, McMahon has officially joined Bowman. Visit <u>bowman.com</u> for more information. Please consider the environment before printing this email

# **APPENDIX I**

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*.<sup>(1)</sup> 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:

<sup>(1)</sup> Transportation Research Board, Highway Capacity Manual, 6<sup>th</sup> Edition, published by the Transportation Research Board, Washington, DC, 2016.

Unsig	nalized Intersections
Level of Service	<b>Control Delay Per Vehicle</b>
	(seconds)
А	0 – 10
В	>10-15
С	>15 - 25
D	>25 - 35
Ε	>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	<b>Control Delay Per Vehicle</b>
Service	(seconds)
А	<u>&lt;</u> 10
В	>10-20
С	>20 - 35
D	>35 – 55
E	>55 - 80
F	> 80

# **APPENDIX J**

2021 Base Capacity/Level-of-Service Analysis

## Intersection

Int Delay, s/veh

8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ŧ			ţ,		7		1			
Traffic Vol, veh/h	68	97	0	0	580	72	301	0	192	0	0	0
Future Vol, veh/h	68	97	0	0	580	72	301	0	192	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	13	7	0	0	1	1	7	0	6	2	2	2
Mvmt Flow	70	100	0	0	598	74	310	0	198	0	0	0

Major/Minor I	Major1			Major2			Minor1			
Conflicting Flow All	672	0	-	-	-	0	875	-	100	
Stage 1	-	-	-	-	-	-	240	-	-	
Stage 2	-	-	-	-	-	-	635	-	-	
Critical Hdwy	4.23	-	-	-	-	-	4.6	-	6.26	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.47	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.47	-	-	
Follow-up Hdwy	2.317	-	-	-	-	-	3.563	-	3.354	
Pot Cap-1 Maneuver	869	-	0	0	-	-	494	0	945	
Stage 1	-	-	0	0	-	-	788	0	-	
Stage 2	-	-	0	0	-	-	519	0	-	
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	869	-	-	-	-	-	452	0	945	
Mov Cap-2 Maneuver	-	-	-	-	-	-	452	0	-	
Stage 1	-	-	-	-	-	-	721	0	-	
Stage 2	-	-	-	-	-	-	519	0	-	
Approach	EB			WB			NB			
HCM Control Delay, s	3.9			0			21.3			
HCM LOS							С			
Minor Lane/Major Mvm	nt	NBLn1	NBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		452	945	869	-	-	-			
HCM Lane V/C Ratio		0.687	0.209	0.081	-	-	-			
HCM Control Delay (s)		28.7	9.8	9.5	0	-	-			
HCM Lane LOS		D	А	А	А	-	-			
HCM 95th %tile Q(veh)	)	5.1	0.8	0.3	-	-	-			

## Intersection

Int Delay, s/veh

4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ţ,			र्स					٦		1
Traffic Vol, veh/h	0	146	219	387	494	0	0	0	0	19	0	98
Future Vol, veh/h	0	146	219	387	494	0	0	0	0	19	0	98
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage,	# -	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	7	6	2	4	0	2	2	2	33	0	11
Mvmt Flow	0	170	255	450	574	0	0	0	0	22	0	114

Major/Minor	Major1		I	Major2				Minor2			
Conflicting Flow All	-	0	0	425	0	0		1772	-	574	
Stage 1	-	-	-	-	-	-		1474	-	-	
Stage 2	-	-	-	-	-	-		298	-	-	
Critical Hdwy	-	-	-	4.12	-	-		4.6	-	6.31	
Critical Hdwy Stg 1	-	-	-	-	-	-		5.73	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-		5.73	-	-	
Follow-up Hdwy	-	-	-	2.218	-	-		3.797	-	3.399	
Pot Cap-1 Maneuver	0	-	-	1134	-	0		218	0	502	
Stage 1	0	-	-	-	-	0		179	0	-	
Stage 2	0	-	-	-	-	0		688	0	-	
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	1134	-	-		91	0	502	
Mov Cap-2 Maneuver	-	-	-	-	-	-		91	0	-	
Stage 1	-	-	-	-	-	-		179	0	-	
Stage 2	-	-	-	-	-	-		287	0	-	
Approach	EB			WB				SB			
HCM Control Delay, s	0			4.5				21.2			
HCM LOS								С			
Minor Lane/Major Mvr	nt	EBT	EBR	WBL	WBT	SBLn1	SBLn2				
Capacity (veh/h)		-	-	1134	-	91	502				
HCM Lane V/C Ratio		-	-	0.397	-	0.243	0.227				
HCM Control Delay (s	)	-	-	10.2	0	56.8	14.3				
HCM Lane LOS		-	-	В	А	F	В				
HCM 95th %tile Q(veh	ı)	-	-	1.9	-	0.9	0.9				

64.5 F

#### Intersection

Intersection Delay, s/veh Intersection LOS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		é.	1		\$			\$			\$	
Traffic Vol, veh/h	4	128	28	47	412	133	29	46	77	160	27	30
Future Vol, veh/h	4	128	28	47	412	133	29	46	77	160	27	30
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	25	12	4	13	4	6	4	5	3	2	15	3
Mvmt Flow	5	149	33	55	479	155	34	53	90	186	31	35
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	13.4			108.7			13.9			16.8		
HCM LOS	В			F			В			С		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	19%	3%	0%	8%	74%
Vol Thru, %	30%	97%	0%	70%	12%
Vol Right, %	51%	0%	100%	22%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	152	132	28	592	217
LT Vol	29	4	0	47	160
Through Vol	46	128	0	412	27
RT Vol	77	0	28	133	30
Lane Flow Rate	177	153	33	688	252
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.334	0.317	0.059	1.151	0.48
Departure Headway (Hd)	7.265	7.787	6.824	6.021	7.292
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	498	465	528	606	497
Service Time	5.265	5.487	4.524	4.079	5.292
HCM Lane V/C Ratio	0.355	0.329	0.063	1.135	0.507
HCM Control Delay	13.9	14.1	10	108.7	16.8
HCM Lane LOS	В	В	А	F	С
HCM 95th-tile Q	1.5	1.3	0.2	22.5	2.6

Int Delay, s/veh	13.6												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		\$			ŧ	1		<b>1</b>			41		
Traffic Vol, veh/h	0	0	0	370	0	106	0	9	104	57	17	0	
Future Vol, veh/h	0	0	0	370	0	106	0	9	104	57	17	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None	
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-	
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77	
Heavy Vehicles, %	2	2	2	2	2	4	2	22	19	0	6	2	
Mvmt Flow	0	0	0	481	0	138	0	12	135	74	22	0	

Major/Minor	Major1		M	ajor2		Μ	inor1			Minor2			
Conflicting Flow All	0	0	0	1	0	0	-	963	-	969	963	-	
Stage 1	-	-	-	-	-	-	-	1	-	962	962	-	
Stage 2	-	-	-	-	-	-	-	962	-	7	1	-	
Critical Hdwy	4.12	-	-	4.12	-	-	-	6.72	-	7.1	6.56	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.72	-	6.1	5.56	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.72	-	6.1	5.56	-	
Follow-up Hdwy	2.218	-	- 2	2.218	-	-	-	4.198	-	3.5	4.054	-	
Pot Cap-1 Maneuver	-	-	-	1622	-	0	0	237	0	235	252	0	
Stage 1	-	-	-	-	-	0	0	857	0	310	329	0	
Stage 2	-	-	-	-	-	0	0	309	0	1020	887	0	
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	-	1622	-	-	-	167	-	172	177	-	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	167	-	172	177	-	
Stage 1	-	-	-	-	-	-	-	857	-	310	231	-	
Stage 2	-	-	-	-	-	-	-	217	-	1006	887	-	
-													

Approach EB	WB	NB SB	
HCM Control Delay, s 0	8.2	42.4	
HCM LOS		- E	

Minor Lane/Major Mvmt	NBLn1 N	BLn2	EBL	EBT	EBR	WBL	WBT :	SBLn1	SBLn2
Capacity (veh/h)	167	-	-	-	-	1622	-	173	177
HCM Lane V/C Ratio	0.035	-	-	-	-	0.296	-	0.492	0.062
HCM Control Delay (s)	27.3	-	0	-	-	8.2	0	44.4	26.7
HCM Lane LOS	D	-	А	-	-	Α	А	Е	D
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.3	-	2.4	0.2

5.4

## Intersection

Int Delay, s/veh

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	٦		1			1		1	1			đ î þ	
Traffic Vol, veh/h	70	0	75	0	0	314	0	1	91	2	0	115	457
Future Vol, veh/h	70	0	75	0	0	314	0	1	91	2	0	115	457
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	-	None
Storage Length	0	-	50	-	-	0	-	-	0	-	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	16	0	4	0	0	2	0	61	6	0	0	6	3
Mvmt Flow	89	0	95	0	0	397	0	1	115	3	0	146	578

Major/Minor	Minor2		ľ	Minor1		Ν	/lajor1		Ma	ajor2				
Conflicting Flow All	442	-	362	-	-	1	-	0	-	-	1	0	0	
Stage 1	441	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	1	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.54	-	6.96	-	-	6.23	-	-	-	-	4.1	-	-	
Critical Hdwy Stg 1	6.74	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.34	-	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.652	-	3.338	-	-	3.319	-	-	-	-	2.2	-	-	
Pot Cap-1 Maneuver	485	0	631	0	0	1083	0	-	0	-	1635	-	-	
Stage 1	535	0	-	0	0	-	0	-	0	-	-	-	-	
Stage 2	985	0	-	0	0	-	0	-	0	-	-	-	-	
Platoon blocked, %								-				-	-	
Mov Cap-1 Maneuver	307	-	631	-	-	1083	-	-	-	-	-	-	-	
Mov Cap-2 Maneuver	307	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	535	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	623	-	-	-	-	-	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	16.4	10.2	0		
HCM LOS	С	В			

Minor Lane/Major Mvmt	NBT EB	Ln1 EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	- 3	307 63´	1083	-	-	-
HCM Lane V/C Ratio	- 0.2	289 0.15	5 0.367	-	-	-
HCM Control Delay (s)	- 2	21.4 11.7	' 10.2	-	-	-
HCM Lane LOS	-	C E	3 B	-	-	-
HCM 95th %tile Q(veh)	-	1.2 0.5	5 1.7	-	-	-

# Intersection

Int Delay, s/veh	5.5						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	Y			ŧ	ţ,		
Traffic Vol, veh/h	4	87	306	118	111	8	
Future Vol, veh/h	4	87	306	118	111	8	
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	88	88	88	88	88	88	
Heavy Vehicles, %	0	6	1	4	9	25	
Mvmt Flow	5	99	348	134	126	9	

Major/Minor	Minor2	I	Major1	Ма	jor2		
Conflicting Flow All	961	131	135	0	-	0	
Stage 1	131	-	-	-	-	-	
Stage 2	830	-	-	-	-	-	
Critical Hdwy	6.4	6.26	4.11	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	3.354	2.209	-	-	-	
Pot Cap-1 Maneuver	287	908	1456	-	-	-	
Stage 1	900	-	-	-	-	-	
Stage 2	432	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	213	908	1456	-	-	-	
Mov Cap-2 Maneuver	213	-	-	-	-	-	
Stage 1	668	-	-	-	-	-	
Stage 2	432	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	10.2		6		0		

HCM LOS B

Minor Lane/Major Mvmt	NBL	NBT E	BLn1	SBT	SBR
Capacity (veh/h)	1456	-	794	-	-
HCM Lane V/C Ratio	0.239	-	0.13	-	-
HCM Control Delay (s)	8.2	0	10.2	-	-
HCM Lane LOS	А	Α	В	-	-
HCM 95th %tile Q(veh)	0.9	-	0.4	-	-

	٦	<b>→</b>	•	*	1	~	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations				1		1	-
Traffic Volume (veh/h)	0	0	0	14	1	101	
Future Volume (Veh/h)	0	0	0	14	1	101	
Sign Control		Stop	Stop		Free		
Grade		0%	0%		0%		
Peak Hour Factor	0.76	0.76	0.76	0 76	0.76	0.76	
Hourly flow rate (yph)	0.70	0.70	0.70	18	1	133	
Pedestrians	v	U	U	10	1	100	
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (yeh)							
Median type					Nono		
Median type					NONE		
linetroom of and (#)							
opstream signal (ft)							
pA, platoon unblocked	00	0	105	0	^		
vC, conflicting volume	20	2	135	0	0		
VC1, stage 1 cont vol							
vC2, stage 2 conf vol	00	•	405	•	0		
vCu, unblocked vol	20	2	135	0	0		
tC, single (s)	7.1	6.5	6.5	6.4	4.1		
tC, 2 stage (s)							
tF (s)	3.5	4.0	4.0	3.5	2.2		
p0 queue free %	100	100	100	98	100		
cM capacity (veh/h)	980	897	759	1024	1636		
Direction, Lane #	WB 1	SB 1					
Volume Total	18	134					
Volume Left	0	1					
Volume Right	18	133					
cSH	1024	1636					
Volume to Capacity	0.02	0.00					
Queue Length 95th (ft)	1	0					
Control Delay (s)	86	01					
Lane LOS	Δ	Δ					
Approach Delay (s)	86	0.1					
Approach LOS	Δ	0.1					
	A						
Intersection Summary							
Average Delay			1.1				
Intersection Capacity Util	ization		Err%	IC	CU Level c	of Service	
Analysis Period (min)			15				

## Intersection

Int Delay, s/veh

15.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		÷.			Þ		٦		1			
Traffic Vol, veh/h	81	247	0	0	476	54	235	0	353	0	0	0
Future Vol, veh/h	81	247	0	0	476	54	235	0	353	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	2	0	0	4	6	11	0	3	0	0	0
Mvmt Flow	87	266	0	0	512	58	253	0	380	0	0	0

Major/Minor	Major1			Major2			Minor1			
Conflicting Flow All	570	) 0	-	-	-	0	981	-	266	
Stage 1			-	-	-	-	440	-	-	
Stage 2			-	-	-	-	541	-	-	
Critical Hdwy	4.11	-	-	-	-	-	5.9	-	6.23	
Critical Hdwy Stg 1			-	-	-	-	5.51	-	-	
Critical Hdwy Stg 2			-	-	-	-	5.51	-	-	
Follow-up Hdwy	2.209	) –	-	-	-	-	3.599	-	3.327	
Pot Cap-1 Maneuver	1007	′ -	0	0	-	-	314	0	770	
Stage 1			0	0	-	-	630	0	-	
Stage 2			0	0	-	-	566	0	-	
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	1007	′ -	-	-	-	-	282	0	770	
Mov Cap-2 Maneuver			-	-	-	-	282	0	-	
Stage 1			-	-	-	-	566	0	-	
Stage 2			-	-	-	-	566	0	-	
Approach	EB	}		WB			NB			
HCM Control Delay, s	2.2			0			36.4			
HCM LOS							E			
Minor Lane/Major Mvn	nt	NBLn1	NBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		282	770	1007	-	-	-			
HCM Lane V/C Ratio		0.896	0.493	0.086	-	-	-			
HCM Control Delay (s)	)	69.8	14.1	8.9	0	-	-			
HCM Lane LOS		F	В	А	А	-	-			
HCM 95th %tile Q(veh	)	8.1	2.8	0.3	-	-	-			

# Intersection

Int Delay, s/veh

11.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		Þ			÷.					٦		1
Traffic Vol, veh/h	0	273	347	333	378	0	0	0	0	55	0	97
Future Vol, veh/h	0	273	347	333	378	0	0	0	0	55	0	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage	,# -	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	1	6	4	8	0	2	2	2	2	0	8
Mvmt Flow	0	303	386	370	420	0	0	0	0	61	0	108

Major/Minor	Major1		I	Major2				Minor2			
Conflicting Flow All	-	0	0	689	0	0		1656	-	420	
Stage 1	-	-	-	-	-	-		1160	-	-	
Stage 2	-	-	-	-	-	-		496	-	-	
Critical Hdwy	-	-	-	4.14	-	-		5.9	-	6.28	
Critical Hdwy Stg 1	-	-	-	-	-	-		5.42	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-		5.42	-	-	
Follow-up Hdwy	-	-	-	2.236	-	-		3.518	-	3.372	
Pot Cap-1 Maneuver	0	-	-	896	-	0		137	0	621	
Stage 1	0	-	-	-	-	0		298	0	-	
Stage 2	0	-	-	-	-	0		612	0	-	
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	896	-	-		63	0	621	
Mov Cap-2 Maneuver	-	-	-	-	-	-		63	0	-	
Stage 1	-	-	-	-	-	-		298	0	-	
Stage 2	-	-	-	-	-	-		282	0	-	
Approach	EB			WB				SB			
HCM Control Delay, s	0			5.5				84.9			
HCM LOS								F			
Minor Lane/Major Mvr	nt	EBT	EBR	WBL	WBT	SBLn1	SBLn2				
Capacity (veh/h)		-	-	896	-	63	621				
HCM Lane V/C Ratio		-	-	0.413	-	0.97	0.174				
HCM Control Delay (s	)	-	-	11.8	0	213.5	12				
HCM Lane LOS		-	-	В	А	F	В				
HCM 95th %tile Q(veh	ı)	-	-	2	-	4.7	0.6				

# Intersection Intersection Delay, s/veh 49.2 Intersection LOS E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		£	1		\$			\$			\$	
Traffic Vol, veh/h	14	329	55	151	133	191	17	51	108	183	68	5
Future Vol, veh/h	14	329	55	151	133	191	17	51	108	183	68	5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	8	4	2	5	16	4	6	10	5	4	2	10
Mvmt Flow	16	370	62	170	149	215	19	57	121	206	76	6
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	35.5			85.3			17.8			25		
HCM LOS	E			F			С			С		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	10%	4%	0%	32%	71%
Vol Thru, %	29%	96%	0%	28%	27%
Vol Right, %	61%	0%	100%	40%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	176	343	55	475	256
LT Vol	17	14	0	151	183
Through Vol	51	329	0	133	68
RT Vol	108	0	55	191	5
Lane Flow Rate	198	385	62	534	288
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.44	0.83	0.12	1.065	0.639
Departure Headway (Hd)	8.397	8.062	7.248	7.181	8.353
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	431	451	497	507	434
Service Time	6.397	5.762	4.948	5.181	6.353
HCM Lane V/C Ratio	0.459	0.854	0.125	1.053	0.664
HCM Control Delay	17.8	39.4	10.9	85.3	25
HCM Lane LOS	С	E	В	F	С
HCM 95th-tile Q	2.2	8	0.4	16.3	4.3
10

### Intersection

Int Delay, s/veh

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			÷.	1		<b>†</b> ]			-f1	
Traffic Vol, veh/h	0	0	0	76	0	34	0	11	221	127	15	0
Future Vol, veh/h	0	0	0	76	0	34	0	11	221	127	15	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	23	2	22	2	50	6	6	50	2
Mvmt Flow	0	0	0	100	0	45	0	14	291	167	20	0

Major/Minor	Major1		Maj	or2		Mir	nor1			Vinor2			
Conflicting Flow All	0	0	0	1	0	0	-	201	-	208	201	-	
Stage 1	-	-	-	-	-	-	-	1	-	200	200	-	
Stage 2	-	-	-	-	-	-	-	200	-	8	1	-	
Critical Hdwy	4.12	-	- 4	.33	-	-	-	7	-	7.16	7	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6	-	6.16	6	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6	-	6.16	6	-	
Follow-up Hdwy	2.218	-	- 2.4	107	-	-	-	4.45	-	3.554	4.45	-	
Pot Cap-1 Maneuver	-	-	- 14	194	-	0	0	618	0	741	618	0	
Stage 1	-	-	-	-	-	0	0	808	0	793	654	0	
Stage 2	-	-	-	-	-	0	0	654	0	1003	808	0	
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	- 14	194	-	-	-	577	-	690	577	-	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	577	-	690	577	-	
Stage 1	-	-	-	-	-	-	-	808	-	793	610	-	
Stage 2	-	-	-	-	-	-	-	610	-	985	808	-	
Approach	EB		I	NB			NB			SB			
HCM Control Delay, s	0			7.6						12.1			
HCM LOS							-			В			

Minor Lane/Major Mvmt	NBLn1 NE	3Ln2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2	
Capacity (veh/h)	577	-	-	-	-	1494	-	683	577	
HCM Lane V/C Ratio	0.013	-	-	-	-	0.067	-	0.259	0.017	
HCM Control Delay (s)	11.3	-	0	-	-	7.6	0	12.1	11.3	
HCM Lane LOS	В	-	А	-	-	А	А	В	В	
HCM 95th %tile Q(veh)	0	-	-	-	-	0.2	-	1	0.1	

8.6												
EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
7		1			1		1	1		đ þ		
179	0	222	0	0	70	0	2	282	1	47	121	
179	0	222	0	0	70	0	2	282	1	47	121	
0	0	0	0	0	0	0	0	0	0	0	0	
Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
-	-	Stop	-	-	Stop	-	-	Free	-	-	None	
0	-	50	-	-	0	-	-	0	-	-	-	
# -	0	-	-	0	-	-	0	-	-	0	-	
-	0	-	-	0	-	-	0	-	-	0	-	
67	67	67	67	67	67	67	67	67	67	67	67	
6	0	2	0	0	18	0	24	1	0	28	17	
267	0	331	0	0	104	0	3	421	1	70	181	
	8.6 EBL 179 179 0 Stop 5 0 # - 0 4 - 67 67 6 267	8.6   EBL EBT   179 0   179 0   179 0   Stop Stop   Stop Stop   0 0   179 0   0 0   179 0   0 0   179 0   0 0   0 0   0 0   0 0   0 0   10	8.6   EBT   EBR     179   0   222     179   0   222     179   0   222     0   0   222     0   0   222     0   0   50     Stop   Stop   Stop     0   -   50     #   0   -     0   -   50     #   0   -     67   67   67     60   2   2     267   0   331	8.6   EBT   EBR   WBL     179   0   222   0     179   0   222   0     179   0   222   0     179   0   222   0     0   0   0   0     Stop   Stop   Stop   Stop     0   -   Stop   -     0   -   Stop   -     0   -   Stop   -     0   -   50   -     #   0   -   -     0   -   50   -     #   0   -   -     0   -   50   -     #   0   -   -     0   0   -   -     67   67   67   67     60   2   0   -     267   0   331   0	8.6   EBR   WBL   WBT     EBL   EBT   EBR   WBL   WBT     179   0   222   0   0     179   0   222   0   0     179   0   222   0   0     0   0   0   0   0     0   0   Stop   Stop   Stop     Stop   Stop   Stop   Stop   Stop     0   -   Stop   -   -     0   -   Stop   -   -     0   -   50   -   -     0   -   50   -   -     0   -   50   -   -     0   -   50   -   -     0   -   50   -   -     0   0   -   0   0     10   0   2   0   0     0   331 <t< td=""><td>8.6   EBI   EBT   EBR   WBL   WBT   WBR     179   00   222   00   00   70     179   00   222   00   00   70     179   00   222   00   00   70     0   0   00   0   0   70     0   0   500   Stop   Stop   Stop     0   -   Stop   Stop   Stop   Stop     0   -   50   -   -   0     17   00   -   50   -   -     0   -   500   -   -   0     10   -   500   -   -   0     10   -   500   -   0   -     10   -   500   -   0   -     10   -   50   -   0   -     10   -   0   -</td></t<> <td>8.6   EBT   EBR   WBL   WBT   WBR   NBL     179   00   222   0   0   70   0     179   00   222   0   0   70   0     179   00   222   0   0   70   0     0   0   0   0   0   0   0     0   0   0   0   0   0   0     0   0   0   0   0   0   0   0     Stop   Stop   Stop   Stop   Stop   Free   0      0   -   50    0        0   -   50    0                      </td> <td>8.6   EBT   EBR   WBL   WBT   WBR   NBL   NBT     179   0   222   0   0   70   0   2     179   0   222   0   0   70   0   2     0   0   222   0   0   70   0   2     179   0   222   0   0   70   0   2     0   0   0   0   0   0   2   0   0   2     0   0   222   0   0   70   0   2     0   0   0   0   0   0   2   0   0   2     0   0   0   0   Stop   Stop   Stop   Free   Free     0   -   50   -   0   -   0   -   -     10   -   50   -   0   0   0   0</td> <td>8.6   EBT   EBR   WBL   WBT   WBR   NBL   NBT   NBR     179   0   222   0   0   70   0   22   282     179   0   222   0   0   70   0   2   282     179   0   222   0   0   70   0   2   282     0   0   0   0   0   0   0   2   282     0   0   0   0   0   0   0   2   282     0   0   0   0   0   0   0   0   2   282     0</td> <td>8.6EBLEBTEBRWBLWBTWBRNBLNBTNBRSBL<math>179</math>02220070022821179022220070022821179022220070022821179022220070022821179022220000022821179022200070022821179022200070022821179022200070022821179022200000022821179022200000000017902220000000001000000000000001010000000000001110200000000001110000000<t< td=""><td>B.6EBLEBTEBRWBLWBTWBRNBLNBTNBRSBLSBT<math>179</math>0022200007000222821147179002220000700022282114717900222000070002228211470000000000000000000000StopStopStopStopStopFreeFreeFreeFreeFreeFree0-StopStopStopStopStopFreeFreeFreeFreeFree0-StopStopStop0-StopStopStopStopStop0Stop1000011000110-0-0-0010102120000-14<t< td=""><td>8.6EBLEBTEBRWBLWBTWBRNBLNBTNBRSBLSBTSBR<math>179</math>0222007002282147121179022200700228214712100222007002282147121000000000000StopStopStopStopStopFreeFreeFreeFreeFreeFree0-StopStopStopStopFreeFreeFreeFreeFreeFree0-Stop-0-Stop-0None0-StopStopStopStop-0None0-Stop-00None0-Stop-0001000-00-11-0-0-0-0-011-0-0-0-0-012-0</td></t<></td></t<></td>	8.6   EBI   EBT   EBR   WBL   WBT   WBR     179   00   222   00   00   70     179   00   222   00   00   70     179   00   222   00   00   70     0   0   00   0   0   70     0   0   500   Stop   Stop   Stop     0   -   Stop   Stop   Stop   Stop     0   -   50   -   -   0     17   00   -   50   -   -     0   -   500   -   -   0     10   -   500   -   -   0     10   -   500   -   0   -     10   -   500   -   0   -     10   -   50   -   0   -     10   -   0   -	8.6   EBT   EBR   WBL   WBT   WBR   NBL     179   00   222   0   0   70   0     179   00   222   0   0   70   0     179   00   222   0   0   70   0     0   0   0   0   0   0   0     0   0   0   0   0   0   0     0   0   0   0   0   0   0   0     Stop   Stop   Stop   Stop   Stop   Free   0      0   -   50    0        0   -   50    0	8.6   EBT   EBR   WBL   WBT   WBR   NBL   NBT     179   0   222   0   0   70   0   2     179   0   222   0   0   70   0   2     0   0   222   0   0   70   0   2     179   0   222   0   0   70   0   2     0   0   0   0   0   0   2   0   0   2     0   0   222   0   0   70   0   2     0   0   0   0   0   0   2   0   0   2     0   0   0   0   Stop   Stop   Stop   Free   Free     0   -   50   -   0   -   0   -   -     10   -   50   -   0   0   0   0	8.6   EBT   EBR   WBL   WBT   WBR   NBL   NBT   NBR     179   0   222   0   0   70   0   22   282     179   0   222   0   0   70   0   2   282     179   0   222   0   0   70   0   2   282     0   0   0   0   0   0   0   2   282     0   0   0   0   0   0   0   2   282     0   0   0   0   0   0   0   0   2   282     0	8.6EBLEBTEBRWBLWBTWBRNBLNBTNBRSBL $179$ 02220070022821179022220070022821179022220070022821179022220070022821179022220000022821179022200070022821179022200070022821179022200070022821179022200000022821179022200000000017902220000000001000000000000001010000000000001110200000000001110000000 <t< td=""><td>B.6EBLEBTEBRWBLWBTWBRNBLNBTNBRSBLSBT<math>179</math>0022200007000222821147179002220000700022282114717900222000070002228211470000000000000000000000StopStopStopStopStopFreeFreeFreeFreeFreeFree0-StopStopStopStopStopFreeFreeFreeFreeFree0-StopStopStop0-StopStopStopStopStop0Stop1000011000110-0-0-0010102120000-14<t< td=""><td>8.6EBLEBTEBRWBLWBTWBRNBLNBTNBRSBLSBTSBR<math>179</math>0222007002282147121179022200700228214712100222007002282147121000000000000StopStopStopStopStopFreeFreeFreeFreeFreeFree0-StopStopStopStopFreeFreeFreeFreeFreeFree0-Stop-0-Stop-0None0-StopStopStopStop-0None0-Stop-00None0-Stop-0001000-00-11-0-0-0-0-011-0-0-0-0-012-0</td></t<></td></t<>	B.6EBLEBTEBRWBLWBTWBRNBLNBTNBRSBLSBT $179$ 0022200007000222821147179002220000700022282114717900222000070002228211470000000000000000000000StopStopStopStopStopFreeFreeFreeFreeFreeFree0-StopStopStopStopStopFreeFreeFreeFreeFree0-StopStopStop0-StopStopStopStopStop0Stop1000011000110-0-0-0010102120000-14 <t< td=""><td>8.6EBLEBTEBRWBLWBTWBRNBLNBTNBRSBLSBTSBR<math>179</math>0222007002282147121179022200700228214712100222007002282147121000000000000StopStopStopStopStopFreeFreeFreeFreeFreeFree0-StopStopStopStopFreeFreeFreeFreeFreeFree0-Stop-0-Stop-0None0-StopStopStopStop-0None0-Stop-00None0-Stop-0001000-00-11-0-0-0-0-011-0-0-0-0-012-0</td></t<>	8.6EBLEBTEBRWBLWBTWBRNBLNBTNBRSBLSBTSBR $179$ 0222007002282147121179022200700228214712100222007002282147121000000000000StopStopStopStopStopFreeFreeFreeFreeFreeFree0-StopStopStopStopFreeFreeFreeFreeFreeFree0-Stop-0-Stop-0None0-StopStopStopStop-0None0-Stop-00None0-Stop-0001000-00-11-0-0-0-0-011-0-0-0-0-012-0

Major/Minor	Minor2		Ν	/linor1		Ν	lajor1		N	/lajor2			
Conflicting Flow All	166	-	126	-	-	3	-	0	-	3	0	0	
Stage 1	163	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	3	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.39	-	6.93	-	-	6.47	-	-	-	4.1	-	-	
Critical Hdwy Stg 1	6.59	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.19	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.557	-	3.319	-	-	3.471	-	-	-	2.2	-	-	
Pot Cap-1 Maneuver	780	0	901	0	0	1033	0	-	0	1632	-	-	
Stage 1	813	0	-	0	0	-	0	-	0	-	-	-	
Stage 2	1008	0	-	0	0	-	0	-	0	-	-	-	
Platoon blocked, %								-			-	-	
Mov Cap-1 Maneuver	700	-	901	-	-	1033	-	-	-	1632	-	-	
Mov Cap-2 Maneuver	700	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	813	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	906	-	-	-	-	-	-	-	-	-	-	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	12.2			8.9			0			0			
HCM LOS	В			A									

Minor Lane/Major Mvmt	NBT EE	BLn1 I	EBLn2V	VBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	700	901	1033	1632	-	-
HCM Lane V/C Ratio	- 0	).382	0.368	0.101	0.001	-	-
HCM Control Delay (s)	-	13.3	11.3	8.9	7.2	0	-
HCM Lane LOS	-	В	В	А	А	А	-
HCM 95th %tile Q(veh)	-	1.8	1.7	0.3	0	-	-

### Intersection Int Delay, s/veh 6.7 Movement EBL EBR NBL NBT SBT SBR Lane Configurations Y £ Þ 227 Traffic Vol, veh/h 11 272 68 145 2 Future Vol, veh/h 11 272 68 145 227 2 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 77 77 77 77 77 77 Heavy Vehicles, % 0 2 20 7 4 0 Mvmt Flow 14 353 88 188 295 3

Major/Minor	Minor2	N	Major1	Ма	ajor2	
Conflicting Flow All	661	297	298	0	-	0
Stage 1	297	-	-	-	-	-
Stage 2	364	-	-	-	-	-
Critical Hdwy	6.4	6.22	4.3	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	2.38	-	-	-
Pot Cap-1 Maneuver	431	742	1167	-	-	-
Stage 1	758	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	395	742	1167	-	-	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	15.2		2.7		0	

		, • •••=
HCM	LOS	С

Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR
Capacity (veh/h)	1167	- 718	-	-
HCM Lane V/C Ratio	0.076	- 0.512	-	-
HCM Control Delay (s)	8.3	0 15.2	-	-
HCM Lane LOS	А	A C	-	-
HCM 95th %tile Q(veh)	0.2	- 2.9	-	-

	٨	<b>→</b>	+	*	4	~	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations				1		1	
Traffic Volume (veh/h)	0	0	0	31	5	27	
Future Volume (Veh/h)	0	0	0	31	5	27	
Sign Control		Stop	Stop		Free		
Grade		0%	0%		0%		
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68	
Hourly flow rate (vph)	0	0	0	46	7	40	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	60	14	54	0	0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	60	14	54	0	0		
tC, single (s)	7.1	6.5	6.5	6.3	4.1		
tC, 2 stage (s)							
tF (s)	3.5	4.0	4.0	3.4	2.2		
p0 queue free %	100	100	100	96	100		
cM capacity (veh/h)	897	881	838	1070	1636		
Direction Lane #	WR 1	SR 1					
Volume Total	16	17					
	40	41					
Volume Dight	16	1					
	40	40					
Volumo to Consoitu	1070	0.00					
Output Longth Of the (ft)	0.04	0.00					
Queue Length 95th (II)	3	0					
Control Delay (S)	C.O	1.1					
Lane LUS	A	A					
Approach Delay (s)	ŏ.5	1.1					
Approach LUS	A						
Intersection Summary							
Average Delay			4.8				
Intersection Capacity Utili	zation		Err%	IC	CU Level o	of Service	
Analysis Period (min)			15				

Int Delay, s/veh

11.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		÷.			Þ		٦		1			
Traffic Vol, veh/h	103	248	0	0	435	44	183	0	397	0	0	0
Future Vol, veh/h	103	248	0	0	435	44	183	0	397	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	0	0	0	3	0	7	0	3	0	0	0
Mvmt Flow	114	276	0	0	483	49	203	0	441	0	0	0

Major/Minor	Major1			Major2			Minor1				
Conflicting Flow All	532	0	-	-	-	0	1012	-	2	276	
Stage 1	-	-	-	-	-	-	504	-		-	
Stage 2	-	-	-	-	-	-	508	-		-	
Critical Hdwy	4.13	-	-	-	-	-	5.7	-	6	.23	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.47	-		-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.47	-		-	
Follow-up Hdwy	2.227	-	-	-	-	-	3.563	-	3.3	327	
Pot Cap-1 Maneuver	1030	-	0	0	-	-	322	0	7	760	
Stage 1	-	-	0	0	-	-	597	0		-	
Stage 2	-	-	0	0	-	-	594	0		-	
Platoon blocked, %		-			-	-					
Mov Cap-1 Maneuver	1030	-	-	-	-	-	280	0	7	760	
Mov Cap-2 Maneuver	-	-	-	-	-	-	280	0		-	
Stage 1	-	-	-	-	-	-	519	0		-	
Stage 2	-	-	-	-	-	-	594	0		-	
Annroach	FR			WB			NR				
HCM Control Delay s	2.6			0			25.4				
HCM LOS	2.0			0			20.4 D				
							U				
Minor Lane/Major Mvr	nt	NBLn1	NBLn2	EBL	EBT	WBT	WBR				
Capacity (veh/h)		280	760	1030	-	-	-				
HCM Lane V/C Ratio		0.726	0.58	0.111	-	-	-				
HCM Control Delay (s	)	45.7	16.1	8.9	0	-	-				
HCM Lane LOS		E	С	Α	Α	-	-				

HCM 95th %tile Q(veh)

5.2

3.8

0.4

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Int Delay, s/veh

11.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		Þ			÷.					٦		1
Traffic Vol, veh/h	0	300	311	308	310	0	0	0	0	51	0	96
Future Vol, veh/h	0	300	311	308	310	0	0	0	0	51	0	96
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage	,# -	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	1	6	3	5	0	2	2	2	2	0	11
Mvmt Flow	0	366	379	376	378	0	0	0	0	62	0	117

Major/Minor	Major1		I	Major2				Minor2			
Conflicting Flow All	-	0	0	745	0	0		1686	-	378	
Stage 1	-	-	-	-	-	-		1130	-	-	
Stage 2	-	-	-	-	-	-		556	-	-	
Critical Hdwy	-	-	-	4.13	-	-		5.7	-	6.31	
Critical Hdwy Stg 1	-	-	-	-	-	-		5.42	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-		5.42	-	-	
Follow-up Hdwy	-	-	-	2.227	-	-		3.518	-	3.399	
Pot Cap-1 Maneuver	0	-	-	858	-	0		145	0	649	
Stage 1	0	-	-	-	-	0		308	0	-	
Stage 2	0	-	-	-	-	0		574	0	-	
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	858	-	-		65	0	649	
Mov Cap-2 Maneuver	-	-	-	-	-	-		65	0	-	
Stage 1	-	-	-	-	-	-		308	0	-	
Stage 2	-	-	-	-	-	-		255	0	-	
Approach	EB			WB				SB			
HCM Control Delay, s	0			6.2				79			
HCM LOS								F			
Minor Lane/Major Mvr	nt	EBT	EBR	WBL	WBT	SBLn1	SBLn2				
Capacity (veh/h)		-	-	858	-	65	649				
HCM Lane V/C Ratio		-	-	0.438	-	0.957	0.18				
HCM Control Delay (s	)	-	-	12.4	0	205.4	11.8				
HCM Lane LOS		-	-	В	А	F	В				
HCM 95th %tile Q(veh	ı)	-	-	2.3	-	4.7	0.7				

# Intersection Intersection Delay, s/veh Intersection LOS

57.7 F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		£	1		\$			\$			\$	
Traffic Vol, veh/h	21	312	36	138	89	179	11	54	109	190	55	3
Future Vol, veh/h	21	312	36	138	89	179	11	54	109	190	55	3
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	4	3	2	19	3	20	6	0	4	0	67
Mvmt Flow	26	390	45	173	111	224	14	68	136	238	69	4
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	52.9			93.3			21.7			31.9		
HCM LOS	F			F			С			D		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	
Vol Left, %	6%	6%	0%	34%	77%	
Vol Thru, %	31%	94%	0%	22%	22%	
Vol Right, %	63%	0%	100%	44%	1%	
Sign Control	Stop	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	174	333	36	406	248	
LT Vol	11	21	0	138	190	
Through Vol	54	312	0	89	55	
RT Vol	109	0	36	179	3	
Lane Flow Rate	218	416	45	508	310	
Geometry Grp	2	7	7	5	2	
Degree of Util (X)	0.525	0.934	0.092	1.083	0.727	
Departure Headway (Hd)	9.102	8.385	7.697	7.685	8.803	
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	
Сар	398	437	468	477	412	
Service Time	7.102	6.085	5.397	5.685	6.803	
HCM Lane V/C Ratio	0.548	0.952	0.096	1.065	0.752	
HCM Control Delay	21.7	57.4	11.2	93.3	31.9	
HCM Lane LOS	С	F	В	F	D	
HCM 95th-tile Q	2.9	10.6	0.3	16.4	5.7	

8.9

### Intersection

Int Delay, s/veh

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्स	1		<b>1</b>			-f1	
Traffic Vol, veh/h	0	0	0	63	0	18	0	6	230	64	9	0
Future Vol, veh/h	0	0	0	63	0	18	0	6	230	64	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	25	2	53	2	33	5	8	22	2
Mvmt Flow	0	0	0	90	0	26	0	9	329	91	13	0

Major/Minor	Major1		М	ajor2		М	inor1			Minor2			
Conflicting Flow All	0	0	0	1	0	0	-	181	-	186	181	-	
Stage 1	-	-	-	-	-	-	-	1	-	180	180	-	
Stage 2	-	-	-	-	-	-	-	180	-	6	1	-	
Critical Hdwy	4.12	-	-	4.35	-	-	-	6.83	-	7.18	6.72	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.83	-	6.18	5.72	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.83	-	6.18	5.72	-	
Follow-up Hdwy	2.218	-	- 2	2.425	-	-	-	4.297	-	3.572	4.198	-	
Pot Cap-1 Maneuver	-	-	-	1483	-	0	0	661	0	762	679	0	
Stage 1	-	-	-	-	-	0	0	837	0	808	714	0	
Stage 2	-	-	-	-	-	0	0	696	0	1000	857	0	
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	-	1483	-	-	-	621	-	719	638	-	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	621	-	719	638	-	
Stage 1	-	-	-	-	-	-	-	837	-	808	670	-	
Stage 2	-	-	-	-	-	-	-	654	-	990	857	-	
Annroach	FR			W/R			NR			SB			
HCM Control Dolay			_	76		_			_	10.0			
HOM LOC	U			1.0						10.9			
HUM LUS							-			В			

Minor Lane/Major Mvmt	NBLn1 NE	3Ln2	EBL	EBT	EBR	WBL	WBT S	SBLn1 S	SBLn2
Capacity (veh/h)	621	-	-	-	-	1483	-	713	638
HCM Lane V/C Ratio	0.007	-	-	-	-	0.061	-	0.137	0.01
HCM Control Delay (s)	10.8	-	0	-	-	7.6	0	10.9	10.7
HCM Lane LOS	В	-	А	-	-	А	А	В	В
HCM 95th %tile Q(veh)	0	-	-	-	-	0.2	-	0.5	0

Int Delay, s/veh 8.5 EBL Movement EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Lane Configurations ٦ ۲ ۴ ŧ ۲ **ħ**₽ 176 Traffic Vol, veh/h 0 175 0 0 13 0 14 206 0 31 59 Future Vol, veh/h 176 0 175 0 0 13 0 14 206 0 31 59 Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 Sign Control Stop Stop Stop Stop Stop Stop Free Free Free Free Free Free RT Channelized None Stop -Stop \_ \_ Free -----Storage Length 0 50 0 ---0 -----Veh in Median Storage, # -0 -0 --0 \_ -0 \_ -Grade, % 0 0 0 0 --------Peak Hour Factor 62 62 62 62 62 62 62 62 62 62 62 62 Heavy Vehicles, % 7 2 1 0 0 25 0 7 2 0 23 21 Mvmt Flow 284 0 282 0 0 21 0 23 332 0 50 95

Major/Minor	Minor2		ľ	Minor1		Ν	/lajor1		М	ajor2			
Conflicting Flow All	121	-	73	-	-	23	-	0	-	-	-	0	
Stage 1	98	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	23	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.405	-	6.915	-	-	6.575	-	-	-	-	-	-	
Critical Hdwy Stg 1	6.605	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.205	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.5665	- 3	3.3095	-	- 3	.5375	-	-	-	-	-	-	
Pot Cap-1 Maneuver	835	0	978	0	0	987	0	-	0	0	-	-	
Stage 1	885	0	-	0	0	-	0	-	0	0	-	-	
Stage 2	981	0	-	0	0	-	0	-	0	0	-	-	
Platoon blocked, %								-			-	-	
Mov Cap-1 Maneuver	r 817	-	978	-	-	987	-	-	-	-	-	-	
Mov Cap-2 Maneuver	r 817	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	885	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	960	-	-	-	-	-	-	-	-	-	-	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	s 11			8.7			0			0			
HCM LOS	В			А									
Minor Lane/Major Mv	mt	NBT E	EBLn1 I	EBLn2WBLr	า1	SBT	SBR						

	NULLDE		VDLIII	301	SDIV	
Capacity (veh/h)	- 8	17 978	987	-	-	
HCM Lane V/C Ratio	- 0.3	47 0.289	0.021	-	-	
HCM Control Delay (s)	- 11	1.7 10.2	8.7	-	-	
HCM Lane LOS	-	B B	Α	-	-	
HCM 95th %tile Q(veh)	- 1	1.6 1.2	0.1	-	-	

4.7					
EBL	EBR	NBL	NBT	SBT	SBR
Y			ŧ	ţ,	
4	202	11	160	196	2
4	202	11	160	196	2
0	0	0	0	0	0
Stop	Stop	Free	Free	Free	Free
-	None	-	None	-	None
0	-	-	-	-	-
,# 0	-	-	0	0	-
0	-	-	0	0	-
72	72	72	72	72	72
25	1	30	2	2	0
6	281	15	222	272	3
	4.7 EBL 4 4 0 Stop - 0 , # 0 0 72 25 6	4.7 EBL EBR ↓ 4 202 4 202 0 0 Stop Stop - None 0 ,# 0 0 72 72 25 1 6 281	4.7 EBL EBR NBL ↓ 202 11 4 202 11 4 202 11 0 0 0 Stop Stop Free None - 0 - ,# 0 - 72 72 72 72 72 72 72 25 1 30 6 281 15	4.7   EBL EBR NBL NBT   ♥ • • •   4 202 11 160   4 202 11 160   0 0 0 0   Stop Stop Free Free   None - None   0 - - 0   0 - - 0   72 72 72 72   25 1 30 2   6 281 15 222	4.7   EBL EBR NBL NBT SBT   ♥  € ● ● ● ●   4 202 11 160 196   4 202 11 160 196   0 0 0 0 0   Stop Stop Free Free Free   None - None -   0 - - 0 0   0 - - 0 0   72 72 72 72 72   25 1 30 2 2   6 281 15 222 272

Major/Minor	Minor2	M	Major1	Ma	ajor2	
Conflicting Flow All	526	274	275	0	-	0
Stage 1	274	-	-	-	-	-
Stage 2	252	-	-	-	-	-
Critical Hdwy	6.65	6.21	4.4	-	-	-
Critical Hdwy Stg 1	5.65	-	-	-	-	-
Critical Hdwy Stg 2	5.65	-	-	-	-	-
Follow-up Hdwy	3.725	3.309	2.47	-	-	-
Pot Cap-1 Maneuver	474	767	1143	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	467	767	1143	-	-	-
Mov Cap-2 Maneuver	467	-	-	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	739	-	-	-	-	-
Approach	EB		NB		SB	

Approach	EB	NB	SB	
HCM Control Delay, s	12.6	0.5	0	
HCM LOS	В			

Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR
Capacity (veh/h)	1143	- 758	-	-
HCM Lane V/C Ratio	0.013	- 0.377	-	-
HCM Control Delay (s)	8.2	0 12.6	-	-
HCM Lane LOS	А	A B	-	-
HCM 95th %tile Q(veh)	0	- 1.8	-	-

	٨	<b>→</b>	+	*	5	~	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations				1		1	
Traffic Volume (veh/h)	0	0	0	24	8	17	
Future Volume (Veh/h)	0	0	0	24	8	17	
Sign Control		Stop	Stop		Free		
Grade		0%	0%		0%		
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	
Hourly flow rate (vph)	0	0	0	28	9	20	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ff)							
pX. platoon unblocked							
vC conflicting volume	46	18	38	0	0		
vC1_stage 1 conf vol	10	10	00	Ŭ	Ű		
vC2_stage 2 conf vol							
vCu_unblocked vol	46	18	38	0	0		
tC single (s)	71	6.5	6.5	63	4 1		
tC, 2 stage (s)		0.0	0.0	0.0			
tF (s)	35	4 0	4 0	34	22		
n0 queue free %	100	100	100	97	99		
cM capacity (veh/h)	931	875	853	1054	1636		
		010			1000		_
Direction, Lane #	WB 1	SB 1					
Volume Total	28	29					
Volume Left	0	9					
Volume Right	28	20					
cSH	1054	1636					
Volume to Capacity	0.03	0.01					
Queue Length 95th (ft)	2	0					
Control Delay (s)	8.5	2.3					
Lane LOS	А	A					
Approach Delay (s)	8.5	2.3					
Approach LOS	А						
Intersection Summary							
Average Delav			5.3				
Intersection Capacity Utiliza	ation		Frr%	IC	CULevelo	f Service	
Analysis Period (min)	· · · · · ·		15				

## **APPENDIX K**

2021 Existing Capacity/Level-of-Service Analysis

Int Delay, s/veh

9.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स			Þ		٦		1			
Traffic Vol, veh/h	82	97	0	0	580	72	301	0	192	0	0	0
Future Vol, veh/h	82	97	0	0	580	72	301	0	192	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	13	7	0	0	1	1	7	0	6	2	2	2
Mvmt Flow	85	100	0	0	598	74	310	0	198	0	0	0

Major/Minor	Major1			Major2			Minor1			
Conflicting Flow All	672	0	-	-	-	0	905	-	100	
Stage 1	-	-	-	-	-	-	270	-	-	
Stage 2	-	-	-	-	-	-	635	-	-	
Critical Hdwy	4.23	-	-	-	-	-	4.6	-	6.26	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.47	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.47	-	-	
Follow-up Hdwy	2.317	-	-	-	-	-	3.563	-	3.354	
Pot Cap-1 Maneuver	869	-	0	0	-	-	481	0	945	
Stage 1	-	-	0	0	-	-	764	0	-	
Stage 2	-	-	0	0	-	-	519	0	-	
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	869	-	-	-	-	-	431	0	945	
Mov Cap-2 Maneuver	-	-	-	-	-	-	431	0	-	
Stage 1	-	-	-	-	-	-	685	0	-	
Stage 2	-	-	-	-	-	-	519	0	-	
Approach	EB			WB			NB			
HCM Control Delay, s	4.4			0			23.4			
HCM LOS							С			
Minor Lane/Maior Mvr	nt	NBLn1	NBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		431	945	869	-	-	-			
HCM Lane V/C Ratio		0.72	0.209	0.097	-	-	-			
HCM Control Delay (s	)	32.1	9.8	9.6	0	-	-			
HCM Lane LOS		D	A	A	A	-	-			
HCM 95th %tile Q(veh	)	5.6	0.8	0.3	-	-	-			

Int Delay, s/veh

4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		Þ			÷.					٦		1
Traffic Vol, veh/h	0	160	229	387	494	0	0	0	0	19	0	99
Future Vol, veh/h	0	160	229	387	494	0	0	0	0	19	0	99
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage,	# -	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	7	6	2	4	0	2	2	2	33	0	11
Mvmt Flow	0	186	266	450	574	0	0	0	0	22	0	115

Major/Minor	Major1			Major2				Minor2			
Conflicting Flow All	-	0	0	452	0	0		1793	-	574	
Stage 1	-	-	-	-	-	-		1474	-	-	
Stage 2	-	-	-	-	-	-		319	-	-	
Critical Hdwy	-	-	-	4.12	-	-		4.6	-	6.31	
Critical Hdwy Stg 1	-	-	-	-	-	-		5.73	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-		5.73	-	-	
Follow-up Hdwy	-	-	-	2.218	-	-		3.797	-	3.399	
Pot Cap-1 Maneuver	0	-	-	1109	-	0		214	0	502	
Stage 1	0	-	-	-	-	0		179	0	-	
Stage 2	0	-	-	-	-	0		672	0	-	
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	1109	-	-		86	0	502	
Mov Cap-2 Maneuver	-	-	-	-	-	-		86	0	-	
Stage 1	-	-	-	-	-	-		179	0	-	
Stage 2	-	-	-	-	-	-		271	0	-	
Approach	EB			WB				SB			
HCM Control Delay, s	0			4.6				21.8			
HCM LOS								С			
Minor Lane/Major Mvr	nt	EBT	EBR	WBL	WBT	SBLn1	SBLn2				
Capacity (veh/h)		-	-	1109	-	86	502				
HCM Lane V/C Ratio		-	-	0.406	-	0.257	0.229				
HCM Control Delay (s	)	-	-	10.4	0	60.8	14.3				
HCM Lane LOS		-	-	В	А	F	В				
HCM 95th %tile Q(veh	ı)	-	-	2	-	0.9	0.9				

67.8 F

### Intersection

Intersection Delay, s/veh Intersection LOS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		é.	1		\$			\$			\$	
Traffic Vol, veh/h	4	152	28	47	413	133	29	46	77	160	27	30
Future Vol, veh/h	4	152	28	47	413	133	29	46	77	160	27	30
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	25	12	4	13	4	6	4	5	3	2	15	3
Mvmt Flow	5	177	33	55	480	155	34	53	90	186	31	35
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	14.4			116.5			14.2			17.3		
HCM LOS	В			F			В			С		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	19%	3%	0%	8%	74%
Vol Thru, %	30%	97%	0%	70%	12%
Vol Right, %	51%	0%	100%	22%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	152	156	28	593	217
LT Vol	29	4	0	47	160
Through Vol	46	152	0	413	27
RT Vol	77	0	28	133	30
Lane Flow Rate	177	181	33	690	252
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.339	0.376	0.059	1.171	0.487
Departure Headway (Hd)	7.427	7.839	6.878	6.114	7.436
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	488	463	524	593	487
Service Time	5.427	5.539	4.578	4.179	5.436
HCM Lane V/C Ratio	0.363	0.391	0.063	1.164	0.517
HCM Control Delay	14.2	15.2	10	116.5	17.3
HCM Lane LOS	В	С	А	F	С
HCM 95th-tile Q	1.5	1.7	0.2	23.4	2.6

### Intersection Int Delay, s/veh 13.6 Movement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR **۠†** 17 Lane Configurations 4 đ ۴ 1Þ 0 Traffic Vol, veh/h 0 0 371 106 9 128 57 0 0 0 Future Vol, veh/h 0 0 0 371 0 106 0 9 128 57 17 0 Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 Sign Control Stop Stop Stop Free Free Free Free Free Free Stop Stop Stop RT Channelized -None --Free Free None -\_ ---Storage Length \_ --\_ -0 ----\_ -Veh in Median Storage, # -0 -0 \_ 0 \_ \_ 0 -\_ -Grade, % 0 0 0 0 --------Peak Hour Factor 77 77 77 77 77 77 77 77 77 77 77 77 Heavy Vehicles, % 2 2 2 2 2 2 22 19 0 6 2 4 Mvmt Flow 0 0 0 482 0 138 0 12 166 74 22 0

Major/Minor	Major1		N	lajor2		М	inor1			Minor2			
Conflicting Flow All	0	0	0	1	0	0	-	965	-	971	965	-	
Stage 1	-	-	-	-	-	-	-	1	-	964	964	-	
Stage 2	-	-	-	-	-	-	-	964	-	7	1	-	
Critical Hdwy	4.12	-	-	4.12	-	-	-	6.72	-	7.1	6.56	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.72	-	6.1	5.56	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.72	-	6.1	5.56	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	-	4.198	-	3.5	4.054	-	
Pot Cap-1 Maneuver	-	-	-	1622	-	0	0	236	0	234	251	0	
Stage 1	-	-	-	-	-	0	0	857	0	309	328	0	
Stage 2	-	-	-	-	-	0	0	309	0	1020	887	0	
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	-	1622	-	-	-	166	-	171	176	-	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	166	-	171	176	-	
Stage 1	-	-	-	-	-	-	-	857	-	309	231	-	
Stage 2	-	-	-	-	-	-	-	217	-	1006	887	-	
Approach	FB			WB			NB			SB			
HCM Control Delay s	0		_	82		_				42.7			
HCM LOS	0			0.2			_			۲ <u>۲</u> ۲.1			
							-			L			

Minor Lane/Major Mvmt	NBLn1 NE	BLn2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	166	-	-	-	-	1622	-	172	176
HCM Lane V/C Ratio	0.035	-	-	-	-	0.297	-	0.495	0.063
HCM Control Delay (s)	27.5	-	0	-	-	8.2	0	44.8	26.8
HCM Lane LOS	D	-	А	-	-	А	А	Е	D
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.3	-	2.4	0.2

5.5

### Intersection

Int Delay, s/veh

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	٦		1			1		1	1			đ î þ	
Traffic Vol, veh/h	70	0	75	0	0	314	0	24	93	2	0	116	457
Future Vol, veh/h	70	0	75	0	0	314	0	24	93	2	0	116	457
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	-	None
Storage Length	0	-	50	-	-	0	-	-	0	-	-	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	16	0	4	0	0	2	0	61	6	0	0	6	3
Mvmt Flow	89	0	95	0	0	397	0	30	118	3	0	147	578

Major/Minor	Minor2		I	/linor1		N	lajor1		Ма	ijor2				
Conflicting Flow All	472	-	363	-	-	30	-	0	-	-	30	0	0	
Stage 1	442	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	30	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.54	-	6.96	-	-	6.23	-	-	-	-	4.1	-	-	
Critical Hdwy Stg 1	6.74	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.34	-	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.652	-	3.338	-	-	3.319	-	-	-	-	2.2	-	-	
Pot Cap-1 Maneuver	462	0	630	0	0	1044	0	-	0	-	1596	-	-	
Stage 1	535	0	-	0	0	-	0	-	0	-	-	-	-	
Stage 2	949	0	-	0	0	-	0	-	0	-	-	-	-	
Platoon blocked, %								-				-	-	
Mov Cap-1 Maneuver	286	-	630	-	-	1044	-	-	-	-	-	-	-	
Mov Cap-2 Maneuver	286	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	535	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	588	-	-	-	-	-	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	17.2	10.6	0		
HCM LOS	С	В			

Minor Lane/Major Mvmt	NBT EBLr	1 EBLn2	WBLn1	SBL	SBT	SBR	
Capacity (veh/h)	- 28	6 630	1044	-	-	-	
HCM Lane V/C Ratio	- 0.3	0.151	0.381	-	-	-	
HCM Control Delay (s)	- 23	.1 11.7	10.6	-	-	-	
HCM Lane LOS	-	C B	В	-	-	-	
HCM 95th %tile Q(veh)	- 1	.3 0.5	1.8	-	-	-	

Int Delay, s/veh	5.5						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	Y			ŧ	ţ,		
Traffic Vol, veh/h	4	89	306	118	111	8	
Future Vol, veh/h	4	89	306	118	111	8	
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	88	88	88	88	88	88	
Heavy Vehicles, %	0	6	1	4	9	25	
Mvmt Flow	5	101	348	134	126	9	

Major/Minor	Minor2		Major1	Maj	or2		
Conflicting Flow All	961	131	135	0	-	0	
Stage 1	131	-	-	-	-	-	
Stage 2	830	-	-	-	-	-	
Critical Hdwy	6.4	6.26	4.11	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	3.354	2.209	-	-	-	
Pot Cap-1 Maneuver	287	908	1456	-	-	-	
Stage 1	900	-	-	-	-	-	
Stage 2	432	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	213	908	1456	-	-	-	
Mov Cap-2 Maneuver	213	-	-	-	-	-	
Stage 1	668	-	-	-	-	-	
Stage 2	432	-	-	-	-	-	
Approach	EB		NB		SB		

Approach	EB	NB	SB	
HCM Control Delay, s	10.2	6	0	
HCM LOS	В			

Minor Lane/Major Mvmt	NBL	NBT EE	BLn1	SBT	SBR
Capacity (veh/h)	1456	-	796	-	-
HCM Lane V/C Ratio	0.239	- 0	.133	-	-
HCM Control Delay (s)	8.2	0	10.2	-	-
HCM Lane LOS	А	А	В	-	-
HCM 95th %tile Q(veh)	0.9	-	0.5	-	-

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations				1		1	1
Traffic Volume (veh/h)	0	0	0	40	0	102	
Future Volume (Veh/h)	0	0	0	40	0	102	
Sign Control		Stop	Stop		Free		
Grade		0%	0%		0%		
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	
Hourly flow rate (vph)	0	0	0	53	0	134	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX. platoon unblocked							
vC. conflicting volume	53	0	134	0	0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	53	0	134	0	0		
tC. single (s)	7.1	6.5	6.5	6.4	4.1		
tC. 2 stage (s)							
tF (s)	3.5	4.0	4.0	3.5	2.2		
p0 queue free %	100	100	100	95	100		
cM capacity (veh/h)	901	900	760	1024	1636		
Disastian Lana #							
Direction, Lane #	WB 1	SBT					
Volume I otal	53	134					
Volume Left	0	0					
Volume Right	53	134					
cSH	1024	1700					
Volume to Capacity	0.05	0.08					
Queue Length 95th (ft)	4	0					
Control Delay (s)	8.7	0.0					
Lane LOS	А						
Approach Delay (s)	8.7	0.0					
Approach LOS	А						
Intersection Summary							
Average Delay			2.5				
Intersection Capacity Utiliza	tion		9.6%	IC	CU Level o	of Service	
Analysis Period (min)			15				

Int Delay, s/veh

17.4

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		्रस्			4		<u>۲</u>		1			
Traffic Vol, veh/h	95	247	0	0	476	54	235	0	353	0	0	0
Future Vol, veh/h	95	247	0	0	476	54	235	0	353	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	2	0	0	4	6	11	0	3	0	0	0
Mvmt Flow	102	266	0	0	512	58	253	0	380	0	0	0

Major/Minor	Major1			Major2			Minor1			
Conflicting Flow All	570	0	-	-	-	0	1011	-	266	6
Stage 1	-	-	-	-	-	-	470	-		-
Stage 2	-	-	-	-	-	-	541	-		-
Critical Hdwy	4.11	-	-	-	-	-	5.9	-	6.23	3
Critical Hdwy Stg 1	-	-	-	-	-	-	5.51	-		-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.51	-		-
Follow-up Hdwy	2.209	-	-	-	-	-	3.599	-	3.32	7
Pot Cap-1 Maneuver	1007	-	0	0	-	-	303	0	77(	0
Stage 1	-	-	0	0	-	-	611	0		-
Stage 2	-	-	0	0	-	-	566	0		-
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	1007	-	-	-	-	-	267	0	77(	0
Mov Cap-2 Maneuver	-	-	-	-	-	-	267	0		-
Stage 1	-	-	-	-	-	-	538	0		-
Stage 2	-	-	-	-	-	-	566	0		-
Annroach	FR			WB			NR			
HCM Control Delay	2.5			0			41.7			
HCM LOS	2.0			0			+1.7 F			
							<u> </u>			
Minor Lane/Major Mvr	nt	NBLn1	NBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		267	770	1007	-	-	-			
HCM Lane V/C Ratio		0.946	0.493	0.101	-	-	-			
HCM Control Delay (s	)	83.2	14.1	9	0	-	-			
HCM Lane LOS		F	В	Α	Α	-	-			

HCM 95th %tile Q(veh)

8.9

2.8

0.3

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Int Delay, s/veh

12

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4Î			र्भ					٦		1
Traffic Vol, veh/h	0	287	357	333	378	0	0	0	0	55	0	98
Future Vol, veh/h	0	287	357	333	378	0	0	0	0	55	0	98
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage,	# -	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	1	6	4	8	0	2	2	2	2	0	8
Mvmt Flow	0	319	397	370	420	0	0	0	0	61	0	109

Major/Minor	Major1		Ν	Major2					Minor2				
Conflicting Flow All	-	0	0	716	0	0			1678	-	420		
Stage 1	-	-	-	-	-	-			1160	-	-		
Stage 2	-	-	-	-	-	-			518	-	-		
Critical Hdwy	-	-	-	4.14	-	-			5.9	-	6.28		
Critical Hdwy Stg 1	-	-	-	-	-	-			5.42	-	-		
Critical Hdwy Stg 2	-	-	-	-	-	-			5.42	-	-		
Follow-up Hdwy	-	-	-	2.236	-	-			3.518	-	3.372		
Pot Cap-1 Maneuver	0	-	-	875	-	0			133	0	621		
Stage 1	0	-	-	-	-	0			298	0	-		
Stage 2	0	-	-	-	-	0			598	0	-		
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	-	875	-	-			~ 60	0	621		
Mov Cap-2 Maneuver	-	-	-	-	-	-			~ 60	0	-		
Stage 1	-	-	-	-	-	-			298	0	-		
Stage 2	-	-	-	-	-	-			268	0	-		
Approach	EB			WB					SB				
HCM Control Delay, s	0			5.7					92.2				
HCM LOS	-								F				
Minor Lane/Maior Mvn	nt	EBT	EBR	WBL	WBTS	SBLn1	SBLn2						
Capacity (veh/h)	-	-	-	875	-	60	621						
HCM Lane V/C Ratio		-	-	0 423	-	1 0 1 9	0 175						
HCM Control Delay (s)	)	-	-	12.1	0	235.1	12						
HCM Lane LOS	/	-	-	. <u>_</u>	A	F	B						
HCM 95th %tile Q(veh	ı)	-	-	2.1	-	4.9	0.6						
Notos	,												
		<u>ф.</u> р.			00-				*				
~: Volume exceeds ca	pacity	\$: De	lay exc	eeds 3	UUS ·	+: Com	putation	Not Defined	î: All i	major v	olume i	n platoon	

54.5 F Weekday Afternoon School Peak Hour ad 2021 Existing

## Intersection

Intersection Delay, s/veh Intersection LOS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		£	1		\$			\$			\$	
Traffic Vol, veh/h	14	353	55	151	134	191	17	51	108	183	68	5
Future Vol, veh/h	14	353	55	151	134	191	17	51	108	183	68	5
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	8	4	2	5	16	4	6	10	5	4	2	10
Mvmt Flow	16	397	62	170	151	215	19	57	121	206	76	6
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	43.9			92.5			18.4			26		
HCM LOS	E			F			С			D		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	
Vol Left, %	10%	4%	0%	32%	71%	
Vol Thru, %	29%	96%	0%	28%	27%	
Vol Right, %	61%	0%	100%	40%	2%	
Sign Control	Stop	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	176	367	55	476	256	
LT Vol	17	14	0	151	183	
Through Vol	51	353	0	134	68	
RT Vol	108	0	55	191	5	
Lane Flow Rate	198	412	62	535	288	
Geometry Grp	2	7	7	5	2	
Degree of Util (X)	0.448	0.893	0.12	1.086	0.649	
Departure Headway (Hd)	8.589	8.135	7.321	7.313	8.52	
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	
Сар	421	449	493	503	426	
Service Time	6.589	5.835	5.021	5.313	6.52	
HCM Lane V/C Ratio	0.47	0.918	0.126	1.064	0.676	
HCM Control Delay	18.4	48.8	11	92.5	26	
HCM Lane LOS	С	E	В	F	D	
HCM 95th-tile Q	2.3	9.6	0.4	17.1	4.5	

Int Delay, s/veh	10												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		\$			र्च	1		<b>≜</b> †₽			-4 <b>1</b>		
Traffic Vol, veh/h	0	0	0	77	0	34	0	11	245	127	15	0	
Future Vol, veh/h	0	0	0	77	0	34	0	11	245	127	15	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None	
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-	
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76	
Heavy Vehicles, %	2	2	2	23	2	22	2	50	6	6	50	2	
Mvmt Flow	0	0	0	101	0	45	0	14	322	167	20	0	

Major/Minor	Major1		Ν	Major2		ľ	Minor1			Minor2				
Conflicting Flow All	0	0	0	1	0	0	-	203	-	210	203	-		
Stage 1	-	-	-	-	-	-	-	1	-	202	202	-		
Stage 2	-	-	-	-	-	-	-	202	-	8	1	-		
Critical Hdwy	4.12	-	-	4.33	-	-	-	7	-	7.16	7	-		
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6	-	6.16	6	-		
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6	-	6.16	6	-		
Follow-up Hdwy	2.218	-	-	2.407	-	-	-	4.45	-	3.554	4.45	-		
Pot Cap-1 Maneuver	-	-	-	1494	-	0	0	616	0	739	616	0		
Stage 1	-	-	-	-	-	0	0	808	0	791	653	0		
Stage 2	-	-	-	-	-	0	0	653	0	1003	808	0		
Platoon blocked, %		-	-		-									
Mov Cap-1 Maneuver	-	-	-	1494	-	-	-	574	-	687	574	-		
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	574	-	687	574	-		
Stage 1	-	-	-	-	-	-	-	808	-	791	609	-		
Stage 2	-	-	-	-	-	-	-	609	-	985	808	-		
Approach	EB			WB			NB			SB				
HCM Control Delay, s	0			7.6						12.1				
HCM LOS							-			В				
Minor Lane/Major Mvr	nt I	NBLn1 NE	3Ln2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2				

Minor Lane/Major Mvmt	NBLn1 NBL	n2	EBL	FRI	FRK	WBL	WRIS	SBLn1	SBLn2	
Capacity (veh/h)	574	-	-	-	-	1494	-	680	574	
HCM Lane V/C Ratio	0.013	-	-	-	-	0.068	-	0.26	0.017	
HCM Control Delay (s)	11.4	-	0	-	-	7.6	0	12.1	11.4	
HCM Lane LOS	В	-	А	-	-	А	А	В	В	
HCM 95th %tile Q(veh)	0	-	-	-	-	0.2	-	1	0.1	

### Intersection Int Delay, s/veh 8.5 EBL Movement EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Lane Configurations ٦ 7 ۴ ŧ ۴ ħ₽ 179 222 Traffic Vol, veh/h 0 0 0 70 26 284 48 121 0 1 Future Vol, veh/h 179 0 222 0 0 70 0 26 284 1 48 121 Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 Sign Control Stop Stop Stop Stop Stop Stop Free Free Free Free Free Free RT Channelized Stop Stop --\_ Free --None ---Storage Length 0 50 0 ---0 ---\_ -Veh in Median Storage, # -0 -0 \_ 0 -0 ----Grade, % 0 0 0 0 --------Peak Hour Factor 67 67 67 67 67 67 67 67 67 67 67 67

Maior/Minor	Minor2		Ν	/linor1		N	laior1		Ν	laior2			
Conflicting Flow All	204		127			30		0	-	30	0	0	
Connicting Flow Air	165	-	121	-	-	33	-	0	-	33	0	0	
Stage 1	100	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	- 39	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.39	-	6.93	-	-	6.47	-	-	-	4.1	-	-	
Critical Hdwy Stg 1	6.59	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.19	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.557	-	3.319	-	-	3.471	-	-	-	2.2	-	-	
Pot Cap-1 Maneuver	735	0	900	0	0	985	0	-	0	1584	-	-	
Stage 1	811	0	-	0	0	-	0	-	0	-	-	-	
Stage 2	965	0	-	0	0	-	0	-	0	-	-	-	
Platoon blocked, %								-			-	-	
Mov Cap-1 Maneuver	656	-	900	-	-	985	-	-	-	1584	-	-	
Mov Cap-2 Maneuver	656	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	811	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	863	-	-	-	-	-	-	-	-	-	-	-	
Annraach	ГР						ND			CD.			
Approach	ED			VVD			IND			30			
HCM Control Delay, s	12.6			9.1			0			0			
HCM LOS	В			Α									

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2V	VBLn1	SBL	SBT	SBR	
Capacity (veh/h)	-	656	900	985	1584	-	-	
HCM Lane V/C Ratio	-	0.407	0.368	0.106	0.001	-	-	
HCM Control Delay (s)	-	14.2	11.3	9.1	7.3	-	-	
HCM Lane LOS	-	В	В	А	А	-	-	
HCM 95th %tile Q(veh)	-	2	1.7	0.4	0	-	-	

Heavy Vehicles, %

Mvmt Flow

6

267

0

0

2

331

0

0

0

0

18

104

0

0

24

39

1

424

0

1

28

72

17

181

### Intersection Int Delay, s/veh 6.7 EBL Movement EBR NBL NBT SBT SBR **₽** 227 Lane Configurations ¥ đ Traffic Vol, veh/h 11 274 68 145 2 Future Vol, veh/h 11 274 68 145 227 2 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 77 77 77 77 77 77 Heavy Vehicles, % 0 2 20 7 4 0 Mvmt Flow 14 356 88 188 295 3

Major/Minor	Minor2	ľ	Major1	Ma	ajor2	
Conflicting Flow All	661	297	298	0	-	0
Stage 1	297	-	-	-	-	-
Stage 2	364	-	-	-	-	-
Critical Hdwy	6.4	6.22	4.3	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	2.38	-	-	-
Pot Cap-1 Maneuver	431	742	1167	-	-	-
Stage 1	758	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	<sup>-</sup> 395	742	1167	-	-	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	694	-	-	-	-	-
Stage 2	707	-	-	-	-	-
Approach	ED		ND		СD	

Approach	EB	NB	SB	
HCM Control Delay, s	15.2	2.7	0	
HCM LOS	С			

Minor Lane/Major Mvmt	NBL	NBT EBLr	1 SBT	SBR
Capacity (veh/h)	1167	- 71	8 -	-
HCM Lane V/C Ratio	0.076	- 0.51	6 -	-
HCM Control Delay (s)	8.3	0 15	2 -	-
HCM Lane LOS	А	А	C -	-
HCM 95th %tile Q(veh)	0.2	-	3 -	-

	٨	<b>→</b>	+	•	5	~
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations				1		1
Traffic Volume (veh/h)	0	0	0	57	0	28
Future Volume (Veh/h)	0	0	0	57	0	28
Sign Control		Stop	Stop		Free	
Grade		0%	0%		0%	
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	0	0	0	84	0	41
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ff)						
pX. platoon unblocked						
vC. conflicting volume	84	0	41	0	0	
vC1, stage 1 conf vol	•.	•		•	•	
vC2, stage 2 conf vol						
vCu, unblocked vol	84	0	41	0	0	
tC, single (s)	7.1	6.5	6.5	6.3	4.1	
tC 2 stage (s)		0.0	0.0	0.0		
tE(s)	35	4 0	4 0	34	22	
n0 queue free %	100	100	100	92	100	
cM capacity (veh/h)	836	900	855	1070	1636	
		000			1000	
Direction, Lane #	WB 1	SB 1				
Volume Total	84	41				
Volume Left	0	0				
Volume Right	84	41				
cSH	1070	1700				
Volume to Capacity	0.08	0.02				
Queue Length 95th (ft)	6	0				
Control Delay (s)	8.6	0.0				
Lane LOS	A					
Approach Delay (s)	8.6	0.0				
Approach LOS	А					
Intersection Summary						
Average Delay			5.8			
Intersection Capacity Utiliz	ration		6.9%	IC	ULevelo	f Service
Analysis Period (min)			15		, _,	

Int Delay, s/veh

11.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		्र			12		1		1			
Traffic Vol, veh/h	104	248	0	0	435	44	183	0	397	0	0	0
Future Vol, veh/h	104	248	0	0	435	44	183	0	397	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	0	0	0	3	0	7	0	3	0	0	0
Mvmt Flow	116	276	0	0	483	49	203	0	441	0	0	0

Major/Minor	Major1		ļ	Major2			Minor1			
Conflicting Flow All	532	0	-	-	-	0	1016	-	276	
Stage 1	-	-	-	-	-	-	508	-	-	
Stage 2	-	-	-	-	-	-	508	-	-	
Critical Hdwy	4.13	-	-	-	-	-	5.7	-	6.23	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.47	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.47	-	-	
Follow-up Hdwy	2.227	-	-	-	-	-	3.563	-	3.327	
Pot Cap-1 Maneuver	1030	-	0	0	-	-	321	0	760	
Stage 1	-	-	0	0	-	-	594	0	-	
Stage 2	-	-	0	0	-	-	594	0	-	
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	1030	-	-	-	-	-	278	0	760	
Mov Cap-2 Maneuver	-	-	-	-	-	-	278	0	-	
Stage 1	-	-	-	-	-	-	515	0	-	
Stage 2	-	-	-	-	-	-	594	0	-	
Approach	EB			WB			NB			
HCM Control Delay, s	2.6			0			25.7			
HCM LOS							D			
Minor Lane/Major Mvn	nt	NBLn11	VBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		278	760	1030	-	-	-			
HCM Lane V/C Ratio		0.731	0.58	0.112	-	-	-			
HCM Control Delay (s	)	46.5	16.1	8.9	0	-	-			
HCM Lane LOS		E	С	А	А	-	-			

HCM 95th %tile Q(veh)

5.2

3.8

0.4

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Int Delay, s/veh

11.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			्र					<u>۲</u>		1
Traffic Vol, veh/h	0	301	311	308	310	0	0	0	0	51	0	97
Future Vol, veh/h	0	301	311	308	310	0	0	0	0	51	0	97
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage	, # -	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	0	1	6	3	5	0	2	2	2	2	0	11
Mvmt Flow	0	367	379	376	378	0	0	0	0	62	0	118

Major/Minor	Major1		ľ	Major2				Minor2			
Conflicting Flow All	-	0	0	746	0	0		1687	-	378	
Stage 1	-	-	-	-	-	-		1130	-	-	
Stage 2	-	-	-	-	-	-		557	-	-	
Critical Hdwy	-	-	-	4.13	-	-		5.7	-	6.31	
Critical Hdwy Stg 1	-	-	-	-	-	-		5.42	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-		5.42	-	-	
Follow-up Hdwy	-	-	-	2.227	-	-		3.518	-	3.399	
Pot Cap-1 Maneuver	0	-	-	858	-	0		144	0	649	
Stage 1	0	-	-	-	-	0		308	0	-	
Stage 2	0	-	-	-	-	0		574	0	-	
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	858	-	-		64	0	649	
Mov Cap-2 Maneuver	-	-	-	-	-	-		64	0	-	
Stage 1	-	-	-	-	-	-		308	0	-	
Stage 2	-	-	-	-	-	-		255	0	-	
Approach	ED			\//D				CD			
HCM Control Dolov o				6.2				0.0			
HCM LOS	U			0.2				0U.0 F			
								F			
Minor Lane/Major Mvn	nt	EBT	EBR	WBL	WBT	SBLn1	SBLn2				
Capacity (veh/h)		-	-	858	-	64	649				
HCM Lane V/C Ratio		-	-	0.438	-	0.972	0.182				
HCM Control Delay (s	)	-	-	12.4	0	211.9	11.8				
HCM Lane LOS		-	-	В	А	F	В				

0.7

4.7

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2.3

HCM 95th %tile Q(veh)

Intersection Delay, s/veh Intersection LOS

58.6 F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		é.	1		\$			\$			\$	
Traffic Vol, veh/h	21	313	36	138	90	179	11	54	109	190	55	3
Future Vol, veh/h	21	313	36	138	90	179	11	54	109	190	55	3
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	4	3	2	19	3	20	6	0	4	0	67
Mvmt Flow	26	391	45	173	113	224	14	68	136	238	69	4
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	53.7			95			21.8			32.2		
HCM LOS	F			F			С			D		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	6%	6%	0%	34%	77%
Vol Thru, %	31%	94%	0%	22%	22%
Vol Right, %	63%	0%	100%	44%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	174	334	36	407	248
LT Vol	11	21	0	138	190
Through Vol	54	313	0	90	55
RT Vol	109	0	36	179	3
Lane Flow Rate	218	418	45	509	310
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.526	0.938	0.092	1.088	0.729
Departure Headway (Hd)	9.127	8.4	7.712	7.699	8.823
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	398	434	468	473	412
Service Time	7.127	6.1	5.412	5.699	6.823
HCM Lane V/C Ratio	0.548	0.963	0.096	1.076	0.752
HCM Control Delay	21.8	58.3	11.2	95	32.2
HCM Lane LOS	С	F	В	F	D
HCM 95th-tile Q	3	10.7	0.3	16.6	5.7

8.9

### Intersection

Int Delay, s/veh

-												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		- 🗘			्र	1		_ <b>≜</b> î≽			-4 <b>†</b>	
Traffic Vol, veh/h	0	0	0	64	0	18	0	6	231	64	9	0
Future Vol, veh/h	0	0	0	64	0	18	0	6	231	64	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage,	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	2	2	2	25	2	53	2	33	5	8	22	2
Mvmt Flow	0	0	0	91	0	26	0	9	330	91	13	0

Major/Minor	Major1		Ν	lajor2		Mi	inor1			Minor2			
Conflicting Flow All	0	0	0	1	0	0	-	183	-	188	183	-	
Stage 1	-	-	-	-	-	-	-	1	-	182	182	-	
Stage 2	-	-	-	-	-	-	-	182	-	6	1	-	
Critical Hdwy	4.12	-	-	4.35	-	-	-	6.83	-	7.18	6.72	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.83	-	6.18	5.72	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.83	-	6.18	5.72	-	
Follow-up Hdwy	2.218	-	-	2.425	-	-	-	4.297	-	3.572	4.198	-	
Pot Cap-1 Maneuver	-	-	-	1483	-	0	0	659	0	759	677	0	
Stage 1	-	-	-	-	-	0	0	837	0	806	713	0	
Stage 2	-	-	-	-	-	0	0	694	0	1000	857	0	
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	-	1483	-	-	-	619	-	716	636	-	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	619	-	716	636	-	
Stage 1	-	-	-	-	-	-	-	837	-	806	670	-	
Stage 2	-	-	-	-	-	-	-	652	-	990	857	-	
Approach	FB			WB			NR			SB			
HCM Control Delay	0		_	7.6						10.9			
HCM LOS	0			1.0			_			-0.5 R			
										U			

Minor Lane/Major Mvmt	NBLn1 NE	3Ln2	EBL	EBT	EBR	WBL	WBT :	SBLn1 S	SBLn2
Capacity (veh/h)	619	-	-	-	-	1483	-	710	636
HCM Lane V/C Ratio	0.007	-	-	-	-	0.062	-	0.138	0.01
HCM Control Delay (s)	10.9	-	0	-	-	7.6	0	10.9	10.7
HCM Lane LOS	В	-	А	-	-	А	А	В	В
HCM 95th %tile Q(veh)	0	-	-	-	-	0.2	-	0.5	0

Int Delay, s/veh 8.5 EBL Movement EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR **↑1**→ 32 Lane Configurations ٦ ۴ ۴ ŧ ۴ 176 Traffic Vol, veh/h 0 175 0 0 13 0 15 206 0 59 Future Vol, veh/h 176 0 175 0 0 13 0 15 206 0 32 59 Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 Sign Control Stop Stop Stop Stop Stop Stop Free Free Free Free Free Free RT Channelized Stop Stop --\_ Free --None ---Storage Length 0 50 0 ---0 -----Veh in Median Storage, # -0 --0 --0 \_ -0 -Grade, % 0 0 0 0 --------Peak Hour Factor 62 62 62 62 62 62 62 62 62 62 62 62 Heavy Vehicles, % 7 2 1 0 0 25 0 7 2 0 23 21 Mvmt Flow 284 0 282 0 0 21 0 24 332 0 52 95

Major/Minor	Minor2		Ν	/linor1		N	lajor1		M	ajor2				
Conflicting Flow All	124	-	74	-	-	24	-	0	-	-	-	0		
Stage 1	100	-	-	-	-	-	-	-	-	-	-	-		
Stage 2	24	-	-	-	-	-	-	-	-	-	-	-		
Critical Hdwy	7.405	-	6.915	-	- (	6.575	-	-	-	-	-	-		
Critical Hdwy Stg 1	6.605	-	-	-	-	-	-	-	-	-	-	-		
Critical Hdwy Stg 2	6.205	-	-	-	-	-	-	-	-	-	-	-		
Follow-up Hdwy	3.5665	-3	3.3095	-	- 3	.5375	-	-	-	-	-	-		
Pot Cap-1 Maneuver	831	0	976	0	0	986	0	-	0	0	-	-		
Stage 1	882	0	-	0	0	-	0	-	0	0	-	-		
Stage 2	980	0	-	0	0	-	0	-	0	0	-	-		
Platoon blocked, %								-			-	-		
Mov Cap-1 Maneuver	814	-	976	-	-	986	-	-	-	-	-	-		
Mov Cap-2 Maneuver	814	-	-	-	-	-	-	-	-	-	-	-		
Stage 1	882	-	-	-	-	-	-	-	-	-	-	-		
Stage 2	959	-	-	-	-	-	-	-	-	-	-	-		
Approach	EB			WB			NB			SB				
HCM Control Delay, s	s 11			8.7			0			0				
HCM LOS	В			A										

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2V	VBLn1	SBT	SBR	
Capacity (veh/h)	-	814	976	986	-	-	
HCM Lane V/C Ratio	-	0.349	0.289	0.021	-	-	
HCM Control Delay (s)	-	11.8	10.2	8.7	-	-	
HCM Lane LOS	-	В	В	А	-	-	
HCM 95th %tile Q(veh)	-	1.6	1.2	0.1	-	-	

Int Delay, s/veh	6.2						
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations	۰¥			- <del>स</del> ी	4		
Traffic Vol, veh/h	4	202	11	160	196	2	
Future Vol, veh/h	4	202	11	160	196	2	
Conflicting Peds, #/hr	0	0	0	0	0	0	I
Sign Control	Stop	Stop	Free	Free	Free	Free	
RT Channelized	-	None	-	None	-	None	!
Storage Length	0	-	-	-	-	-	
Veh in Median Storage	e, # 0	-	-	0	0	-	
Grade, %	0	-	-	0	0	-	
Peak Hour Factor	56	56	88	88	83	83	
Heavy Vehicles, %	25	1	30	2	2	0	
Mvmt Flow	7	361	13	182	236	2	

Major/Minor	Minor2	I	Major1	Maj	or2		
Conflicting Flow All	445	237	238	0	-	0	
Stage 1	237	-	-	-	-	-	
Stage 2	208	-	-	-	-	-	
Critical Hdwy	6.65	6.21	4.4	-	-	-	
Critical Hdwy Stg 1	5.65	-	-	-	-	-	
Critical Hdwy Stg 2	5.65	-	-	-	-	-	
Follow-up Hdwy	3.725	3.309	2.47	-	-	-	
Pot Cap-1 Maneuver	530	804	1181	-	-	-	
Stage 1	751	-	-	-	-	-	
Stage 2	775	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	524	804	1181	-	-	-	
Mov Cap-2 Maneuver	524	-	-	-	-	-	
Stage 1	742	-	-	-	-	-	
Stage 2	775	-	-	-	-	-	

Approach	EB	NB	SB	
HCM Control Delay, s	13.3	0.5	0	
HCM LOS	В			

Minor Lane/Major Mvmt	NBL	NBT EBLn	1 SBT	SBR
Capacity (veh/h)	1181	- 79	6 -	-
HCM Lane V/C Ratio	0.011	- 0.46	2 -	-
HCM Control Delay (s)	8.1	0 13.	3 -	-
HCM Lane LOS	А	А	3 -	-
HCM 95th %tile Q(veh)	0	- 2.	5 -	-

	٦	<b>→</b>	+	*	4	1
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations				1		1
Traffic Volume (veh/h)	0	0	0	25	0	18
Future Volume (Veh/h)	0	0	0	25	0	18
Sign Control		Stop	Stop		Free	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	0	0	29	0	21
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	29	0	21	0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	29	0	21	0	0	
tC, single (s)	7.1	6.5	6.5	6.3	4.1	
tC, 2 stage (s)						
tF (s)	3.5	4.0	4.0	3.4	2.2	
p0 queue free %	100	100	100	97	100	
cM capacity (veh/h)	958	900	877	1054	1636	
Direction, Lane #	WB 1	SB 1				
Volume Total	20	21				
	29	21				
Volume Right	20	21				
cSH	29 105/	1700				
Volume to Canacity	0.03	0.01				
Oueue Length 95th (ft)	0.00	0.01				
Control Delay (s)	2	0.0				
	Δ	0.0				
Annroach Delay (s)	85	0.0				
Approach LOS	Δ	0.0				
	А					
Intersection Summary						
Average Delay			4.9			( <b>A</b>
Intersection Capacity Utili	zation		6.7%	IC	CU Level c	of Service
Analysis Period (min)			15			
## **APPENDIX L**

2028 No-Build Capacity/Level-of-Service Analysis

Int Delay, s/veh

16

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स			ţ,		٢		1			
Traffic Vol, veh/h	88	103	0	0	620	77	322	0	205	0	0	0
Future Vol, veh/h	88	103	0	0	620	77	322	0	205	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	13	7	0	0	1	1	7	0	6	2	2	2
Mvmt Flow	96	112	0	0	674	84	350	0	223	0	0	0

Major/Minor	Major1			Major2			Minor1			
Conflicting Flow All	758	0	-	-	-	0	1020	-	112	
Stage 1	-	· -	-	-	-	-	304	-	-	
Stage 2	-		-	-	-	-	716	-	-	
Critical Hdwy	4.23	- 1	-	-	-	-	4.6	-	6.26	
Critical Hdwy Stg 1	-	· -	-	-	-	-	5.47	-	-	
Critical Hdwy Stg 2	-	· -	-	-	-	-	5.47	-	-	
Follow-up Hdwy	2.317	· -	-	-	-	-	3.563	-	3.354	
Pot Cap-1 Maneuver	806	- 1	0	0	-	-	436	0	930	
Stage 1	-	· -	0	0	-	-	737	0	-	
Stage 2	-	· -	0	0	-	-	475	0	-	
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	806	i –	-	-	-	-	381	0	930	
Mov Cap-2 Maneuver	-	· -	-	-	-	-	381	0	-	
Stage 1	-	· -	-	-	-	-	643	0	-	
Stage 2	-	· -	-	-	-	-	475	0	-	
Approach	EB			WB			NB			
HCM Control Delay, s	4.6	i		0			41.4			
HCM LOS							E			
Minor Lane/Major Mvn	nt	NBLn1	NBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		381	930	806	-	-	-			
HCM Lane V/C Ratio		0.919	0.24	0.119	-	-	-			
HCM Control Delay (s)	)	61.3	10.1	10.1	0	-	-			
HCM Lane LOS		F	В	В	А	-	-			
HCM 95th %tile Q(veh	)	9.7	0.9	0.4	-	-	-			

Int Delay, s/veh

4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		Þ			4					٦		1
Traffic Vol, veh/h	0	171	244	414	528	0	0	0	0	20	0	106
Future Vol, veh/h	0	171	244	414	528	0	0	0	0	20	0	106
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage,	# -	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	7	6	2	4	0	2	2	2	33	0	11
Mvmt Flow	0	186	265	450	574	0	0	0	0	22	0	115

Major/Minor	Major1		l	Major2				Minor2			
Conflicting Flow All	-	0	0	451	0	0		1793	-	574	
Stage 1	-	-	-	-	-	-		1474	-	-	
Stage 2	-	-	-	-	-	-		319	-	-	
Critical Hdwy	-	-	-	4.12	-	-		4.6	-	6.31	
Critical Hdwy Stg 1	-	-	-	-	-	-		5.73	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-		5.73	-	-	
Follow-up Hdwy	-	-	-	2.218	-	-		3.797	-	3.399	
Pot Cap-1 Maneuver	0	-	-	1109	-	0		214	0	502	
Stage 1	0	-	-	-	-	0		179	0	-	
Stage 2	0	-	-	-	-	0		672	0	-	
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	1109	-	-		86	0	502	
Mov Cap-2 Maneuver	-	-	-	-	-	-		86	0	-	
Stage 1	-	-	-	-	-	-		179	0	-	
Stage 2	-	-	-	-	-	-		271	0	-	
Approach	EB			WB				SB			
HCM Control Delay, s	0			4.6				21.6			
HCM LOS								С			
Minor Lane/Major Mvr	nt	EBT	EBR	WBL	WBT	SBLn1	SBLn2				
Capacity (veh/h)		-	-	1109	-	86	502				
HCM Lane V/C Ratio		-	-	0.406	-	0.253	0.23				
HCM Control Delay (s	)	-	-	10.4	0	60.5	14.3				
HCM Lane LOS		-	-	В	А	F	В				
HCM 95th %tile Q(veh	ı)	-	-	2	-	0.9	0.9				

Intersection D Intersection L

Delay, s/veh	67.7
.OS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		é.	7		\$			\$			\$	
Traffic Vol, veh/h	4	162	30	50	442	142	32	49	82	171	29	33
Future Vol, veh/h	4	162	30	50	442	142	32	49	82	171	29	33
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, %	25	12	4	13	4	6	4	5	3	2	15	3
Mvmt Flow	4	176	33	54	480	154	35	53	89	186	32	36
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	14.4			116.5			14.2			17.3		
HCM LOS	В			F			В			С		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	20%	2%	0%	8%	73%
Vol Thru, %	30%	98%	0%	70%	12%
Vol Right, %	50%	0%	100%	22%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	163	166	30	634	233
LT Vol	32	4	0	50	171
Through Vol	49	162	0	442	29
RT Vol	82	0	30	142	33
Lane Flow Rate	177	180	33	689	253
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.34	0.374	0.059	1.171	0.489
Departure Headway (Hd)	7.431	7.847	6.886	6.119	7.432
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	487	462	523	593	489
Service Time	5.431	5.547	4.586	4.182	5.432
HCM Lane V/C Ratio	0.363	0.39	0.063	1.162	0.517
HCM Control Delay	14.2	15.2	10	116.5	17.3
HCM Lane LOS	В	С	А	F	С
HCM 95th-tile Q	1.5	1.7	0.2	23.4	2.6

### Intersection

Movement         EBL         EBT         EBR         WBL         WBT         WBR         NBL         NBT         NBR         SBL         SBT         SBR           Lane Configurations         Image: Configuration in the image: Configited in the image: Configited in the image: Configit													
Lane Configurations       Image: height display="block"	Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h       0       0       0       396       0       113       0       10       136       61       18       0         Future Vol, veh/h       0       0       0       396       0       113       0       10       136       61       18       0         Conflicting Peds, #/hr       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       18       0       0       0       0       0       0       0       0       0       0       0	Lane Configurations		4			÷.	1		<b>†</b> ]			- <b>4</b> ↑	
Future Vol, veh/h         0         0         0         396         0         113         0         10         136         61         18         0           Conflicting Peds, #/hr         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Traffic Vol, veh/h	0	0	0	396	0	113	0	10	136	61	18	0
Conflicting Peds, #/hr         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Future Vol, veh/h	0	0	0	396	0	113	0	10	136	61	18	0
Sign ControlFreeFreeFreeFreeFreeStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStopStop <td>Conflicting Peds, #/hr</td> <td>0</td>	Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
RT Channelized       -       -       None       -       -       Free       -       -       None         Storage Length       -       -       -       0       -       -       -       None         Veh in Median Storage, #       -       0       -       -       0       -       -       0       -       -       0       -         Grade, %       -       0       -       -       0       -       -       0       -       0       -	Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Storage Length         -         -         -         -         0         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -	RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None
Veh in Median Storage, #         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0         -         0 <td>Storage Length</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>0</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Grade, % - 0 0 0 0 -	Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
	Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor 92 92 92 92 92 92 92 92 92 92 92 92 92	Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, % 2 2 2 2 2 2 4 2 22 19 0 6 2	Heavy Vehicles, %	2	2	2	2	2	4	2	22	19	0	6	2
Mvmt Flow 0 0 0 430 0 123 0 11 148 66 20 0	Mvmt Flow	0	0	0	430	0	123	0	11	148	66	20	0

Major/Minor	Major1		Ν	/lajor2		М	inor1			Minor2			
Conflicting Flow All	0	0	0	1	0	0	-	861	-	867	861	-	
Stage 1	-	-	-	-	-	-	-	1	-	860	860	-	
Stage 2	-	-	-	-	-	-	-	860	-	7	1	-	
Critical Hdwy	4.12	-	-	4.12	-	-	-	6.72	-	7.1	6.56	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.72	-	6.1	5.56	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.72	-	6.1	5.56	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	-	4.198	-	3.5	4.054	-	
Pot Cap-1 Maneuver	-	-	-	1622	-	0	0	272	0	275	289	0	
Stage 1	-	-	-	-	-	0	0	857	0	353	367	0	
Stage 2	-	-	-	-	-	0	0	346	0	1020	887	0	
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	-	1622	-	-	-	200	-	210	212	-	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	200	-	210	212	-	
Stage 1	-	-	-	-	-	-	-	857	-	353	270	-	
Stage 2	-	-	-	-	-	-	-	254	-	1007	887	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0	8		30.6	
HCM LOS			-	D	

Minor Lane/Major Mvmt	NBLn1 NE	3Ln2	EBL	EBT	EBR	WBL	WBT 3	SBLn1	SBLn2
Capacity (veh/h)	200	-	-	-	-	1622	-	210	212
HCM Lane V/C Ratio	0.027	-	-	-	-	0.265	-	0.362	0.046
HCM Control Delay (s)	23.5	-	0	-	-	8	0	31.6	22.8
HCM Lane LOS	С	-	А	-	-	А	А	D	С
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.1	-	1.6	0.1

### Intersection

Movement	FRI	FRT	FBR	W/RI	W/RT	W/BR	NRI	NRT	NRR	SBLI	SBI	SBT	SBB
		LDI		VVDL			NDL			000	JDL	301	SDIV
Lane Configurations	1		r .			- <b>r</b>		T.	<b>7</b>			र्स कि	
Traffic Vol, veh/h	75	0	80	0	0	336	0	26	99	2	0	124	488
Future Vol, veh/h	75	0	80	0	0	336	0	26	99	2	0	124	488
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	-	None
Storage Length	0	-	50	-	-	0	-	-	0	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	16	0	4	0	0	2	0	61	6	0	0	6	3
Mvmt Flow	82	0	87	0	0	365	0	28	108	2	0	135	530

Major/Minor	Minor2		ľ	Minor1		Ν	/lajor1		Ma	ajor2				
Conflicting Flow All	432	-	333	-	-	28	-	0	-	-	28	0	0	
Stage 1	404	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	28	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.54	-	6.96	-	-	6.23	-	-	-	-	4.1	-	-	
Critical Hdwy Stg 1	6.74	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.34	-	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.652	-	3.338	-	-	3.319	-	-	-	-	2.2	-	-	
Pot Cap-1 Maneuver	493	0	658	0	0	1047	0	-	0	-	1599	-	-	
Stage 1	564	0	-	0	0	-	0	-	0	-	-	-	-	
Stage 2	952	0	-	0	0	-	0	-	0	-	-	-	-	
Platoon blocked, %								-				-	-	
Mov Cap-1 Maneuver	321	-	658	-	-	1047	-	-	-	-	-	-	-	
Mov Cap-2 Maneuver	321	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	564	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	620	-	-	-	-	-	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB	
HCM Control Delay, s	15.5	10.3	0		
HCM LOS	С	В			

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2V	VBLn1	SBL	SBT	SBR	
Capacity (veh/h)	-	321	658	1047	-	-	-	
HCM Lane V/C Ratio	-	0.254	0.132	0.349	-	-	-	
HCM Control Delay (s)	-	20	11.3	10.3	-	-	-	
HCM Lane LOS	-	С	В	В	-	-	-	
HCM 95th %tile Q(veh)	-	1	0.5	1.6	-	-	-	

Jet Deley eluch	E E					
Int Delay, s/ven	5.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			<del>د</del>	ţ,	
Traffic Vol, veh/h	4	95	327	126	119	9
Future Vol, veh/h	4	95	327	126	119	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, %	0	6	1	4	9	25
Mvmt Flow	4	103	355	137	129	10

Major/Minor	Minor2	l	Major1	Maj	or2		
Conflicting Flow All	981	134	139	0	-	0	
Stage 1	134	-	-	-	-	-	
Stage 2	847	-	-	-	-	-	
Critical Hdwy	6.4	6.26	4.11	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	3.354	2.209	-	-	-	
Pot Cap-1 Maneuver	279	904	1451	-	-	-	
Stage 1	897	-	-	-	-	-	
Stage 2	424	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	205	904	1451	-	-	-	
Mov Cap-2 Maneuver	205	-	-	-	-	-	
Stage 1	659	-	-	-	-	-	
Stage 2	424	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	10.2		6		0		

HCM LOS B

Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR
Capacity (veh/h)	1451	- 795	-	-
HCM Lane V/C Ratio	0.245	- 0.135	-	-
HCM Control Delay (s)	8.3	0 10.2	-	-
HCM Lane LOS	А	A B	-	-
HCM 95th %tile Q(veh)	1	- 0.5	-	-

	٨	<b>→</b>	+	•	1	~	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations				1		1	Ī
Traffic Volume (veh/h)	0	0	0	40	0	102	
Future Volume (Veh/h)	0	0	0	40	0	102	
Sign Control		Stop	Stop		Free		
Grade		0%	0%		0%		
Peak Hour Factor	0.92	0.92	0.51	0.51	0.88	0.88	
Hourly flow rate (vph)	0	0	0	78	0	116	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	78	0	116	0	0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	78	0	116	0	0		
tC, single (s)	7.1	6.5	6.5	6.4	4.1		
tC, 2 stage (s)							
tF (s)	3.5	4.0	4.0	3.5	2.2		
p0 queue free %	100	100	100	92	100		
cM capacity (veh/h)	846	900	778	1024	1636		
Direction, Lane #	WB 1	SB 1					
Volume Total	78	116					
Volume Left	0	0					
Volume Right	78	116					
cSH	1024	1700					
Volume to Canacity	0.08	0 07					
Queue Length 95th (ft)	6.00	0.07					
Control Delay (s)	8.8	0.0					
Lane LOS	Δ	0.0					
Approach Delay (s)	8.8	0.0					
Approach LOS	0.0 A	0.0					
Intersection Summary			0.5				
Average Delay	. C.		3.5			( <b>0</b>	
Intersection Capacity Utiliz	zation		9.6%	IC	U Level o	of Service	
Analysis Period (min)			15				

Int Delay, s/veh

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		्रस्			4		<u>۲</u>		1			
Traffic Vol, veh/h	101	264	0	0	509	58	251	0	377	0	0	0
Future Vol, veh/h	101	264	0	0	509	58	251	0	377	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage,	, # -	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	1	2	0	0	4	6	11	0	3	0	0	0
Mvmt Flow	110	287	0	0	553	63	273	0	410	0	0	0

Major/Minor	Major1			Major2			Minor1			
Conflicting Flow All	616	0	-	-	-	0	1092	-	287	
Stage 1	-	-	-	-	-	-	507	-	-	
Stage 2	-	-	-	-	-	-	585	-	-	
Critical Hdwy	4.11	-	-	-	-	-	5.9	-	6.23	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.51	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.51	-	-	
Follow-up Hdwy	2.209	-	-	-	-	-	3.599	-	3.327	
Pot Cap-1 Maneuver	969	-	0	0	-	-	275	0	750	
Stage 1	-	-	0	0	-	-	587	0	-	
Stage 2	-	-	0	0	-	-	540	0	-	
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	969	-	-	-	-	-	~ 238	0	750	
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 238	0	-	
Stage 1	-	-	-	-	-	-	508	0	-	
Stage 2	-	-	-	-	-	-	540	0	-	
Approach	EB			WB			NB			
HCM Control Delay, s	2.5			0			68.1			
HCM LOS							F			
Minor Lane/Major Mvn	nt	NBLn1	NBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		238	750	969	-	-	-			
HCM Lane V/C Ratio		1.146	0.546	0.113	-	-	-			
HCM Control Delay (s	)	147.3	15.4	9.2	0	-	-			
HCM Lane LOS	,	F	С	А	А	-	-			
HCM 95th %tile Q(veh	ı)	12.5	3.4	0.4	-	-	-			
Notes										
~: Volume exceeds ca	pacity	\$: D	elay exc	ceeds 30	)0s ·	+: Com	putatior	n Not D	efined	*: All major volume in platoon

Int Delay, s/veh

17.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ef 👘			र्भ					ሻ		1
Traffic Vol, veh/h	0	306	382	356	404	0	0	0	0	59	0	105
Future Vol, veh/h	0	306	382	356	404	0	0	0	0	59	0	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage,	# -	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	6	4	8	0	2	2	2	2	0	8
Mvmt Flow	0	333	415	387	439	0	0	0	0	64	0	114

Major/Minor	Major1		Ν	/lajor2				Mino	2			
Conflicting Flow All	-	0	0	748	0	0		175	i4 -	439		
Stage 1	-	-	-	-	-	-		121	3 -	-		
Stage 2	-	-	-	-	-	-		54	.1 -	-		
Critical Hdwy	-	-	-	4.14	-	-		5	.9 -	6.28		
Critical Hdwy Stg 1	-	-	-	-	-	-		5.4	-2	-		
Critical Hdwy Stg 2	-	-	-	-	-	-		5.4	-2	-		
Follow-up Hdwy	-	-	-	2.236	-	-		3.51	8 -	3.372		
Pot Cap-1 Maneuver	0	-	-	852	-	0		12	21 0	605		
Stage 1	0	-	-	-	-	0		28	61 0	-		
Stage 2	0	-	-	-	-	0		58	3 0	-		
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	852	-	-		~ 4	8 0	605		
Mov Cap-2 Maneuver	-	-	-	-	-	-		~ 4	8 0	-		
Stage 1	-	-	-	-	-	-		28	61 0	-		
Stage 2	-	-	-	-	-	-		23	3 0	-		
Approach	EB			WB				S	В			
HCM Control Delay, s	0			5.9				144	.9			
HCM LOS	-								F			
Minor Lane/Maior Mvr	nt	EBT	EBR	WBL	WBT	SBLn1	SBLn2					
Capacity (veh/h)	-	-	-	852	-	48	605					
HCM Lane V/C Ratio		-	-	0 454	-	1 336	0 189					
HCM Control Delay (s	;)	_	-	12.7	0	\$ 381	12.3					
HCM Lane LOS	·)	-	-	B	A	F	B					
HCM 95th %tile Q(veh	1)	-	-	2.4	-	6	0.7					
Notes												
~: Volume exceeds ca	apacity	\$: De	lav exc	eeds 3	00s	+: Com	putation Not	Defined *:	All maior	volume	in platoon	
	puony	ψ. De		0003 0	000		putation NOL	Donnou .	a major	volume	in platoon	

65.7 F Weekday Afternoon School Peak Hour ad 2028 No Build

# Intersection

Intersection Delay, s/veh Intersection LOS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		é.	1		\$			\$			\$	
Traffic Vol, veh/h	15	377	59	161	143	205	18	55	115	196	73	5
Future Vol, veh/h	15	377	59	161	143	205	18	55	115	196	73	5
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, %	8	4	2	5	16	4	6	10	5	4	2	40
Mvmt Flow	16	410	64	175	155	223	20	60	125	213	79	5
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	52.8			113.9			19.7			28.9		
HCM LOS	F			F			С			D		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	
Vol Left, %	10%	4%	0%	32%	72%	
Vol Thru, %	29%	96%	0%	28%	27%	
Vol Right, %	61%	0%	100%	40%	2%	
Sign Control	Stop	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	188	392	59	509	274	
LT Vol	18	15	0	161	196	
Through Vol	55	377	0	143	73	
RT Vol	115	0	59	205	5	
Lane Flow Rate	204	426	64	553	298	
Geometry Grp	2	7	7	5	2	
Degree of Util (X)	0.475	0.942	0.128	1.146	0.685	
Departure Headway (Hd)	8.918	8.378	7.563	7.454	8.795	
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	
Сар	407	435	477	487	414	
Service Time	6.918	6.078	5.263	5.54	6.795	
HCM Lane V/C Ratio	0.501	0.979	0.134	1.136	0.72	
HCM Control Delay	19.7	59	11.4	113.9	28.9	
HCM Lane LOS	С	F	В	F	D	
HCM 95th-tile Q	2.5	10.9	0.4	19.3	5	

Int Delay, s/veh	9.6												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		÷			÷	1		<b>^</b> î,			-4 <b>†</b>		
Traffic Vol, veh/h	0	0	0	82	0	36	0	12	262	136	16	0	
Future Vol, veh/h	0	0	0	82	0	36	0	12	262	136	16	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None	
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-	
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	23	2	22	2	50	6	6	50	2	
Mvmt Flow	0	0	0	89	0	39	0	13	285	148	17	0	

Major/Minor	Major1		Μ	lajor2		Mi	nor1		I	Minor2			
Conflicting Flow All	0	0	0	1	0	0	-	179	-	186	179	-	
Stage 1	-	-	-	-	-	-	-	1	-	178	178	-	
Stage 2	-	-	-	-	-	-	-	178	-	8	1	-	
Critical Hdwy	4.12	-	-	4.33	-	-	-	7	-	7.16	7	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6	-	6.16	6	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6	-	6.16	6	-	
Follow-up Hdwy	2.218	-	- 1	2.407	-	-	-	4.45	-	3.554	4.45	-	
Pot Cap-1 Maneuver	-	-	-	1494	-	0	0	637	0	766	637	0	
Stage 1	-	-	-	-	-	0	0	808	0	815	670	0	
Stage 2	-	-	-	-	-	0	0	670	0	1003	808	0	
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	-	1494	-	-	-	599	-	719	599	-	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	599	-	719	599	-	
Stage 1	-	-	-	-	-	-	-	808	-	815	630	-	
Stage 2	-	-	-	-	-	-	-	630	-	987	808	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	0			7.6						11.5			
HCM LOS							-			В			

Minor Lane/Major Mvmt	NBLn1 NB	Ln2	EBL	EBT	EBR	WBL	WBT S	BLn1	SBLn2	
Capacity (veh/h)	599	-	-	-	-	1494	-	711	599	
HCM Lane V/C Ratio	0.011	-	-	-	-	0.06	-	0.22	0.015	
HCM Control Delay (s)	11.1	-	0	-	-	7.6	0	11.5	11.1	
HCM Lane LOS	В	-	А	-	-	А	Α	В	В	
HCM 95th %tile Q(veh)	0	-	-	-	-	0.2	-	0.8	0	

### Intersection Int Delay, s/veh 7.5 EBL Movement EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR Lane Configurations ٦ ۴ ۴ ŧ ۴ ħ₽ 191 Traffic Vol, veh/h 0 237 0 0 75 28 304 51 129 0 1 Future Vol, veh/h 191 0 237 0 0 75 0 28 304 1 51 129 Conflicting Peds, #/hr 0 0 0 0 0 0 0 0 0 0 0 0 Sign Control Stop Stop Stop Stop Stop Stop Free Free Free Free Free Free RT Channelized Stop Stop -\_ Free --None ----Storage Length 0 50 0 ---0 ---\_ -Veh in Median Storage, # 0 -0 \_ 0 -0 \_ ----Grade, % 0 0 0 0 --------Peak Hour Factor 92 92 92 92 92 92 92 92 92 92 92 92 Heavy Vehicles, % 6 0 2 0 0 18 0 24 1 0 28 17 Mvmt Flow 208 0 258 0 0 82 0 30 330 1 55 140

Major/Minor	Minor2		Ν	/linor1		N	1ajor1		N	/lajor2			
Conflicting Flow All	157	-	98	-	-	30	-	0	-	30	0	0	
Stage 1	127	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	30	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.39	-	6.93	-	-	6.47	-	-	-	4.1	-	-	
Critical Hdwy Stg 1	6.59	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.19	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.557	-	3.319	-	-	3.471	-	-	-	2.2	-	-	
Pot Cap-1 Maneuver	792	0	939	0	0	997	0	-	0	1596	-	-	
Stage 1	854	0	-	0	0	-	0	-	0	-	-	-	
Stage 2	976	0	-	0	0	-	0	-	0	-	-	-	
Platoon blocked, %								-			-	-	
Mov Cap-1 Maneuver	727	-	939	-	-	997	-	-	-	1596	-	-	
Mov Cap-2 Maneuver	727	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	854	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	896	-	-	-	-	-	-	-	-	-	-	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	11			8.9			0			0			
HCM LOS	В			A									

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	VBLn1	SBL	SBT	SBR
Capacity (veh/h)		- 727	939	997	1596	-	-
HCM Lane V/C Ratio		0.286	0.274	0.082	0.001	-	-
HCM Control Delay (s)		11.9	10.3	8.9	7.3	-	-
HCM Lane LOS		- В	В	А	А	-	-
HCM 95th %tile Q(veh)		- 1.2	1.1	0.3	0	-	-

6.1					
EBL	EBR	NBL	NBT	SBT	SBR
۰¥			- <del>द</del>	4	
12	293	73	155	243	2
12	293	73	155	243	2
0	0	0	0	0	0
Stop	Stop	Free	Free	Free	Free
-	None	-	None	-	None
0	-	-	-	-	-
,# 0	-	-	0	0	-
0	-	-	0	0	-
92	92	92	92	92	92
0	2	20	7	4	0
13	318	79	168	264	2
	6.1 EBL 12 12 0 Stop - 0 ,# 0 0 92 0 13	6.1 EBL EBR 12 293 12 293 0 0 Stop Stop − None 0 − ,# 0 − 92 92 0 2 13 318	6.1 EBL EBR NBL 12 293 73 12 293 73 12 293 73 0 0 0 Stop Stop Free - None - 0 - ↓ 0 - 92 92 92 92 0 2 20 13 318 79	6.1         EBL       EBR       NBL       NBT         Y	6.1         EBL       EBR       NBL       NBT       SBT         Y        12       293       73       155       243         12       293       73       155       243         12       293       73       155       243         0       0       0       0       0         Stop       Stop       Free       Free       Free         None       -       None       -         0       -       -       0       0         0       -       -       0       0         0       -       -       0       0         10       -       -       0       0         0       -       -       0       0         10       -       -       0       0         10       -       -       0       0         92       92       92       92       92         0       2       20       7       4         13       318       79       168       264

Minor2	Ν	Major1	Maj	or2	
591	265	266	0	-	0
265	-	-	-	-	-
326	-	-	-	-	-
6.4	6.22	4.3	-	-	-
5.4	-	-	-	-	-
5.4	-	-	-	-	-
3.5	3.318	2.38	-	-	-
473	774	1201	-	-	-
784	-	-	-	-	-
736	-	-	-	-	-
			-	-	-
438	774	1201	-	-	-
438	-	-	-	-	-
727	-	-	-	-	-
736	-	-	-	-	-
	Minor2 591 265 326 6.4 5.4 5.4 3.5 473 784 736 438 438 727 736	Minor2         Minor2           591         265           265         -           326         -           6.4         6.22           5.4         -           5.4         -           3.5         3.318           473         774           784         -           736         -           438         774           736         -           736         -           736         -	Minor2         Major1           591         265         266           265         -         -           326         -         -           6.4         6.22         4.3           5.4         -         -           5.4         -         -           3.5         3.318         2.38           473         774         1201           784         -         -           736         -         -           727         -         -           736         -         -           736         -         -           736         -         -	Minor2         Major1         Maj           591         265         266         0           265         -         -         -           326         -         -         -           6.4         6.22         4.3         -           5.4         -         -         -           3.5         3.318         2.38         -           473         774         1201         -           784         -         -         -           736         -         -         -           736         -         -         -           736         -         -         -           736         -         -         -           736         -         -         -           736         -         -         -           736         -         -         -           736         -         -         -           736         -         -         -	Minor2         Major1         Major2           591         265         266         0         -           265         -         -         -         -           326         -         -         -         -           6.4         6.22         4.3         -         -           5.4         -         -         -         -           5.4         -         -         -         -           3.5         3.318         2.38         -         -           473         774         1201         -         -           784         -         -         -         -           736         -         -         -         -           736         -         -         -         -           727         -         -         -         -           736         -         -         -         -           736         -         -         -         -           736         -         -         -         -

Approach	EB	NB	SB
HCM Control Delay, s	13.5	2.6	0
HCMLOS	В		

Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR
Capacity (veh/h)	1201	- 751	-	-
HCM Lane V/C Ratio	0.066	- 0.441	-	-
HCM Control Delay (s)	8.2	0 13.5	-	-
HCM Lane LOS	А	A B	-	-
HCM 95th %tile Q(veh)	0.2	- 2.3	-	-

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations				1		1	
Traffic Volume (veh/h)	0	0	0	57	0	28	
Future Volume (Veh/h)	0	0	0	57	0	28	
Sign Control		Stop	Stop		Free		
Grade		0%	0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	0	0	0	62	0	30	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ff)							
pX, platoon unblocked							
vC. conflicting volume	62	0	30	0	0		
vC1, stage 1 conf vol		· ·		Ţ	•		
vC2, stage 2 conf vol							
vCu, unblocked vol	62	0	30	0	0		
tC. single (s)	7.1	6.5	6.5	6.3	4.1		
tC, 2 stage (s)		0.0	0.0	0.0			
tF (s)	3.5	4.0	4.0	3.4	2.2		
p0 queue free %	100	100	100	94	100		
cM capacity (veh/h)	884	900	867	1070	1636		
		0.5.4					
Direction, Lane #	WB 1	SB 1					
Volume I otal	62	30					
Volume Left	0	0					
Volume Right	62	30					
cSH	1070	1700					
Volume to Capacity	0.06	0.02					
Queue Length 95th (ft)	5	0					
Control Delay (s)	8.6	0.0					
Lane LOS	А						
Approach Delay (s)	8.6	0.0					
Approach LOS	А						
Intersection Summary							
Average Delav			5.8				
Intersection Capacity Utiliz	ation		6.9%	IC	CU Level o	of Service	
Analysis Period (min)			15		, _,		

Int Delay, s/veh

13.3

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		- 4			4		<u>۲</u>		1			
Traffic Vol, veh/h	111	266	0	0	465	47	196	0	424	0	0	0
Future Vol, veh/h	111	266	0	0	465	47	196	0	424	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	3	0	0	0	3	0	7	0	3	0	0	0
Mvmt Flow	121	289	0	0	505	51	213	0	461	0	0	0

Major/Minor	Major1			Major2			Minor1			
Conflicting Flow All	556	0	-	-	-	0	1062	-	289	9
Stage 1	-	-	-	-	-	-	531	-	-	-
Stage 2	-	-	-	-	-	-	531	-	-	-
Critical Hdwy	4.13	-	-	-	-	-	5.7	-	6.23	3
Critical Hdwy Stg 1	-	-	-	-	-	-	5.47	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.47	-	-	-
Follow-up Hdwy	2.227	-	-	-	-	-	3.563	-	3.327	7
Pot Cap-1 Maneuver	1010	-	0	0	-	-	304	0	748	8
Stage 1	-	-	0	0	-	-	580	0	-	-
Stage 2	-	-	0	0	-	-	580	0	-	-
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	1010	-	-	-	-	-	261	0	748	8
Mov Cap-2 Maneuver		-	-	-	-	-	261	0	-	-
Stage 1	-	-	-	-	-	-	497	0	-	-
Stage 2	-	-	-	-	-	-	580	0	-	-
Approach	FB			WB			NB			
HCM Control Delay s	27			0			30.7			
HCM LOS				Ŭ			D			
							_			
Minor Lane/Major Mvr	mt	NBLn1	NBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		261	748	1010	_	_	_			
HCM Lane V/C Ratio		0.816	0.616	0.119	_	-	-			
HCM Control Delay (s	5)	59.8	17.2	9	0	-	-			
HCM Lane LOS	,	F	C	A	A	-	-			

HCM 95th %tile Q(veh)

6.4

4.3

0.4

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Int Delay, s/veh

8.5

Maximum		EDT						NDT			ODT	
Movement	ERL	FRI	ERK	WBL	<b>WRI</b>	WBR	NBL	NRT	NRK	SBL	SBT	SBR
Lane Configurations		- <b>1</b> 2			- सी					- ኘ		1
Traffic Vol, veh/h	0	322	332	329	332	0	0	0	0	55	0	104
Future Vol, veh/h	0	322	332	329	332	0	0	0	0	55	0	104
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage	, # -	0	-	-	0	-	-	16974	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	1	6	3	5	0	2	2	2	2	0	11
Mvmt Flow	0	350	361	358	361	0	0	0	0	60	0	113

Major/Minor	Major1		1	Major2				Minor2			
Conflicting Flow All	-	0	0	711	0	0		1608	-	361	
Stage 1	-	-	-	-	-	-		1077	-	-	
Stage 2	-	-	-	-	-	-		531	-	-	
Critical Hdwy	-	-	-	4.13	-	-		5.7	-	6.31	
Critical Hdwy Stg 1	-	-	-	-	-	-		5.42	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-		5.42	-	-	
Follow-up Hdwy	-	-	-	2.227	-	-		3.518	-	3.399	
Pot Cap-1 Maneuver	0	-	-	884	-	0		159	0	664	
Stage 1	0	-	-	-	-	0		327	0	-	
Stage 2	0	-	-	-	-	0		590	0	-	
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	884	-	-		78	0	664	
Mov Cap-2 Maneuver	-	-	-	-	-	-		78	0	-	
Stage 1	-	-	-	-	-	-		327	0	-	
Stage 2	-	-	-	-	-	-		291	0	-	
Annroach	FB			WR				SB			
HCM Control Delay	0			5.9				5/ 3			
HCM LOS	U			0.0				54.5 F			
								1			
Minor Lane/Major Mvr	nt	EBT	EBR	WBL	WBT	SBLn1	SBLn2				
Capacity (veh/h)		-	-	884	-	78	664				
HCM Lane V/C Ratio		-	-	0.405	-	0.766	0.17				
HCM Control Delay (s	)	-	-	11.8	0	135.3	11.5				
HCM Lane LOS		-	-	В	Α	F	В				

3.7

-

2

0.6

HCM 95th %tile Q(veh)

Intersection Delay, s/veh Intersection LOS

38.4 E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		£	1		\$			\$			\$	
Traffic Vol, veh/h	22	334	38	148	96	192	12	58	117	203	59	3
Future Vol, veh/h	22	334	38	148	96	192	12	58	117	203	59	3
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, %	0	4	3	2	19	3	20	6	0	4	0	67
M∨mt Flow	24	363	41	161	104	209	13	63	127	221	64	3
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	37.6			55.5			18.7			25.4		
HCM LOS	E			F			С			D		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	
Vol Left, %	6%	6%	0%	34%	77%	
Vol Thru, %	31%	94%	0%	22%	22%	
Vol Right, %	63%	0%	100%	44%	1%	
Sign Control	Stop	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	187	356	38	436	265	
LT Vol	12	22	0	148	203	
Through Vol	58	334	0	96	59	
RT Vol	117	0	38	192	3	
Lane Flow Rate	203	387	41	474	288	
Geometry Grp	2	7	7	5	2	
Degree of Util (X)	0.471	0.844	0.082	0.949	0.653	
Departure Headway (Hd)	8.344	7.856	7.172	7.209	8.162	
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	
Сар	431	464	501	507	441	
Service Time	6.425	5.578	4.894	5.228	6.231	
HCM Lane V/C Ratio	0.471	0.834	0.082	0.935	0.653	
HCM Control Delay	18.7	40.5	10.5	55.5	25.4	
HCM Lane LOS	С	E	В	F	D	
HCM 95th-tile Q	2.5	8.4	0.3	11.8	4.6	

Int Delay, s/veh	8.6												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		\$			र्च	1		<b>1</b> 12			-4 <b>†</b>		
Traffic Vol, veh/h	0	0	0	68	0	19	0	6	247	68	10	0	
Future Vol, veh/h	0	0	0	68	0	19	0	6	247	68	10	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None	
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-	
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	25	2	53	2	33	5	8	22	2	
Mvmt Flow	0	0	0	74	0	21	0	7	268	74	11	0	

Major/Minor	Major1		Ν	/lajor2		М	inor1			Minor2			
Conflicting Flow All	0	0	0	1	0	0	-	149	-	153	149	-	
Stage 1	-	-	-	-	-	-	-	1	-	148	148	-	
Stage 2	-	-	-	-	-	-	-	148	-	5	1	-	
Critical Hdwy	4.12	-	-	4.35	-	-	-	6.83	-	7.18	6.72	-	
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.83	-	6.18	5.72	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.83	-	6.18	5.72	-	
Follow-up Hdwy	2.218	-	-	2.425	-	-	-	4.297	-	3.572	4.198	-	
Pot Cap-1 Maneuver	-	-	-	1483	-	0	0	689	0	801	707	0	
Stage 1	-	-	-	-	-	0	0	837	0	841	738	0	
Stage 2	-	-	-	-	-	0	0	719	0	1002	857	0	
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	-	1483	-	-	-	655	-	765	672	-	
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	655	-	765	672	-	
Stage 1	-	-	-	-	-	-	-	837	-	841	701	-	
Stage 2	-	-	-	-	-	-	-	683	-	994	857	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	0			7.6						10.3			
HCM LOS							-			В			

Minor Lane/Major Mvmt	NBLn1 NB	Ln2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2	
Capacity (veh/h)	655	-	-	-	-	1483	-	758	672	
HCM Lane V/C Ratio	0.005	-	-	-	-	0.05	-	0.105	0.008	
HCM Control Delay (s)	10.5	-	0	-	-	7.6	0	10.3	10.4	
HCM Lane LOS	В	-	А	-	-	А	А	В	В	
HCM 95th %tile Q(veh)	0	-	-	-	-	0.2	-	0.3	0	

### Intersection

Movement	EDI	EDT	EDD				NDI	NDT	NDD	CDI	CDT	CDD
Movement	EDL	EDI	EDK	VVDL	VVDI	VVDR	INDL	INDI	NDR	SDL	SDI	SDK
Lane Configurations	<u>۲</u>		- T			- T		- <b>†</b>	- T		- <b>†</b> Þ	
Traffic Vol, veh/h	188	0	187	0	0	14	0	16	220	0	34	63
Future Vol, veh/h	188	0	187	0	0	14	0	16	220	0	34	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	0	-	50	-	-	0	-	-	0	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	7	2	1	0	0	25	0	7	2	0	23	21
Mvmt Flow	204	0	203	0	0	15	0	17	239	0	37	68

Major/Minor	Minor2		Ν	/linor1		N	lajor1		М	ajor2			
Conflicting Flow All	88	-	53	-	-	17	-	0	-	-	-	0	
Stage 1	71	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	17	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.405	-	6.915	-	-	6.575	-	-	-	-	-	-	
Critical Hdwy Stg 1	6.605	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.205	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.5665	-	3.3095	-	- 3	.5375	-	-	-	-	-	-	
Pot Cap-1 Maneuver	880	0	1007	0	0	995	0	-	0	0	-	-	
Stage 1	918	0	-	0	0	-	0	-	0	0	-	-	
Stage 2	989	0	-	0	0	-	0	-	0	0	-	-	
Platoon blocked, %								-			-	-	
Mov Cap-1 Maneuver	<sup>-</sup> 867	-	1007	-	-	995	-	-	-	-	-	-	
Mov Cap-2 Maneuver	<sup>-</sup> 867	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	918	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	974	-	-	-	-	-	-	-	-	-	-	-	
Approach	FR			W/R			NR			SB			
HCM Control Dolov of				0.7						00			
HOM CONTROL Delay, S				0.7			U			0			
	В			А									

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2V	VBLn1	SBT	SBR	
Capacity (veh/h)	-	867	1007	995	-	-	
HCM Lane V/C Ratio	-	0.236	0.202	0.015	-	-	
HCM Control Delay (s)	-	10.4	9.5	8.7	-	-	
HCM Lane LOS	-	B	А	А	-	-	
HCM 95th %tile Q(veh)	-	0.9	0.8	0	-	-	

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			÷	et e	
Traffic Vol, veh/h	4	216	12	171	209	2
Future Vol, veh/h	4	216	12	171	209	2
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	1	30	2	2	0
Mvmt Flow	4	235	13	186	227	2

Minor2	ľ	Major1	Majo	or2			
440	228	229	0	-	0		
228	-	-	-	-	-		
212	-	-	-	-	-		
6.65	6.21	4.4	-	-	-		
5.65	-	-	-	-	-		
5.65	-	-	-	-	-		
3.725	3.309	2.47	-	-	-		
534	814	1190	-	-	-		
759	-	-	-	-	-		
772	-	-	-	-	-		
			-	-	-		
528	814	1190	-	-	-		
528	-	-	-	-	-		
750	-	-	-	-	-		
772	-	-	-	-	-		
	Minor2 440 228 212 6.65 5.65 5.65 3.725 534 759 772 528 528 750 772	Minor2         N           440         228           228         -           212         -           6.65         6.21           5.65         -           3.725         3.309           534         814           759         -           772         -           528         814           750         -           772         -	Minor2         Major1           440         228         229           228         -         -           212         -         -           6.65         6.21         4.4           5.65         -         -           3.725         3.309         2.47           534         814         1190           759         -         -           772         -         -           528         814         1190           528         -         -           750         -         -           772         -         -	Minor2         Major1         Major           440         228         229         0           228         -         -         -           212         -         -         -           6.65         6.21         4.4         -           5.65         -         -         -           3.725         3.309         2.47         -           5.34         814         1190         -           759         -         -         -           7528         814         1190         -           528         -         -         -           750         -         -         -           772         -         -         -           770         -         -         -           772         -         -         -           772         -         -         -           772         -         -         -           772         -         -         -           772         -         -         -	Minor2         Major1         Major2           440         228         229         0         -           228         -         -         -         -           212         -         -         -         -           6.65         6.21         4.4         -         -           5.65         -         -         -         -           5.65         -         -         -         -           3.725         3.309         2.47         -         -           5.65         -         -         -         -           5.759         -         -         -         -           7759         -         -         -         -           528         814         1190         -         -           528         -         -         -         -           750         -         -         -         -           772         -         -         -         -           772         -         -         -         -	Minor2Major1Major2 $440$ $228$ $229$ $0$ $ 0$ $228$ $    212$ $    6.65$ $6.21$ $4.4$ $  5.65$ $    5.65$ $    5.65$ $    5.65$ $    5.65$ $    5.65$ $    5.65$ $    5.65$ $    7.72$ $3.309$ $2.47$ $  759$ $    772$ $    7528$ $814$ $1190$ $  750$ $    772$ $    772$ $   -$	Minor2       Major1       Major2         440       228       229       0       -       0         228       -       -       -       -       -         212       -       -       -       -       -         6.65       6.21       4.4       -       -       -         5.65       -       -       -       -       -         5.65       -       -       -       -       -         5.65       -       -       -       -       -         5.65       -       -       -       -       -         5.65       -       -       -       -       -         5.65       -       -       -       -       -         5.65       -       -       -       -       -         5.65       -       -       -       -       -         5.65       -       -       -       -       -         759       -       -       -       -       -         7528       814       1190       -       -       -         7528       -       -       -

Approach	EB	NB	SB	
HCM Control Delay, s	11.3	0.5	0	
HCM LOS	В			

Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR
Capacity (veh/h)	1190	- 806	-	-
HCM Lane V/C Ratio	0.011	- 0.297	-	-
HCM Control Delay (s)	8.1	0 11.3	-	-
HCM Lane LOS	А	A B	-	-
HCM 95th %tile Q(veh)	0	- 1.2	-	-

	٦	-	+	*	4	~	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations				1		1	
Traffic Volume (veh/h)	0	0	0	25	0	18	
Future Volume (Veh/h)	0	0	0	25	0	18	
Sign Control		Stop	Stop		Free		
Grade		0%	0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	0	0	0	27	0	20	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	27	0	20	0	0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	27	0	20	0	0		
tC. single (s)	7.1	6.5	6.5	6.3	4.1		
tC. 2 stage (s)							
tF (s)	3.5	4.0	4.0	3.4	2.2		
p0 queue free %	100	100	100	97	100		
cM capacity (veh/h)	963	900	878	1054	1636		
Direction Long #							
	21	20					
	0	0					
volume Right	21	20					
CSH VI Constitution	1054	1700					
Volume to Capacity	0.03	0.01					
Queue Length 95th (ft)	2	0					
Control Delay (s)	8.5	0.0					
Lane LOS	A						
Approach Delay (s)	8.5	0.0					
Approach LOS	A						
Intersection Summary							
Average Delay			4.9				
Intersection Capacity Utiliz	ation		6.7%	IC	CU Level o	of Service	
Analysis Period (min)			15				

# APPENDIX M

2028 Build Capacity/Level-of-Service Analysis

Int Delay, s/veh

20.3

	501	FRT			WDT		NIDI	NET		0.01	0.D.T	000
Movement	EBL	EBT	EBR	WBL	WBI	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ି କ			- <b>1</b> 2		<u>۲</u>		1			
Traffic Vol, veh/h	105	103	0	0	620	77	326	0	205	0	0	0
Future Vol, veh/h	105	103	0	0	620	77	326	0	205	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	15	7	0	0	1	1	8	0	6	2	2	2
Mvmt Flow	114	112	0	0	674	84	354	0	223	0	0	0

Major/Minor I	Major1			Major2			Minor1			
Conflicting Flow All	758	0	-	-	-	0	1056	-	112	
Stage 1	-	-	-	-	-	-	340	-	-	
Stage 2	-	-	-	-	-	-	716	-	-	
Critical Hdwy	4.25	-	-	-	-	-	4.6	-	6.26	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.48	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.48	-	-	
Follow-up Hdwy	2.335	-	-	-	-	-	3.572	-	3.354	
Pot Cap-1 Maneuver	798	-	0	0	-	-	422	0	930	
Stage 1	-	-	0	0	-	-	708	0	-	
Stage 2	-	-	0	0	-	-	473	0	-	
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	798	-	-	-	-	-	358	0	930	
Mov Cap-2 Maneuver	-	-	-	-	-	-	358	0	-	
Stage 1	-	-	-	-	-	-	600	0	-	
Stage 2	-	-	-	-	-	-	473	0	-	
Approach	EB			WB			NB			
HCM Control Delay, s	5.2			0			52.8			
HCM LOS							F			
Minor Lane/Major Mvm	nt	NBLn11	VBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		358	930	798	-	-	-			
HCM Lane V/C Ratio		0.99	0.24	0.143	-	-	-			
HCM Control Delay (s)	)	79.7	10.1	10.3	0	-	-			
HCM Lane LOS		F	В	В	A	-	-			
HCM 95th %tile Q(veh	)	11.3	0.9	0.5	-	-	-			

Int Delay, s/veh

4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		12			्स					٦.		1
Traffic Vol, veh/h	0	188	259	414	532	0	0	0	0	20	0	111
Future Vol, veh/h	0	188	259	414	532	0	0	0	0	20	0	111
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	9	7	2	5	0	2	2	2	35	0	14
Mvmt Flow	0	204	282	450	578	0	0	0	0	22	0	121

Major/Minor N	1ajor1			Major2				Minor2			
Conflicting Flow All	-	0	0	486	0	0		1823	-	578	
Stage 1	-	-	-	-	-	-		1478	-	-	
Stage 2	-	-	-	-	-	-		345	-	-	
Critical Hdwy	-	-	-	4.12	-	-		4.6	-	6.34	
Critical Hdwy Stg 1	-	-	-	-	-	-		5.75	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-		5.75	-	-	
Follow-up Hdwy	-	-	-	2.218	-	-		3.815	-	3.426	
Pot Cap-1 Maneuver	0	-	-	1077	-	0		208	0	494	
Stage 1	0	-	-	-	-	0		176	0	-	
Stage 2	0	-	-	-	-	0		649	0	-	
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	1077	-	-		80	0	494	
Mov Cap-2 Maneuver	-	-	-	-	-	-		80	0	-	
Stage 1	-	-	-	-	-	-		176	0	-	
Stage 2	-	-	-	-	-	-		249	0	-	
Approach	EB			WB				SB			
HCM Control Delay, s	0			4.7				22.4			
HCM LOS								С			
Minor Lane/Major Mvmt	t	EBT	EBR	WBL	WBT :	SBLn1	SBLn2				
Capacity (veh/h)		-	-	1077	-	80	494				
HCM Lane V/C Ratio		-	-	0.418	-	0.272	0.244				
HCM Control Delay (s)		-	-	10.7	0	66	14.6				
HCM Lane LOS		-	-	В	Α	F	В				
HCM 95th %tile Q(veh)		-	-	2.1	-	1	0.9				

# Intersection Intersection Delay, s/veh 76.2 Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1		4			4			4	
Traffic Vol, veh/h	4	193	30	50	451	142	32	49	82	171	29	33
Future Vol, veh/h	4	193	30	50	451	142	32	49	82	171	29	33
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, %	25	15	3	14	6	6	3	4	3	2	14	3
Mvmt Flow	4	210	33	54	490	154	35	53	89	186	32	36
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	16			134.2			14.7			18		
HCM LOS	С			F			В			С		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	20%	2%	0%	8%	73%
Vol Thru, %	30%	98%	0%	70%	12%
Vol Right, %	50%	0%	100%	22%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	163	197	30	643	233
LT Vol	32	4	0	50	171
Through Vol	49	193	0	451	29
RT Vol	82	0	30	142	33
Lane Flow Rate	177	214	33	699	253
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.346	0.446	0.06	1.216	0.497
Departure Headway (Hd)	7.655	7.935	7.029	6.261	7.649
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	473	456	513	580	474
Service Time	5.655	5.635	4.729	4.323	5.649
HCM Lane V/C Ratio	0.374	0.469	0.064	1.205	0.534
HCM Control Delay	14.7	16.9	10.2	134.2	18
HCM Lane LOS	В	С	В	F	С
HCM 95th-tile Q	1.5	2.3	0.2	25.5	2.7

### Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्भ	1		<b>≜</b> †₽			-۠	
Traffic Vol, veh/h	0	0	0	405	0	113	0	10	167	61	18	0
Future Vol, veh/h	0	0	0	405	0	113	0	10	167	61	18	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	4	4	2	20	21	0	6	2
Mvmt Flow	0	0	0	440	0	123	0	11	182	66	20	0

Major1		Μ	lajor2		Mi	nor1		Ν	/linor2				
0	0	0	1	0	0	-	881	-	887	881	-		
-	-	-	-	-	-	-	1	-	880	880	-		
-	-	-	-	-	-	-	880	-	7	1	-		
4.12	-	-	4.12	-	-	-	6.7	-	7.1	6.56	-		
-	-	-	-	-	-	-	5.7	-	6.1	5.56	-		
-	-	-	-	-	-	-	5.7	-	6.1	5.56	-		
2.218	-	- 2	2.218	-	-	-	4.18	-	3.5	4.054	-		
-	-	-	1622	-	0	0	267	0	267	281	0		
-	-	-	-	-	0	0	860	0	345	360	0		
-	-	-	-	-	0	0	341	0	1020	887	0		
	-	-		-									
-	-	-	1622	-	-	-	195	-	203	205	-		
-	-	-	-	-	-	-	195	-	203	205	-		
-	-	-	-	-	-	-	860	-	345	262	-		
-	-	-	-	-	-	-	249	-	1007	887	-		
	<u>Major1</u> 0 - 4.12 - 2.218 - - - - - - - - - - - - - - - - - - -	Major1 0 0 4.12 2.218	Major1         M           0         0         0           -         -         -           4.12         -         -           -         -         -           2.218         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -           -         -         -	Major1         Major2           0         0         0         1           -         -         -         -           4.12         -         -         4.12           -         -         -         -           2.218         -         2.218         -         2.218           -         -         -         1622         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         -           -         -         -         -         <	Major1         Major2           0         0         1         0           -         -         -         -           -         -         -         -           4.12         -         4.12         -           -         -         4.12         -           -         -         -         -           2.218         -         2.218         -           -         -         1622         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         -         -         -           -         - <t< td=""><td>Major1         Major2         Mi           0         0         0         1         0         0           -         -         -         -         -         -           -         -         -         -         -         -           4.12         -         4.12         -         -         -           -         -         4.12         -         -         -           -         -         -         -         -         -           -         -         -         2.218         -         -         -           -         -         1622         -         0         -         -         0           -         -         -         -         0         -         -         -           -         -         -         1622         -         -         -         -           -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         -           -         -         -         -         -         -         <t< td=""><td>Major1         Major2         Minor1           0         0         0         1         0         0         -           -         -         -         -         -         -         -           -         -         -         -         -         -         -         -           4.12         -         4.12         -         -         -         -         -           -         -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -</td><td>Major1         Major2         Minor1           0         0         0         1         0         0         -         881           -         -         -         -         -         1         1           -         -         -         -         -         1         1           -         -         -         -         -         1         1         1           -         -         -         -         -         -         1         1         1           -         -         -         -         -         -         6.7         1           -         -         -         -         -         5.7         5.7         1         -         5.7           2.218         -         -         2.218         -         -         4.18           -         -         1622         -         0         0         341           -         -         -         -         0         0         341           -         -         -         -         195         -         195           -         -         -         -         <td< td=""><td>Major1         Major2         Minor1         N           0         0         0         1         0         0         -         881         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         880         -         -           4.12         -         -         4.12         -         -         6.7         -           -         -         -         -         5.7         -         -         5.7         -           2.218         -         -         2.0         0         267         0           -         -         -         0         0         340         0           -         -         -         -         195         -           -         -         -<!--</td--><td>Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887           -         -         -         -         -         -         1         -         880           -         -         -         -         -         -         880         -         7           4.12         -         -         4.12         -         -         6.7         -         7.1           -         -         -         -         5.7         -         6.1           -         -         -         -         -         5.7         -         6.1           2.218         -         -         2.218         -         -         4.18         -         3.5           -         -         1622         -         0         0         267         0         267           -         -         -         -         0         0         341         0         1020           -         -         -         -         -         195         203         203           -</td><td>Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887         881           -         -         -         -         -         1         -         880         880           -         -         -         -         -         1         -         880         880           -         -         -         -         -         880         -         7         1           4.12         -         -         -         6.7         -         7.1         6.56           -         -         -         -         5.7         -         6.1         5.56           2.218         -         2.218         -         -         4.18         3.5         4.054           -         -         1622         -         0         0         267         281           -         -         -         -         0         341         0         1020         887           -         -         -         -         195         203         205           -</td><td>Major1         Major2         Minor1         Minor2           0         0         1         0         0         <math>-</math>         881         <math>-</math>         887         881         <math>-</math>           -         -         -         -         -         1         <math>-</math>         880         <math>-</math>           -         -         -         -         -         1         <math>-</math>         880         <math>-</math>           -         -         -         -         -         880         -         <math>-</math>         1         <math>-</math>           4.12         -         -         6.7         -         <math>7.1</math> <math>6.56</math> <math>-</math>           -         -         -         -         <math>5.7</math> <math>6.1</math> <math>5.56</math> <math>-</math>           -         -         <math>2.218</math>         -         <math> 4.18</math> <math>3.5</math> <math>4.054</math> <math>-</math>           2.218         -         <math>2.218</math>         -         <math> 4.18</math> <math>3.5</math> <math>4.054</math> <math>-</math>           -         -         1622         -         <math>0</math> <math>0</math> <math>341</math> <math>0</math> <math>1020</math> <math>887</math> <math>0</math>           -</td><td>Major1         Major2         Minor1         Minor2           0         0         1         0         0         -         881         -         887         881         -           -         -         -         -         -         1         -         880         880         -           -         -         -         -         -         880         -         7         1         -           4.12         -         -         6.7         -         7.1         6.56         -           -         -         -         -         5.7         -         6.1         5.56         -           -         -         -         -         -         5.7         -         6.1         5.56         -           2.218         -         2.218         -         -         4.18         3.5         4.054         -           -         -         1622         -         0         0         267         0         267         281         0           -         -         -         0         0         341         0         1020         887         0</td></td></td<></td></t<></td></t<>	Major1         Major2         Mi           0         0         0         1         0         0           -         -         -         -         -         -           -         -         -         -         -         -           4.12         -         4.12         -         -         -           -         -         4.12         -         -         -           -         -         -         -         -         -           -         -         -         2.218         -         -         -           -         -         1622         -         0         -         -         0           -         -         -         -         0         -         -         -           -         -         -         1622         -         -         -         -           -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         -           -         -         -         -         -         - <t< td=""><td>Major1         Major2         Minor1           0         0         0         1         0         0         -           -         -         -         -         -         -         -           -         -         -         -         -         -         -         -           4.12         -         4.12         -         -         -         -         -           -         -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -</td><td>Major1         Major2         Minor1           0         0         0         1         0         0         -         881           -         -         -         -         -         1         1           -         -         -         -         -         1         1           -         -         -         -         -         1         1         1           -         -         -         -         -         -         1         1         1           -         -         -         -         -         -         6.7         1           -         -         -         -         -         5.7         5.7         1         -         5.7           2.218         -         -         2.218         -         -         4.18           -         -         1622         -         0         0         341           -         -         -         -         0         0         341           -         -         -         -         195         -         195           -         -         -         -         <td< td=""><td>Major1         Major2         Minor1         N           0         0         0         1         0         0         -         881         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         880         -         -           4.12         -         -         4.12         -         -         6.7         -           -         -         -         -         5.7         -         -         5.7         -           2.218         -         -         2.0         0         267         0           -         -         -         0         0         340         0           -         -         -         -         195         -           -         -         -<!--</td--><td>Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887           -         -         -         -         -         -         1         -         880           -         -         -         -         -         -         880         -         7           4.12         -         -         4.12         -         -         6.7         -         7.1           -         -         -         -         5.7         -         6.1           -         -         -         -         -         5.7         -         6.1           2.218         -         -         2.218         -         -         4.18         -         3.5           -         -         1622         -         0         0         267         0         267           -         -         -         -         0         0         341         0         1020           -         -         -         -         -         195         203         203           -</td><td>Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887         881           -         -         -         -         -         1         -         880         880           -         -         -         -         -         1         -         880         880           -         -         -         -         -         880         -         7         1           4.12         -         -         -         6.7         -         7.1         6.56           -         -         -         -         5.7         -         6.1         5.56           2.218         -         2.218         -         -         4.18         3.5         4.054           -         -         1622         -         0         0         267         281           -         -         -         -         0         341         0         1020         887           -         -         -         -         195         203         205           -</td><td>Major1         Major2         Minor1         Minor2           0         0         1         0         0         <math>-</math>         881         <math>-</math>         887         881         <math>-</math>           -         -         -         -         -         1         <math>-</math>         880         <math>-</math>           -         -         -         -         -         1         <math>-</math>         880         <math>-</math>           -         -         -         -         -         880         -         <math>-</math>         1         <math>-</math>           4.12         -         -         6.7         -         <math>7.1</math> <math>6.56</math> <math>-</math>           -         -         -         -         <math>5.7</math> <math>6.1</math> <math>5.56</math> <math>-</math>           -         -         <math>2.218</math>         -         <math> 4.18</math> <math>3.5</math> <math>4.054</math> <math>-</math>           2.218         -         <math>2.218</math>         -         <math> 4.18</math> <math>3.5</math> <math>4.054</math> <math>-</math>           -         -         1622         -         <math>0</math> <math>0</math> <math>341</math> <math>0</math> <math>1020</math> <math>887</math> <math>0</math>           -</td><td>Major1         Major2         Minor1         Minor2           0         0         1         0         0         -         881         -         887         881         -           -         -         -         -         -         1         -         880         880         -           -         -         -         -         -         880         -         7         1         -           4.12         -         -         6.7         -         7.1         6.56         -           -         -         -         -         5.7         -         6.1         5.56         -           -         -         -         -         -         5.7         -         6.1         5.56         -           2.218         -         2.218         -         -         4.18         3.5         4.054         -           -         -         1622         -         0         0         267         0         267         281         0           -         -         -         0         0         341         0         1020         887         0</td></td></td<></td></t<>	Major1         Major2         Minor1           0         0         0         1         0         0         -           -         -         -         -         -         -         -           -         -         -         -         -         -         -         -           4.12         -         4.12         -         -         -         -         -           -         -         -         -         -         -         -         -         -           -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -	Major1         Major2         Minor1           0         0         0         1         0         0         -         881           -         -         -         -         -         1         1           -         -         -         -         -         1         1           -         -         -         -         -         1         1         1           -         -         -         -         -         -         1         1         1           -         -         -         -         -         -         6.7         1           -         -         -         -         -         5.7         5.7         1         -         5.7           2.218         -         -         2.218         -         -         4.18           -         -         1622         -         0         0         341           -         -         -         -         0         0         341           -         -         -         -         195         -         195           -         -         -         - <td< td=""><td>Major1         Major2         Minor1         N           0         0         0         1         0         0         -         881         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         880         -         -           4.12         -         -         4.12         -         -         6.7         -           -         -         -         -         5.7         -         -         5.7         -           2.218         -         -         2.0         0         267         0           -         -         -         0         0         340         0           -         -         -         -         195         -           -         -         -<!--</td--><td>Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887           -         -         -         -         -         -         1         -         880           -         -         -         -         -         -         880         -         7           4.12         -         -         4.12         -         -         6.7         -         7.1           -         -         -         -         5.7         -         6.1           -         -         -         -         -         5.7         -         6.1           2.218         -         -         2.218         -         -         4.18         -         3.5           -         -         1622         -         0         0         267         0         267           -         -         -         -         0         0         341         0         1020           -         -         -         -         -         195         203         203           -</td><td>Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887         881           -         -         -         -         -         1         -         880         880           -         -         -         -         -         1         -         880         880           -         -         -         -         -         880         -         7         1           4.12         -         -         -         6.7         -         7.1         6.56           -         -         -         -         5.7         -         6.1         5.56           2.218         -         2.218         -         -         4.18         3.5         4.054           -         -         1622         -         0         0         267         281           -         -         -         -         0         341         0         1020         887           -         -         -         -         195         203         205           -</td><td>Major1         Major2         Minor1         Minor2           0         0         1         0         0         <math>-</math>         881         <math>-</math>         887         881         <math>-</math>           -         -         -         -         -         1         <math>-</math>         880         <math>-</math>           -         -         -         -         -         1         <math>-</math>         880         <math>-</math>           -         -         -         -         -         880         -         <math>-</math>         1         <math>-</math>           4.12         -         -         6.7         -         <math>7.1</math> <math>6.56</math> <math>-</math>           -         -         -         -         <math>5.7</math> <math>6.1</math> <math>5.56</math> <math>-</math>           -         -         <math>2.218</math>         -         <math> 4.18</math> <math>3.5</math> <math>4.054</math> <math>-</math>           2.218         -         <math>2.218</math>         -         <math> 4.18</math> <math>3.5</math> <math>4.054</math> <math>-</math>           -         -         1622         -         <math>0</math> <math>0</math> <math>341</math> <math>0</math> <math>1020</math> <math>887</math> <math>0</math>           -</td><td>Major1         Major2         Minor1         Minor2           0         0         1         0         0         -         881         -         887         881         -           -         -         -         -         -         1         -         880         880         -           -         -         -         -         -         880         -         7         1         -           4.12         -         -         6.7         -         7.1         6.56         -           -         -         -         -         5.7         -         6.1         5.56         -           -         -         -         -         -         5.7         -         6.1         5.56         -           2.218         -         2.218         -         -         4.18         3.5         4.054         -           -         -         1622         -         0         0         267         0         267         281         0           -         -         -         0         0         341         0         1020         887         0</td></td></td<>	Major1         Major2         Minor1         N           0         0         0         1         0         0         -         881         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         1         -         -           -         -         -         -         -         880         -         -           4.12         -         -         4.12         -         -         6.7         -           -         -         -         -         5.7         -         -         5.7         -           2.218         -         -         2.0         0         267         0           -         -         -         0         0         340         0           -         -         -         -         195         -           -         -         - </td <td>Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887           -         -         -         -         -         -         1         -         880           -         -         -         -         -         -         880         -         7           4.12         -         -         4.12         -         -         6.7         -         7.1           -         -         -         -         5.7         -         6.1           -         -         -         -         -         5.7         -         6.1           2.218         -         -         2.218         -         -         4.18         -         3.5           -         -         1622         -         0         0         267         0         267           -         -         -         -         0         0         341         0         1020           -         -         -         -         -         195         203         203           -</td> <td>Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887         881           -         -         -         -         -         1         -         880         880           -         -         -         -         -         1         -         880         880           -         -         -         -         -         880         -         7         1           4.12         -         -         -         6.7         -         7.1         6.56           -         -         -         -         5.7         -         6.1         5.56           2.218         -         2.218         -         -         4.18         3.5         4.054           -         -         1622         -         0         0         267         281           -         -         -         -         0         341         0         1020         887           -         -         -         -         195         203         205           -</td> <td>Major1         Major2         Minor1         Minor2           0         0         1         0         0         <math>-</math>         881         <math>-</math>         887         881         <math>-</math>           -         -         -         -         -         1         <math>-</math>         880         <math>-</math>           -         -         -         -         -         1         <math>-</math>         880         <math>-</math>           -         -         -         -         -         880         -         <math>-</math>         1         <math>-</math>           4.12         -         -         6.7         -         <math>7.1</math> <math>6.56</math> <math>-</math>           -         -         -         -         <math>5.7</math> <math>6.1</math> <math>5.56</math> <math>-</math>           -         -         <math>2.218</math>         -         <math> 4.18</math> <math>3.5</math> <math>4.054</math> <math>-</math>           2.218         -         <math>2.218</math>         -         <math> 4.18</math> <math>3.5</math> <math>4.054</math> <math>-</math>           -         -         1622         -         <math>0</math> <math>0</math> <math>341</math> <math>0</math> <math>1020</math> <math>887</math> <math>0</math>           -</td> <td>Major1         Major2         Minor1         Minor2           0         0         1         0         0         -         881         -         887         881         -           -         -         -         -         -         1         -         880         880         -           -         -         -         -         -         880         -         7         1         -           4.12         -         -         6.7         -         7.1         6.56         -           -         -         -         -         5.7         -         6.1         5.56         -           -         -         -         -         -         5.7         -         6.1         5.56         -           2.218         -         2.218         -         -         4.18         3.5         4.054         -           -         -         1622         -         0         0         267         0         267         281         0           -         -         -         0         0         341         0         1020         887         0</td>	Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887           -         -         -         -         -         -         1         -         880           -         -         -         -         -         -         880         -         7           4.12         -         -         4.12         -         -         6.7         -         7.1           -         -         -         -         5.7         -         6.1           -         -         -         -         -         5.7         -         6.1           2.218         -         -         2.218         -         -         4.18         -         3.5           -         -         1622         -         0         0         267         0         267           -         -         -         -         0         0         341         0         1020           -         -         -         -         -         195         203         203           -	Major1         Major2         Minor1         Minor2           0         0         0         1         0         0         -         881         -         887         881           -         -         -         -         -         1         -         880         880           -         -         -         -         -         1         -         880         880           -         -         -         -         -         880         -         7         1           4.12         -         -         -         6.7         -         7.1         6.56           -         -         -         -         5.7         -         6.1         5.56           2.218         -         2.218         -         -         4.18         3.5         4.054           -         -         1622         -         0         0         267         281           -         -         -         -         0         341         0         1020         887           -         -         -         -         195         203         205           -	Major1         Major2         Minor1         Minor2           0         0         1         0         0 $-$ 881 $-$ 887         881 $-$ -         -         -         -         -         1 $-$ 880 $-$ -         -         -         -         -         1 $-$ 880 $-$ -         -         -         -         -         880         - $-$ 1 $-$ 4.12         -         -         6.7         - $7.1$ $6.56$ $-$ -         -         -         - $5.7$ $6.1$ $5.56$ $-$ -         - $2.218$ - $ 4.18$ $3.5$ $4.054$ $-$ 2.218         - $2.218$ - $ 4.18$ $3.5$ $4.054$ $-$ -         -         1622         - $0$ $0$ $341$ $0$ $1020$ $887$ $0$ -	Major1         Major2         Minor1         Minor2           0         0         1         0         0         -         881         -         887         881         -           -         -         -         -         -         1         -         880         880         -           -         -         -         -         -         880         -         7         1         -           4.12         -         -         6.7         -         7.1         6.56         -           -         -         -         -         5.7         -         6.1         5.56         -           -         -         -         -         -         5.7         -         6.1         5.56         -           2.218         -         2.218         -         -         4.18         3.5         4.054         -           -         -         1622         -         0         0         267         0         267         281         0           -         -         -         0         0         341         0         1020         887         0

Approach	EB	WB	NB	SB	
HCM Control Delay, s	0	8		31.9	
HCM LOS			-	D	

Minor Lane/Major Mvmt	NBLn1NB	3Ln2	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2	
Capacity (veh/h)	195	-	-	-	-	1622	-	203	205	
HCM Lane V/C Ratio	0.028	-	-	-	-	0.271	-	0.375	0.048	
HCM Control Delay (s)	24	-	0	-	-	8	0	33	23.4	
HCM Lane LOS	С	-	А	-	-	А	Α	D	С	
HCM 95th %tile Q(veh)	0.1	-	-	-	-	1.1	-	1.6	0.1	

### Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Lane Configurations	ľ		1			1		•	1			4î þ	
Traffic Vol, veh/h	75	0	80	0	0	335	0	57	102	2	0	133	488
Future Vol, veh/h	75	0	80	0	0	335	0	57	102	2	0	133	488
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free						
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	-	None
Storage Length	0	-	50	-	-	0	-	-	0	-	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	16	0	4	0	0	2	0	44	6	0	0	13	3
Mvmt Flow	82	0	87	0	0	364	0	62	111	2	0	145	530

Major/Minor	Minor2		I	Minor1		Ν	/lajor1		Ma	ajor2				
Conflicting Flow All	476	-	338	-	-	62	-	0	-	-	62	0	0	
Stage 1	414	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	62	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.54	-	6.96	-	-	6.23	-	-	-	-	4.1	-	-	
Critical Hdwy Stg 1	6.74	-	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.34	-	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.652	-	3.338	-	-	3.319	-	-	-	-	2.2	-	-	
Pot Cap-1 Maneuver	459	0	654	0	0	1002	0	-	0	-	1554	-	-	
Stage 1	556	0	-	0	0	-	0	-	0	-	-	-	-	
Stage 2	912	0	-	0	0	-	0	-	0	-	-	-	-	
Platoon blocked, %								-				-	-	
Mov Cap-1 Maneuver	292	-	654	-	-	1002	-	-	-	-	-	-	-	
Mov Cap-2 Maneuver	292	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	556	-	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	581	-	-	-	-	-	-	-	-	-	-	-	-	
-														

Approach	EB	WB	NB	SB	
HCM Control Delay, s	16.5	10.6	0		
HCM LOS	С	В			

Minor Lane/Major Mvmt	NBT EBLn1	EBLn2V	VBLn1	SBL	SBT	SBR
Capacity (veh/h)	- 292	. 654	1002	-	-	-
HCM Lane V/C Ratio	- 0.279	0.133	0.363	-	-	-
HCM Control Delay (s)	- 22	11.3	10.6	-	-	-
HCM Lane LOS	- C	B	В	-	-	-
HCM 95th %tile Q(veh)	- 1.1	0.5	1.7	-	-	-

### Intersection Int Delay, s/veh 5.5 EBL Movement EBR NBL NBT SBT SBR Lane Configurations ¥ đ Þ Traffic Vol, veh/h 4 98 327 9 126 119 Future Vol, veh/h 4 98 327 126 119 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, % 0 5 4 10 22 1 Mvmt Flow 4 107 137 129 10 355

Major/Minor	Minor2		Major1	Ν	/lajor2		
Conflicting Flow All	981	134	139	0	-	0	
Stage 1	134	-	-	-	-	-	
Stage 2	847	-	-	-	-	-	
Critical Hdwy	6.4	6.25	4.11	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	3.345	2.209	-	-	-	
Pot Cap-1 Maneuver	279	907	1451	-	-	-	
Stage 1	897	-	-	-	-	-	
Stage 2	424	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	205	907	1451	-	-	-	
Mov Cap-2 Maneuver	205	-	-	-	-	-	
Stage 1	659	-	-	-	-	-	
Stage 2	424	-	-	-	-	-	
Approach	EB		NB		SB		
HCM Control Delay, s	10.2		6		0		
HCM LOS	В						
Minor Lane/Major Mvi	nt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)		1451	-	800	-	-	
HCM Lane V/C Ratio		0.245	-	0.139	-	-	

0.245	- 0.	139	-	-	
8.3	0 1	0.2	-	-	
А	А	В	-	-	
1	-	0.5	-	-	
	0.245 8.3 A 1	0.245 - 0. 8.3 0 1 A A 1 -	0.245 - 0.139 8.3 0 10.2 A A B 1 - 0.5	0.245 - 0.139 - 8.3 0 10.2 - A A B - 1 - 0.5 -	0.245 - 0.139 8.3 0 10.2 A A B 1 - 0.5

	٦	-	+	•	1	∢
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations				1		1
Traffic Volume (veh/h)	0	0	0	74	0	111
Future Volume (Veh/h)	0	0	0	74	0	111
Sign Control		Stop	Stop		Free	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.51	0.51	0.88	0.88
Hourly flow rate (vph)	0	0	0	145	0	126
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	145	0	126	0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	145	0	126	0	0	
tC. single (s)	7.1	6.5	6.5	6.4	4.1	
tC. 2 stage (s)						
tF (s)	3.5	4.0	4.0	3.5	2.2	
p0 queue free %	100	100	100	86	100	
cM capacity (veh/h)	711	900	768	1024	1636	
		00.4				
Direction, Lane #	VVB 1	SBT				
Volume I otal	145	126				
Volume Lett	0	0				
Volume Right	145	126				
cSH	1024	1700				
Volume to Capacity	0.14	0.07				
Queue Length 95th (ft)	12	0				
Control Delay (s)	9.1	0.0				
Lane LOS	А					
Approach Delay (s)	9.1	0.0				
Approach LOS	А					
Intersection Summary						
Average Delav			4.9			
Intersection Capacity Utiliz	ation		10.2%	IC	U Level o	of Service
Analysis Period (min)			15			,

Int Delay, s/veh

35.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		्स			12		<u>٦</u>		1			
Traffic Vol, veh/h	118	264	0	0	509	58	255	0	377	0	0	0
Future Vol, veh/h	118	264	0	0	509	58	255	0	377	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	2	0	0	4	5	12	0	3	0	0	0
Mvmt Flow	128	287	0	0	553	63	277	0	410	0	0	0

Major/Minor	Major1			Major2			Minor1			
Conflicting Flow All	616	0	-	-	-	0	1128	-	287	
Stage 1	-	-	-	-	-	-	543	-	-	
Stage 2	-	-	-	-	-	-	585	-	-	
Critical Hdwy	4.15	-	-	-	-	-	5.9	-	6.23	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.52	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.52	-	-	
Follow-up Hdwy	2.245	-	-	-	-	-	3.608	-	3.327	
Pot Cap-1 Maneuver	949	-	0	0	-	-	~ 262	0	750	
Stage 1	-	-	0	0	-	-	563	0	-	
Stage 2	-	-	0	0	-	-	538	0	-	
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	949	-	-	-	-	-	~ 220	0	750	
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 220	0	-	
Stage 1	-	-	-	-	-	-	473	0	-	
Stage 2	-	-	-	-	-	-	538	0	-	
Approach	EB			WB			NB			
HCM Control Delay, s	2.9			0			86.9			
HCMLOS				•			F			
Minor Long/Major Myr	nt			EDI	EDT					
	<u> </u>				EDI	VVDI	VVDR			
Capacity (ven/n)		220	/50	949	-	-	-			
HCM Lane V/C Ratio	<b>`</b>	1.26	0.546	0.135	-	-	-			
HCM Control Delay (s	)	192.5	15.4	9.4	0	-	-			
HOM Lane LUS	.)			A	A	-	-			
HUM 95th %tile Q(Ver	1)	14.4	3.4	0.5	-	-	-			
Notes										
~: Volume exceeds ca	pacity	\$: D	elay ex	ceeds 3	00s	+: Con	putation	n Not E	Defined	*: All major volume in platoon

Scenario 1 New Bedford Solid Waste Transfer Station 06/14/2018 Weekday Afternoon School Peak Hour McMahon Associates

Int Delay, s/veh

19.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		<b>f</b>			- 4					<u>۲</u>		1
Traffic Vol, veh/h	0	323	396	356	408	0	0	0	0	59	0	110
Future Vol, veh/h	0	323	396	356	408	0	0	0	0	59	0	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	3	7	4	9	0	2	2	2	2	0	12
Mvmt Flow	0	351	430	387	443	0	0	0	0	64	0	120

Major/Minor	Major1			Major2					Minor2				
Conflicting Flow All	-	0	0	781	0	0			1783	-	443		
Stage 1	-	-	-	-	-	-			1217	-	-		
Stage 2	-	-	-	-	-	-			566	-	-		
Critical Hdwy	-	-	-	4.14	-	-			5.9	-	6.32		
Critical Hdwy Stg 1	-	-	-	-	-	-			5.42	-	-		
Critical Hdwy Stg 2	-	-	-	-	-	-			5.42	-	-		
Follow-up Hdwy	-	-	-	2.236	-	-			3.518	-	3.408		
Pot Cap-1 Maneuver	0	-	-	828	-	0			116	0	594		
Stage 1	0	-	-	-	-	0			280	0	-		
Stage 2	0	-	-	-	-	0			568	0	-		
Platoon blocked, %		-	-		-								
Mov Cap-1 Maneuver	-	-	-	828	-	-			~ 44	0	594		
Mov Cap-2 Maneuver	-	-	-	-	-	-			~ 44	0	-		
Stage 1	-	-	-	-	-	-			280	0	-		
Stage 2	-	-	-	-	-	-			216	0	-		
Approach	EB			WB					SB				
HCM Control Delay, s	0			6.1					163				
HCM LOS									F				
Minor Lane/Major Mvn	nt	EBT	EBR	WBL	WBT S	BLn1	SBLn2						
Capacity (veh/h)		-	-	828	-	44	594						
HCM Lane V/C Ratio		-	-	0.467	- 1	.458	0.201						
HCM Control Delay (s)	)	-	-	13.1	0\$ 4	43.3	12.6						
HCM Lane LOS	,	-	-	В	А	F	В						
HCM 95th %tile Q(veh	ı)	-	-	2.5	-	6.3	0.7						
Notes													
~: Volume exceeds ca	pacity	\$: De	elay ex	ceeds 3	00s +	: Com	putation	n Not Defined	d *: All	major	volume	in platoon	

Scenario 1 New Bedford Solid Waste Transfer Station 06/14/2018 Weekday Afternoon School Peak Hour McMahon Associates

# Intersection Delay, s/veh 76 Intersection LOS F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1		\$			\$			\$	
Traffic Vol, veh/h	15	408	59	161	152	205	18	55	115	196	73	5
Future Vol, veh/h	15	408	59	161	152	205	18	55	115	196	73	5
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, %	7	6	2	5	20	4	6	11	5	4	1	40
Mvmt Flow	16	443	64	175	165	223	20	60	125	213	79	5
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	68.7			127.2			20.4			30		
HCM LOS	F			F			С			D		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1	
Vol Left, %	10%	4%	0%	31%	72%	
Vol Thru, %	29%	96%	0%	29%	27%	
Vol Right, %	61%	0%	100%	40%	2%	
Sign Control	Stop	Stop	Stop	Stop	Stop	
Traffic Vol by Lane	188	423	59	518	274	
LT Vol	18	15	0	161	196	
Through Vol	55	408	0	152	73	
RT Vol	115	0	59	205	5	
Lane Flow Rate	204	460	64	563	298	
Geometry Grp	2	7	7	5	2	
Degree of Util (X)	0.481	1.015	0.129	1.181	0.693	
Departure Headway (Hd)	9.162	8.446	7.684	7.685	9.003	
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	
Сар	396	432	469	479	405	
Service Time	7.162	6.146	5.384	5.685	7.003	
HCM Lane V/C Ratio	0.515	1.065	0.136	1.175	0.736	
HCM Control Delay	20.4	76.7	11.5	127.2	30	
HCM Lane LOS	С	F	В	F	D	
HCM 95th-tile Q	2.5	13.1	0.4	20.6	5.1	
9.7

### Intersection

Int Delay, s/veh

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्च	1		<b>∱</b> î≽			4ħ	
Traffic Vol, veh/h	0	0	0	91	0	36	0	12	293	136	16	0
Future Vol, veh/h	0	0	0	91	0	36	0	12	293	136	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	31	2	22	2	50	9	6	50	2
Mvmt Flow	0	0	0	99	0	39	0	13	318	148	17	0

Major/Minor	Major1		Major2		Mi	nor1			Minor2			
Conflicting Flow All	0	0	0 1	0	0	-	199	-	206	199	-	
Stage 1	-	-		-	-	-	1	-	198	198	-	
Stage 2	-	-		-	-	-	198	-	8	1	-	
Critical Hdwy	4.12	-	- 4.41	-	-	-	7	-	7.16	7	-	
Critical Hdwy Stg 1	-	-		-	-	-	6	-	6.16	6	-	
Critical Hdwy Stg 2	-	-		-	-	-	6	-	6.16	6	-	
Follow-up Hdwy	2.218	-	- 2.479	-	-	-	4.45	-	3.554	4.45	-	
Pot Cap-1 Maneuver	-	-	- 1451	-	0	0	620	0	743	620	0	
Stage 1	-	-		-	0	0	808	0	795	656	0	
Stage 2	-	-		-	0	0	656	0	1003	808	0	
Platoon blocked, %		-	-	-								
Mov Cap-1 Maneuver	-	-	- 1451	-	-	-	578	-	692	578	-	
Mov Cap-2 Maneuver	-	-		-	-	-	578	-	692	578	-	
Stage 1	-	-		-	-	-	808	-	795	611	-	
Stage 2	-	-		-	-	-	611	-	987	808	-	
Approach	EB		WB			NB			SB			
	0		77						44.0			

HCM Control Delay, s	0	7.7		11.8	
HCM LOS			-	В	

Minor Lane/Major Mvmt	NBLn1NB	Ln2	EBL	EBT	EBR	WBL	WBT \$	SBLn1	SBLn2	
Capacity (veh/h)	578	-	-	-	-	1451	-	684	578	
HCM Lane V/C Ratio	0.011	-	-	-	-	0.068	-	0.229	0.015	
HCM Control Delay (s)	11.3	-	0	-	-	7.7	0	11.8	11.3	
HCM Lane LOS	В	-	А	-	-	Α	Α	В	В	
HCM 95th %tile Q(veh)	0	-	-	-	-	0.2	-	0.9	0	

7.4

### Intersection

Int Delay, s/veh

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7		1			1		•	1		<b>∱î</b> ≽	
Traffic Vol, veh/h	191	0	237	0	0	75	0	59	307	1	60	129
Future Vol, veh/h	191	0	237	0	0	75	0	59	307	1	60	129
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	0	-	50	-	-	0	-	-	0	-	-	-
Veh in Median Storage	e, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	6	0	3	0	0	19	0	27	2	0	38	17
Mvmt Flow	208	0	258	0	0	82	0	64	334	1	65	140

Major/Minor	Minor2		Ν	/linor1		N	lajor1		Ν	/lajor2			
Conflicting Flow All	201	-	103	-	-	64	-	0	-	64	0	0	
Stage 1	137	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	64	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.39	-	6.945	-	- (	6.485	-	-	-	4.1	-	-	
Critical Hdwy Stg 1	6.59	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.19	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.557	-3	3.3285	-	- 3	.4805	-	-	-	2.2	-	-	
Pot Cap-1 Maneuver	739	0	930	0	0	951	0	-	0	1551	-	-	
Stage 1	842	0	-	0	0	-	0	-	0	-	-	-	
Stage 2	936	0	-	0	0	-	0	-	0	-	-	-	
Platoon blocked, %								-			-	-	
Mov Cap-1 Maneuver	675	-	930	-	-	951	-	-	-	1551	-	-	
Mov Cap-2 Maneuver	675	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	842	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	856	-	-	-	-	-	-	-	-	-	-	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	11.4			9.1			0			0			

riolar control bolay, o		0.1
HCM LOS	В	А

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2V	VBLn1	SBL	SBT	SBR	
Capacity (veh/h)	-	675	930	951	1551	-	-	
HCM Lane V/C Ratio	-	0.308	0.277	0.086	0.001	-	-	
HCM Control Delay (s)	-	12.7	10.3	9.1	7.3	-	-	
HCM Lane LOS	-	В	В	А	А	-	-	
HCM 95th %tile Q(veh)	-	1.3	1.1	0.3	0	-	-	

Intersection						
Int Delay, s/veh	6.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	۰¥			- <del>स</del> ी	<b>f</b>	
Traffic Vol, veh/h	12	296	73	155	243	2
Future Vol, veh/h	12	296	73	155	243	2
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	1	19	6	4	0
Mumt Flow				100		•

Major/Minor	Minor2		Major1	Ma	jor2		
Conflicting Flow All	591	265	266	0	-	0	
Stage 1	265	-	-	-	-	-	
Stage 2	326	-	-	-	-	-	
Critical Hdwy	6.4	6.21	4.29	-	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	-	
Follow-up Hdwy	3.5	3.309	2.371	-	-	-	
Pot Cap-1 Maneuver	473	776	1206	-	-	-	
Stage 1	784	-	-	-	-	-	
Stage 2	736	-	-	-	-	-	
Platoon blocked, %				-	-	-	
Mov Cap-1 Maneuver	r 439	776	1206	-	-	-	
Mov Cap-2 Maneuver	r 439	-	-	-	-	-	
Stage 1	728	-	-	-	-	-	
Stage 2	736	-	-	-	-	-	
A I.					00		

Approach	EB	NB	SB	
HCM Control Delay, s	13.6	2.6	0	
HCM LOS	В			

Minor Lane/Major Mvmt	NBL	NBT EBLn	SBT	SBR
Capacity (veh/h)	1206	- 75	} -	-
HCM Lane V/C Ratio	0.066	- 0.44	5 -	-
HCM Control Delay (s)	8.2	0 13.6	) -	-
HCM Lane LOS	А	A E	} -	-
HCM 95th %tile Q(veh)	0.2	- 2.3	3 -	-

	٦	-	←	•	1	∢
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations				1		1
Traffic Volume (veh/h)	0	0	0	91	0	37
Future Volume (Veh/h)	0	0	0	91	0	37
Sign Control		Stop	Stop		Free	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	99	0	40
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	99	0	40	0	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	99	0	40	0	0	
tC, single (s)	7.1	6.5	6.5	6.3	4.1	
tC, 2 stage (s)						
tF (s)	3.5	4.0	4.0	3.4	2.2	
p0 queue free %	100	100	100	91	100	
cM capacity (veh/h)	804	900	856	1051	1636	
Direction Long #	\//D 1	CD 1				
Volume Total	99	40				
Volume Left	0	0				
	99	40				
CSH Malana la Oscarit	1051	1700				
Volume to Capacity	0.09	0.02				
	8	0				
Control Delay (s)	8.8	0.0				
Lane LOS	A	0.0				
Approach Delay (s)	8.8	0.0				
Approach LOS	A					
Intersection Summary						
Average Delay			6.3			
Intersection Capacity Utiliz	zation		9.0%	IC	CU Level o	of Service
Analysis Period (min)			15			

### Intersection

Int Delay, s/veh

14.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		- କୀ			<b>1</b>		- ሽ		1			
Traffic Vol, veh/h	116	266	0	0	465	47	200	0	424	0	0	0
Future Vol, veh/h	116	266	0	0	465	47	200	0	424	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	0	-	75	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	7	0	0	0	3	0	10	0	3	0	0	0
Mvmt Flow	126	289	0	0	505	51	217	0	461	0	0	0

Major/Minor I	Major1			Major2			Minor1			
Conflicting Flow All	556	0	-	-	-	0	1072	-	289	
Stage 1	-	-	-	-	-	-	541	-	-	
Stage 2	-	-	-	-	-	-	531	-	-	
Critical Hdwy	4.17	-	-	-	-	-	5.7	-	6.23	
Critical Hdwy Stg 1	-	-	-	-	-	-	5.5	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	5.5	-	-	
Follow-up Hdwy	2.263	-	-	-	-	-	3.59	-	3.327	
Pot Cap-1 Maneuver	990	-	0	0	-	-	299	0	748	
Stage 1	-	-	0	0	-	-	568	0	-	
Stage 2	-	-	0	0	-	-	574	0	-	
Platoon blocked, %		-			-	-				
Mov Cap-1 Maneuver	990	-	-	-	-	-	254	0	748	
Mov Cap-2 Maneuver	-	-	-	-	-	-	254	0	-	
Stage 1	-	-	-	-	-	-	482	0	-	
Stage 2	-	-	-	-	-	-	574	0	-	
Approach	EB			WB			NB			
HCM Control Delay, s	2.8			0			33.3			
HCM LOS							D			
Minor Lane/Major Mvm	nt	NBLn1	NBLn2	EBL	EBT	WBT	WBR			
Capacity (veh/h)		254	748	990	-	-	-			
HCM Lane V/C Ratio		0.856	0.616	0.127	-	-	-			
HCM Control Delay (s)	)	67.4	17.2	9.2	0	-	-			
HCM Lane LOS		F	С	А	А	-	-			
HCM 95th %tile Q(veh	)	7	4.3	0.4	-	-	-			

### Intersection

Int Delay, s/veh

HCM 95th %tile Q(veh)

8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			र्भ					۲.		1
Traffic Vol, veh/h	0	327	336	329	336	0	0	0	0	55	0	109
Future Vol, veh/h	0	327	336	329	336	0	0	0	0	55	0	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Stop
Storage Length	-	-	-	-	-	-	-	-	-	0	-	75
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	2	7	3	6	0	2	2	2	2	0	15
Mvmt Flow	0	355	365	358	365	0	0	0	0	60	0	118

Major/Minor	Major1			Major2				Minor2			
Conflicting Flow All	-	0	0	720	0	0		1619	-	365	
Stage 1	-	-	-	-	-	-		1081	-	-	
Stage 2	-	-	-	-	-	-		538	-	-	
Critical Hdwy	-	-	-	4.13	-	-		5.7	-	6.35	
Critical Hdwy Stg 1	-	-	-	-	-	-		5.42	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-		5.42	-	-	
Follow-up Hdwy	-	-	-	2.227	-	-		3.518	-	3.435	
Pot Cap-1 Maneuver	0	-	-	877	-	0		157	0	652	
Stage 1	0	-	-	-	-	0		326	0	-	
Stage 2	0	-	-	-	-	0		585	0	-	
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	877	-	-		77	0	652	
Mov Cap-2 Maneuver	· _	-	-	-	-	-		77	0	-	
Stage 1	-	-	-	-	-	-		326	0	-	
Stage 2	-	-	-	-	-	-		285	0	-	
Approach	ED			\\/D				CD			
Approach				5 O				54 Q			
HUM Control Delay, s	0			5.9				54.3 F			
HGM LOS								Г			
Minor Lane/Major Mvi	nt	EBT	EBR	WBL	WBT	SBLn1	SBLn2				
Capacity (veh/h)		-	-	877	-	77	652				
HCM Lane V/C Ratio		-	-	0.408	-	0.776	0.182				
HCM Control Delay (s	;)	-	-	11.9	0	138.8	11.7				
HCM Lane LOS		-	-	В	А	F	В				

0.7

3.8

2

# Intersection Delay, s/veh 42.2 Intersection LOS E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्भ	1		\$			4			\$	
Traffic Vol, veh/h	22	343	38	148	105	192	12	58	117	203	59	3
Future Vol, veh/h	22	343	38	148	105	192	12	58	117	203	59	3
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, %	0	7	3	1	26	3	17	5	0	4	0	67
Mvmt Flow	24	373	41	161	114	209	13	63	127	221	64	3
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			2			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			2			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			2		
HCM Control Delay	41.6			62			19			26.3		
HCM LOS	E			F			С			D		

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	6%	6%	0%	33%	77%
Vol Thru, %	31%	94%	0%	24%	22%
Vol Right, %	63%	0%	100%	43%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	187	365	38	445	265
LT Vol	12	22	0	148	203
Through Vol	58	343	0	105	59
RT Vol	117	0	38	192	3
Lane Flow Rate	203	397	41	484	288
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.476	0.873	0.084	0.977	0.662
Departure Headway (Hd)	8.422	7.925	7.294	7.27	8.269
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Сар	427	460	492	503	435
Service Time	6.515	5.651	5.02	5.293	6.352
HCM Lane V/C Ratio	0.475	0.863	0.083	0.962	0.662
HCM Control Delay	19	44.8	10.7	62	26.3
HCM Lane LOS	С	E	В	F	D
HCM 95th-tile Q	2.5	9.1	0.3	12.8	4.7

8.7

### Intersection

HCM LOS

Int Delay, s/veh

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		\$			÷	1		<b>≜</b> î≽			-4 <b>†</b>	
Traffic Vol, veh/h	0	0	0	77	0	19	0	6	256	68	10	0
Future Vol, veh/h	0	0	0	77	0	19	0	6	256	68	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	Free	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage,	# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	34	2	53	2	33	9	9	20	2
Mvmt Flow	0	0	0	84	0	21	0	7	278	74	11	0

Major/Minor	Major1		Major2				Minor1				Minor2			
Conflicting Flow All	0	0	0	1	0	0	-	169	-	173	169	-		
Stage 1	-	-	-	-	-	-	-	1	-	168	168	-		
Stage 2	-	-	-	-	-	-	-	168	-	5	1	-		
Critical Hdwy	4.12	-	-	4.44	-	-	-	6.83	-	7.19	6.7	-		
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.83	-	6.19	5.7	-		
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.83	-	6.19	5.7	-		
Follow-up Hdwy	2.218	-	- 3	2.506	-	-	-	4.297	-	3.581	4.18	-		
Pot Cap-1 Maneuver	-	-	-	1435	-	0	0	671	0	775	693	0		
Stage 1	-	-	-	-	-	0	0	837	0	818	727	0		
Stage 2	-	-	-	-	-	0	0	704	0	999	860	0		
Platoon blocked, %		-	-		-									
Mov Cap-1 Maneuver	-	-	-	1435	-	-	-	631	-	734	652	-		
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	631	-	734	652	-		
Stage 1	-	-	-	-	-	-	-	837	-	818	684	-		
Stage 2	-	-	-	-	-	-	-	662	-	991	860	-		
Approach	EB			WB			NB			SB				
HCM Control Delay, s	0			7.7						10.5				

Minor Lane/Major Mvmt	NBLn1NE	3Ln2	EBL	EBT	EBR	WBL	WBT S	SBLn1	SBLn2
Capacity (veh/h)	631	-	-	-	-	1435	-	728	652
HCM Lane V/C Ratio	0.005	-	-	-	-	0.058	-	0.109	0.008
HCM Control Delay (s)	10.7	-	0	-	-	7.7	0	10.5	10.6
HCM Lane LOS	В	-	А	-	-	А	Α	В	В
HCM 95th %tile Q(veh)	0	-	-	-	-	0.2	-	0.4	0

-

В

7.5

### Intersection

Int Delay, s/veh

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ		1			1		1	1		<b>≜</b> î≽	
Traffic Vol, veh/h	188	0	187	0	0	14	0	25	220	0	43	63
Future Vol, veh/h	188	0	187	0	0	14	0	25	220	0	43	63
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	None
Storage Length	0	-	50	-	-	0	-	-	0	-	-	-
Veh in Median Storage	, # -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	6	2	1	0	0	29	0	40	1	0	40	22
Mvmt Flow	204	0	203	0	0	15	0	27	239	0	47	68

Major/Minor	Minor2		Ν	/linor1		Major1		1 Major2		ajor2			
Conflicting Flow All	108	-	58	-	-	27	-	0	-	-	-	0	
Stage 1	81	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	27	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	7.39	-	6.915	-	-	6.635	-	-	-	-	-	-	
Critical Hdwy Stg 1	6.59	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.19	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.557	-3	3.3095	-	-3	.5755	-	-	-	-	-	-	
Pot Cap-1 Maneuver	855	0	999	0	0	971	0	-	0	0	-	-	
Stage 1	908	0	-	0	0	-	0	-	0	0	-	-	
Stage 2	979	0	-	0	0	-	0	-	0	0	-	-	
Platoon blocked, %								-			-	-	
Mov Cap-1 Maneuver	841	-	999	-	-	971	-	-	-	-	-	-	
Mov Cap-2 Maneuver	841	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	908	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	964	-	-	-	-	-	-	-	-	-	-	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	10.1			8.8			0			0			

HCM LOS B A

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2V	VBLn1	SBT	SBR	
Capacity (veh/h)	-	841	999	971	-	-	
HCM Lane V/C Ratio	-	0.243	0.203	0.016	-	-	
HCM Control Delay (s)	-	10.6	9.5	8.8	-	-	
HCM Lane LOS	-	В	А	А	-	-	
HCM 95th %tile Q(veh)	-	1	0.8	0	-	-	

Intersection						
Int Delay, s/veh	4.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	۰¥			्र	4	
Traffic Vol, veh/h	4	216	12	171	209	2
Future Vol, veh/h	4	216	12	171	209	2
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	1	33	2	1	0
Mvmt Flow	4	235	13	186	227	2

Major/Minor	Minor2		Major1	Majo	or2						
Conflicting Flow All	440	228	229	0	-	0					
Stage 1	228	-	-	-	-	-					
Stage 2	212	-	-	-	-	-					
Critical Hdwy	6.65	6.21	4.43	-	-	-					
Critical Hdwy Stg 1	5.65	-	-	-	-	-					
Critical Hdwy Stg 2	5.65	-	-	-	-	-					
Follow-up Hdwy	3.725	3.309	2.497	-	-	-					
Pot Cap-1 Maneuver	534	814	1176	-	-	-					
Stage 1	759	-	-	-	-	-					
Stage 2	772	-	-	-	-	-					
Platoon blocked, %				-	-	-					
Mov Cap-1 Maneuver	528	814	1176	-	-	-					
Mov Cap-2 Maneuver	528	-	-	-	-	-					
Stage 1	750	-	-	-	-	-					
Stage 2	772	-	-	-	-	-					
Approach	EB		NB	:	SB			_			
HCM Control Delay, s	11.3		0.5		0						
HCM LOS	В										

Minor Lane/Major Mvmt	NBL	NBT EBLn1	SBT	SBR
Capacity (veh/h)	1176	- 806	-	-
HCM Lane V/C Ratio	0.011	- 0.297	-	-
HCM Control Delay (s)	8.1	0 11.3	-	-
HCM Lane LOS	А	A B	-	-
HCM 95th %tile Q(veh)	0	- 1.2	-	-

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations				1		1	
Traffic Volume (veh/h)	0	0	0	34	0	27	
Future Volume (Veh/h)	0	0	0	34	0	27	
Sign Control		Stop	Stop		Free		
Grade		0%	0%		0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	0	0	0	37	0	29	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None		
Median storage veh)							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	37	0	29	0	0		
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	37	0	29	0	0		
tC, single (s)	7.1	6.5	6.5	6.5	4.1		
tC, 2 stage (s)							
tF (s)	3.5	4.0	4.0	3.6	2.2		
p0 queue free %	100	100	100	96	100		
cM capacity (veh/h)	937	900	868	996	1636		
Direction, Lane #	WB 1	SB 1					
Volume Total		29					
Volume Left	0	0					
Volume Right	37	29					
cSH	996	1700					
Volume to Canacity	0.04	0.02					
Queue Length 95th (ft)		0.02					
Control Delay (s)	8.8	0.0					
Lane LOS	Δ	5.0					
Approach Delay (s)	8.8	0.0					
Approach LOS	A	5.0					
Intersection Summary			4.0				
Average Delay			4.9			( O	
Intersection Capacity Utili	Ization		b./%	IC	U Level o	of Service	
Analysis Period (min)			15				

## **APPENDIX N**

Capacity/Level-of-Service Analysis Summary

#### Capacity Analysis Summary South Coast Renewables New Bedford, MA

	Weekday Morning Peak Hour       2021 Base     2021 Existing     2028 No Build     2028 Build - SFEIR     2028 Build - Revised     2028 w/ Mitigation - SFEIR     2028 w/ Mitigation - Revised																					
			2021 Bas	se	2	021 Exis	ting	20	)28 No B	uild	202	8 Build - 9	SFEIR	2028	Build - R	evised	2028 w	/ Mitigati	on - SFEIR	2028 w	/ Mitigation	ı - Revised
Intersection	Movement	LOS <sup>1</sup>	Delay <sup>2</sup>	V/C <sup>3</sup>	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C
Route 140 Northbound Ramps	EB LT	Α	3.9	0.08	А	4.4	0.10	А	4.6	0.12	Α	5.3	0.15	Α	5.2	0.14	А	5.3	0.15	А	5.2	0.14
at Braley Road	WB TR	Α	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00
	NB L	D	28.7	0.69	D	32.1	0.72	F	61.3	0.92	F	89.0	1.02	F	79.7	0.99	F	89.0	1.02	F	79.7	0.99
	R	А	9.8	0.21	А	9.8	0.21	В	10.1	0.24	В	10.1	0.24	В	10.1	0.24	В	10.1	0.24	В	10.1	0.24
Route 140 Southbound Ramos	FR TR	Δ	0.0	0.00	Δ	0.0	0.00	Δ	0.0	0.00	Δ	0.0	0.00	Δ	0.0	0.00	Δ	0.0	0.00	Δ	0.0	0.00
at Braley Road	WB IT	B	10.2	0.00	Δ	4.6	0.00	Δ	4.6	0.00	Δ	0.0 4 7	0.00	Δ	47	0.00	Δ	0.0 4 7	0.00	Δ	47	0.00
	SB L	F	56.8	0.24	F	60.8	0.26	F	60.5	0.25	F	68.1	0.28	F	66.0	0.27	F	68.1	0.28	F	66.0	0.27
	R	В	14.3	0.23	В	14.3	0.23	В	14.3	0.23	C	15.0	0.26	C	14.6	0.24	C	15.0	0.26	C	14.6	0.24
Braley Road/	EB LT	в	14.1	0.33	С	15.2	0.39	с	15.2	0.39	С	17.4	0.49	C	16.9	0.47	А	8.2	0.27	А	8.2	0.26
Theodore Rice Boulevard at	R	А	10.0	0.06	A	10.0	0.06	A	10.0	0.06	В	10.3	0.07	В	10.2	0.06	А	1.1	0.04	А	1.2	0.04
Phillips Road	WB LTR	F	108.7	1.14	F	116.5	1.16	F	116.5	1.16	F	141.7	1.22	F	134.2	1.21	В	19.0	0.81	В	18.8	0.81
	NB LTR	В	13.9	0.36	В	14.2	0.36	В	14.2	0.36	В	14.8	0.38	В	14.7	0.37	С	22.0	0.42	С	21.6	0.41
	SB LTR	С	16.8	0.51	С	17.3	0.52	С	17.3	0.52	С	18.2	0.54	С	18.0	0.53	D	50.4	0.84	D	46.4	0.81
	Overall	F	64.5	n/a	F	67.8	n/a	F	67.7	n/a	F	80.2	n/a	F	76.2	n/a	С	23.0	0.82	С	22.2	0.81
Theodore Rice Boulevard at	WB LR	А	8.2	0.30	А	8.2	0.30	А	8.0	0.27	А	8.1	0.28	А	8.0	0.27	А	8.1	0.28	А	8.0	0.27
Duchaine Boulevard	NB TR	Α	0.0	0.04	А	0.0	0.04	А	0.0	0.03	А	0.0	0.03	A	0.0	0.03	А	0.0	0.03	А	0.0	0.03
	SB L	E	44.4	0.49	E	44.8	0.50	D	31.6	0.36	D	34.6	0.39	D	33.0	0.38	D	34.6	0.39	D	33.0	0.38
	Т	D	26.7	0.06	D	26.8	0.06	С	22.8	0.05	С	24.1	0.05	С	23.4	0.05	C	24.1	0.05	С	23.4	0.05
Duchaine Boulevard at	EB L	С	21.4	0.29	С	23.1	0.31	С	20.0	0.25	С	23.1	0.29	С	22.0	0.28	С	23.1	0.29	С	22.0	0.28
Samuel Barnet Boulevard	R	В	11.7	0.15	В	11.7	0.15	В	11.3	0.13	В	11.4	0.13	В	11.3	0.13	В	11.4	0.13	В	11.3	0.13
	WB R	В	10.2	0.37	В	10.6	0.38	В	10.3	0.35	В	10.7	0.37	В	10.6	0.36	В	10.7	0.37	В	10.6	0.36
	NB TR	A	0.0	0.00	Α	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
	SB TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
Phillips Road at	EB LR	В	10.2	0.13	В	10.2	0.13	В	10.2	0.14	В	10.2	0.14	В	10.2	0.14	В	10.2	0.14	В	10.2	0.14
Samuel Barnet Boulevard	NB LT	Α	6.0	0.24	А	6.0	0.24	А	6.0	0.25	A	6.0	0.25	A	6.0	0.25	A	6.0	0.25	A	6.0	0.25
	SB TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
Duchaine Boulevard at	WB R	А	8.6	0.02	А	8.7	0.05	А	8.8	0.08	А	9.3	0.16	А	9.1	0.14	А	9.3	0.16	А	9.1	0.14
Site Driveway	SB R	Α	0.1	0.00	А	0.0	0.08	Α	0.0	0.07	Α	0.0	0.08	A	0.0	0.07	A	0.0	0.08	A	0.0	0.07

1 Level-of-Service

2 Average vehicle delay in seconds

3 Volume to capacity ratio; intersection capacity utilization reported for overall

n/a Not Applicable

#### Queue Summary South Coast Renewables New Bedford, MA

							Weekday	Morning Pea	k Hour							
			2021	Base	2021	Existing	2028 N	lo Build	2028 Bu	ild - SFEIR	2028 Buil	d - Revised	2028 w/ Miti	gation - SFEIR	2028 w/ Mitig	ation - Revised
Intersection	Mov	ement	50th Queue <sup>1</sup>	95th Queue <sup>2</sup>	50th Queue	95th Queue	50th Queue	95th Queue	50th Queue	95th Queue	50th Queue	95th Queue	50th Queue	95th Queue	50th Queue	95th Queue
Route 140 Northbound Ramps	EB	LT	n/a	8	n/a	8	n/a	10	n/a	13	n/a	13	n/a	13	n/a	13
at Braley Road	WB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	NB	L	n/a	128	n/a	140	n/a	243	n/a	303	n/a	283	n/a	303	n/a	283
		R	n/a	20	n/a	20	n/a	23	n/a	23	n/a	23	n/a	23	n/a	23
Route 140 Southbound Ramps	EB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
at Braley Road	WB	LT	n/a	48	n/a	50	n/a	50	n/a	53	n/a	53	n/a	53	n/a	53
	SB	L	n/a	23	n/a	23	n/a	23	n/a	25	n/a	25	n/a	25	n/a	25
		R	n/a	23	n/a	23	n/a	23	n/a	25	n/a	23	n/a	25	n/a	23
Braley Road/	EB	LT	n/a	33	n/a	43	n/a	43	n/a	60	n/a	58	23	108	22	103
Theodore Rice Boulevard at		R	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5	0	6	0	6
Phillips Road	WB	LTR	n/a	563	n/a	585	n/a	585	n/a	665	n/a	638	107	465	103	447
	NB	LTR	n/a	38	n/a	38	n/a	38	n/a	38	n/a	38	25	176	24	176
	SB	LTR	n/a	65	n/a	65	n/a	65	n/a	68	n/a	68	54	361	51	360
Theodore Rice Boulevard at	WB	LR	n/a	33	n/a	33	n/a	28	n/a	28	n/a	28	n/a	28	n/a	28
Duchaine Boulevard	NB	TR	n/a	3	n/a	3	n/a	3	n/a	3	n/a	3	n/a	3	n/a	3
	SB	L	n/a	60	n/a	60	n/a	40	n/a	43	n/a	40	n/a	43	n/a	40
		Т	n/a	5	n/a	5	n/a	3	n/a	5	n/a	3	n/a	5	n/a	3
Duchaine Boulevard at	EB	L	n/a	30	n/a	33	n/a	25	n/a	30	n/a	28	n/a	30	n/a	28
Samuel Barnet Boulevard		R	n/a	13	n/a	13	n/a	13	n/a	13	n/a	13	n/a	13	n/a	13
	WB	R	n/a	43	n/a	45	n/a	40	n/a	43	n/a	43	n/a	43	n/a	43
	NB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	SB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
Phillips Road at	EB	LR	n/a	10	n/a	13	n/a	13	n/a	13	n/a	13	n/a	13	n/a	13
Samuel Barnet Boulevard	NB	LT	n/a	23	n/a	23	n/a	25	n/a	25	n/a	25	n/a	25	n/a	25
	SB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
Duchaine Boulevard at	WB	R	n/a	1	n/a	4	n/a	6	n/a	14	n/a	12	n/a	14	n/a	12
Site Driveway	SB	R	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0

1 50th Percentile Queue Length (ft) 2 95th Percentile Queue Length (ft) n/a Not Applicable

#### Capacity Analysis Summary South Coast Renewables New Bedford, MA

	Weekday Afternoon School Dismissal Peak Hour       2021 Base     2021 Existing     2028 No Build     2028 Build - SFEIR     2028 Build - Revised     2028 w/ Mitigation - SFEIR     2028 w/ Mitigation - SFEIR																					
			2021 Bas	se	2	021 Exis	ting	20	028 No B	uild	202	28 Build - S	SFEIR	2028	Build - R	evised	2028 w	/ Mitigati	on - SFEIR	2028 w/	/ Mitigation	ı - Revised
Intersection	Movement	LOS <sup>1</sup>	Delay <sup>2</sup>	V/C <sup>3</sup>	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C
Route 140 Northbound Ramps	EB LT	Α	2.2	0.09	А	2.5	0.10	Α	2.5	0.11	А	3.0	0.14	А	2.9	0.14	А	3.0	0.14	А	2.9	0.14
at Braley Road	WB TR	Α	0.0	0.00	А	0.0	0.00	Α	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00
	NB L	F	69.8	0.90	F	83.2	0.95	F	147.3	1.15	F	214.6	1.31	F	192.5	1.26	F	214.6	1.31	F	192.5	1.26
	R	В	14.1	0.49	В	14.1	0.49	С	15.4	0.55	С	15.4	0.55	С	15.4	0.55	С	15.4	0.55	С	15.4	0.55
Route 140 Southbound Ramps	EB TR	A	0.0	0.00	А	0.0	0.00	A	0.0	0.00	А	0.0	0.00	Α	0.0	0.00	A	0.0	0.00	Α	0.0	0.00
at Braley Road	WB LT	A	5.5	0.41	A	5.7	0.42	A	5.9	0.45	A	6.1	0.47	A	6.1	0.47	A	6.1	0.47	A	6.1	0.47
	SB L	F	213.5	0.97	F	235.1	1.02	F	381.0	1.34	F	460.8	1.49	F	443.3	1.46	F	460.8	1.49	F	443.3	1.46
	R	В	12.0	0.17	В	12.0	0.18	В	12.3	0.19	В	12.8	0.21	В	12.6	0.20	В	12.8	0.21	В	12.6	0.20
Braley Road/	EB LT	Е	39.4	0.85	Е	48.8	0.92	F	59.0	0.98	F	82.6	1.09	F	76.7	1.07	В	14.0	0.49	В	13.6	0.47
Theodore Rice Boulevard at	R	В	10.9	0.13	В	11.0	0.13	В	11.4	0.13	В	11.6	0.14	В	11.5	0.14	А	3.8	0.07	А	3.8	0.07
Phillips Road	WB LTR	F	85.3	1.05	F	92.5	1.06	F	113.9	1.14	F	128.5	1.20	F	127.2	1.18	Е	58.0	1.00	D	47.1	0.96
	NB LTR	С	17.8	0.46	С	18.4	0.47	С	19.7	0.50	С	20.5	0.52	С	20.4	0.52	В	17.0	0.41	В	17.0	0.41
	SB LTR	С	25.0	0.66	D	26.0	0.68	D	28.9	0.72	D	30.3	0.74	D	30.0	0.74	Е	78.4	0.98	E	78.4	0.98
	Overall	Ε	49.2	n/a	F	54.5	n/a	F	65.7	n/a	F	78.5	n/a	F	76.0	n/a	D	41.5	0.92	D	37.7	0.91
Theodore Rice Boulevard at	WB IB	Δ	76	0.07	Δ	76	0.07	Δ	76	0.06	Δ	77	0.08	Δ	77	0.07	Δ	77	0.08	Δ	77	0.07
Duchaine Boulevard	NB TR	A	0.0	0.01	A	0.0	0.01	A	0.0	0.00	A	0.0	0.00	A	0.0	0.01	A	0.0	0.00	A	0.0	0.01
Duchanic Doulorard	SB I	B	12.1	0.26	B	12.1	0.26	B	11 5	0.22	В	12.1	0.24	B	11.8	0.23	B	12.1	0.24	B	11.8	0.23
	T	В	11.3	0.02	В	11.4	0.02	В	11.1	0.02	В	11.6	0.02	В	11.3	0.02	B	11.6	0.02	B	11.3	0.02
Duchaine Boulevard at	EB L	В	13.3	0.38	В	14.2	0.41	В	11.9	0.29	В	13.0	0.32	В	12.7	0.31	В	13.0	0.32	В	12.7	0.31
Samuel Barnet Boulevard	R	В	11.3	0.37	В	11.3	0.37	В	10.3	0.27	В	10.4	0.28	В	10.3	0.28	В	10.4	0.28	В	10.3	0.28
	WB R	A	8.9	0.10	A	9.1	0.11	A	8.9	0.08	A	9.2	0.09	A	9.1	0.09	A	9.2	0.09	A	9.1	0.09
	NB TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
	SB TR	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
Phillips Road at	EB LR	С	15.2	0.51	С	15.2	0.52	В	13.5	0.44	В	13.6	0.45	В	13.6	0.45	В	13.6	0.45	В	13.6	0.45
Samuel Barnet Boulevard	NB LT	А	2.7	0.08	А	2.7	0.08	А	2.6	0.07	А	2.6	0.07	А	8.2	0.07	А	8.2	0.07	А	8.2	0.07
	SB TR	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00
Duchaine Boulevard at	WB R	Δ	85	0.04	Δ	86	0.08	Δ	86	0.06	Δ	89	0.10	Δ	8.8	0 00	Δ	89	0.10	Δ	8.8	0.09
Site Drivoway	SR R	Δ	11	0.04	Δ	0.0	0.00	Δ	0.0	0.00		0.9	0.10		0.0	0.09	Δ	0.9	0.10	Δ	0.0	0.03
Site Driveway	JD N	А	1.1	0.00	А	0.0	0.02	А	0.0	0.02	А	0.0	0.03	А	0.0	0.02	А	0.0	0.05	А	0.0	0.02

1 Level-of-Service

2 Average vehicle delay in seconds

3 Volume to capacity ratio; intersection capacity utilization reported for overall

n/a Not Applicable

#### Queue Summary South Coast Renewables New Bedford, MA

						Week	day Afterno	on School Disi	nissal Peak I	Hour						
			202	1 Base	2021	Existing	2028 1	No Build	2028 Bu	uild - SFEIR	2028 Buil	d - Revised	2028 Build v	v/ Mitigation	028 Build w/ M	itigation - Revise
Intersection	Mov	ement	50th Queue <sup>1</sup>	95th Queue <sup>2</sup>	50th Queue	95th Queue	50th Queue	95th Queue	50th Queu	e 95th Queue	50th Queue	95th Queue	50th Queue	95th Queue	50th Queue	95th Queue
Route 140 Northbound Ramps	EB	LT	n/a	8	n/a	8	n/a	10	n/a	13	n/a	13	n/a	13	n/a	13
at Braley Road	WB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	NB	L	n/a	203	n/a	223	n/a	313	n/a	385	n/a	360	n/a	385	n/a	360
		R	n/a	70	n/a	70	n/a	85	n/a	85	n/a	85	n/a	85	n/a	85
Route 140 Southbound Ramps	EB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
at Braley Road	WB	LT	n/a	50	n/a	53	n/a	60	n/a	65	n/a	63	n/a	65	n/a	63
	SB	L	n/a	118	n/a	123	n/a	150	n/a	160	n/a	158	n/a	160	n/a	158
		R	n/a	15	n/a	15	n/a	18	n/a	20	n/a	18	n/a	20	n/a	18
Braley Road/	EB	LT	n/a	200	n/a	240	n/a	273	n/a	345	n/a	328	98	306	96	296
Theodore Rice Boulevard at		R	n/a	10	n/a	10	n/a	10	n/a	10	n/a	10	0	22	0	22
Phillips Road	WB	LTR	n/a	408	n/a	428	n/a	483	n/a	518	n/a	515	185	602	171	581
	NB	LTR	n/a	55	n/a	58	n/a	63	n/a	63	n/a	63	39	129	39	129
	SB	LTR	n/a	108	n/a	113	n/a	125	n/a	128	n/a	128	117	375	117	375
Theodore Rice Boulevard at	WB	LR	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5
Duchaine Boulevard	NB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	SB	L	n/a	25	n/a	25	n/a	20	n/a	23	n/a	23	n/a	23	n/a	23
		Т	n/a	3	n/a	3	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
Duchaine Boulevard at	EB	L	n/a	45	n/a	50	n/a	30	n/a	35	n/a	33	n/a	35	n/a	33
Samuel Barnet Boulevard		R	n/a	43	n/a	43	n/a	28	n/a	28	n/a	28	n/a	28	n/a	28
	WB	R	n/a	8	n/a	10	n/a	8	n/a	8	n/a	8	n/a	8	n/a	8
	NB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	SB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
Phillips Road at	EB	LR	n/a	73	n/a	75	n/a	58	n/a	58	n/a	58	n/a	58	n/a	58
Samuel Barnet Boulevard	NB	LT	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5
	SB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
Duchaine Boulevard at	WB	R	n/a	3	n/a	6	n/a	5	n/a	9	n/a	8	n/a	9	n/a	8
Site Driveway	SB	R	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0

1 50th Percentile Queue Length (ft) 2 95th Percentile Queue Length (ft) n/a Not Applicable

#### Capacity Analysis Summary South Coast Renewables New Bedford, MA

	Weekday Afternoon Commuter Peak Hour																					
			2021 Bas	se	2	021 Exis	ting	20	)28 No B	uild	202	8 Build - S	SFEIR	2028	Build - R	evised	2028 w	/ Mitigatio	n - SFEIR	2028 w/	Mitigation	- Revised
Intersection	Movement	LOS <sup>1</sup>	Delay <sup>2</sup>	V/C <sup>3</sup>	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C
Route 140 Northbound Ramps	EB LT	Α	2.6	0.11	А	2.6	0.11	А	2.7	0.12	Α	2.9	0.13	Α	2.8	0.13	Α	2.9	0.13	А	2.8	0.13
at Braley Road	WB TR	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00
	NB L	Е	45.7	0.73	Е	46.5	0.73	F	59.8	0.82	F	76.6	0.90	F	67.4	0.86	F	76.6	0.90	F	67.4	0.86
	R	С	16.1	0.58	С	16.1	0.58	С	17.2	0.62	С	17.2	0.62	С	17.2	0.62	С	17.2	0.62	С	17.2	0.62
Route 140 Southbound Ramps	EB TR	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00
at Braley Road	WB LT	Α	6.2	0.44	Α	6.2	0.44	Α	5.9	0.41	Α	5.9	0.41	Α	5.9	0.41	Α	5.9	0.41	А	5.9	0.41
	SB L	F	205.4	0.96	F	211.9	0.97	F	135.3	0.77	F	150.3	0.81	F	138.8	0.78	F	150.3	0.81	F	138.8	0.78
	R	В	11.8	0.18	В	11.8	0.18	В	11.5	0.17	В	11.9	0.19	В	11.7	0.18	В	11.9	0.19	В	11.7	0.18
Braley Road/	EB LT	F	57.4	0.95	F	58.3	0.96	Е	40.5	0.83	Е	46.9	0.88	Е	44.8	0.86	В	13.1	0.44	В	12.8	0.42
Theodore Rice Boulevard at	R	В	11.2	0.10	В	11.2	0.10	В	10.5	0.08	В	10.8	0.08	В	10.7	0.08	А	2.4	0.05	А	2.4	0.05
Phillips Road	WB LTR	F	93.3	1.07	F	95.0	1.08	F	55.5	0.94	F	68.0	0.99	F	62.0	0.96	С	24.1	0.78	С	22.2	0.74
	NB LTR	С	21.7	0.55	С	21.8	0.55	С	18.7	0.47	С	19.3	0.48	С	19.0	0.48	В	15.9	0.38	В	15.9	0.38
	SB LTR	D	31.9	0.75	D	32.2	0.75	D	25.4	0.65	D	26.5	0.67	D	26.3	0.66	E	78.7	0.98	E	78.7	0.98
	Overall	F	57.7	n/a	F	58.6	n/a	Ε	38.4	n/a	Ε	45.1	n/a	Ε	42.2	n/a	С	30.2	0.84	С	29.6	0.84
Theodore Rice Boulevard at	WB LR	А	7.6	0.06	А	7.6	0.06	А	7.6	0.05	А	7.7	0.07	А	7.7	0.06	А	7.7	0.07	А	7.7	0.06
Duchaine Boulevard	NB TR	Α	0.0	0.01	А	0.0	0.01	А	0.0	0.01	А	0.0	0.01	А	0.0	0.00	Α	0.0	0.00	А	0.0	0.00
	SB L	В	10.9	0.14	В	10.9	0.14	В	10.3	0.11	В	10.7	0.11	В	10.5	0.11	В	10.7	0.11	В	10.5	0.11
	Т	В	10.7	0.01	В	10.7	0.01	В	10.4	0.01	В	10.7	0.01	В	10.6	0.01	В	10.7	0.01	В	10.6	0.01
Duchaine Boulevard at	EB L	В	11.7	0.35	В	11.8	0.35	В	10.4	0.24	В	10.9	0.25	В	10.6	0.24	В	10.9	0.25	В	10.6	0.24
Samuel Barnet Boulevard	R	В	10.2	0.29	В	10.2	0.29	А	9.5	0.20	А	9.6	0.21	А	9.5	0.20	А	9.6	0.21	А	9.5	0.20
	WB R	Α	8.7	0.02	А	8.7	0.02	А	8.7	0.02	Α	8.8	0.02	Α	8.8	0.02	Α	8.8	0.02	А	8.8	0.02
	NB TR	Α	0.0	0.00	Α	0.0	0.00	Α	0.0	0.00	Α	0.0	0.00	Α	0.0	0.00	Α	0.0	0.00	А	0.0	0.00
	SB TR	A	0.0	0.00	A	0.0	0.00	А	0.0	0.00	Α	0.0	0.00	A	0.0	0.00	A	0.0	0.00	А	0.0	0.00
Phillips Road at	EB LR	В	12.6	0.38	В	13.3	0.46	В	11.3	0.30	В	11.3	0.30	В	11.3	0.30	В	11.3	0.30	В	11.3	0.30
Samuel Barnet Boulevard	NB LT	Α	0.5	0.01	А	0.5	0.01	А	0.5	0.01	А	0.5	0.01	А	8.0	0.01	Α	8.0	0.01	А	8.0	0.01
	SB TR	А	0.0	0.00	А	0.0	0.00	А	0.0	0.00	A	0.0	0.00	Α	0.0	0.00	A	0.0	0.00	А	0.0	0.00
Duchaine Boulevard at	WB R	А	8.5	0.03	А	8.5	0.03	А	8.5	0.03	А	8.9	0.05	А	8.8	0.04	А	8.9	0.05	А	8.8	0.04
Site Driveway	SB R	Α	2.3	0.01	А	0.0	0.01	А	0.0	0.01	А	0.0	0.02	А	0.0	0.02	А	0.0	0.02	А	0.0	0.02

1 Level-of-Service

2 Average vehicle delay in seconds

3 Volume to capacity ratio; intersection capacity utilization reported for overall

n/a Not Applicable

#### Queue Summary South Coast Renewables New Bedford, MA

						w	eekday After	noon Commu	ter Peak Hou	ur						
			2021	Base	2021	Existing	2028 1	No Build	2028 Bu	uild - SFEIR	2028 Buil	d - Revised	2028 w/ Miti	gation - SFEIR	2028 w/ Mitig	gation - Revised
Intersection	Mov	ement	50th Queue <sup>1</sup>	95th Queue <sup>2</sup>	50th Queue	95th Queue	50th Queue	95th Queue	50th Queu	e 95th Queue	50th Queue	95th Queue	50th Queue	95th Queue	50th Queue	95th Queue
Route 140 Northbound Ramps	EB	LT	n/a	10	n/a	10	n/a	10	n/a	13	n/a	10	n/a	13	n/a	10
at Braley Road	WB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	NB	L	n/a	130	n/a	130	n/a	160	n/a	193	n/a	175	n/a	193	n/a	175
		R	n/a	95	n/a	95	n/a	108	n/a	108	n/a	108	n/a	108	n/a	108
Route 140 Southbound Ramps	EB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
at Braley Road	WB	LT	n/a	58	n/a	58	n/a	50	n/a	50	n/a	50	n/a	50	n/a	50
	SB	L	n/a	118	n/a	118	n/a	93	n/a	98	n/a	95	n/a	98	n/a	95
		R	n/a	18	n/a	18	n/a	15	n/a	18	n/a	18	n/a	18	n/a	18
Braley Road/	EB	LT	n/a	265	n/a	268	n/a	210	n/a	235	n/a	228	82	258	79	249
Theodore Rice Boulevard at		R	n/a	8	n/a	8	n/a	8	n/a	8	n/a	8	0	12	0	12
Phillips Road	WB	LTR	n/a	410	n/a	415	n/a	295	n/a	340	n/a	320	118	460	111	440
	NB	LTR	n/a	73	n/a	75	n/a	63	n/a	63	n/a	63	36	122	36	122
	SB	LTR	n/a	143	n/a	143	n/a	115	n/a	118	n/a	118	113	368	113	368
Theodore Rice Boulevard at	WB	LR	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5	n/a	5
Duchaine Boulevard	NB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	SB	L	n/a	13	n/a	13	n/a	8	n/a	10	n/a	10	n/a	10	n/a	10
		Т	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
Duchaine Boulevard at	EB	L	n/a	40	n/a	40	n/a	23	n/a	25	n/a	25	n/a	25	n/a	25
Samuel Barnet Boulevard		R	n/a	30	n/a	30	n/a	20	n/a	20	n/a	20	n/a	20	n/a	20
	WB	R	n/a	3	n/a	3	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	NB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	SB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
Phillips Road at	EB	LR	n/a	45	n/a	63	n/a	30	n/a	30	n/a	30	n/a	30	n/a	30
Samuel Barnet Boulevard	NB	LT	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
	SB	TR	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0
Duchaine Boulevard at	WB	R	n/a	2	n/a	2	n/a	2	n/a	4	n/a	3	n/a	4	n/a	3
Site Driveway	SB	R	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0	n/a	0

1 50th Percentile Queue Length (ft) 2 95th Percentile Queue Length (ft) n/a Not Applicable

## **APPENDIX O**

Traffic Signal Warrant Analysis

## **Project Information**

Analyst	ZRD	Date	12/2/2021
Agency	McMahon Associates	Analysis Year	2021 Existing
Jurisdiction	New Bedford, MA	Time Period Analyzed	Weekday
Project Description	New Bedford Transfer Station		
General			
Major Street Direction	East-West	Population < 10,000	No
Starting Time Interval	7	Coordinated Signal System	No
Median Type	Divided	Crashes (crashes/year)	4
Major Street Speed (mi/h)	30	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	2700		

## **Geometry and Traffic**

**Volume Summary** 

Major

Volume

Minor

Volume

Volume

Hour



Approach		Eastbound	b	, v	Westboun	d	N	Iorthbour	nd	S	outhbour	d
Movement	L	Т	R	L	Т	R	L	Т	R	L	Т	R
Number of Lanes, N	0	1	1	0	1	0	0	1	0	0	1	0
Lane Usage		LT	R		LTR			LTR			LTR	
Vehicle Volumes Averages (veh/h)	8	139	24	70	142	99	11	31	68	101	31	9
Pedestrian Averages (peds/h)		0			0			1		0		
Gap Averages (gaps/h)		0			0			0			0	
Delay (s/veh)		0.0 0			0.0			0.0		0.0		
Delay (veh-hrs)		0.0			0.0 0.0						0.0	
School Crossing and Roadway	Netwo	rk										
Number of Students in Highest Hour	0			1	wo or Mo	re Major	Routes		No			
Number of Adequate Gaps in Period	0			١	Veekend (	Counts			No			
Number of Minutes in Period	0			5	5-year Gro	wth Facto	or (%)		0			
Railroad Crossing												
Grade Crossing Approach	None	None			Rail Traffic	(trains/da	ıy)		0			
Highest Volume Hour with Trains	Unknow	Unknown			High Occu	pancy Bus	uses (%) 0					
Distance to Stop Line (ft)				1	Tractor-Trailer Trucks (%)				0			
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<sup>2021</sup> Existing.xsw

			HCS	7 War	rants	Repor	't					
or	Total	Peds/h	Gaps/h	1A	1A	1B	1B	2	3A	3B	4A	4B

(100%) (80%) (100%) (80%) (100%) (100%) (100%) (100%) (100%)

07 - 08	776	217	1145	4	0	Yes	Yes	No	Yes	Yes	No	No	No	No
08 - 09	648	253	1084	4	0	Yes	Yes	No	No	No	No	No	No	No
09 - 10	624	225	990	1	0	Yes	Yes	No	No	No	No	No	No	No
10 - 11	0	0	0	0	0	No	No	No	No	No	No	No	No	No
11 - 12	630	163	944	6	0	Yes	Yes	No	No	No	No	No	No	No
12 - 13	0	0	0	0	0	No	No	No	No	No	No	No	No	No
13 - 14	0	0	0	0	0	No	No	No	No	No	No	No	No	No
14 - 15	697	181	1052	1	0	Yes	Yes	No	No	No	No	No	No	No
15 - 16	968	224	1394	0	0	Yes	Yes	Yes	Yes	Yes	No	No	No	No
16 - 17	804	266	1243	0	0	Yes	Yes	No	Yes	Yes	No	No	No	No
17 - 18	674	198	1023	9	0	Yes	Yes	No	No	No	No	No	No	No
18 - 19	0	0	0	0	0	No	No	No	No	No	No	No	No	No
Total	5821	1727	8875	25	0	8	8	1	3	3	0	0	0	0
Warrants														
Warrant 1: I	Eight-Hou	ur Vehicu	ılar Voluı	ne									✓	
A. Minimu	m Vehicula	ar Volumes	s (Both ma	jor approa	ichesan	d higher	minor app	oroach)c	or				$\checkmark$	
B. Interrup	tion of Co	ntinuous T	Traffic (Bot	n major ap	proaches	and hi	gher mino	r approacl	n)or					
80% Vehic	ularand	Interrup	tion Volun	nes (Both i	major app	roaches	and high	ner minor a	approach)					
Warrant 2: I	Four-Hou	r Vehicul	lar Volun	ne										
Four-Hour	<sup>.</sup> Vehicular	Volume (B	Both major	approach	esand	higher m	inor appro	ach)						
Warrant 3: I	Peak Hou	ır												
A. Peak-Ho	our Condit	ions (Minc	or delay	and min	or volume	and to	otal volum	e)or						
B. Peak-Ho	our Vehicu	lar Volume	es (Both m	ajor appro	achesar	nd highe	r minor ap	proach)						
Warrant 4: I	Pedestria	n Volum	e											
A. Four Ho	our Volume	esor												
B. One-Ho	ur Volume	es												
Warrant 5: S	School Cr	ossing												
Gaps Same	e Period	and												
Student Vo	olumes													
Nearest Tr	affic Contr	ol Signal (	optional)										$\checkmark$	
Warrant 6: 0	Coordina	ted Signa	al System											
Degree of	Platooning	g (Predom	inant direc	tion or bo	th directio	ons)								
Warrant 7: 0	Crash Exp	perience												
A. Adequa	te trials of	alternative	es, observa	ance and e	enforceme	nt failed	and							
B. Reporte	d crashes	susceptible	e to correc	tion by sig	gnal (12-m	onth perio	od)and	-						
C. 80% Vo	lumes for V	Warrants 1	A, 1B,or	4 are sa	itisfied								$\checkmark$	
Warrant 8: I	Roadway	Network	1											
A. Weekda	y Volume	(Peak hou	r totalar	nd projec	cted warra	nts 1, 2, or	r 3)or							
B. Weeken	d Volume	(Five hour	s total)											
Warrant 9: 0	Grade Cro	ossing												
A. Grade C	Crossing wi	ithin 140 ft	tand											
B. Peak-Ho	our Vehicu	lar Volume	es											
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## **Project Information**

- <b>-</b>			
Analyst	ZRD	Date	12/2/2021
Agency	McMahon Associates	Analysis Year	2028 No Build
Jurisdiction	New Bedford, MA	Time Period Analyzed	Weekday
Project Description	New Bedford Transfer Station		
General			
Major Street Direction	East-West	Population < 10,000	No
Starting Time Interval	7	Coordinated Signal System	No
Median Type	Divided	Crashes (crashes/year)	4
Major Street Speed (mi/h)	30	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	2700		

## **Geometry and Traffic**



	Eastbound	ł	\ \	Westbound Northbound			d	Southbound			
L	Т	R	L	Т	R	L	Т	R	L	Т	R
0	1	1	0	1	0	0	1	0	0	1	0
	LT	R		LTR			LTR			LTR	
8	148	26	75	75 152 106		12 34		72	109	34	10
	0			0			1		0		
	0			0			0			0	
	0.0			0.0			0.0			0.0	
0.0 0.0 0.0						0.0					
Netwo	letwork										
0			1	wo or Mo	re Major I	Routes No			lo		
0			\	Veekend (	Counts			No	No		
0			5	-year Gro	wth Facto	or (%)		0			
None	None			Rail Traffic	(trains/da	ıy)		0			
Unknow	Unknown			ligh Occu	pancy Bus	uses (%) 0					
				ractor-Tra	iler Trucks	s (%)		0			
	Image:	Eastbound   L T   0 1   K LT   8 148   0 0   0 0.0   Vetwork 0.0   0 0.0   0 0.0   1 0.0   0 0.0   0 0.0   0 0   0 0   0 0   0 0   0 0	L   T   R     0   1   1     0   1   1     LT   R     8   148   26     0   0   0     0   0.0   0.0     0   0.0   0.0     V   Vetwork   Vetwork     0   0   0     0   0   Vetwork     0   0   Vetwork     0   Vetwork   Vetwork     Vetwork   Vetwork   Vetwork     1   Vetwork   Vetwork     1   Vetwork   Vetwork     1   Vetwork   Vetwork     1   Vetwork   Vetwork     1	Eastbound   R   L     L   T   R   L     0   1   1   0     LT   R   26   75     8   148   26   75     0   0   0   1     0   0.0   0   1     Vetwork   7   7     0   0   5     None   F     Unknown   F     Unknown   T	EastboundWestboundLTRLT0110101101101101814826751528148267515200000000OOOOOOOOOOOOOOOOOOOTwo or MoOTwo or Mo<	WestboundLTRLTR01101010011010108148267515210600000000.00.00.00.0Network0Two or More Major0S-year Growth Factor0S-year Growth Factor0S-year Growth FactorNoneRail Traffic (trains/daNoneHigh Occupancy Bus1High Occupancy Bus0Tractor-Trailer Trucker	WestboundNLTRLTRL011010011010100110101008148267515210612814826751521061200000000.00.00.00.0Network0Two or More Major Routes0Two or More Major Routes0S-year Growth Factor (%)NoneRail Traffic (trains/day)NoneHigh Occupancy Buses (%)UnknownHigh Occupancy Buses (%)	LTRLTRLT0110100101101001814826751521061234000010100000001000000000.00.00.00.00.0Vetwork00Two or More Major Routes0Two or More Major Routes00.00Two or More Major Routes05-year Growth Factor (%)NoneRail Traffic (trains/day)High Occupancy Buses (%)High Occupancy Buses (%)UnknownHigh Occupancy Buses (%)Tractor-Trailer Trucks (%)	Eastbound   Westbound   Northbound     L   T   R   L   T   R   L   T   R     0   1   1   0   1   0   0   1   0     L   LT   R   LT   R   LTR   LTR   LTR   LTR   T     8   148   26   75   152   106   12   34   72     0   0   0   0   1   0   0   1   72     0   0   0   0   0   0   12   34   72     0   0   0   0   0   0   0   0   1   72     Network   No     0   0.0   0.0   0.0   0.0   0   1   72     Vetwork   Vetwork   Vetwork   Vetwork   No   No   No   No     0   0   Image: Second S	Eastbound   Westbound   Northbound   S     L   T   R   L   T   R   L   T   R   L     0   1   1   0   1   0   0   1   0   0     1   1   0   1   0   0   1   0   0   1   0   0     1   1   0   1   0   0   1   0   0   1   0   0   0     1   1   0   1   1   0   0   1   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0   0	NerthboundSouthboundLTRLTRLT01101001001011010010010111010010010011101010010018148267515210612347210934000010010000000000000000.00.00.00.00.00.00.00.0Neverther Major RoutesNo015-year Growth Factor (%)00015-year Growth Factor (%)0011NoneRail Traffic (trains/day)00111111110111111110110111011010101010111111111110<

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# Volume Summary

		-					-		-				-	
Hour	Major Volume	Minor Volume	Total Volume	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 ( 100% )	3A (100%)	3B (100%)	4A (100%)	4B (100%)
07 - 08	829	233	1225	4	0	Yes	Yes	No	Yes	Yes	No	No	No	No
08 - 09	693	272	1161	4	0	Yes	Yes	No	No	Yes	No	No	No	No
09 - 10	668	241	1060	1	0	Yes	Yes	No	No	No	No	No	No	No
10 - 11	0	0	0	0	0	No	No	No	No	No	No	No	No	No
11 - 12	673	175	1010	6	0	Yes	Yes	No	No	No	No	No	No	No
12 - 13	0	0	0	0	0	No	No	No	No	No	No	No	No	No
13 - 14	0	0	0	0	0	No	No	No	No	No	No	No	No	No
14 - 15	746	194	1127	1	0	Yes	Yes	No	Yes	No	No	No	No	No
15 - 16	1034	239	1489	0	0	Yes	Yes	Yes	Yes	Yes	No	No	No	No
16 - 17	860	286	1332	0	0	Yes	Yes	No	Yes	Yes	No	No	No	No
17 - 18	722	213	1098	9	0	Yes	Yes	No	Yes	No	No	No	No	No
18 - 19	0	0	0	0	0	No	No	No	No	No	No	No	No	No
Total	6225	1853	9502	25	0	8	8	1	5	4	0	0	0	0
Warrants														
Warrant 1: E	ight-Hou	ır Vehicu	lar Volur	ne									✓	
A. Minimu	m Vehicula	ar Volumes	(Both maj	jor approa	chesand	d higher	minor app	oroach)c	pr				✓	
B. Interrup	tion of Co	ntinuous T	raffic (Both	n major ap	proaches	and hig	gher mino	r approach	n)or					
80% Vehice	ularand-	Interrup	tion Volum	nes (Both r	major appi	roachesa	and high	ner minor a	approach)					
Warrant 2: F	our-Hou	r Vehicul	ar Volum	ne									✓	
Four-Hour	Vehicular	Volume (B	oth major	approach	esand	higher mi	nor appro	ach)					$\checkmark$	
Warrant 3: P	Peak Hou	r												
A. Peak-Hour Conditions (Minor delay and minor volumeand total volume)or														
B. Peak-Ho	ur Vehicul	ar Volume	s (Both ma	ajor appro	achesar	nd highei	r minor ap	proach)						
Warrant 4: F	Pedestria	n Volum	2											
A. Four Ho	ur Volume	sor												
B. One-Ho	ur Volume	s												
Warrant 5: S	chool Cr	ossing												
Gaps Same	e Period	and												
Student Vo	olumes													
Nearest Tra	affic Contr	ol Signal (	optional)										$\checkmark$	
Warrant 6: C	Coordinat	ted Signa	ıl System											
Degree of Platooning (Predominant direction or both directions)														
Warrant 7: Crash Experience														
A. Adequate trials of alternatives, observance and enforcement failedand														
B. Reported	d crashes s	susceptible	e to correc	tion by sig	ınal (12-m	onth peric	od)and	-						
C. 80% Vol	umes for \	Narrants 1	A, 1B,or	4 are sa	tisfied								$\checkmark$	
Warrant 8: R	Roadway	Network	-											
A. Weekda	y Volume	(Peak hou	r totalan	d projec	ted warra	nts 1, 2, or	3)or							
B. Weeken	d Volume	(Five hour	s total)											
Warrant 9: 0	Grade Cro	ossing												
A. Grade C	rossing wi	thin 140 ft	and											
B. Peak-Hour Vehicular Volumes														

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## **Project Information**

Analyst	ZRD	Date	12/2/2021
Agency	McMahon Associates	Analysis Year	2028 Build
Jurisdiction	New Bedford, MA	Time Period Analyzed	Weekday
Project Description	New Bedford Transfer Station		
General			
Major Street Direction	East-West	Population < 10,000	No
Starting Time Interval	7	Coordinated Signal System	No
Median Type	Divided	Crashes (crashes/year)	4
Major Street Speed (mi/h)	30	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	2700		

## **Geometry and Traffic**



Approach	Eastbound			١	Nestboun	d	Northbound			Southbound		
Movement	L	L T R		L	Т	R	L	Т	R	L	Т	R
Number of Lanes, N	0	1	1	0	1	0	0	1	0	0	1	0
Lane Usage		LT	R		LTR			LTR			LTR	
Vehicle Volumes Averages (veh/h)	8	8 162 26		75	75 161 106		12 34		72	109	34	10
Pedestrian Averages (peds/h)		0			0			1		0		
Gap Averages (gaps/h)		0			0			0			0	
Delay (s/veh)		0.0			0.0			0.0			0.0	
Delay (veh-hrs)	0.0 0.0 0.0						0.0					
School Crossing and Roadway	Netwo	letwork										
Number of Students in Highest Hour	0			Т	wo or Mo	re Major	Routes		No			
Number of Adequate Gaps in Period	0			٧	Veekend (	Counts			No	No		
Number of Minutes in Period	0			5	-year Gro	wth Facto	r (%)	0				
Railroad Crossing												
Grade Crossing Approach	None	None			Rail Traffic	(trains/da	y)		0	0		
Highest Volume Hour with Trains	Unknow	Unknown			High Occupancy Bus			uses (%) 0			)	
Distance to Stop Line (ft)					Tractor-Trailer Trucks (%)				0			

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# Volume Summary

	-													
Hour	Major Volume	Minor Volume	Total Volume	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 ( 100% )	3A (100%)	3B (100%)	4A (100%)	4B (100%)
07 - 08	885	233	1281	4	0	Yes	Yes	No	Yes	Yes	No	No	No	No
08 - 09	717	272	1185	4	0	Yes	Yes	No	No	Yes	No	No	No	No
09 - 10	696	241	1088	1	0	Yes	Yes	No	No	No	No	No	No	No
10 - 11	0	0	0	0	0	No	No	No	No	No	No	No	No	No
11 - 12	705	175	1042	6	0	Yes	Yes	No	No	No	No	No	No	No
12 - 13	0	0	0	0	0	No	No	No	No	No	No	No	No	No
13 - 14	0	0	0	0	0	No	No	No	No	No	No	No	No	No
14 - 15	801	194	1182	1	0	Yes	Yes	No	Yes	No	No	No	No	No
15 - 16	1072	239	1527	0	0	Yes	Yes	Yes	Yes	Yes	No	No	No	No
16 - 17	890	286	1362	0	0	Yes	Yes	No	Yes	Yes	No	No	No	No
17 - 18	728	213	1104	9	0	Yes	Yes	No	Yes	No	No	No	No	No
18 - 19	0	0	0	0	0	No	No	No	No	No	No	No	No	No
Total	6494	1853	9771	25	0	8	8	1	5	4	0	0	0	0
Warrants														
Warrant 1: E	ight-Hou	ır Vehicu	lar Volur	ne									✓	
A. Minimu	m Vehicula	ar Volumes	(Both ma	ior approa	chesand	d higher	minor app	oroach)c	pr				✓	
B. Interrup	tion of Co	ntinuous T	raffic (Botl	n major ap	proaches	and hi	gher mino	r approach	n)or					
80% Vehic	ularand-	Interrup	tion Volun	nes (Both r	major appi	roaches	and high	ner minor a	approach)					
Warrant 2: F	our-Hou	r Vehicul	ar Volun	ne									✓	
Four-Hour	Vehicular	Volume (B	oth major	approache	esand	higher mi	nor appro	ach)					$\checkmark$	
Warrant 3: P	Peak Hou	r												
A. Peak-Hour Conditions (Minor delay and minor volumeand total volume)or														
B. Peak-Ho	ur Vehicul	ar Volume	s (Both ma	ajor approa	achesar	nd highei	r minor ap	proach)						
Warrant 4: F	Pedestria	n Volum	2											
A. Four Ho	ur Volume	sor												
B. One-Ho	ur Volume	s												
Warrant 5: S	chool Cr	ossing												
Gaps Same	e Period	and												
Student Vo	olumes													
Nearest Tra	affic Contr	ol Signal (	optional)										$\checkmark$	
Warrant 6: C	Coordinat	ted Signa	ıl System											
Degree of Platooning (Predominant direction or both directions)														
Warrant 7: Crash Experience														
A. Adequate trials of alternatives, observance and enforcement failedand														
B. Reporte	d crashes s	susceptible	e to correc	tion by sig	nal (12-m	onth peric	od)and	-						
C. 80% Vol	umes for \	Narrants 1	A, 1B,or	4 are sa	tisfied								$\checkmark$	
Warrant 8: F	Roadway	Network												
A. Weekda	y Volume	(Peak hou	r totalar	d projec	ted warra	nts 1, 2, or	3)or							
B. Weeken	d Volume	(Five hour	s total)											
Warrant 9: 0	Grade Cro	ossing												
A. Grade C	rossing wi	thin 140 ft	and											
B. Peak-Hour Vehicular Volumes														

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# **APPENDIX P**

2028 Build Capacity/Level-of-Service Analysis with Mitigation

# Lanes, Volumes, Timings 3: Phillips Road & Theodore Rice Boulevard/Braley Road

02/06/2023

	٨	-	$\mathbf{\hat{z}}$	4	+	*	•	Ť	۲	1	ŧ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्च	1		\$			÷			\$	
Traffic Volume (vph)	4	193	30	50	451	142	32	49	82	171	29	33
Future Volume (vph)	4	193	30	50	451	142	32	49	82	171	29	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		225	0		0	0		0	0		75
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1648	1568	0	1722	0	0	1697	0	0	1735	0
Flt Permitted		0.991			0.964			0.922			0.677	
Satd. Flow (perm)	0	1635	1568	0	1666	0	0	1581	0	0	1217	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			61		24			46			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1311			261			2131			367	
Travel Time (s)		29.8			5.9			48.4			8.3	
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 (%)	25%	15%	3%	14%	6%	6%	3%	4%	3%	2%	14%	3%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	214	33	0	698	0	0	177	0	0	254	0
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Total Split (s)	52.0	52.0	52.0	52.0	52.0		15.0	15.0		15.0	15.0	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Act Effct Green (s)		25.3	25.3		25.3			12.4			12.4	
Actuated g/C Ratio		0.51	0.51		0.51			0.25			0.25	
v/c Ratio		0.26	0.04		0.81			0.41			0.81	
Control Delay		8.2	1.2		18.8			21.6			46.4	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		8.2	1.2		18.8			21.6			46.4	
LOS		А	А		В			С			D	
Approach Delay		7.2			18.8			21.6			46.4	
Approach LOS		А			В			С			D	
Queue Length 50th (ft)		22	0		103			24			51	
Queue Length 95th (ft)		103	6		447			#176			#360	
Internal Link Dist (ft)		1231			181			2051			287	
Turn Bay Length (ft)			225									
Base Capacity (vph)		1482	1427		1513			433			312	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		0.14	0.02		0.46			0.41			0.81	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 49	9.3											
Control Type: Actuated-Ur	ncoordinated											
Maximum v/c Ratio: 0.81												

Scenario 1 New Bedford Soild Waste Transfer Station 06/14/2018 Weekday Morning Peak Hour Mitigated McMahon Associates

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	
Total Split (s)	23.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

02/06/2023

Lanes, Volumes, Timings 3: Phillips Road & Theodore Rice Bouleva	rd/Braley Road	02/06/2023
Intersection Signal Delay: 22.2	Intersection LOS: C	
Intersection Capacity Utilization 81.2%	ICU Level of Service D	
Analysis Period (min) 15		
# 95th percentile volume exceeds capacity, queue may be lo	onger.	
Queue shown is maximum after two cycles.	0	

## Splits and Phases: 3: Phillips Road & Theodore Rice Boulevard/Braley Road

1 ø2		₩Aø9	
15 s	52 s	23 s	
Ø6	<b>€</b> Ø8		
15 s	52 s		

# Lanes, Volumes, Timings 3: Phillips Road & Theodore Rice Boulevard/Braley Road

02/06/2023

	٦	-	$\mathbf{\hat{z}}$	4	-	*	•	Ť	۲	1	ŧ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्च	1		4			÷			\$	
Traffic Volume (vph)	15	408	59	161	152	205	18	55	115	196	73	5
Future Volume (vph)	15	408	59	161	152	205	18	55	115	196	73	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		225	0		0	0		0	0		75
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1788	1583	0	1626	0	0	1624	0	0	1763	0
Flt Permitted		0.978			0.621			0.961			0.582	
Satd. Flow (perm)	0	1752	1583	0	1025	0	0	1569	0	0	1063	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			64		46			80			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1311			261			2131			367	
Travel Time (s)		29.8			5.9			48.4			8.3	
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 (%)	7%	6%	2%	5%	20%	4%	6%	11%	5%	4%	1%	40%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	459	64	0	563	0	0	205	0	0	297	0
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Total Split (s)	43.0	43.0	43.0	43.0	43.0		24.0	24.0		24.0	24.0	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Act Effct Green (s)		39.5	39.5		39.5			20.3			20.3	
Actuated g/C Ratio		0.55	0.55		0.55			0.28			0.28	
v/c Ratio		0.47	0.07		0.96			0.41			0.98	
Control Delay		13.6	3.8		47.1			17.0			78.4	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		13.6	3.8		47.1			17.0			78.4	
LOS		В	А		D			В			E	
Approach Delay		12.4			47.1			17.0			78.4	
Approach LOS		В			D			В			E	
Queue Length 50th (ft)		95	0		171			39			117	
Queue Length 95th (ft)		296	22		#581			129			#375	
Internal Link Dist (ft)		1231			181			2051			287	
Turn Bay Length (ft)			225									
Base Capacity (vph)		967	903		586			501			302	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		0.47	0.07		0.96			0.41			0.98	
Intersection Summary	01											
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: /1.6												
Control Type: Actuated-Uncoordinated												
waximum v/c Ratio: 0.98												

Scenario 1 New Bedford Solid Waste Transfer Station 06/14/2018 Weekday Afternoon School Peak Hour Mitigated Synchro 11 Report McMahon Associates Page 1

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	
Total Split (s)	23.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings 3: Phillips Road & Theodore Rice	Boulevard/Braley Road	02/06/2023			
Intersection Signal Delay: 37.7	Intersection LOS: D				
Intersection Capacity Utilization 91.0%	ICU Level of Service F				
Analysis Period (min) 15					
# 95th percentile volume exceeds capacity, queue may be longer.					
Queue shown is maximum after two cycles.					

# Splits and Phases: 3: Phillips Road & Theodore Rice Boulevard/Braley Road

1 Ø2	₩Ø4	. <b>∦</b> .≰ <sub>Ø9</sub>
24 s	43 s	23 s
Ø6	<b>↓</b> Ø8	
24 s	43 s	
## Lanes, Volumes, Timings 3: Phillips Road & Theodore Rice Boulevard/Braley Road

02/06/2023

	٦	-	$\mathbf{\hat{z}}$	4	←	×	1	Ť	۲	1	Ļ	~
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		é.	1		\$			\$			\$	
Traffic Volume (vph)	22	343	38	148	105	192	12	58	117	203	59	3
Future Volume (vph)	22	343	38	148	105	192	12	58	117	203	59	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		225	0		0	0		0	0		75
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1777	1568	0	1634	0	0	1691	0	0	1762	0
Flt Permitted		0.963			0.683			0.973			0.565	
Satd. Flow (perm)	0	1717	1568	0	1134	0	0	1650	0	0	1033	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			61		54			86			1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1311			261			2131			367	
Travel Time (s)		29.8			5.9			48.4			8.3	
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 (%)	0%	7%	3%	1%	26%	3%	17%	5%	0%	4%	0%	67%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	397	41	0	484	0	0	203	0	0	288	0
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Total Split (s)	43.0	43.0	43.0	43.0	43.0		24.0	24.0		24.0	24.0	
Total Lost Time (s)		4.0	4.0		4.0			4.0			4.0	
Act Effct Green (s)		39.5	39.5		39.5			20.3			20.3	
Actuated g/C Ratio		0.55	0.55		0.55			0.28			0.28	
v/c Ratio		0.42	0.05		0.74			0.38			0.98	
Control Delay		12.8	2.4		22.2			15.9			78.7	
Queue Delay		0.0	0.0		0.0			0.0			0.0	
Total Delay		12.8	2.4		22.2			15.9			78.7	
LOS		В	А		С			В			E	
Approach Delay		11.9			22.2			15.9			78.7	
Approach LOS		В			С			В			E	
Queue Length 50th (ft)		79	0		111			36			113	
Queue Length 95th (ft)		249	12		#440			122			#368	
Internal Link Dist (ft)		1231			181			2051			287	
Turn Bay Length (ft)			225									
Base Capacity (vph)		948	893		650			528			293	
Starvation Cap Reductn		0	0		0			0			0	
Spillback Cap Reductn		0	0		0			0			0	
Storage Cap Reductn		0	0		0			0			0	
Reduced v/c Ratio		0.42	0.05		0.74			0.38			0.98	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 7	1.6											
Control Type: Actuated-U	ncoordinated											
Maximum v/c Ratio: 0.98												

Scenario 1 New Bedford Solid Waste Transfer Station 06/14/2018 Weekday Afternoon Commuter Peak Hour MitigatedSynchro 11 Report McMahon Associates Page 1

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	
Total Split (s)	23.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

Lanes, Volumes, Timings 3: Phillips Road & Theodore Rice Boule	vard/Braley Road	02/06/2023
Intersection Signal Delay: 29.6	Intersection LOS: C	
Intersection Capacity Utilization 83.5%	ICU Level of Service E	
Analysis Period (min) 15		
# 95th percentile volume exceeds capacity, queue may b	be longer.	
Queue shown is maximum after two cycles.		

## Splits and Phases: 3: Phillips Road & Theodore Rice Boulevard/Braley Road

<sup>™</sup> ¶ø2			
24 s	43 s	23 s	
Ø6	<b>↓</b> Ø8		
24 s	43 s		