Development Impact Statement

Pembroke Country Club Age-Qualified Village
94 West Elm Street, Pembroke, MA

July 28, 2022

Introduction

This Development Impact Statement has been prepared in accordance with the requirements of Section VI of the Town of Pembroke Planning Board Rules and Regulations Governing the Issuance of Site Plan Approval. Per the regulations, the purpose is to assess the impacts of the proposed Age-Qualified Cluster Development project on the four subject areas enumerated within the Site Plan Approval Regulations.

Project Summary

The Applicant, Weathervane at Pembroke Country Club, LLC ("Weathervane"), proposes a one-hundred and seventy-two (172) dwelling unit Age-Qualified Cluster Development project, pursuant to Section V.13 of the Zoning Bylaws, for occupancy by individuals 55 years of age or older, with preservation of open/recreational space (the "Project").

The site is approximately 244 acres, zoned Residential District A, and is a series of parcels consolidate by an ANR Plan endorsed by the Planning Board on November 22, 2021, and attached hereto as Exhibit A (the "Property").[1] The Property is presently improved with the Pembroke Country Club, an 18-hole golf course and associated hospitality and maintenance facilities, and two (2) single-family dwellings. The Property possesses frontage on three (3) ways – West Elm, Dwelley Street, and Hazelwood Drive.

Weathervane proposes to redevelop the Property to preserve the existing 18-hole golf course, associated hospitality facilities, and to intersperse the age-restricted, dwellings units throughout the site to be located in proximity to the existing golf holes.[2] The proposed age-qualified dwelling units are comprised of one-hundred and sixty-three (163) new detached dwellings, the renovation of two (2) existing dwellings, and a new multifamily building with seven (7) dwelling units located adjacent to the 10th golf hole

[1] The Property consists of the properties formerly identified as: 94 West Elm Street (Map B11, Lot 33), 0 West Elm Street (Map B10, Lot 4), 80 West Elm Street (Map B10, Lot 4A), 54 Dwelley Street (Map B12, Lot 39), 110 Dwelley Street (Map A12, Lot 47), a portion of 84 Hazelwood Drive (Map A11, Lot 32), and a portion of 58 West Elm Street (Map B10, Lot 3).

[2] As part of the Project layout, some of the golf holes will be altered/reconstructed to accommodate the internal roadway and cluster development layout.

and in proximity to the existing golf course clubhouse. A plan depicting the proposed layout of the Project is attached hereto as Exhibit B.

The 172 dwelling units proposed is equal to the number of building lots that could be created on a conventional subdivision plan of the Property meeting all dimensional and other requirements of the Zoning Bylaw and being in compliance with the Subdivision Rules and Regulations. However, a conventional subdivision would (i) eliminate the existing 18-hole golf course at the Property, (ii) contain limited open space within the development site, and (iii) require two-times more impervious roadway. Moreover, a conventional subdivision would not be age-restricted – and, thus, would have a greater impact on town resources – and would not create any affordable housing (unlike the proposed Project). A plan depicting a conventional subdivision of the Property is attached hereto as Exhibit C.

The proposed Project site layout is more efficient and environmentally-friendly than a conventional subdivision. Weathervane proposes to continue the primary access to the site via the existing driveway at 94 West Elm Street that has historically served as ingress/egress for the golf club. A boulevard-style roadway is proposed to be constructed off of the existing golf club access drive to serve as primary access to the age-qualified dwellings. The internal access drive traverses the site to the egress/ingress at the Dwelley Street frontage, with a series of "pocket-neighborhoods" located off of the drive. Access to the drive is proposed to be controlled by a gate system that allows residents and visitors to access the residential portion of the development site. Separate "pocket-neighborhoods" are proposed to be located off of Dwelley Street and Hazelwood Drive, and have internal access to the site via a multi-use path for pedestrians, bicycles and golf carts – which will also serve as an emergency access connections between different portions of the site. The proposed multifamily building is located adjacent to the 10th golf hole and in proximity to the golf course club house. Internal roadway access to/from the age-qualified dwelling units is proposed via a two-way circular drive. Each of the new detached dwelling units will include a two-car garage, and the existing garages associated with the 80 West Elm Street and 54 Dwelley Street dwellings are proposed to be retained. A detached multi-vehicle garage is also proposed to provide garaged parking for the multifamily building located adjacent to the 10th golf hole. Each of the proposed detached dwelling units will have a separate driveway, with a minimum length of twenty (20) feet, providing additional off-street parking.

All dwelling units within the Age-Qualified Cluster Development Project will be age-restricted, such that at least one resident of each dwelling unit must be over the age of 55.

The proposed dwellings will be modest in size, and maximum number of bedrooms will not exceed three bedrooms per unit and the average number of bedrooms within the overall development will not exceed 2.25 bedrooms per unit. As part of the proposed Project, affordable housing equal to ten percent (10%) of the total number of dwelling units is proposed to be constructed at an offsite location by Weathervane. Finally, at least 50% of the land area of the Property, exclusive of land set aside for road and drainage areas, is proposed to be designated as open space and will continue to be maintained and operated as a golf course.

Anticipated traffic generation for the proposed Age-Qualified Cluster Development Project has been analyzed through the development of a Traffic Impact Assessment study, prepared by Vanasse & Associates, Inc (VAI). The proposed Project is anticipated to generate approximately 720 vehicle trips per day, on average. Notably, if the Property were redeveloped as a 170 single-family home subdivision the average number of vehicle trips per day would be approximately 1,640. See Trip Generation Summary attached hereto as Exhibit D.

Environmental Impact Assessment

The proposed Age-Qualified Cluster Development Project is a redevelopment with the majority of the Project proposed to be constructed on a portion of the previously graded, existing 18-hole golf course. Anticipated environmental impacts and associated mitigation are summarized as follows.

The Property contains approximately 244 acres, of which approximately 193 acres are upland and approximately 51 acres are wetlands. The existing topography of the Property varies through the site – between elevations 100 and 110. The majority of the site is currently developed and maintained as a an 18-hole golf course, with golf holes, water features, and stands of trees providing separation between holes. Existing onsite vegetation will be removed as necessary to accommodate the required alterations of the site to construct the age-restricted cluster development. At least 50% of the land area of the Property, exclusive of land set aside for road and drainage areas, is proposed to be designated as open space and will continue to be maintained and operated as a golf course.

The Property is located partially within the Town's Well Head Protection Zone II and Well Head Protection Zone III, as well and partially within a MassDEP Zone II. The Property is not within a FEMA Flood Zone or within an Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species, as mapped by the Natural Heritage and Endangered Species Program (NHESP). Additionally, the Property is not located within any Area of Critical Environmental Concern (ACEC).

The wetland resource areas on the Property were delineated by South River Environmental between January 2020 and April of 2021, and surveyed by Crocker Design Group. An Order of Resource Area Delineation (ORAD) was issued by the Conservation Commission on October 12, 2021. The site has bordering vegetated wetlands (BVW) systems and isolated vegetated wetlands (IVW) located in various locations throughout the site. A copy of the approved Order of Resource Area Delineation is attached hereto as Exhibit E.

The proposed Project's impact to natural wetland areas on and adjacent to the site will be addressed during the design process and with an Order of Conditions from the Conservation Commission. As the wetland delineation is established by the ORAD, the Applicant intends to file a Notice of Intent with the Conservation Commission once the plans have advanced based upon the input of the Planning Board related to the preliminary layout plan and conventional subdivision plan.

Similarly, a Stormwater Report will be formally submitted during the design review process, once the preliminary layout plan and conventional subdivision plan have been reviewed by the Planning Board. The stormwater management for the proposed Project will meet the requirements of the MassDEP Stormwater Management Standards, the Town of Pembroke Planning Board regulations, and the Town of Pembroke Stormwater Management Bylaw.

The Project is proposed to have its own Private Wastewater Treatment Plant designed in accordance with current MassDEP and Board of Health regulations. The Applicant has filed an application for a Groundwater Discharge Permit with MassDEP and performed multiple days of test pits with MassDEP to determine soil suitability and the best location for the system. The outcome of these test pits determined good soils necessary for the treatment plant.

The proposed Project is an age-restricted cluster development with the retention of significant open space, which is not anticipated to generate significant noise, light, dust, fumes, noxious gases, radiation, or water pollutants.

Fiscal Impact Assessment

The following information summarizes the anticipated fiscal and economic impacts, of the proposed Age-Qualified Cluster Development Project, based on information available at filing. With regard to certain impacts, the proposed Age-Qualified Cluster Development Project is compared to the potential development impacts that would result if a conventional single family subdivision was permitted and constructed. Overall, the fiscal impact of the Project is anticipated to be a net positive annual benefit of approximately $2,000,000 to the Town, with limited impact to Town resources.

Projection of Town Revenues and Costs

In order to calculate the potential local revenues to be generated by the proposed Age-Qualified Cluster Development Project, the existing land and improvement valuations are held constant, as land is not altered and the existing structures are proposed to be retained. Thus, the Applicant calculated the increased revenues and costs based upon the addition if 170 new dwelling units that are proposed to be constructed.

Property Taxes

Weathervane projects an average selling price of $800,000 per unit. Based on this projection, it is anticipated that the proposed development will generate an additional $1,924,400 in yearly property tax revenues, at full sell-out.

# Units	Value	Total Value
170	$800,000	$136,000,000
Est. Taxes @ $14.15 per $1,000		$1,924,400

Motor Vehicle Excise Tax

To estimate motor vehicle excise taxes, an average assessed value of $30,000 has been applied to each vehicle. As the Project will have an average bedroom count per unit of not more than 2.25, Weathervane has applied an average of 1.25 vehicles per unit. Based on these reasonable assumptions, it is estimated that yearly excise tax revenue would be $159,375.

# Cars	Avg. Value	Total Value
213	**$30,000**	**$6,375,000**
$25 x $1,000		**$159,375**

Community Preservation Surcharge

The Community Preservation Surcharge associated with the proposed Age-Qualified Cluster Development Project is estimated to generate $16,839 per year.

Age Qualified Unit Taxes[3]	$1,638,850
1% Surcharge	$16,839

Estimated Yearly Project Revenues

Based on the above, the proposed Age-Qualified Cluster Development Project is estimated to generate $2,100,614 in local annual revenues from property taxes, excise taxes, and surcharges. In addition, one-time payment revenue will also be realized as part of the development, as detailed below.

Building Permit Fees

The Building Department charges $15 per $1,000 of construction costs. It is conservatively estimated that the proposed Project will involve approximately $51,000,000 in building construction costs, generating approximately $765,000 in building permit fee income.

Municipal Service Costs

In order to calculate the potential local municipal service costs (police, fire, other services) associated with the proposed Age-Qualified Cluster Development Project, Weathervane estimates that the net costs equate to five percent (5%) of the estimated yearly revenues. Thus, the projected municipal service costs associated with the Project equate to $105,031.

Fiscal Summary

Based on the foregoing, the proposed Project is estimated to generate $2,100,614 in annual tax revenue at full sell-out, with a resulting net positive annual fiscal impact of $1,995,583.

[3] Unit value is reduced by $100,000 before calculating taxes subject to surcharge.

In addition, the proposed Project is estimated to generate approximately $765,000 in building permit fees during the build-out period.

Estimated Tax Revenues	
Estimated Residential Property Taxes	$1,924,400
Estimated Excise Taxes	$159,375
Estimated Community Preservation Surcharge	$16,839
Total Project Tax Revenues	**$2,100,614**
Estimated Municipal Costs	
Total Costs (5%)	**($105,031)**
Net Annual Positive Fiscal Impact	**+$1,995,583**

Educational Services

As the proposed Age-Qualified Cluster Development Project is age-restricted, Weathervane does not anticipate that the Project will have associated school costs. Notably, if Weathervane elected to construct a non-age-restricted conventional subdivision with 170 new dwellings, the above outlined costs would stay relatively consistent; however, the potential estimated school costs for a conventional Project would have a net annual negative impact of over $3,330,000.

Number of new single family homes	170
Students per home	2
Total students	340
Estimated annual cost per student (2020)	$15,671
Estimated Cost	$5,328,140
Net Annual Negative Impact[4]	($3,332,557)

Police/ Fire Protection

Police and Fire access will be provided via multiple points of ingress/egress throughout the site. The primary access to the site will continue to via the existing driveway at 94 West Elm Street that has historically served as ingress/egress for the golf club. A boulevard-style roadway is proposed to be constructed off of the existing golf club access drive to serve as primary access to the age-qualified dwellings. The internal access drive traverses the site to the egress/ingress at the Dwelley Street frontage, with a series of "pocket-neighborhoods" located off of the drive. Access to the drive is proposed to be controlled by a gate system that allows residents and visitors to access the residential portion of the development site. The Applicant will coordinate with police and fire on a lock box or key access system. The "pocket-neighborhoods" located off of Dwelley Street and Hazelwood Drive have internal access to the site via multi-use paths that serve as an emergency access connections between different portions of the site. The Applicant proposes fire gates at

[4] Utilizing same revenues.

these access locations, and will coordinated the design and access to the gates with the Fire Department.

Highway/Traffic

Anticipated traffic generation for the Project has been analyzed through the development of a Transportation Impact Assessment prepared by VAI. Please see the Traffic Impact Assessment section, below, and copy of VAI's report, attached as Exhibit F, for further information.

Water

The Project will extend the municipal water distribution system already on site, and will undergo review by the Town of Pembroke Water Division as part of the formal submittal.

Sewer

The Project is proposed to have its own Private Wastewater Treatment Plant designed in accordance with current MassDEP and Board of Health regulations. The Applicant has filed an application for a Groundwater Discharge Permit with MassDEP and performed multiple days of test pits with MassDEP to determine soil suitability and the best location for the system.

Recreational Facility Impact

The proposed Age-Qualified Cluster Development Project preserves and incorporates the existing 18-hole golf course within its redevelopment of the Property. As noted previously, a conventional subdivision with a similar number of units would eliminate the golf course. The golf course is, and will continue to be, open to the public.

Community Impact Assessment

The proposed Age-Qualified Cluster Development Project provides moderately-sized, primarily detached dwelling units for occupancy by individuals 55 years of age or older, on approximately 244 acres of land. Weathervane proposes to retain the existing 18-hole golf course, and to intersperse the age-restricted dwellings units throughout the site to be located in proximity to the existing golf holes. The residential development, located within the Residential District A, maintains a significant buffer from all of the surrounding residential properties, and preserves over fifty percent (50%) of the site as open space that will continue to be a golf course open to the public. The site layout is more efficient and environmentally-friendly than a conventional subdivision. Weathervane proposes to continue the primary access to the site via the existing driveway at 94 West Elm Street that has historically served as ingress/egress for the golf club. Moreover, the proposed Age-Qualified Cluster Development Project will provide for more diverse housing options for the aging segment of the population, create affordable housing, while conserving environmental features, woodlands, and open/recreational space.

Traffic Impact Assessment

Anticipated traffic generation for the proposed Age-Qualified Cluster Development Project has been analyzed through the development of a Traffic Impact Assessment study, prepared by Vanasse & Associates, Inc (VAI). Based on their assessment, VAI have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the Institute of Transportation Engineers (ITE),[5] the Project is expected to generate approximately 724 vehicle trips on an average weekday (two-way, 24-hour volume), with 58 vehicle trips expected during the weekday morning peak-hour and 67 vehicle trips expected during the weekday evening peak-hour;

2. Using empirical trip-generation data derived from traffic counts conducted at a similar age qualified residential community (The Villages at Weathervane in Weymouth, Massachusetts), the Project was shown to generate approximately 424 vehicle trips on an average weekday, with 34 vehicle trips expected during the weekday morning peak-hour and 70 vehicle trips during the weekday evening peak-hour. Given that the use of the ITE trip-generation statistics resulted in higher or comparable traffic volumes for the Project, the ITE data was used to assess the potential impact of the Project on the transportation infrastructure;

3. The Project will not result in a significant impact (increase) on motorist delays or vehicle queuing over Existing or anticipated future conditions without the Project (No-Build conditions), with no changes in levels of service shown to occur as a result of the Project and all of the movements at the study area intersections shown to continue to operate at level-of-service (LOS) D or better with the addition of Project-related traffic, where an LOS of "D" or better is defined as "acceptable" traffic operations;

4. All movements exiting the Project site driveways are predicted to operate at LOS B or better during the peak hours with queues of up to one (1) vehicle;

5. No apparent safety deficiencies were noted with respect to the motor vehicle crash history at the study intersections; and

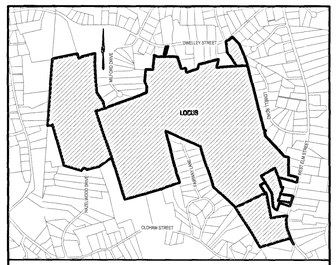
6. Lines of sight at the Project site driveways were found to exceed the recommended minimum sight distance to function in a safe manner based on the appropriate approach speeds.

A copy of the VAI Traffic Impact Assessment is attached hereto as Exhibit F.

[5] *Trip Generation,* 11th Edition; Institute of Transportation Engineers; Washington, DC; 2021.

Exhibit A

PEMBROKE COUNTRY CLUB
DWELLEY STREET, HAZELWOOD DRIVE, & WEST ELM STREET
PEMBROKE, MASSACHUSETTS



LOCATION MAP NOT TO SCALE

RECORD OWNERS:

0 WEST ELM STREET
MAP B10 LOT 4
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 52833 PAGE 287

80 WEST ELM STREET
MAP B10 LOT 4C
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 52833 PAGE 287

94 WEST ELM STREET
MAP B11 LOT 33
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 51721 PAGE 126

54 DWELLEY STREET
MAP B12 LOT 39
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 52108 PAGE 82

110 DWELLEY STREET
MAP A12 LOT 47
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 51721 PAGE 126

84 HAZELWOOD DRIVE
MAP A11 LOT 32
ALEX R. AND HEATHER B. QUINTAL
DEED BOOK 54795 PAGE 263

58 WEST ELM STREET
MAP B10 LOT 3
ESTATE OF CARL E. PETERSON
PLYMOUTH COUNTY PROBATE AND
FAMILY COURT - PL21P1345EA
DEED BOOK 54722 PAGE 46

PLAN REFERENCES:

1. LAND COURT CASE No. 14480
2. PLYMOUTH COUNTY LAYOUT DECREE No. 784 OF 1929
3. PLYMOUTH COUNTY LAYOUT DECREE No. 1098 OF 1950
4. PLAN No. 166 OF 1961 PLAN BOOK 16 PAGE 233
5. PLAN No. 263 OF 1962 PLAN BOOK 12 PAGE 547
6. PLAN No. 599 OF 1964 PLAN BOOK 3138 PAGE 122
7. PLAN No. 663 OF 1969 PLAN BOOK 15 PAGE 320
8. PLAN No. 789 OF 1969 PLAN BOOK 15 PAGE 378
9. PLAN No. 866 OF 1974 PLAN BOOK 18 PAGE 131
10. PLAN No. 121 OF 1979 PLAN BOOK 20 PAGE 752
11. PLAN No. 600 OF 1986 PLAN BOOK 27 PAGE 298
12. PLAN No. 265 OF 1990 PLAN BOOK 27 PAGE 297
13. PLAN No. 364 OF 1992 PLAN BOOK 35 PAGE 241
14. PLAN No. 554 OF 1995 PLAN BOOK 38 PAGE 70
15. PLAN No. 634 OF 1995 PLAN BOOK 38 PAGE 181
16. PLAN No. 280 OF 1998 PLAN BOOK 41 PAGE 60
17. PLAN No. 337 OF 1998 PLAN BOOK 41 PAGE 156
18. PLAN No. 537 OF 1998 PLAN BOOK 41 PAGE 477
19. PLAN No. 867 OF 1999 PLAN BOOK 42 PAGE 1117
20. PLAN No. 282 OF 2001 PLAN BOOK 44 PAGE 478
21. PLAN No. 931 OF 2002 PLAN BOOK 46 PAGE 345
22. PLAN No. 339 OF 2003 PLAN BOOK 46 PAGE 963
23. PLAN No. 29 OF 2004 PLAN BOOK 47 PAGE 732
24. PLAN No. 162 OF 2004 PLAN BOOK 47 PAGE 946
25. PLAN No. 733 OF 2004 PLAN BOOK 48 PAGE 727
26. PLAN No. 475 OF 2010 PLAN BOOK 56 PAGE 194

ZONING DATA:

DISTRICT: RESIDENCE A				
CRITERIA	REQUIRED	LOT A	LOT B	LOT C
MINIMUM LOT AREA	40,000 S.F.	528,158 S.F.	10,828,823 S.F.	133,003 S.F.
CONTIGUOUS UPLAND	32,000 S.F.	208,538 S.F.	8,162,847 S.F.	72,474 S.F.
WITHIN 275 FT. OF WAY LINE	30,000 S.F.	137,946 S.F.	69,483 S.F.	82,468 S.F.
MINIMUM LOT FRONTAGE	150 FT.	479.49 FT.	247.02 FT.	150 FT.
MINIMUM FRONT YARD	40 FT.	49.4 FT.	874 FT.	63.4 FT.
MINIMUM SIDE YARD	20 FT.	78.7 FT.	47 FT.	27.9 FT.
MINIMUM REAR YARD	25 FT.	298.8 FT.	N/A	246.8 FT.

FLOOD NOTE:

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, AS SHOWN ON MAP No. 25023C0204K, WHICH BEARS AN EFFECTIVE DATE OF JULY 6, 2021, AND IS NOT LOCATED WITHIN A SPECIAL FLOOD HAZARD AREA.

NOTES:

1. PROPERTY LINE, STREET LINE AND OWNER INFORMATION WAS COMPILED FROM RECORDS ON FILE AT THE PLYMOUTH COUNTY REGISTRY OF DEEDS AND PEMBROKE TOWN HALL.
2. DETAIL INFORMATION SHOWN HEREON IS BASED UPON AN ON THE GROUND SURVEY PERFORMED BY CROCKER DESIGN GROUP LLC BETWEEN MARCH AND OCTOBER OF 2021. EXISTING STRUCTURE LOCATIONS SHOW ON MAP A12 LOT 47 AND MAP B11 LOT 33 WERE COMPILED FROM AERIAL MAPPING INFORMATION AND SHOULD BE CONSIDERED APPROXIMATE FOR THE PURPOSE OF THIS PLAN.
3. THE SITE IS LOCATED WITHIN THE "RESIDENCE A" ZONING DISTRICT AS DEPICTED ON THE TOWN OF PEMBROKE ZONING MAP.
4. WETLAND RESOURCE AREAS SHOWN HEREON WERE DELINEATED BY SOUTH RIVER ENVIRONMENTAL BETWEEN JANUARY 2020 AND APRIL 2021 AND WERE FIELD LOCATED BY CROCKER DESIGN GROUP LLC. PORTION OF WETLAND RESOURCE AREAS ON THE 58 ELM STREET PARCEL GRAPHICALLY PLOTTED FROM CURRENT PLYMOUTH COUNTY SOIL MAPS AND SHOULD BE CONSIDERED APPROXIMATE FOR THE PURPOSE OF THIS PLAN.
5. THE PURPOSE OF THIS PLAN IS TO DIVIDE MAP A11 LOT 32, MAP A12 LOT 47, MAP B10 LOTS 3, 4 AND 4C, MAP B11 LOT 33 AND MAP B12 LOT 39 TO CREATE LOTS A, B AND C AS SHOWN HEREON.

MASS GRID NAD83

Plymouth County Registry of Deeds
PLAN BOOK 65 PAGE 1004

2021 00000599
Bk: 65 Pg: 1004 Page: 1 of 6
Recorded: 12/15/2021 09:36 AM
ATTEST: John R. Buckley, Jr. Register
Plymouth County Registry of Deeds

PLYMOUTH CO. REG. OF DEEDS
DEC 15 2021
12-15-21
RECORDED

21-599

FOR REGISTRY USE ONLY

PEMBROKE PLANNING BOARD

APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED

CHAIRMAN

DATE: 11/22/21

PLANNING BOARD ENDORSEMENT OF THIS PLAN INDICATES ONLY THAT THE PLAN IS NOT A SUBDIVISION UNDER M.G.L. CH. 41 SEC. 81L AND DOES NOT INDICATE THAT THE LOT IS BUILDABLE, OR THAT IT MEETS ZONING, BOARD OF HEALTH, CONSERVATION OR GENERAL BY-LAW REQUIREMENTS.

300 0 150 300 600
SCALE: 1" = 300'

12/15 #599

Date	Description	No.

Revisions

I HEREBY CERTIFY THAT EACH ITEM REQUIRED BY THE PEMBROKE PLANNING BOARD RULES AND REGULATIONS, SECTION 3.4.1 THROUGH 10 ARE FULLY AND ACCURATELY SHOWN ON THE PLAN.

SHANE M. BRENNER, P.L.S. DATE 11/9/21

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SHANE M. BRENNER, P.L.S. DATE 11/9/21

SHANE M. BRENNER
No. 45917
REGISTERED PROFESSIONAL LAND SURVEYOR

SHANE M. BRENNER
PROFESSIONAL LAND SURVEYOR, MA REGISTRATION #45917

Crocker Design Group
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P: 781-919-0808

Project
PEMBROKE COUNTRY CLUB
DWELLEY STREET, HAZELWOOD DRIVE & WEST ELM STREET
PEMBROKE, MA

Prepared for
WEATHERVANE AT PEMBROKE COUNTRY CLUB, LLC
190 OLD DERBY STREET
HINGHAM, MA 02043

Drawing Title
APPROVAL NOT REQUIRED PLAN OF LAND

Project No.	100-064
Date	11-8-2021
Scale	1"=300'
Drawn By	SMB
Approved By	SMB

Drawing No. COVER

Deed #1402168 $630-

(1 OF 6) 21-599

I HEREBY CERTIFY THAT EACH ITEM REQUIRED BY THE PEMBROKE PLANNING BOARD RULES AND REGULATIONS, SECTION III-B-1 THROUGH 10 ARE FULLY AND ACCURATELY SHOWN ON THE PLAN.

SHANE M. BRENNER, P.L.S. — DATE 11/2/21

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SHANE M. BRENNER, P.L.S. — DATE 11/2/21

SHANE M. BRENNER No. 45917 REGISTERED PROFESSIONAL LAND SURVEYOR

MASS GRID NAD83

(SHEET 3) (SHEET 1)

MATCH LINE

ASSESSORS MAP B11 LOT 47 — 25 FAIRWAY LANE — N/F MICHAEL & JULIE MICHEL — DEED BOOK 50234 PAGE 290 — PLAN BOOK 27 — LOT 20 — 680.39' — N16°39'02"W

ASSESSORS MAP B11 LOT 1L — 19 FAIRWAY LANE — N/F PHILIP A. & M. REARDON KELLI — DEED BOOK 44078 PAGE 124 — PLAN BOOK 27 — LOT 21 — PAGES 295-311

ASSESSORS MAP B10 LOT 1M — 15 FAIRWAY LANE — N/F KILWAY FAMILY TRUST — DEED BOOK 40666 PAGE 47 — PLAN BOOK 27 — LOT 22 — PAGES 295-311

ASSESSORS MAP B10 LOT 1N — 7 FAIRWAY LANE — N/F BENJAMIN TESSER — DEED BOOK 54023 PAGE 115 — PLAN BOOK 27 — LOT 23 — PAGES 295-311

ASSESSORS MAP B10 LOT 1P — 3 FAIRWAY LANE — N/F JOSHUA A. & ZUZANA FALOVA DINERT — DEED BOOK 42575 PAGE 245 — PLAN BOOK 27 — LOT 24 — PAGES 295-311

ASSESSORS MAP B10 LOT 1Q — 41 COUNTRY CLUB CIRCLE — N/F GARY M. & SHOLIN PAGE & EVELYN A. — DEED BOOK 8500 PAGE 49 — PLAN BOOK 27 — LOT 25 — PAGES 295-311 — 630.25' — N45°08'59"W

ASSESSORS MAP B10 LOT 1R — 37 COUNTRY CLUB CIRCLE — N/F GREGORY HOWELL & CARA E. — DEED BOOK 43592 PAGE 156 — PLAN BOOK 27 — LOT 26 — PAGES 295-311

ASSESSORS MAP B10 LOT 1S — 29 COUNTRY CLUB CIRCLE — N/F DANIEL L. & ELIZABETH STEVENS — DEED BOOK 43686 PAGE 159 — PLAN BOOK 27 — LOT 27 — PAGES 295-311

ASSESSORS MAP B10 LOT 1T — 23 COUNTRY CLUB CIRCLE — N/F SUSAN K. SMART-JOBSON — DEED BOOK 40223 PAGE 322 — PLAN BOOK 27 — LOT 28A — PAGES 295-311

ASSESSORS MAP B11 LOT 46 — 31 FAIRWAY LANE — N/F THOMAS E. & LISA A. LEE — DEED BOOK 10258 PAGE 343 — LOT 19 — PLAN BOOK 27 — PAGES 295-311

ASSESSORS MAP B11 LOT 45 — 37 FAIRWAY LANE — N/F MARY K. & ROGER C. AHLFIELD — DEED BOOK 50833 PAGE 211 — LOT 18 — PLAN BOOK 27 — PAGES 295-311

EXISTING FAIRWAY (TYPICAL)

MATCH LINE

(SHEET 2) (SHEET 1)

LOT B
10,628,623± S.F.
OR
244.00± ACRES

94 WEST ELM STREET
MAP B11 LOT 33
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 51721 PAGE 126

UPLAND WETLAND

POND

EXISTING CLUBHOUSE

PAVED PARKING AREA

150' DIAMETER BUILDING CIRCLE

PAVED PARKING AREA

UPLAND WETLAND

POND

WETLAND UPLAND

POND

UPLAND WETLAND

ASSESSORS MAP B11 LOT 30C — 26 LOWELL ROAD — N/F CHARLES R. & JOYCE A. AUBUT — DEED BOOK 7054 PAGE 281 — LOT 3 — PLAN BOOK 15 PAGE 320

ASSESSORS MAP B11 LOT 30B — 20 LOWELL ROAD — N/F DENNIS M. & SUSAN R. HAEN — DEED BOOK 16479 PAGE 295 — LOT 2 — PLAN BOOK 15 PAGE 320

ASSESSORS MAP B11 LOT 30A — 14 LOWELL ROAD — N/F BBC CAPITOL GROUP LLC — DEED BOOK 40443 PAGE 299 — LOT 1 — PLAN BOOK 15 PAGE 320

LOWELL ROAD ~ PUBLIC - 50.00' WIDE ~

S15°25'05"E 158.01'

S15°23'35"E 241.13'

ASSESSORS MAP B11 LOT 31 — 112 WEST ELM STREET — N/F GERARD ERAMO & JUDITH ERAMO CIRIGNANO — DEED BOOK 28315 PAGE 163

S72°21'31"E 98.63'

S43°28'25"E 67.97'

S44°47'05"E 213.06'

S17°02'38"E 96.00'

S17°01'20"W 220.28'

N10°58'10"W 289.83'

380.86' PROPERTY LINE (TYP.) S04°55'49"W

ASSESSORS MAP B11 LOT 8 — 88 WEST ELM STREET — N/F MICHAEL & RACHEL C. O'CONNOR — DEED BOOK 44491 PAGE 271 — LOT 8-1 — PLAN BOOK 48 PAGE 727

ASSESSORS MAP B11 LOT 8-2 — 112 WEST ELM STREET — N/F FRANK M. LAGLOLOTTA, JR. — DEED BOOK 28047 PAGE 340 — LOT 8-2 — PLAN BOOK 48 PAGE 727

ASSESSORS MAP B10 LOT 44 — 88 WEST ELM STREET — N/F RONALD & MARA KARN URQUIZA — DEED BOOK 51632 PAGE 166 — PLAN BOOK 8061 PAGE 21

ASSESSORS MAP B10 LOT 21 — 90 WEST ELM STREET — N/F RUTH KOT REVOCABLE TRUST — DEED BOOK 50096 PAGE 164

N82°09'11"W 40.49'

S17°38'09"W 150.44'

N82°08'33"E

213.44'

S20°11'44"E

CB TYPICAL

S17°54'09"E 67.2'

210.95' FORMER PROPERTY LINE (TYP.)

N17°38'09"E 150.00'

221.49' FORMER PROPERTY LINE (TYP.)

N82°05'56"W 231.62'

EXISTING DWELLING (TO BE RAZED)

S17°41'42"W 247.02'

S17°41'42"W 65.67'

WEST ELM STREET ~ PUBLIC - 1950 PLYMOUTH COUNTY LAYOUT ~ 50.00' WIDE ~

CBdisk (fnd)

CBdisk (fnd)

PARCEL A
(PORTION OF ASSESSORS MAP B10 LOT 3)
169,384± S.F. OR 3.89± ACRES

FORMER PROPERTY LINE

N69°10'37"E 361.09'

N69°10'37"E 123.40'

S56°42'04"W 123.94'

S17°39'33"E 198.91'

20.18'

WATER TANK

CBdh (fnd)

N37°17'58"W 169.44'

N35°36'29"E 265.56'

339.90'

S17°39'33"E 143.58

N64°19'25"W 456.14'

N35°01'10"W 182.02'

WETLAND LINE PER WETLAND DELINEATION (SEE NOTE 4)

ASSESSORS MAP B10 LOT 92 — 64 WEST ELM STREET — N/F TOWN OF PEMBROKE DEPT. OF PUBLIC WORKS — DEED BOOK 16213 PAGE 226

S11°18'27"E 542.01'

S75°20'14"W 214.36'

N37°17'58"W 300.30'

ASSESSORS MAP B10 LOT 4 — 0 WEST ELM STREET — N/F WEATHERVANE AT PEMBROKE — DEED BOOK 52833 PAGE 287 — PLAN BOOK 64 PAGE 345

ASSESSORS MAP B10 LOT 4C — 80 WEST ELM STREET — N/F WEATHERVANE AT PEMBROKE COUNTRY CLUB LLC — DEED BOOK 52833 PAGE 287 — PLAN BOOK 64 PAGE 345

N40°16'15"W 66.66'

N05°46'33"W

N57°12'48"W 45.87'

N57°12'48"W 33.99'

CBdh (fnd)

CB (fnd)

S17°41'42"W 167.65'

N72°15'18"W 122.00'

N17°58'08"W 201.07'

L=55.74' — ASSESSORS MAP B10 LOT 49 — 78 WEST ELM STREET — N/F ANTHONY M. & CHERYL A. D'ANGELO — DEED BOOK 10927 PAGE 45 — PLAN BOOK 7138 PAGE 122

34.02'

347.63'

N81°48'57"E

S17°07'12"W 671.38'

ASSESSORS MAP B10 LOT 30 — 42 WEST ELM STREET — N/F DONALD W. MEAD — DEED BOOK 45039 PAGE 311 — PLAN BOOK 35 PAGE 241 — LOT 1A

ASSESSORS MAP B10 LOT 30A — 40 WEST ELM STREET — N/F ELEANOR M. PUSKARICH & CHING C. PUSKARICH — DEED BOOK 15067 PAGE 103 — PLAN BOOK 35 PAGE 241 — LOTS 1B & 2

150' DIAMETER BUILDING CIRCLE

BARN

#58 EXISTING DWELLING

78.7'

49.4'

PAVED DRIVEWAY

R=1055.07' L=51.70' S19°59'08"E 66.00'

R=686.61' L=451.55'

L=361.79

CBdisk (fnd)

LOT A
529,158± S.F.
OR
12.15± ACRES

GARAGE

WETLAND LINE PER PLYMOUTH COUNTY SOILS MAPS (SEE NOTE 4)

UPLAND WETLAND

UPLAND WETLAND

ASSESSORS MAP B10 LOT 79B — 18 MARIAH'S PATH — N/F ADAM J. & MEGHAN K. GRIER — DEED BOOK 45039 PAGE 307 — LOT 3 — PLAN BOOK 48 PAGE 807

ASSESSORS MAP B10 LOT 17 — 289 OLDHAM STREET — N/F MICHELLE AND JORDAN FOTEV FAMILY REVOCABLE TRUST — DEED BOOK 53557 PAGE 140 — PLAN BOOK 47 PAGE 946 — DEED BOOK 53557 PAGE 132 — PLAN BOOK 64 PAGE 678

561.98'

N46°25'53"W 29.40'

N45°20'00"W 78.45'

S65°30'19"W 127.84'

S64°01'22"W 46.06'

S65°10'57"W 54.91'

N69°10'37"E 182.02'

N35°01'10"W 456.14'

N12°05'59"W 153.55'

N12°05'59"W 218.07'

N31°45'58"W STONEWALL (TYP.)

DRAINAGE EASEMENT PLAN BOOK 48 PAGE 807

ASSESSORS MAP B10 LOT 79C — 15 MARIAH'S PATH — N/F ANTONIO VERA MEDINA & JAMES KANTOR 48099 PAGE 226 — DEED BOOK 46 PAGE 862 — PLAN BOOK 46 PAGE 862

CBdh (fnd) CBdh (fnd) CBdh (fnd) CBdh (fnd) Dh (fnd) Dh (fnd)

371.85'

150.00' WIDE N/F NEW BEDFORD GAS & EDISON LIGHT CO. EASEMENT (APPROXIMATE LOCATION)

298.6'

135.36' N31°45'58"W 169.10'

33.74'

MARIAH'S PATH ~ 50.00' WIDE ~

Plymouth County Registry of Deeds
PLAN BOOK 65 PAGE 1005

FOR REGISTRY USE ONLY

PEMBROKE PLANNING BOARD

APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED

CHAIRMAN

DATE: 11/22/21

PLANNING BOARD ENDORSEMENT OF THIS PLAN INDICATES ONLY THAT THE PLAN IS NOT A SUBDIVISION UNDER M.G.L. CH. 41 SEC. 81L, AND DOES NOT INDICATE THAT THE LOT IS BUILDABLE, OR THAT IT MEETS ZONING, BOARD OF HEALTH, CONSERVATION OR GENERAL BY-LAW REQUIREMENTS.

100 0 50 100 200

SCALE: 1" = 100'

Date	Description	No.
	Revisions	

SHANE M. BRENNER No. 45917 REGISTERED PROFESSIONAL LAND SURVEYOR

SHANE M. BRENNER
PROFESSIONAL LAND SURVEYOR, MA REGISTRATION #45917

Crocker Design Group
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P: 781-919-0808

Project
PEMBROKE COUNTRY CLUB
DWELLEY STREET, HAZELWOOD DRIVE
& WEST ELM STREET
PEMBROKE, MA

Prepared for
WEATHERVANE AT
PEMBROKE COUNTRY CLUB, LLC
190 OLD DERBY STREET
HINGHAM, MA 02043

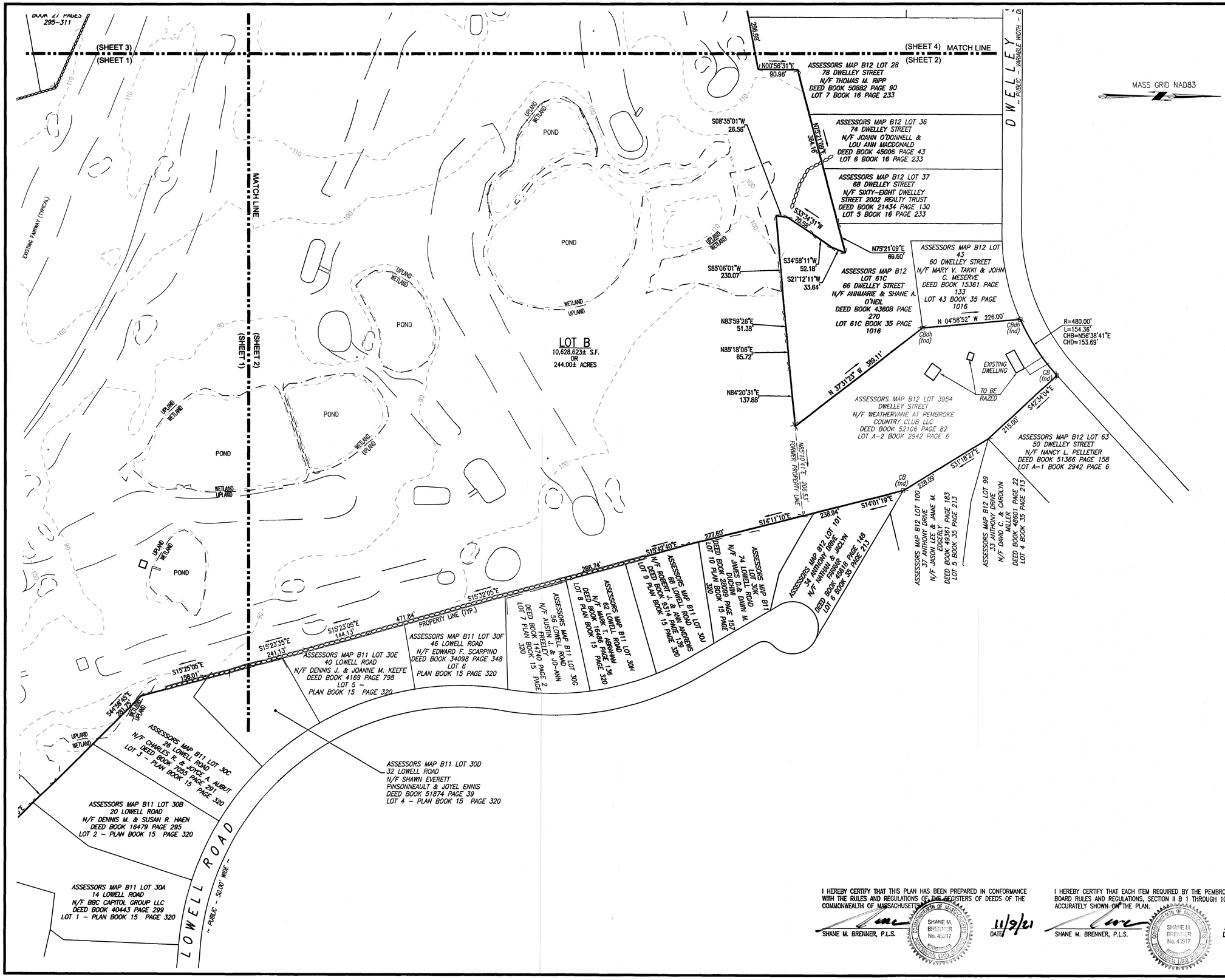
Drawing Title
APPROVAL NOT REQUIRED
PLAN OF LAND

Project No.	100-064
Date	11-8-2021
Scale	1"=100'
Drawn By	SMB
Approved By	SMB

Drawing No. 2 OF 6

(2 OF 6)

21-599



I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SHANE M. BRENNER, P.L.S. — DATE 11/9/21

I HEREBY CERTIFY THAT EACH ITEM REQUIRED BY THE PEMBROKE PLANNING BOARD RULES AND REGULATIONS, SECTION II B 1 THROUGH 10 ARE FULLY AND ACCURATELY SHOWN ON THE PLAN.

SHANE M. BRENNER, P.L.S. — DATE 11/9/21

Plymouth County Registry of Deeds
PLAN BOOK 65 PAGE 1006

FOR REGISTRY USE ONLY

PEMBROKE PLANNING BOARD

APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED

CHAIRMAN

DATE: 11/24/21

PLANNING BOARD ENDORSEMENT OF THIS PLAN INDICATES ONLY THAT THE PLAN IS NOT A SUBDIVISION UNDER M.G.L. CH. 41 SEC. 81L AND DOES NOT INDICATE THAT THE LOT IS BUILDABLE, OR THAT IT MEETS ZONING, BOARD OF HEALTH, CONSERVATION OR GENERAL BY-LAW REQUIREMENTS.

100 0 50 100 200

SCALE: 1" = 100'

Date	Description	No.
	Revisions	

SHANE M. BRENNER
No. 45917
REGISTERED
PROFESSIONAL LAND SURVEYOR
COMMONWEALTH OF MASSACHUSETTS

SHANE M. BRENNER
PROFESSIONAL LAND SURVEYOR, MA REGISTRATION #45917

Crocker Design Group
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P: 781-919-0808

Project
PEMBROKE COUNTRY CLUB
DWELLEY STREET, HAZELWOOD DRIVE & WEST ELM STREET
PEMBROKE, MA

Prepared for
WEATHERVANE AT
PEMBROKE COUNTRY CLUB, LLC
190 OLD DERBY STREET
HINGHAM, MA 02043

Drawing Title
APPROVAL NOT REQUIRED
PLAN OF LAND

Project No.	100-064
Date	11-8-2021
Scale	1"=100'
Drawn By	SMB
Approved By	SMB

Drawing No. 3 OF 6

(3 OF 6)

'21-599

Plymouth County Registry of Deeds
PLAN BOOK 65 PAGE 1007

FOR REGISTRY USE ONLY

PEMBROKE PLANNING BOARD

APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED

CHAIRMAN

DATE: 11/22/21

PLANNING BOARD ENDORSEMENT OF THIS PLAN INDICATES ONLY THAT THE PLAN IS NOT A SUBDIVISION UNDER M.G.L. CH. 41 SEC. 81L, AND DOES NOT INDICATE THAT THE LOT IS BUILDABLE, OR THAT IT MEETS ZONING, BOARD OF HEALTH, CONSERVATION OR GENERAL BY-LAW REQUIREMENTS.

100 0 50 100 200
SCALE: 1" = 100'

Date	Description	No.
	Revisions	

SHANE M. BRENNER
No. 45917
REGISTERED PROFESSIONAL LAND SURVEYOR
COMMONWEALTH OF MASSACHUSETTS

SHANE M. BRENNER
PROFESSIONAL LAND SURVEYOR, MA REGISTRATION #45917

Crocker Design Group
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P: 781-919-0808

Project
PEMBROKE COUNTRY CLUB
DWELLEY STREET, HAZELWOOD DRIVE & WEST ELM STREET
PEMBROKE, MA

Prepared for
WEATHERVANE AT PEMBROKE COUNTRY CLUB, LLC
190 OLD DERBY STREET
HINGHAM, MA 02043

Drawing Title
APPROVAL NOT REQUIRED PLAN OF LAND

Project No.	100-064
Date	11-8-2021
Scale	1"=100'
Drawn By	SMB
Approved By	SMB
Drawing No.	4 OF 6

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SHANE M. BRENNER, P.L.S. — DATE 11/2/21

I HEREBY CERTIFY THAT EACH ITEM REQUIRED BY THE PEMBROKE PLANNING BOARD RULES AND REGULATIONS, SECTION II.B.1 THROUGH 10 ARE FULLY AND ACCURATELY SHOWN ON THE PLAN.

SHANE M. BRENNER, P.L.S. — DATE 11/2/21

(4 OF 6) 21-599

Plymouth County Registry of Deeds
PLAN BOOK 65 PAGE 1008

FOR REGISTRY USE ONLY

PEMBROKE PLANNING BOARD

APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED

CHAIRMAN

DATE: 11/22/21

PLANNING BOARD ENDORSEMENT OF THIS PLAN INDICATES ONLY THAT THE PLAN IS NOT A SUBDIVISION UNDER M.G.L. CH. 41 SEC. 81L, AND DOES NOT INDICATE THAT THE LOT IS BUILDABLE, OR THAT IT MEETS ZONING, BOARD OF HEALTH, CONSERVATION OR GENERAL BY-LAW REQUIREMENTS.

100 0 50 100 200
SCALE: 1" = 100'

Date	Description	No.
	Revisions	

SHANE M. BRENNER
No. 45917
REGISTERED PROFESSIONAL LAND SURVEYOR
COMMONWEALTH OF MASSACHUSETTS

SHANE M. BRENNER
PROFESSIONAL LAND SURVEYOR, MA REGISTRATION #45917

Crocker Design Group
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P: 781-919-0808

Project
PEMBROKE COUNTRY CLUB
DWELLEY STREET, HAZELWOOD DRIVE & WEST ELM STREET
PEMBROKE, MA

Prepared for
WEATHERVANE AT PEMBROKE COUNTRY CLUB, LLC
190 OLD DERBY STREET
HINGHAM, MA 02043

Drawing Title
APPROVAL NOT REQUIRED PLAN OF LAND

Project No.	100-084
Date	11-8-2021
Scale	1"=100'
Drawn By	SMB
Approved By	SMB
Drawing No.	5 OF 6

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SHANE M. BRENNER, P.L.S. — DATE 11/2/21

I HEREBY CERTIFY THAT EACH ITEM REQUIRED BY THE PEMBROKE PLANNING BOARD RULES AND REGULATIONS, SECTION 4-B-1 THROUGH 10 ARE FULLY AND ACCURATELY SHOWN ON THE PLAN.

SHANE M. BRENNER, P.L.S. — DATE 11/2/21

(5 of 6)

'21-599

Plymouth County Registry of Deeds
PLAN BOOK 65 PAGE 1009

FOR REGISTRY USE ONLY

PEMBROKE PLANNING BOARD

APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED

CHAIRMAN

DATE: 11/22/21

PLANNING BOARD ENDORSEMENT OF THIS PLAN INDICATES ONLY THAT THE PLAN IS NOT A SUBDIVISION UNDER M.G.L. CH. 41 SEC. 81L, AND DOES NOT INDICATE THAT THE LOT IS BUILDABLE, OR THAT IT MEETS ZONING, BOARD OF HEALTH, CONSERVATION OR GENERAL BY-LAW REQUIREMENTS.

100 0 50 100 200
SCALE: 1" = 100'

Date	Description	No.
	Revisions	

SHANE M. BRENNER
No. 45917
REGISTERED PROFESSIONAL LAND SURVEYOR
COMMONWEALTH OF MASSACHUSETTS

SHANE M. BRENNER
PROFESSIONAL LAND SURVEYOR, MA REGISTRATION #45917

Crocker Design Group
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P: 781-919-0808

Project
PEMBROKE COUNTRY CLUB
DWELLEY STREET, HAZELWOOD DRIVE & WEST ELM STREET
PEMBROKE, MA

Prepared for
WEATHERVANE AT PEMBROKE COUNTRY CLUB, LLC
190 OLD DERBY STREET
HINGHAM, MA 02043

Drawing Title
APPROVAL NOT REQUIRED PLAN OF LAND

Project No.	100-064
Date	11-8-2021
Scale	1"=100'
Drawn By	SMB
Approved By	SMB
Drawing No.	6 OF 6

I HEREBY CERTIFY THAT EACH ITEM REQUIRED BY THE PEMBROKE PLANNING BOARD RULES AND REGULATIONS, SECTION V.B.3. THROUGH 10 ARE FULLY AND ACCURATELY SHOWN ON THE PLAN.

SHANE M. BRENNER, P.L.S. — DATE 11/9/21

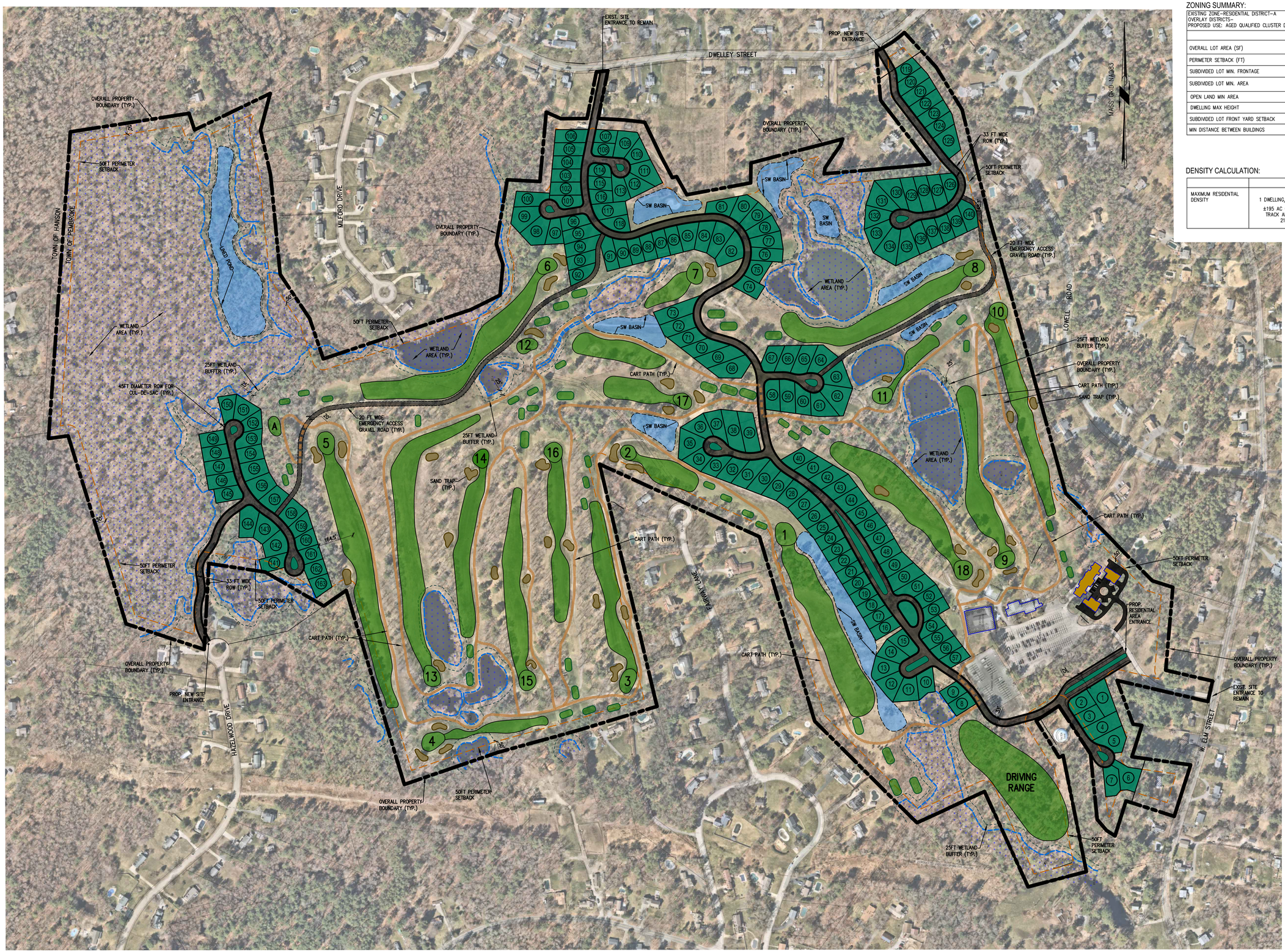
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

SHANE M. BRENNER, P.L.S. — DATE 11/9/21

(6 of 6)

21-599

Exhibit B



ZONING SUMMARY:

EXISTING ZONE–RESIDENTIAL DISTRICT–A
OVERLAY DISTRICTS–
PROPOSED USE: AGED QUALIFIED CLUSTER DEVELOPMENT –SECTION V 13.

	REQUIRED	PROPOSED
OVERALL LOT AREA (SF)	1,306,800 SF (30 AC)	TOTAL=10,628,623± SF(244 AC)
PERIMETER SETBACK (FT)	50'	50'
SUBDIVIDED LOT MIN. FRONTAGE	N/A	N/A
SUBDIVIDED LOT MIN. AREA	N/A	N/A
OPEN LAND MIN AREA	50% OF TOTAL TRACK AREA	±180 AC OF OPEN LAND=±74%
DWELLING MAX HEIGHT	2.5 STORIES	2.5 STORIES
SUBDIVIDED LOT FRONT YARD SETBACK	18 FT	MORE OR EQUAL TO 18 FT
MIN DISTANCE BETWEEN BUILDINGS	20 FT	MORE OR EQUAL TO 20 FT

DENSITY CALCULATION:

	REQUIRED	PROPOSED
MAXIMUM RESIDENTIAL DENSITY	1 DWELLING/ 40,000 SF OF UPLAND ±195 AC OF UPLAND WITHIN TOTAL TRACK AREA THEREFORE MAX OF 212 UNITS ALLOWED	172 RESIDENTIAL UNITS

172 UNITS
PROPOSED AQV CONCEPT PLAN
PEMBROKE COUNTRY CLUB
PEMBROKE, MA 02359

DATE: 07-27-2022

200 100 0 200 400

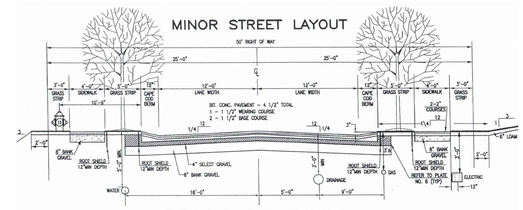
SCALE: 1"=200'

Crocker Design Group
2 SHARP STREET, UNIT A
HINGHAM, MA 02043
P: 781-919-0808

C:\2021\Crocker Design Group, LLC\Gabriel Crocker - Projects\100-364 Pembroke - Country Club\dwg\Concept Plans_3-8 SUBDIVISION PLAN AQV.dwg, Subdivision, Jul 27, 2022 12:10

Exhibit C

MINOR STREET LAYOUT

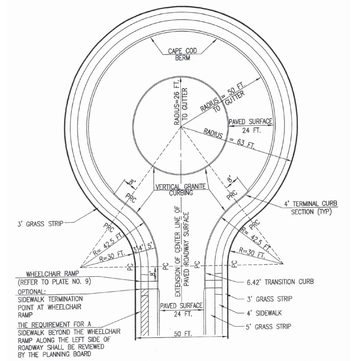


TYPICAL ROADWAY SECTION

(NOT TO SCALE)

ZONING TABLE:

ZONE: RESIDENT DISTRICT A	
REQUIREMENT	REQUIRES
MINIMUM LOT AREA (SF)	40,000 SF
MINIMUM LOT WIDTH (FT)	150 FT
MINIMUM LOT FRONTAGE (FT)	150 FT
MINIMUM FRONT YARD (FT)	40 FT
MINIMUM SIDE YARD (FT)	20 FT
MINIMUM REAR YARD (FT)	25 FT
MAXIMUM BLDG COVERAGE (%)	N/A
MAXIMUM HEIGHT (STORIES)	2.5 STORIES



MINOR STREET CUL-DE-SAC CONSTRUCTION DETAILS

(NOT TO SCALE)

SUBDIVISION RULES AND REGULATIONS TABLE :

REQUIREMENT	REQUIRED
R.O.W. WIDTH (MINOR STREET)	50 FT
CENTERLINE RADIUS	150 FT
ROW RADIUS AT INTERSECTIONS	30 FT
DEAD END STREET LENGTH	1,000 FT
CUL-DE-SAC OUTSIDE ROADWAY DIAM.	100 FT
CUL-DE-SAC R.O.W. DIAM.	126 FT
CUL-DE-SAC INSIDE CIRCULAR LANDSCAPE ISLAND RADIUS	26 FT
SIDEWALK	4' WIDE SIDEWALK BOTH SIDES OF THE ROAD WITH A 5' (ROAD SIDE) AND 3' (ROW SIDE) GRASS PLOT
MIN. ROADWAY WIDTH (MINOR STREET)	24 FT
CURBING	12" CAPE COD BERM SHOULD BE PROVIDED ALONG EACH SIDE

172 POTENTIAL BUILDABLE SINGLE FAMILY LOTS

PROPOSED SUBDIVISION CONCEPT PLAN

PEMBROKE COUNTRY CLUB

PEMBROKE, MA 02359

DATE: 7-27-2022

200 100 0 200 400

SCALE: 1"=200'

Crocker Design Group

2 SHARP STREET, UNIT A
HINGHAM, MA 02043
P: 781-919-0808

Exhibit D

Table 1
PEMBROKE COUNTRY CLUB REDEVELOPMENT
(AGE-RESTRICTED)
TRIP-GENERATION SUMMARY

Time Period/Direction	(A) Single-Family Component (162 dwellings)[a]	(B) Multifamily Component (8 units)[b]	**(C = A + B) Total Trips**
Average Weekday Daily:			
Entering	349	13	**362**
Exiting	349	13	**362**
Total	698	26	**724**
Weekday Morning Peak Hour:			
Entering	18	1	**19**
Exiting	38	1	**39**
Total	56	2	**58**
Weekday Evening Peak Hour:			
Entering	39	1	**40**
Exiting	26	1	**27**
Total	65	2	**67**

[a]Based on ITE LUC 251, *Senior Adult Housing – Single-Family*.
[b]Based on ITE LUC 252, *Senior Adult Housing – Multifamily*.

Table 2
PEMBROKE COUNTRY CLUB REDEVELOPMENT
(NON-AGE RESTRICTED)
TRIP-GENERATION SUMMARY

Time Period/Direction	(A) Single-Family Component (170 dwellings)[a]
Average Weekday Daily:	
Entering	822
Exiting	822
Total	1,644
Weekday Morning Peak Hour:	
Entering	31
Exiting	90
Total	121
Weekday Evening Peak Hour:	
Entering	103
Exiting	61
Total	164

[a]Based on ITE LUC 210, *Single-Family Detached Housing*.

Exhibit E

TOWN OF PEMBROKE
CONSERVATION COMMISSION

October 12, 2021

Weathervane at Pembroke Country Club, LLC
190 Old Derby Street
Hingham, Ma 02043

RE: Order of Resource Area Delineation (ORAD)
Pembroke Country Club, 94 West Elm Street, Pembroke, MA
DEP file number: SE056-1075

To Whom it May Concern:

Enclosed please find the Order of Resource Area Delineation (ORAD) for the property located at the Pembroke Country Club and associated parcels, 94 West Elm Street in Pembroke, Massachusetts. Please be aware that this ORAD is valid for three years from the date of issuance and will expire on October 12, 2024. Please be also aware that this ORAD does not relieve the applicant from complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.

If you have any questions in this regard, please do not hesitate to contact me at (781) 293-4674.

Sincerely,

Melissa Joyce
Administrative Agent
Pembroke Conservation Commission

cc: DEP, Southeast Region
John Zimmer, South River Environmental

COPY

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 4B - Order of Resource Area Delineation
Massachusetts Wetlands Protection Act M.G.L. c. 131 S40

Provided by MassDEP:
MassDEP File #:056-1075
eDEP Transaction #:1314384
City/Town:PEMBROKE

A. General Information

1. Conservation Commission PEMBROKE
2. This Issuance is for (Check one):
   a. ☑ Order of Resource Area Delineation
   b. ☐ Amended Order of Resource Area Delineation

3. Applicant Details

a. First Name		b. Last Name		
c. Organization	WEATHERVANE AT PEMBROKE COUNTRY CLUB LLC			
d. Mailing Address	190 OLD DERBY STREET			
e. City/Town	PEMBROKE	f. State	MA	g. ZIP

4. Property Owner (if different from applicant):

a. First Name		b. Last Name		
c. Organization	WEATHERVANE AT PEMBROKE COUNTRY CLUB LLC			
d. Mailing Address	190 OLD DERBY STREET			
e. City/Town	PEMBROKE	f. State	MA	g. ZIP

5. Project Location

a. Street Address	94 WEST ELM STREET		
b. City/Town	PEMBROKE	c. Zip	02359
d. Assessors Map/Plat#	B10, B11, B12, A11, A12	e. Parcel/Lot#	4,3,4C; 33; 39; 32;47
f. Latitude	42.07962N	g. Longitude	70.82758W

6. Dates

a. Date ANRAD Filed	6/21/2021	b. Date Public Hearing Closed	10/7/2021	c. Date Of Issuance	10/12/2021

7. Final Approved Plans and Other Documents

Plan Title	Plan Prepared By	Plan Signed By	Plan Final Date	Plan Scale
WETLAND LOCATION PLAN	SHANE M. BRENNER, PLS		9/30/2021	1"=120'

B. Order of Delineation

1. The Conservation Commission has determined the following (check whichever is applicable)

a. ☑ **Accurate:** The boundaries described on the referenced plan(s) above and in the Abbreviated Notice of Resource Area Delineation are accurately drawn for the following resource area(s):

1. ☑ Bordering Vegetated Wetlands
2. ☑ Other resource area(s), specifically
   a.PONDS WITH BVW, INLAND BANK TO PERENNIAL STREAM, RIVERFRONT AREA

b. ☐ **Modified:** The boundaries described on the plan(s) referenced above, as modified by the Conservation Commission from the plans contained in the Abbreviated Notice of Resource Area Delineation, are accurately drawn from the following resource area(s):

1. ☐ Bordering Vegetated Wetlands
2. ☐ Other resource area(s), specifically
   a.

c. ☐ **Inaccurate::** The boundaries described on the referenced plan(s) and in the Abbreviated Notice of Recource Area Delineation

were found to be inaccurate and cannot be confirmed for the following resource area(s):

1. ☐ Bordering Vegetated Wetlands
2. ☐ Other resource area(s), specifically
   a.
3. The boundaries were determined to be inaccurate because:

C. Findings

This Order of Resource Area Delineation determines that the boundaries of those resource areas noted above, have been delineated and approved by the Commission and are binding as to all decisions rendered pursuant to the Massachusetts Wetlands Protection Act (M.G.L. c.131, S 40) and its regulations (310 CMR 10.00). This Order does not, however, determine the boundaries of any resource area or Buffer Zone to any resource area not specifically noted above, regardless of whether such boundaries are contained on the plans attached to this Order or to the Abbreviated Notice of Resource Area Delineation. This Order must be signed by a majority of the Conservation Commission. The Order must be sent by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate DEP Regional Office (see http://www.mass.gov/dep/about/region/findyour.htm).

D. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate DEP Regional Office to issue a Superseding Order of Resource Area Delineation. When requested to issue a Superseding Order of Resource Area Delineation, the Department's review is limited to the objections to the resource area delineation(s) stated in the appeal request. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant. Any appellants seeking to appeal the Department?s Superseding Order of Resource Area Delineation will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order or Determination, or providing written information to the Department prior to issuance of a Superseding Order or Determination. The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act, (M.G.L. c. 131, S 40) and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal bylaw or ordinance, and not on the Massachusetts Wetlands Protection Act or regulations, the Department of Environmental Protection has no appellate jurisdiction.

E. Signatures

1. Date of Original Order

2. No. of Signatures required 4

This Order is valid for three years from the date of issuance.

If this Order constitutes an Amended Order of Resource Area Delineation, this Order does not extend the issuance date of the original Final Order, and the Amended Order will expire on the date of the Original Final Order unless extended in writing by the Department.

This Order is issued to the applicant and the property owner (if different) as follows:

3. ☐ By hand delivery on

a. Date _____

4. ☒ By certified mail, return receipt requested on

a. Date October 12, 2021

MASS GRID NAD83

(SHEET 2) MATCH LINE (SHEET 1)

(SHEET 2) (SHEET 1) MATCH LINE

37 FAIRWAY LANE
MAP B11 LOT 45
N/F
MARY K. AHLFELD

MAP B11 LOT 44
N/F MICHAEL T. ZEOLI

31 FAIRWAY LANE
MAP B11 LOT 46
N/F THOMAS E. LEE

25 FAIRWAY LANE
MAP B11 LOT 47
N/F MICHAEL MCNEIL

19 FAIRWAY LANE
MAP B11 LOT 48
N/F PHILIP A.
REARDON

15 FAIRWAY LANE
MAP B10 LOT 1L
N/F KILNAPP
FAMILY TRUST

3 FAIRWAY LANE
MAP B10 LOT 1M
N/F JOSHUA A.
DINER

1 FAIRWAY LANE
MAP B10 LOT 1N
N/F WILLIAM S.
MULRAIN

41 COUNTRY
CLUB CIRCLE
MAP B10 LOT 1P
GARY M. SJOLIN

33 COUNTRY CLUB CIRCLE
MAP B10 LOT 1Q
N/F GREGORY J.
HOWELL

29 COUNTRY
CLUB CIRCLE
MAP B10 LOT 1R
N/F DANIEL J.
STEVENS

23 COUNTRY CLUB CIRCLE
MAP B10 LOT 1S
N/F SUSAN K.
SMART-JUDSON

291 OLDHAM STREET
MAP B10 LOT 17A
N/F OLDHAM STREET NOMINEE TRUST

BEDFORD GAS AND EDISON LIGHT CO. EASEMENT

94 WEST ELM STREET
MAP B11 LOT 33 &
110 DWELLEY STREET
MAP A12 LOT 47
WEATHERVANE AT
PEMBROKE
COUNTRY CLUB, LLC
7,777,952± SF
178.56± AC

EXISTING FAIRWAY (TYPICAL)

EXISTING CLUBHOUSE

PARKING AREA

WATER TANK

WETLAND SERIES "A"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "R"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "M"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "O"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "X"
BORDERING VEGETATED WETLAND (BVW)

SERIES "N"
GOLF COURSE WATER HAZARD
NON-JURISDICTIONAL

SERIES "P"
GOLF COURSE WATER HAZARD
NON-JURISDICTIONAL

SERIES "Q"
GOLF COURSE WATER HAZARD
NON-JURISDICTIONAL

WETLAND FLAG (typ.)

ISLAND

58 WEST ELM STREET
MAP B10 LOT 3
CARL E. PETERSON

64 WEST ELM STREET
MAP B10 LOT 92
N/F TOWN OF PEMBROKE

MAP B10 LOT 4
WEATHERVANE AT
PEMBROKE
COUNTRY CLUB, LLC
206,980 SF
4.75 AC ±

78 WEST ELM STREET
MAP B10 LOT 4B
N/F ANTHONY M. D'ANGELO

80 WEST ELM ST.
MAP B10 LOT 4C
WEATHERVANE AT
PEMBROKE
COUNTRY
CLUB, LLC
40,076 SF
0.92 AC ±

98 WEST ELM STREET
MAP B10 LOT 4A
N/F PAUL J. MEMMO

90 WEST ELM STREET
MAP B10 LOT 5
RUTH ROY REVOCABLE LIVING

98 WEST ELM STREET
MAP B11 LOT 8
N/F MICHAEL O'CONNOR

GARDEN AREA

112 WEST ELM
STREET
MAP B11 LOT
88
N/F FRANK H.
LANZILLOTTA JR.

118 WEST ELM STREET
MAP B11 LOT 31
N/F GERARD ERAMO

128 WEST ELM STREET
MAP B11 LOT 10A
N/F JOSEPH E. MARANI

PROPERTY LINE

WEST ELM STREET
(PUBLIC - 50' WIDE)

DECREE No. 11098
DECREE No. 1784

LOWELL ROAD

32 LOWELL ROAD
MAP B11 LOT 30D
N/F WAYNE R. ROBERTSON

26 LOWELL ROAD
MAP B11 LOT 30C
N/F CHARLES R. AUBUT

20 LOWELL ROAD
MAP B11 LOT 30B
N/F HAEN DENNIS M.

14 LOWELL ROAD
MAP B11 LOT 30A
N/F BBC CAPITAL GROUP LLC

40 LOWELL ROAD
MAP B11 LOT 30E
N/F DENNIS J. KEEFE

46 LOWELL ROAD
MAP B11 LOT 30F
N/F EDWARD F. SCARPINO

56 LOWELL ROAD
MAP B11 LOT 30G
N/F AUSTIN J. FREELEY

62 LOWELL ROAD
MAP B11 LOT 30H
N/F MARK T. ABRAHAM

68 LOWELL ROAD
MAP B11 LOT 30J
N/F ROBERT J. ANDREWS

74 LOWELL ROAD
MAP B11 LOT 30K
N/F JAMES D. DUCHINI

78 LOWELL ROAD
MAP B12 LOT 65
N/F JOSEPH E. DONLAN

78 DWELLEY STREET
MAP B12 LOT 28
N/F THOMAS M. RIPP

74 DWELLEY STREET
MAP B12 LOT 36
N/F JOANN O'DONNELL

68 DWELLEY STREET
MAP B12 LOT 37
N/F SIXTY-EIGHT DWELLEY
STREET 2002 REALTY TRUST

66 DWELLEY STREET
MAP B12 LOT 61C
N/F ANNMARIE O'NEIL

54 DWELLEY STREET
MAP B12 LOT 39
WEATHERVANE AT
PEMBROKE
COUNTRY CLUB, LLC
153,529 SF ±
3.52 AC ±

0 120 240 360
SCALE
1"=120'

RECORD OWNERS:

0 WEST ELM
MAP B10 LOT4
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 52833 PAGE 287

80 WEST ELM
MAP B10 LOT 4C
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 52833 PAGE 287

94 WEST ELM STREET
MAP B11 LOT 33
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 51721 PAGE 126

54 DWELLEY STREET
MAP B12 LOT 39
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 52106 PAGE 82

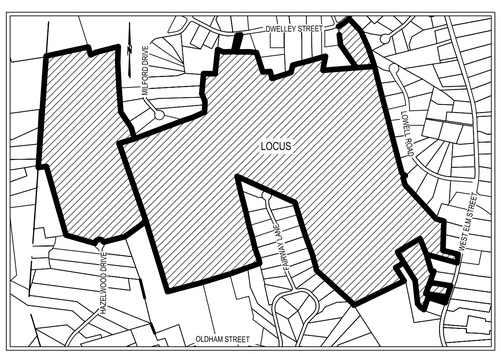
110 DWELLEY STREET
MAP A12 LOT 47
WEATHERVANE AT PEMBROKE
COUNTRY CLUB, LLC
DEED BOOK 51721 PAGE 126

84 HAZELWOOD DRIVE
MAP A11 LOT 32
ALEX R. AND HEATHER B. QUINTAL
DEED BOOK 54795 PAGE 263

58 WEST ELM STREET
MAP B10 LOT 3
CARL E. PETERSON
DEED BOOK 54722 PAGE 46

NOTES:

1. WETLAND RESOURCE AREAS SHOWN HEREON DELINEATED BY SOUTH RIVER ENVIRONMENTAL LLC BETWEEN JANUARY 2020 AND APRIL OF 2021.
2. PROPERTY LINE INFORMATION SHOWN HEREON IS THE RESULTS OF A FIELD SURVEY PERFORMED BY DOUGLAS L. AABERG BETWEEN SEPTEMBER AND NOVEMBER OF 2019.



LOCUS MAP
NOT TO SCALE

DATE	REVISIONS

PROJECT:

PEMBROKE COUNTRY CLUB

WEST ELM STREET, DWELLEY STREET AND HAZELWOOD DRIVE

PEMBROKE, MA

PREPARED FOR:

WEATHERVANE AT PEMBROKE COUNTRY CLUB, LLC
190 OLD DERBY STREET
HINGHAM, MA

PLAN TITLE:

WETLAND LOCATION PLAN

SURVEYOR:

SHANE M. BRENNER, PLS
LIC MA #45917
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P)781-919-0808

COMMONWEALTH OF MASSACHUSETTS
SHANE M. BRENNER
No. 45917
REGISTERED PROFESSIONAL LAND SURVEYOR

DATE: MAY 25, 2021
SCALE: 1" = 120'
DRAWN BY: MPM
FILE: 100-064
SHEET: 1 OF 3

MASS GRID NAD83

(SHEET 3)
(SHEET 2) MATCH LINE

61 HAZELWOOD DRIVE
MAP A10 LOT 47
N/F JENNIFER L. TROY

67 HAZELWOOD DRIVE
MAP A10 LOT 47
N/F KATHLEEN SUTKOWSKI

73 HAZELWOOD DRIVE
MAP A11 LOT 16
N/F DAVID CARDINAL

79 HAZELWOOD DRIVE
MAP A11 LOT 17
N/F BRIAN J. KRAUSE

0 OLDHAM STREET
MAP A10 LOT 5A
N/F PETERSON FAMILY TRUST

323 OLDHAM STREET
MAP A10 LOT 6
N/F SHAWN R. HENNIGAN

67 COUNTRY CLUB CIRCLE
MAP B10 LOT 89
N/F THOMAS F. JAMES

61 COUNTRY CLUB CIRCLE
MAP B10 LOT 90
N/F KEVIN D. PRENDEVILLE

10 FAIRWAY LANE
MAP B10 LOT 1J
N/F
KEVIN T.
O'CONNOR

16 FAIRWAY LANE
MAP B10 LOT 1K
N/F
CHERYL
LEAVITT-KRUEGER

22 FAIRWAY LANE
MAP B11 LOT 38
N/F CARSON-SMITH
FAMILY

28 FAIRWAY LANE
MAP B11 LOT 39
N/F
DAVID E. HAUGHN

34 FAIRWAY LANE
MAP B11 LOT 40
N/F MELINDA HAWKES

40 FAIRWAY LANE
MAP B11-41
N/F DONALD PARK JR.

44 FAIRWAY LANE
MAP B11 LOT 42
N/F JOHN AHEARN

31 FAIRWAY LANE
MAP B11 LOT 46
N/F THOMAS E. LEE

37 FAIRWAY LANE
MAP B11 LOT 45
N/F
MARY K. AHLFELD

45 FAIRWAY LANE
MAP B11 LOT 44
N/F MICHAEL T. ZEOLI

52 FAIRWAY LANE
MAP B11 LOT 43
N/F FITZPATRICK LAWRENCE

94 WEST ELM STREET
MAP B1,1 LOT 33 &
110 DWELLEY STREET
MAP A12 LOT 47
WEATHERVANE AT
PEMBROKE
COUNTRY CLUB, LLC
7,777,952± SF
178.56± AC

63 MILFORD DRIVE
MAP A11 LOT 25
N/F GERARD J.
RUGGIERO

57 MILFORD DRIVE
MAP A11 LOT 24
N/F MICHAEL HANSEN

51 MILFORD DRIVE
MAP A11 LOT 23
N/F MARK SANTORO

45 MILFORD DRIVE
MAP A11 LOT 22
N/F LANE WATKINS

39 MILFORD DRIVE
MAP A11 LOT 21
N/F GERARD J.
RUGGIERO

33 MILFORD DRIVE
MAP A12 LOT 65
N/F CHRISTOPHER
KEMP

27 MILFORD DRIVE
MAP A12 LOT 64
N/F PAUL LYONS

174 DWELLEY STREET
MAP A12 LOT 28A
N/F KRISTA HENDRIX

MILFORD DRIVE

70 MILFORD DRIVE
MAP A11 LOT 26
N/F RICHARD A. FEDERICO

64 MILFORD DRIVE
MAP A11 LOT 27
N/F WILLIAM C. DARGIE

58 MILFORD
DRIVE MAP
A11 LOT 28
N/F
MARGARET M.
MORRIS

52 MILFORD DRIVE
MAP A11 LOT 29
N/F DALE D. MORRIS

46 MILFORD DRIVE
MAP A11 LOT 30
N/F CHRISTO GIZELIS

0 DWELLEY STREET
MAP A12 LOT 62
N/F RICHARD A. FEDERICO

116 DWELLEY STREET
MAP A12 LOT 21
N/F URN REALTY/TRUST

104 DWELLEY STREET
MAP A12 LOT 27
N/F HENRY W. MOSCA JR

92 DWELLEY STREET
MAP B12 LOT 61
N/F DAVID J. SCOTT

78 DWELLEY STREET
MAP B12 LOT 28
N/F THOMAS M. RIPP

WETLAND SERIES "A"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "B"
ISOLATED VEGETATED WETLAND (IVW)

WETLAND SERIES "C"
ISOLATED VEGETATED WETLAND (IVW)

WETLAND SERIES "D"
BORDERING VEGETATED WETLAND (BVW)
INTERMITTENT STREAM

WETLAND SERIES "E"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "F"
ISOLATED VEGETATED WETLAND (IVW)

WETLAND SERIES "G"
ISOLATED VEGETATED WETLAND (IVW)

WETLAND SERIES "I"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "J"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "K"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "L"
BORDERING VEGETATED WETLAND (BVW)
INTERMITTENT STREAM

WETLAND SERIES "M"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "R"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "S"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "T"
BORDERING VEGETATED WETLAND (BVW)

SERIES "D"
GOLF COURSE WATER HAZARD
NON-JURISDICTIONAL

SERIES "E"
GOLF COURSE WATER HAZARD
NON-JURISDICTIONAL

SERIES "J"
GOLF COURSE WATER HAZARD
NON-JURISDICTIONAL

SERIES "K"
GOLF COURSE WATER HAZARD
NON-JURISDICTIONAL

EXISTING FAIRWAY (TYPICAL)

PROPERTY LINE

N 18°49'27" W 1039.31'
S 73°59'51" W 225.05'
N 16°40'27" W 927.23'
S 71°02'21" W 229.23'
S 14°58'20" W 183.74'
S 13°18'40" E 1109.62'
S 14°30'31" E 29.18'
N 71°35'29" E 710.81'
S 33°43'18" E 243.07'
S 18°33'49" E 124.40'
S 05°30'37" E 457.65'
S 12°42'43" E 209.53'
S 14°52'56" W 174.22'
N 05°27'50" E 139.71'
N 17°47'10" W 100.00'
N 09°42'50" E 298.02'
S 86°47'35" E 149.69'
N 05°14'06" E 318.95'
N 89°43'01" E 119.30'
S 65°54'59" E 73.40'
N 11°26'16" E 216.88'
S 11°26'16" W 223.64'
S 88°47'05" E 122.17'
S 42°30'14" E 91.43'
S 25°35'41" E 172.67'
S 27°56'39" E 110.44'
S 29°29'04" E 95.27'
N 77°09'01" E 20.00'
N 79°23'31" E 296.98'
N 00°56'31" E 90.96'
N 82°31' E 52.85'

POND 82.6
POND 85.7
POND 85.8
POND 82.2
POND 91.0

DMH R=106.01
DMH R=101.86
DMH R=101.19
DMH R=102.35
DMH R=95.90
INV 24" PIPE R=102.11

WETLAND FLAG (typ.)
UPLAND
WETLAND

0 120 240 360
SCALE
1"=120'

DATE	REVISIONS

PROJECT:
PEMBROKE COUNTRY CLUB
WEST ELM STREET, DWELLEY STREET AND HAZELWOOD DRIVE
PEMBROKE, MA

PREPARED FOR:
WEATHERVANE AT PEMBROKE COUNTRY CLUB, LLC
190 OLD DERBY STREET
HINGHAM, MA

PLAN TITLE:
WETLAND LOCATION PLAN

SURVEYOR:
SHANE M. BRENNER, PLS
LIC. MA #45917
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P)781-919-0808

COMMONWEALTH OF MASSACHUSETTS
SHANE M. BRENNER
No. 45917
REGISTERED PROFESSIONAL LAND SURVEYOR

DATE: MAY 25, 2021
SCALE: 1" = 120'
DRAWN BY: MPM
FILE: 100-064
SHEET: 2 OF 3

MASS GRID NADB3

APPROXIMATE TOWN LINE

0 OLDHAM STREET
MAP A11 LOT 11
N/F TOWN OF PEMBROKE

150 STATE STREET
MAP104 LOT 2D
N/FBARBARA PISHKIN

170 STATE STREET
MAP 104 LOT 2
N/F CYNTHIA BERMINGHAM

182 STATE STREET
MAP 104 LOT 2B
N/F ROBERT O'BRIEN

214 STATE STREET
MAP 104 LOT 3
N/F DONNA CAREY

228 STATE STREET
MAP 104 LOT 3
N/F MICHAEL J. MINICUCCI

254 STATE STREET
MAP 104 LOT 3-2
N/F DOUGLAS DIBONA

258 STATE STREET
MAP 104 LOT 3
N/F KENNETH WENTWORTH

0 STATE STREET
MAP 112 LOT 1A
N/F DENNIS GRAZIANO

56 ELM PLACE
MAP 112 LOT 6
N/F NORMA BILLINGS

206 DWELLEY STREET
MAP A12 LOT 20
N/F MARY HAUGH

0 OLDHAM STREET
MAP A11 LOT 10
N/F TOWN OF PEMBROKE

N 04°03'26" E 1406.39'

APPROXIMATE TOWN LINE

N 17°08'57" W 600.19'

PROPERTY LINES (TYP.)

78 HAZELWOOD DRIVE
MAP A11 LOT 19
N/F CRAIG TARANTINO

68 HAZELWOOD DRIVE
MAP A10 LOT 48
N/F DAVID COURNEY

72 HAZELWOOD DRIVE
MAP A11 LOT 20

84 HAZELWOOD DRIVE
MAP A11 LOT 32
ALEX R. &
HEATHER B. QUINTAL
2,413,415± S.F.
55.40± AC

N 17°08'57" W 176.62'

N 17°08'57" W 423.98'

S 16°35'19" E 540.64'

184 DWELLEY STREET
MAP A12 LOT 19
N/F JUSTIN PROIA

180 DWELLEY STREET
MAP A12 LOT 28
N/F MARY SPARDA

174 DWELLEY STREET
MAP A12 LOT 28A
N/F KRISTA HENDRIX

HAZELWOOD DRIVE

CB/DH
R=60.00'
L=150.00'

WETLAND SERIES "R"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "U"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "V"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "T"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "S"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "Y"
ISOLATED VEGETATED WETLAND (IVW)

WETLAND SERIES "G"
ISOLATED VEGETATED WETLAND (IVW)

WETLAND SERIES "I"
BORDERING VEGETATED WETLAND (BVW)

WETLAND SERIES "L"
BORDERING VEGETATED WETLAND (BVW)

SERIES "D"
GOLF COURSE WATER HAZARD
NON-JURISDICTIONAL

SERIES "K"
GOLF COURSE WATER HAZARD
NON-JURISDICTIONAL

SERIES "J"

MATCH LINE (SHEET 3) (SHEET 2)

(SHEET 3) MATCH LINE (SHEET 2)

61 HAZELWOOD DRIVE
MAP A10 LOT 47
N/F JENNIFER L. TROY

67 HAZELWOOD DRIVE
MAP A10 LOT 47
N/F KATHLEEN SUTKOWSKI

73 HAZELWOOD DRIVE
MAP A10 LOT 16
N/F DAVID CARDINAL

79 HAZELWOOD DRIVE
MAP A11 LOT 17
N/F BRIAN J. KRAUSE

0 OLDHAM STREET
MAP A10 LOT 5A
N/F PETERSON FAMILY TRUST

N 16°40'27" W 927.23'

N 16°40'27" W 1039.31'

S 16°40'27" E 305.04'

PROPERTY LINE

EXISTING FAIRWAY (TYPICAL)

94 WEST ELM STREET
MAP B1,1 LOT 33 &
110 DWELLEY STREET
MAP A12 LOT 47
100' WEATHERVANE AT
PEMBROKE
COUNTRY CLUB, LLC
7,777,952± SF
178.56± AC

S 71°57'58" E 710.87'

PROPERTY LINE

POND 91.0

POND 85.8

POND 85.7

POND 82.2

85.8

87.3

MILFORD DRIVE

63 MILFORD DRIVE
MAP A11 LOT 25
N/F GERARD J. RUGGIERO

70 MILFORD DRIVE
MAP A11 LOT 26
N/F RICHARD A. FEDERICO

64 MILFORD DRIVE
MAP A11 LOT 27
N/F WILLIAM C. DARGIE

58 MILFORD DRIVE MAP A11 LOT 28
N/F MARGARET M. MORRIS

52 MILFORD DRIVE
MAP A11 LOT 29
N/F DALE D. MORRIS

57 MILFORD DRIVE
MAP A11 LOT 24
N/F MICHAEL HANSEN

51 MILFORD DRIVE
MAP A11 LOT 23
N/F MARK SANTORO

45 MILFORD DRIVE
MAP A11 LOT 22
N/F LANE WATKINS

39 MILFORD DRIVE
MAP A11 LOT 21
N/F GERARD J. RUGGIERO

33 MILFORD DRIVE
MAP A12 LOT 65
N/F CHRISTOPHER KEMP

27 MILFORD DRIVE
MAP A12 LOT 64
N/F PAUL LYONS

S 05°30'37" E 457.65'

S 32°43'46" E 443.07'

S 18°33'49" E 642.35'

S 16°42'43" E 209.53'

S 14°52'58" W 174.22'

0 120 240 360
SCALE
1"=120'

DATE	REVISIONS

PROJECT:
PEMBROKE COUNTRY CLUB
WEST ELM STREET, DWELLEY STREET AND HAZELWOOD DRIVE
PEMBROKE, MA

PREPARED FOR:
WEATHERVANE AT PEMBROKE COUNTRY CLUB, LLC
190 OLD DERBY STREET
HINGHAM, MA

PLAN TITLE:
WETLAND LOCATION PLAN

SURVEYOR:
SHANE M. BRENNER, PLS
LIC MA #45917
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P)781-919-0808

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Exhibit F

Transportation Impact Assessment

Proposed Age-Qualified Residential Community
Pembroke Country Club
94 West Elm Street
Pembroke, Massachusetts

Prepared for:

Bristol Bros. Development Corporation
Hingham, Massachusetts

July 2022

Prepared by:

Vanasse & Associates inc
Transportation Engineers & Planners

35 New England Business Center Drive
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Andover, MA 01810

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Dear Reviewer:

This letter shall certify that this *Transportation Impact Assessment* has been prepared under my direct supervision and responsible charge. I am a Registered Professional Engineer (P.E.) in the Commonwealth of Massachusetts (Massachusetts P.E. No. 38871, Civil) and hold Certification as a Professional Traffic Operations Engineer (PTOE) from the Transportation Professional Certification Board, Inc. (TPCB), an independent affiliate of the Institute of Transportation Engineers (ITE) (PTOE Certificate No. 993). I am also a Fellow of the Institute of Transportation Engineers (FITE).

Sincerely,

VANASSE & ASSOCIATES, INC.

Jeffrey S. Dirk

Jeffrey S. Dirk, P.E., PTOE, FITE
Managing Partner

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EXECUTIVE SUMMARY

Vanasse & Associates, Inc. (VAI) has conducted a Transportation Impact Assessment (TIA) in order to determine the potential impacts on the transportation infrastructure associated with the proposed construction of an age-qualified residential community to be located within the Pembroke Country Club located at 94 West Elm Street in Pembroke, Massachusetts (hereafter referred to as the "Project"). This assessment was prepared in consultation with the Town of Pembroke and the Massachusetts Department of Transportation (MassDOT), and was performed in accordance with MassDOT's *Transportation Impact Assessment (TIA) Guidelines* and the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports.

Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the Institute of Transportation Engineers (ITE),[1] the Project is expected to generate approximately 724 vehicle trips on an average weekday (two-way, 24-hour volume), with 58 vehicle trips expected during the weekday morning peak-hour and 67 vehicle trips expected during the weekday evening peak-hour;

2. Using empirical trip-generation data derived from traffic counts conducted at a similar age-qualified residential community (The Villages at Weathervane in Weymouth, Massachusetts), the Project was shown to generate approximately 424 vehicle trips on an average weekday, with 34 vehicle trips expected during the weekday morning peak-hour and 70 vehicle trips during the weekday evening peak-hour. Given that the use of the ITE trip-generation statistics resulted in higher or comparable traffic volumes for the Project, the ITE data was used to assess the potential impact of the Project on the transportation infrastructure;

3. When compared to a traditional (non age-qualified) residential community, the Project is expected to generate approximately 920 fewer vehicle trips on an average weekday, with 63 fewer vehicle trips expected during the weekday peak-hour and 97 fewer vehicle trips during the weekday evening peak-hour;

[1] *Trip Generation,* 11th Edition; Institute of Transportation Engineers; Washington, DC; 2021.

4. The Project will not result in a significant impact (increase) on motorist delays or vehicle queuing over Existing or anticipated future conditions without the Project (No-Build conditions), with no changes in levels of service shown to occur as a result of the Project and all of the movements at the study area intersections shown to continue to operate at level-of-service (LOS) D or better with the addition of Project-related traffic, where an LOS of "D" or better is defined as "acceptable" traffic operations;

5. All movements exiting the Project site driveways are predicted to operate at LOS B or better during the peak hours with queues of up to one (1) vehicle;

6. No apparent safety deficiencies were noted with respect to the motor vehicle crash history at the study intersections; and

7. Lines of sight at the Project site driveways were found to exceed the recommended minimum sight distance to function in a safe manner based on the appropriate approach speeds.

RECOMMENDATIONS

A detailed transportation improvement program has been developed that is designed to provide safe and efficient access to the Project site and address any deficiencies identified at off-site locations evaluated in conjunction with this study. The following improvements have been recommended as a part of this evaluation and, where applicable, will be completed in conjunction with the Project subject to receipt of all necessary rights, permits, and approvals.

Project Access

Access to the Project will be provided as follows:

- ***Pembroke Country Club and Attached Residential Units (8 units)*** – Pembroke Country Club Drive which intersects the west side of West Elm Street.

- ***Pembroke Country Club Home Sites (117± units) -*** New roadway that will traverse a general north-south alignment between the existing Pembroke Country Club driveway and Dwelley Street at the location of the existing maintenance driveway for the Pembroke Country Club. The new roadway will include an access control gate at its intersection with the Pembroke Country Club driveway and at a point south of Dwelley Street that will limit the use of the roadway to residents, service/maintenance vehicles and emergency vehicles.

- ***Dwelley Street Residences (22± units) –*** New roadway that will intersect the south side of Dwelley Street opposite Maple Street.

- ***Hazelwood Drive Residences (23± units) –*** New roadway that will intersect north side of the cul-de-sac at the terminus of Hazelwood Drive.

In addition, 20-foot wide, gravel emergency vehicle access drives will be provided to connect the proposed roadways. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation:

- The Project site roadways should be a minimum of 24 feet in width and will be designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle.

- The emergency vehicle access drives should be constructed of a suitable material that will support travel by an emergency vehicle and should be secured in a manner that will restrict use of the drives to emergency vehicles only.

- Driveways to the residential units should be a minimum of 21 feet long measured between the garage door and the far edge of the sidewalk (edge closest to the residence) where a sidewalk is provided, and 23 feet measured between the garage door and the edge of the traveled-way in locations without a sidewalk.

- Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided. STOP-signs and marked STOP-lines should also be provided at major intersections located within the Project site.

- All signs and pavement markings to be installed within the Project site should conform to the applicable standards of the *Manual on Uniform Traffic Control Devices* (MUTCD).[2]

- Sidewalks should be provided along at least one side of the proposed roadways and extend to the intersecting public way (i.e., Dwelley Street, West Elm Street and Hazelwood Drive).

- Americans with Disabilities Act (ADA)-compliant wheelchair ramps should be provided at pedestrian crossings that are to be constructed or modified in conjunction with the Project.

- Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site roadways and at internal intersections should be designed and maintained so as not to restrict lines of sight.

- Snow accumulations (windrows) within sight triangle areas should be promptly removed where such accumulations would impede sight lines.

Off-Site

Independent of the Project, the following sign and pavement marking improvements should be considered:

- ***Elm Street at Water Street*** – Install marked STOP-lines to accompany the STOP-signs in order to define the desired stopping point.
- ***West Elm Street at the Pembroke Country Club Driveway*** – Install a marked STOP-line on the Pembroke Country Club Driveway approach.
- ***Oldham Street at Hazelwood Drive*** – Install a STOP-sign and marked STOP-line on the Hazelwood Drive approach.

[2]*Manual on Uniform Traffic Control Devices (MUTCD)*; Federal Highway Administration; Washington, DC; 2009.

Transportation Demand Management

Public transportation services are provided within the study area by the Greater Attleboro-Taunton Regional Transit Authority (GATRA). GATRA provides on-demand bus service within the Town of Pembroke by way of the GATRA GO Explore transit service. In addition to fixed route bus services, GATRA also provides demand response (Dial-A-Ride) services for people with disabilities and seniors in member communities.

In an effort to encourage the use of alternative modes of transportation to single-occupant vehicles (SOVs), the follow Transportation Demand Management (TDM) measures will be implemented as part of the Project:

- A transportation coordinator will be assigned for the Project to coordinate the TDM program;
- Information regarding public transportation services, maps, schedules, and fare information will be made available to residents;
- A "welcome packet" will be provided to residents detailing available public transportation services and bicycle and walking alternatives, including services offered by the Pembroke Council on Aging (COA);
- Pedestrian accommodations will be incorporated within the Project site and consist of walkways and paths that will connect to public ways; and
- Secure bicycle parking will be provided for residents and visitors at appropriate locations within the Project site.

With implementation of the aforementioned recommendations, safe and efficient access will continue to be provided to the Project site and the Project can be accommodated within the confines of the existing and improved transportation system.

INTRODUCTION

Vanasse & Associates, Inc. (VAI) has conducted a Transportation Impact Assessment (TIA) in order to determine the potential impacts on the transportation infrastructure associated with the proposed construction of an age-qualified residential community to be located within the Pembroke Country Club located at 94 West Elm Street in Pembroke, Massachusetts (hereafter referred to as the "Project"). This study evaluates the following specific areas as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; and identifies and analyzes existing traffic conditions and future traffic conditions, both with and without the Project, along West Elm Street, Dwelley Street and Oldham Street, and at major intersections located along these roadways through which Project-related traffic will travel.

PROJECT DESCRIPTION

As proposed, the Project will entail the construction of 170± age-qualified residential units (162 detached units and eight (8) attached units) to be located within the Pembroke Country Club (94 West Elm Street) in Pembroke, Massachusetts. In conjunction with the Project, the existing 18-hole golf course will be reconfigured to accommodate the addition of the residential units and the constriction of the associated supporting infrastructure, and the clubhouse, restaurant and two (2) function halls will remain. The Project site encompasses approximately 247± acres of land that is generally bounded by Dwelley Street, residential properties and areas of open and wooded space to the north; Hazelwood Drive, Fairway Lane, residential properties and areas of open and wooded space to the south; West Elm Street, residential properties and areas of open and wooded space to the east; and residential properties and areas of open and wooded space to the west. Figure 1 depicts the Project site location in relation to the existing roadway network.

Access to the Project will be provided as follows:

- ***Pembroke Country Club and Attached Residential Units (8 units)*** – Pembroke Country Club Drive which intersects the west side of West Elm Street.

- ***Pembroke Country Club Home Sites (117± units) -*** New roadway that will traverse a general north-south alignment between the existing Pembroke Country Club driveway and Dwelley Street at the location of the existing maintenance driveway for the Pembroke Country Club. The new roadway will include an access control gate at its

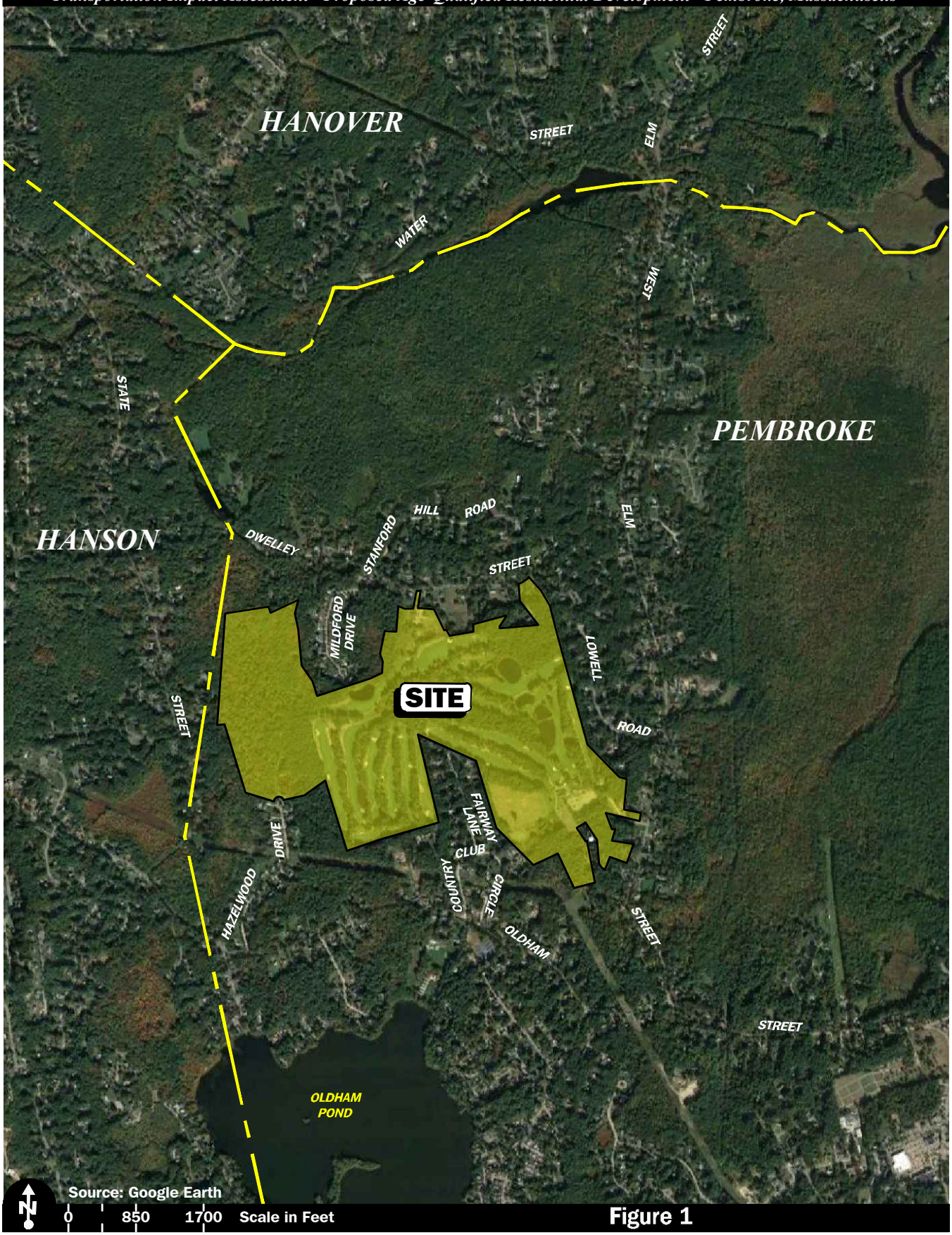

Figure 1

Site Location Map

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intersection with the Pembroke Country Club driveway and at a point south of Dwelley Street that will limit the use of the roadway to residents, service/maintenance vehicles and emergency vehicles.

- ***Dwelley Street Residences (22± units) –*** New roadway that will intersect the south side of Dwelley Street opposite Maple Street.

- ***Hazelwood Drive Residences (23± units) –*** New roadway that will intersect north side of the cul-de-sac at the terminus of Hazelwood Drive.

In addition, 20-foot wide, gravel emergency vehicle access drives will be provided to connect the proposed roadways.

Off-street parking will be provided for the residential units in individual garages and driveways that will accommodate a minimum of two (2) vehicles per dwelling. Parking for the golf course, clubhouse, restaurant and function halls will be retained as currently provided.

STUDY METHODOLOGY

This study was prepared in consultation with the Town of Pembroke and the Massachusetts Department of Transportation (MassDOT); was performed in accordance with MassDOT's *Transportation Impact Assessment (TIA) Guidelines* and the standards of the Traffic Engineering and Transportation Planning professions for the preparation of such reports; and was conducted in three distinct stages.

The first stage involved an assessment of existing conditions in the study area and included an inventory of roadway geometrics; pedestrian and bicycle facilities; on-street parking; public transportation services; observations of traffic flow; and collection of pedestrian, bicycle, and vehicle counts.

In the second stage of the study, future traffic conditions were projected and analyzed. Specific travel demand forecasts for the Project were assessed along with future traffic demands due to expected traffic growth independent of the Project. A seven-year time horizon was selected for analyses consistent with MassDOT's *Transportation Impact Assessment (TIA) Guidelines*. The traffic analysis conducted in stage two identifies existing or projected future roadway capacity, traffic safety, and site access issues.

The third stage of the study presents and evaluates measures to address traffic and safety issues, if any, identified in stage two of the study.

EXISTING CONDITIONS

A comprehensive field inventory of existing conditions within the study area was conducted in January, February, and July 2022. The field investigation consisted of an inventory of existing roadway geometrics; pedestrian and bicycle facilities; public transportation services; traffic volumes; and operating characteristics; as well as posted speed limits and land use information within the study area. The study area that was assessed for the Project consisted of West Elm Street, Dwelley Street and Oldham Street, and the following specific intersections:

- Elm Street at Water Street
- West Elm Street at Dwelley Street and Milbery Lane
- West Elm Street at Oldham Street
- Oldham Street at Hazelwood Drive

The following describes the study area roadways and intersections.

ROADWAYS

West Elm Street/Elm Street

- Two-lane urban collector roadway under Town jurisdiction;
- Traverses the study area in a general north-south direction between Oldham Street and the Hanover town line, where West Elm Street becomes Elm Street;
- Provides two 10 to 12-foot wide travel lanes that are separated by a double-yellow centerline with 1 to 2-foot wide marked shoulders;
- The posted speed limit is 35 miles per hour (mph) in the vicinity of the Pembroke Country Club driveway and 30 mph to the south;
- Sidewalks are not provided along West Elm Street/Elm Street;
- Illumination is provided intermittently by way of streetlights mounted on wood poles;
- Land use within the study area consists of the Project site and residential properties.

Dwelley Street/East Washington Street

- Two-lane urban collector roadway under Town jurisdiction;
- Traverses the study area in a general east-west direction between West Elm Street and the Hanson town line, where Dwelley Street becomes East Washington Street;
- Provides two 10 to 12-foot wide travel lanes that are separated by a double-yellow centerline with no marked shoulders provided;
- The statutory speed limit pursuant to M.G.L. c. 90 § 17 is 30 mph;[3]
- Sidewalks are not provided along Dwelley Street/East Washington Street;
- Illumination is provided intermittently by way of streetlights mounted on wooden poles;
- Land use within the study area consists of the Project site and residential properties.

Oldham Street/Brook Street

- Two-lane urban collector roadway under Town jurisdiction;
- Traverses the study area in a general east-west direction between Route 14 and the Hanson town line, where Oldham Street becomes Brook Street;
- Provides two 10 to 14-foot wide travel lanes that are separated by a double-yellow centerline with 1 to 2-foot wide marked shoulders;
- The posted speed limit along Oldham Street is 25 mph in the vicinity of West Elm Street, 30 mph in the vicinity of Hazelwood Drive, and 40 mph east of West Elm Street;
- Sidewalks are not provided along Oldham Street/Brook Street;
- Illumination is provided intermittently by way of streetlights mounted on wooden poles;
- Land use within the study area consists of residential properties.

INTERSECTIONS

Table 1 and Figure 2 summarize existing lane use, traffic control, and pedestrian and bicycle accommodations at the study area intersections as observed in January and July 2022.

[3]The statutory of "prima facie" speed is defined in M.G.L Chapter 90, Section 17, as the speed which would be deemed reasonable and proper to operate a motor vehicle.

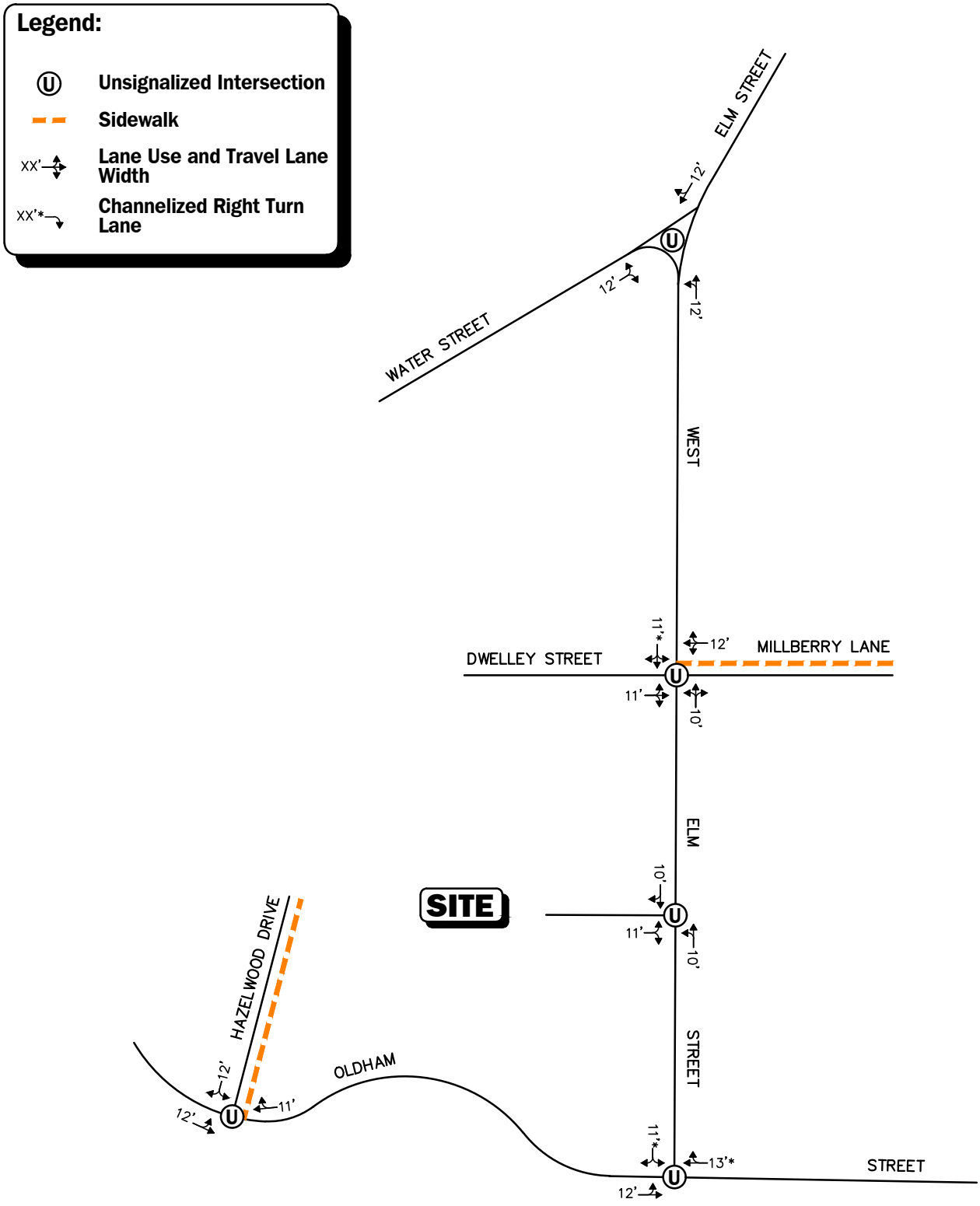

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Figure 2

Existing Intersection Lane Use, Travel Lane Width and Pedestrian Facilities

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Table 1
STUDY AREA INTERSECTIONS DESCRIPTION

Intersection	Traffic Control Type[a]	No. of Travel Lanes Provided	Shoulder Provided? (Yes/No/Width)	Pedestrian Accommodations? (Yes/No/Description)	Bicycle Accommodations? (Yes/No/Description)
Elm St./ Water St.	S	1 general-purpose travel lane on all approaches	Yes; 1 to 3-feet along all legs	No	No
West Elm St./ Dwelley St./ Milbery Ln.	S	1 general-purpose travel lane on all approaches with southbound right-turns exiting prior to the intersection by way of a channelized right-turn lane	Yes; 1-foot along Milbery Ln.	Yes; a sidewalk is provided along the north side of Milbery Ln.	No
Oldham St./ West Elm St.	S	1 general-purpose travel lane on all approaches with southbound and westbound right-turns exiting prior to the intersection by way of channelized right-turn lanes	Yes; 1-foot along all legs	No	No
Oldham St./ Hazelwood Dr.	S	1 general purpose travel lane on all approaches	Yes; 1-foot along Oldham St.	Yes; a sidewalk is provided along the east side of Hazelwood Dr.	No

[a]S = STOP-sign control.

TRAFFIC VOLUMES

In order to determine existing traffic-volume demands and flow patterns within the study area, automatic traffic recorder (ATR) counts, turning movement counts (TMCs), and vehicle classification counts were completed in January and February 2022. The ATR counts were conducted on West Elm Street south of the Pembroke Country Club main driveway, on Dwelley Street west of West Elm Street, and on Oldham Street east of West Elm Street, on January 25th through 26th, 2022 (Tuesday through Wednesday, inclusive) in order to record weekday traffic conditions over an extended period, with peak period TMCs performed at the study intersections during the weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak periods on Tuesday, January 25th and on Tuesday, February 1st, 2022. These time periods were selected for analysis purposes as they are representative of the peak-traffic-volume hours for both the Project and the adjacent roadway network.

Traffic-Volume Adjustments

In order to evaluate the potential for seasonal fluctuation of traffic volumes within the study area, MassDOT weekday seasonal factors for Urban Group 4-7 roadways (minor arterials, major collectors, minor collectors, and local roads and streets) were reviewed.[4] Based on a review of this data, it was determined that traffic volumes for the month of January are approximately 1.0 percent *below* average-month conditions. As such, the January traffic volumes were adjusted upward by

[4]MassDOT statewide Traffic Data Collection; 2019 Weekday Seasonal Factors, Group U4-7.

1.0 percent in order to be representative of average-month conditions. Traffic volumes for the month of February are consistent with average-month conditions and, as such, no adjustments were made to the February traffic volumes.

In order to account for the impact on traffic volumes and trip patterns resulting from the COVID-19 pandemic, traffic-volume data collected at MassDOT Continuous Count Station No. 6255, which is located on Route 3, north of Route 18 in Weymouth, in January and February 2022 was compared to data collected at the same count station in January and February 2018. The 2018 traffic volumes were expanded to 2019 by applying the traffic growth procedure detailed in the April 2020 "Guidance on Traffic Counting Data" published by MassDOT[5] in order to allow for a comparison of the data. Based on this pre- and post-COVID-19 traffic-volume comparison, the January traffic volume data that was collected as part of this assessment was found to be approximately 8.9 percent *below* the conditions that existed prior to the COVID-19 pandemic, with the February traffic volume data found to be approximately 5.7 percent *below* pre-pandemic conditions. As such, the seasonally adjusted January and February traffic volumes were adjusted upward by an additional 8.9 percent and 5.7 percent, respectively.

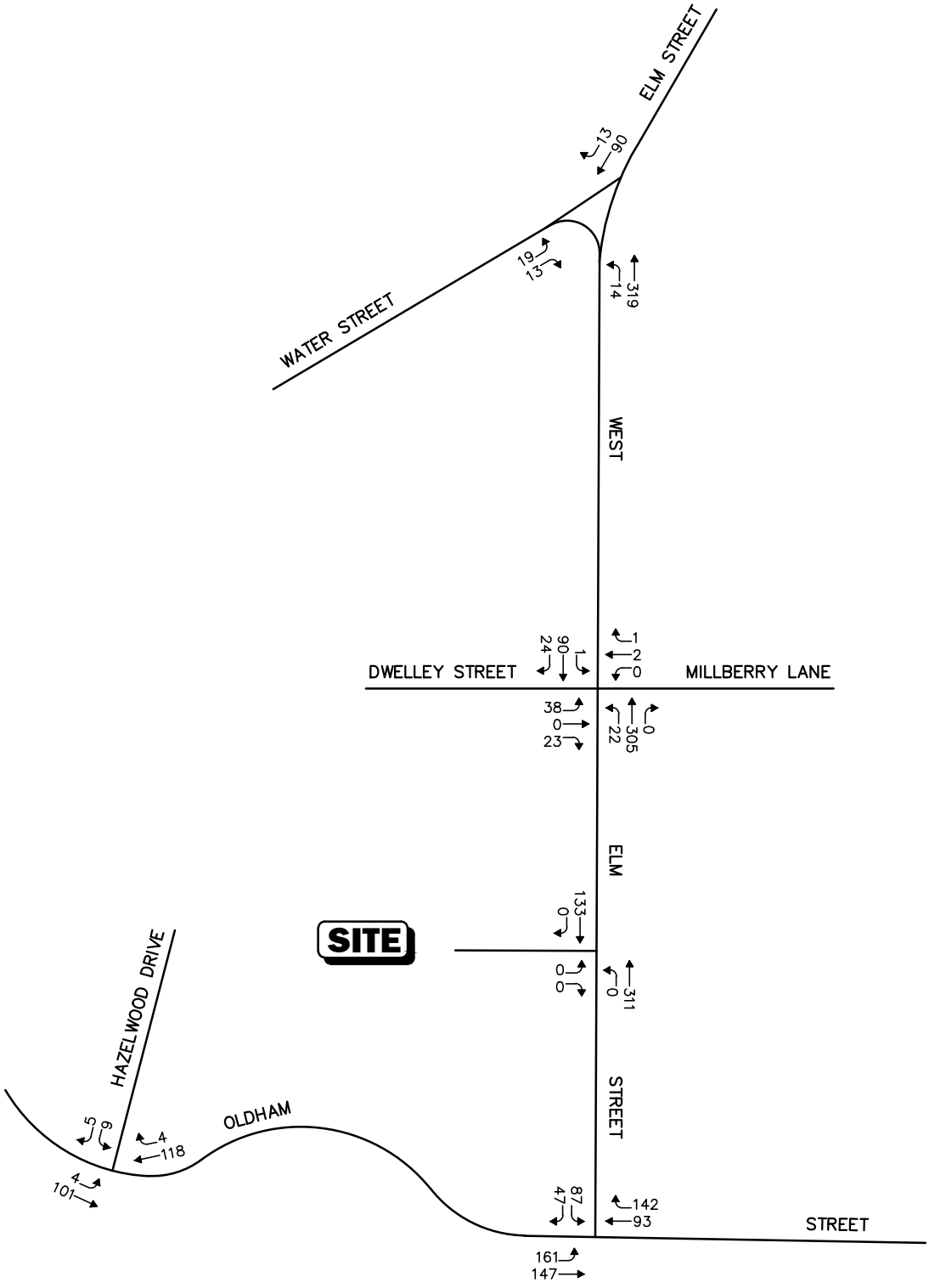
The 2022 Existing traffic volumes are summarized in Table 2, with the weekday morning and evening peak-hour traffic volumes graphically depicted on Figures 3 and 4, respectively. Note that the peak-hour traffic volumes that are presented in Table 2 were obtained from the aforementioned figures.

Table 2
2022 EXISTING TRAFFIC VOLUMES

Location/Peak Hour	AWT[a]	VPH[b]	K Factor[c]	Directional Distribution[d]
West Elm St., south of the Pembroke Country Club Main Driveway:	4,745	--	--	--
Weekday Morning (7:30 – 8:30 AM)	--	444	9.4	70.0% NB
Weekday Evening (4:30 – 5:30 PM)	--	514	10.8	69.3% SB
Dwelley St., west of West Elm St.:	1,185	--	--	--
Weekday Morning (7:30 – 8:30 AM)	--	109	9.2	56.0% EB
Weekday Evening (4:30 – 5:30 PM)	--	119	10.0	51.3% EB
Oldham St., east of West Elm St.:	5,740	--	--	--
Weekday Morning (7:30 – 8:30 AM)	--	469	8.2	50.1% WB
Weekday Evening (4:30 – 5:30 PM)	--	584	10.2	57.7% EB

[a]Average weekday traffic in vehicles per day.
[b]Vehicles per hour.
[c]Percent of daily traffic occurring during the peak hour.
[d]Percent traveling in peak direction.
NB = northbound; SB = southbound; EB = eastbound; WB = westbound.

[5]*Guidance on Traffic Counting Data*; MassDOT; revised April 2020.



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure 3

2022 Existing
Weekday Morning
Peak-Hour Traffic Volumes

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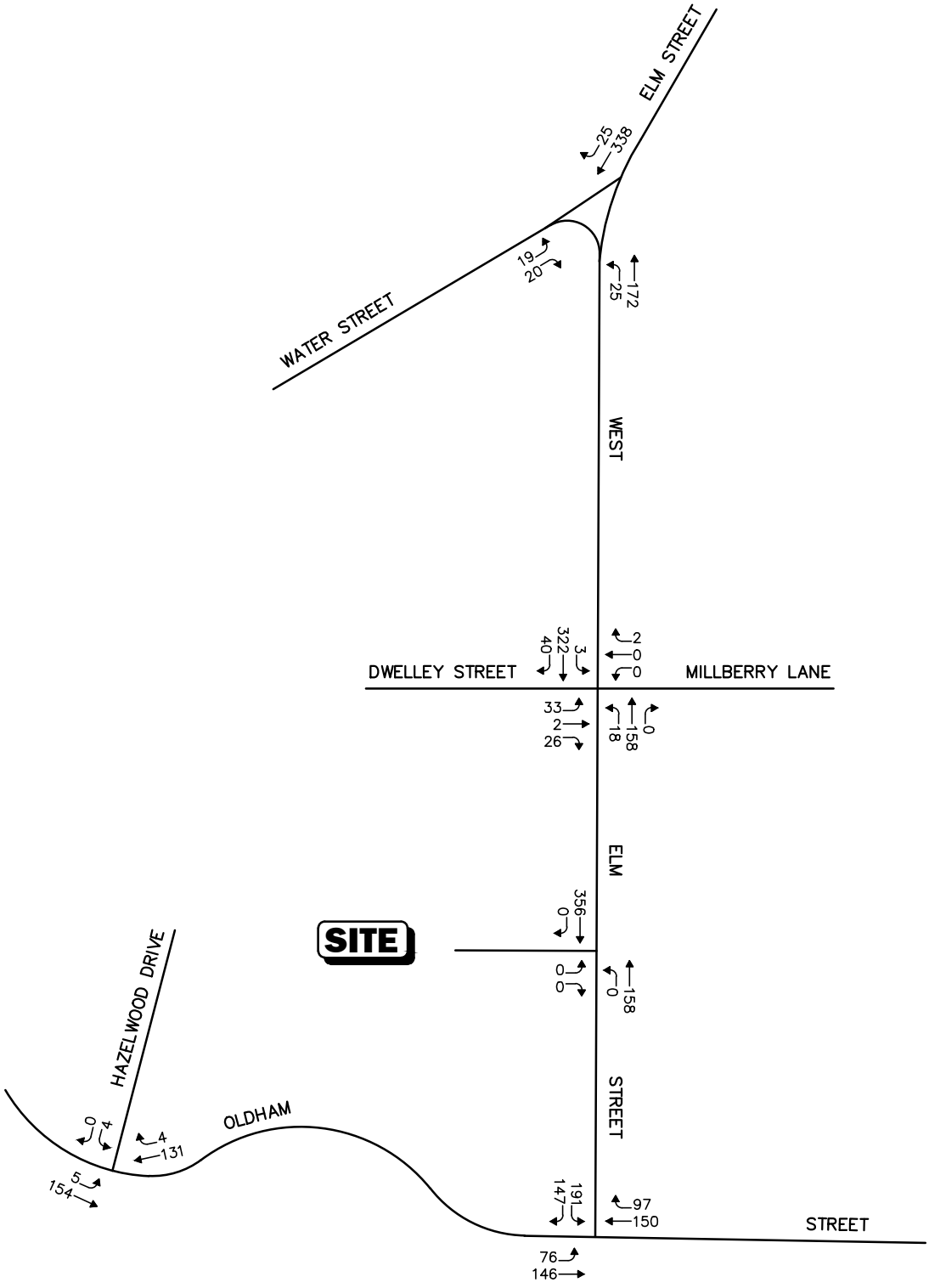

Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure 4

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2022 Existing
Weekday Evening
Peak-Hour Traffic Volumes

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As can be seen in Table 2, West Elm Street, south of the Pembroke Country Club main driveway, was found to accommodate approximately 4,745 vehicles on an average weekday (two-way, 24-hour volume), with approximately 444 vehicles per hour (vph) during the weekday morning peak-hour and 514 vph during the weekday evening peak-hour. Dwelley Street, west of West Elm Street, was found to accommodate approximately 1,185 vehicles on an average weekday, with approximately 109 vph during the weekday morning peak-hour and 119 vph during the weekday evening peak-hour. Oldham Street, east of West Elm Street, was found to accommodate approximately 5,740 vehicles on an average weekday, with approximately 469 vph during the weekday morning peak-hour and 584 vph during the weekday evening peak-hour.

PEDESTRIAN AND BICYCLE FACILITIES

A comprehensive field inventory of pedestrian and bicycle facilities within the study area was undertaken in January and July 2022. The field inventory consisted of a review of the location of sidewalks and pedestrian crossing locations along the study roadways and at the study area intersections. As detailed on Figure 2, sidewalks are provided along the north side of Milbery Lane and along the east side of Hazelwood Drive.

Formal bicycle facilities are not provided within the study area and the study area roadways generally do not provide sufficient width (combined travel lane and shoulder) to support bicycle travel in a shared traveled-way configuration (i.e., motor vehicles and bicyclists sharing the roadway).[6]

PUBLIC TRANSPORTATION

Public transportation services are provided within the study area by the Greater Attleboro and Taunton Regional Transit Authority (GATRA). GATRA provides on-demand bus service within the Town of Pembroke by way of the GATRA GO Explore transit service. In addition to fixed route bus services, GATRA also provides demand response (Dial-A-Ride) services for people with disabilities and seniors in member communities.

SPOT SPEED MEASUREMENTS

Vehicle travel speed measurements were performed on West Elm Street, Dwelley Street and Oldham Street in conjunction with the ATR counts. Table 3 summarizes the vehicle travel speed measurements.

[6]A minimum combined travel lane and paved shoulder width of 14-feet is required to support bicycle travel in a shared traveled-way condition.

Table 3
VEHICLE TRAVEL SPEED MEASUREMENTS

	West Elm Street	Dwelley Street	Oldham Street
	Northbound/ Southbound	Eastbound/ Westbound	Eastbound/ Westbound
Mean Travel Speed (mph)	36/35	26/24	35/37
85th Percentile Speed (mph)	40/39	29/28	39/41
Posted or Statutory Speed Limit (mph)	30/30	30/30	40/40

mph = miles per hour.

As can be seen in Table 3, the mean vehicle travel speed along West Elm Street south of the Pembroke Country Club driveway was found to be 36 mph in the northbound direction and 35 mph southbound. The measured 85th percentile vehicle travel speed, or the speed at which 85 percent of the observed vehicles traveled at or below, was found to be 40 mph northbound and 39 mph southbound, which is 9 to 10 mph above the posted speed limit south of the Pembroke Country Club driveway (30 mph). The 85th percentile speed is used as the basis of engineering design and in the evaluation of sight distances, and is often used in establishing posted speed limits.

The mean vehicle travel speed along Dwelley Street west of West Elm Street was found to be 26 mph in the eastbound direction and 24 mph westbound. The measured 85th percentile vehicle travel speed was found to be 29 mph in the eastbound direction and 28 mph westbound, which is consistent with the statutory speed limit where the measurements were performed.

The mean vehicle travel speed along Oldham Street east of West Elm Street was found to 35 mph in the eastbound direction and 37 mph westbound. The measured 85th percentile vehicle travel speed was found to be 39 mph in the eastbound direction and 41 mph southbound, which is generally consistent with the posted speed limit.

MOTOR VEHICLE CRASH DATA

Motor vehicle crash information for the study area intersections was provided by the MassDOT Highway Division Safety Management/Traffic Operations Unit for the most recent five-year period available (2015 through 2019, inclusive) in order to examine motor vehicle crash trends occurring within the study area. The data is summarized by intersection, type, severity, roadway and weather conditions, and day of occurrence, and presented in Table 4.

Table 4
MOTOR VEHICLE CRASH DATA SUMMARY[a]

	West Elm Street/ Dwelley Street/ Milbery Lane	West Elm Street/ Pembroke CC Main Driveway	Oldham Street/ West Elm Street
Traffic Control Type[b]	U	U	U
Year:			
2015	0	0	1
2016	0	0	0
2017	0	0	1
2018	0	0	3
2019	2	2	1
Total	2	2	6
Average	0.40	0.40	1.20
Crash Rate[c]	0.16	0.19	0.37
MassDOT Crash Rate:[d]	0.57/0.57	0.57/0.57	0.57/0.57
Significant?[e]	No	No	No
Type:			
Angle	0	1	2
Head-On	1	0	0
Rear-End	0	1	0
Rear-to-Rear	0	0	0
Sideswipe	0	0	1
Fixed Object	1	0	2
Pedestrian/Bicycle	0	0	0
Unknown/Other	0	0	1
Total	2	2	6
Conditions:			
Clear	1	2	4
Cloudy	0	0	1
Rain	1	0	1
Snow/Ice	0	0	0
Not Reported/Other	0	0	0
Total	2	2	6
Lighting:			
Daylight	2	2	4
Dawn/Dusk	0	0	0
Dark (Road Lit)	0	0	1
Dark (Road Unlit)	0	0	1
Total	2	2	6
Day of Week:			
Monday-Friday	2	1	5
Saturday	0	1	1
Sunday	0	0	0
Total	2	2	6
Severity:			
Property Damage Only	2	0	5
Non-fatal Injury	0	2	0
Fatality	0	0	0
Not Reported	0	0	1
Total	2	2	6

[a]Source: MassDOT Safety Management/Traffic Operations Unit records, 2015 through 2019.
[b]Traffic Control Type: U = unsignalized.
[c]Crash rate per million vehicles entering the intersection.
[d]Statewide/District crash rate.
[e]The intersection crash rate is significant if it is found to exceed the MassDOT crash rate for the MassDOT Highway Division District in which the Project is located (District 5).

Based on a review of this data, no (0) motor vehicle crashes were reported to have occurred over the five-year review period at the Elm Street/Water Street or Oldham Street/Hazelwood Drive intersections, and no (0) crashes were reported to have occurred along Dwelley Street in the vicinity of the proposed access locations to the Project site (i.e., opposite Maple Avenue and at the maintenance driveway for the Pembroke Country Club). The remaining study area intersections were found to have experienced an average of 1.2 or fewer reported motor vehicle crashes per year over the five-year review period and were found to have motor vehicle crash rates *below* the MassDOT statewide and District average crash rates for similar intersections for the MassDOT Highway Division District in which the intersections are located (District 5). The majority of the reported crashes occurred on a weekday; under clear weather conditions; during daylight; and involved angle-type collisions or collisions with a fixed-object that resulted in property damage only.

A review of the MassDOT statewide High Crash Location List indicated that there are no locations within the study area that are included on MassDOT's Highway Safety Improvement Program (HSIP) listing as a high crash location.

The detailed MassDOT Crash Rate Worksheets are attached.

FUTURE CONDITIONS

Traffic volumes in the study area were projected to the year 2029, which reflects a seven-year planning horizon consistent with MassDOT's *Transportation Impact Assessment (TIA) Guidelines*. Independent of the Project, traffic volumes on the roadway network in the year 2029 under No-Build conditions include all existing traffic and new traffic resulting from background traffic growth. Anticipated Project-generated traffic volumes superimposed upon the 2029 No-Build traffic volumes reflect 2029 Build traffic-volume conditions with the Project.

FUTURE TRAFFIC GROWTH

Future traffic growth is a function of the expected land development in the immediate area and the surrounding region. Several methods can be used to estimate this growth. A procedure frequently employed estimates an annual percentage increase in traffic growth and applies that percentage to all traffic volumes under study. The drawback to such a procedure is that some turning volumes may actually grow at either a higher or a lower rate at particular intersections.

An alternative procedure identifies the location and type of planned development, estimates the traffic to be generated, and assigns it to the area roadway network. This procedure produces a more realistic estimate of growth for local traffic; however, potential population growth and development external to the study area would not be accounted for in the resulting traffic projections.

To provide a conservative analysis framework, both procedures were used, the salient components of which are described below.

Specific Development by Others

The Town of Pembroke Planning Department was contacted in order to determine if there were any projects planned within the study area that would have an impact on future traffic volumes at the study intersections. Based on this consultation, no developments were identified at this time that are expected to result in an increase in traffic within the study area beyond the general traffic growth rate.

General Background Traffic Growth

Traffic-volume data compiled by MassDOT from permanent count stations located in Pembroke, Hanover, and Hanson were reviewed in order to determine general traffic growth trends in the area. This data indicates that traffic volumes have fluctuated over the past several years, with the average traffic growth rate found to be approximately 0.75 percent. In order to provide a prudent planning condition for the Project, a slightly higher 1.0 percent per year compounded annual background traffic growth rate was used in order to account for future traffic growth and presently unforeseen development within the study area.

Roadway Improvement Projects

The Town of Pembroke and MassDOT were contacted in order to determine if there were any planned future roadway improvement projects expected to be complete by 2029 within the study area. Based on these discussions, no roadway improvement projects aside from routine maintenance activities were identified to be planned within the study area at this time.

No-Build Traffic Volumes

The 2029 No-Build condition peak-hour traffic volumes were developed by: i) applying the 1.0 percent per year compounded annual background traffic growth rate to the 2022 Existing peak-hour traffic volumes; and ii) adding trips generated by the existing operations at the Pembroke Country Club (18 hole golf course with supporting amenities), which was not in operation at the time the traffic counts that form the basis of this assessment were performed (January and February).[7] The resulting 2029 No-Build weekday morning and evening peak-hour traffic volumes are shown on Figures 5 and 6, respectively.

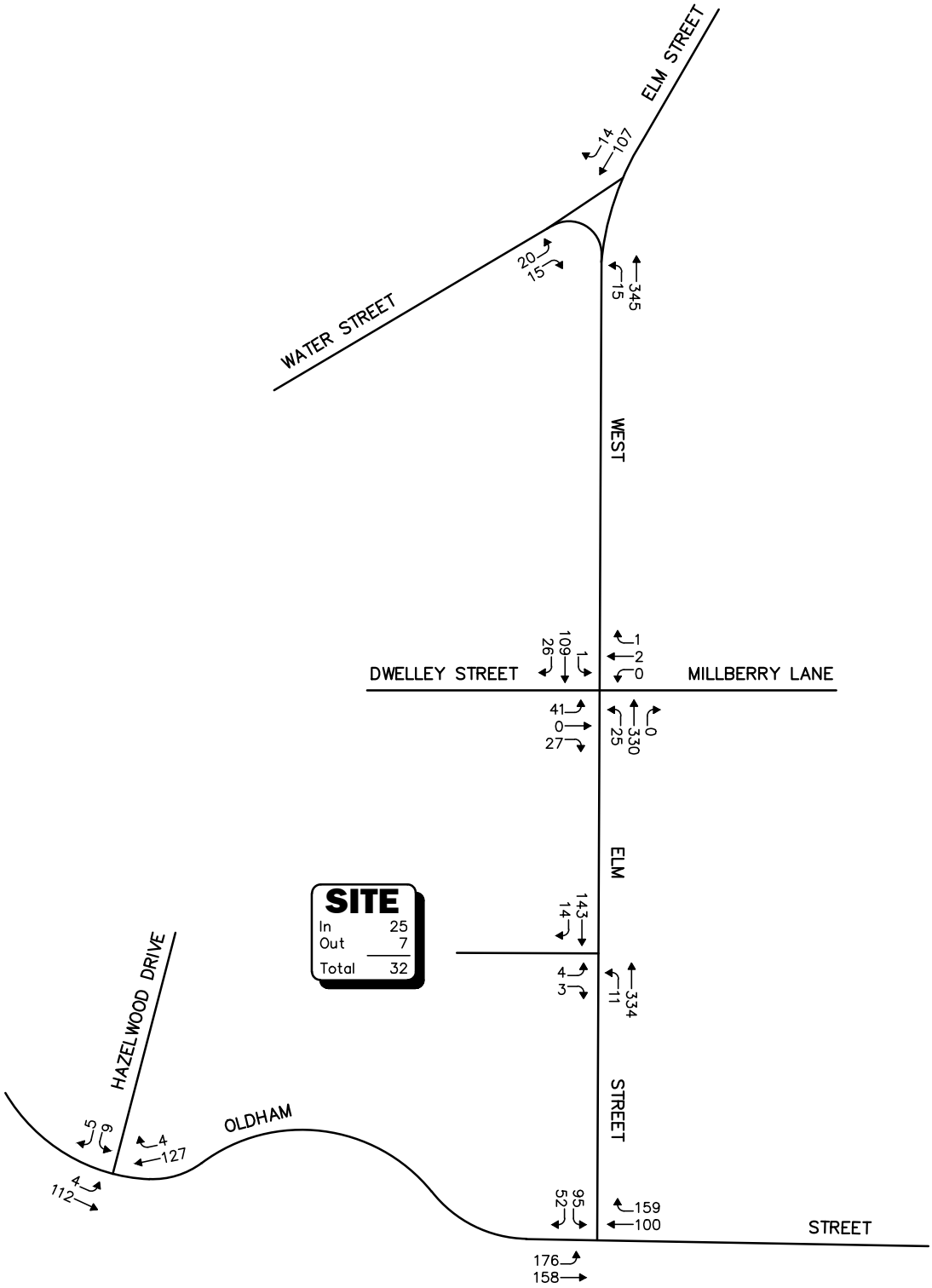
PROJECT-GENERATED TRAFFIC

Design year (2029 Build) traffic volumes for the study area roadways were determined by estimating Project-generated traffic volumes and assigning those volumes on the study roadways. The following sections describe the methodology used to develop the anticipated traffic characteristics of the Project.

As proposed, the Project will entail the construction of 170± age-qualified residential units, consisting of 162 detached units and eight (8) attached units. In order to develop the traffic characteristics of the Project, trip-generation statistics published by the Institute of Transportation Engineers (ITE)[8] for similar land uses as those proposed (attached and detached senior housing) and empirical trip rates developed from traffic counts performed at an age-qualified residential community in a similar setting were reviewed. ITE Land Use Codes (LUCs) 251, *Senior Adult Housing – Single-Family*, and LUC 252, *Senior Adult Housing* – Multifamily, were used to develop the base trip-generation calculations the Project, which were then compared to trip calculations for the Project developed using trip rates (per unit) derived from data obtained from The Villages at Weathervane, which is located within the Weathervane Golf Club located at 117 Clubhouse Drive in Weymouth.

[7]Trips associated with the existing golf course were generated using Institute of Transportation Engineers (ITE) Land Use Code (LUC) 430, *Golf Course*, which includes supporting amenities such as a clubhouse, restaurant and functional hall.

[8]Ibid 1.



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure 5

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2029 No-Build
Weekday Morning
Peak-Hour Traffic Volumes

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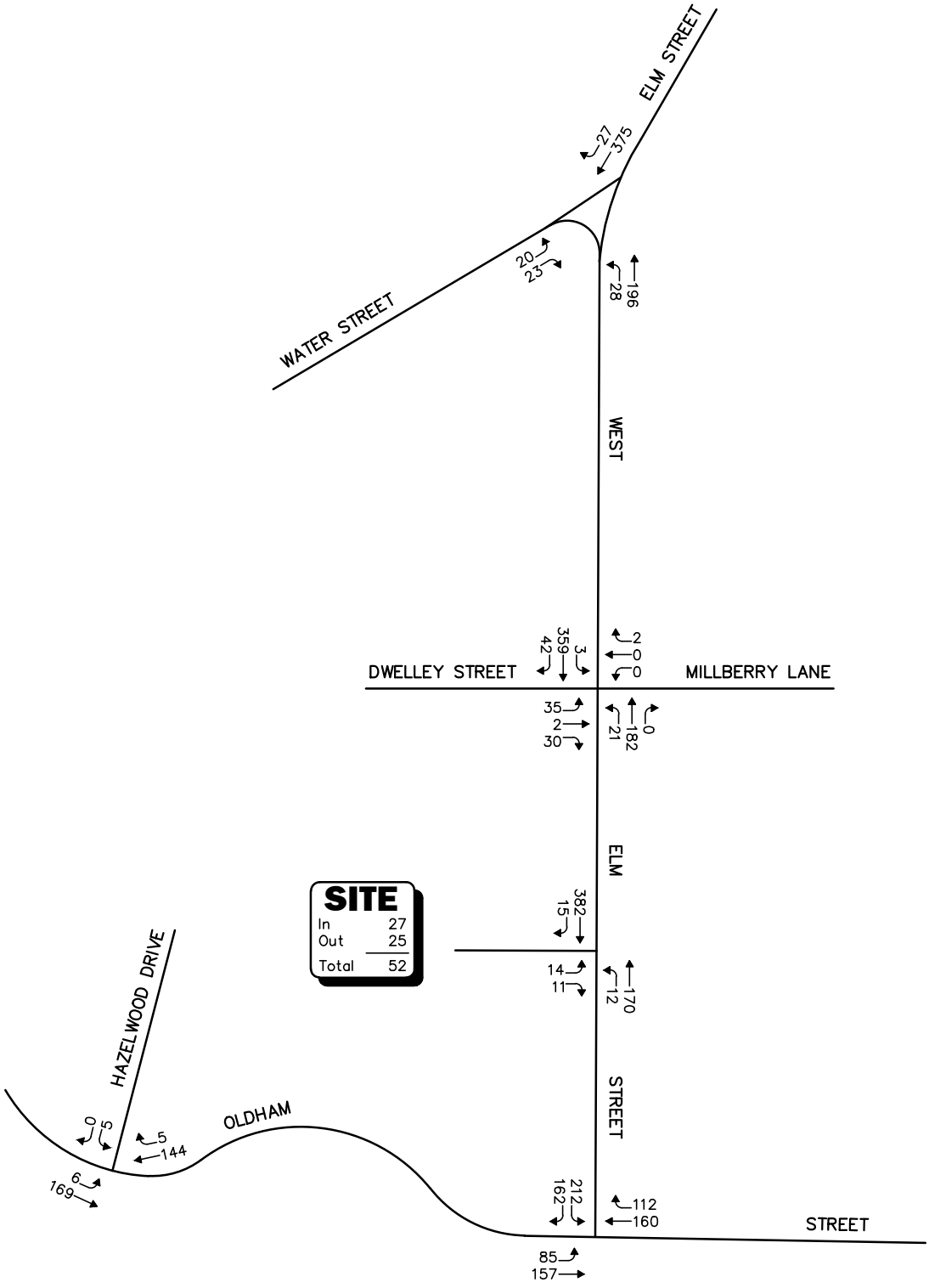

Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

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Figure 6

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2029 No-Build
Weekday Evening
Peak-Hour Traffic Volumes

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Table 5 summarizes and compares the anticipated traffic characteristics of the Project using the ITE data and the empirical trip rates, and includes a comparison to the trips that would be associated with a traditional (non age-qualified) residential community. The detailed trip-generation calculations and empirical trip data provided in the appendix.

Table 5
TRIP-GENERATION SUMMARY AND COMPARISON

	Vehicle Trips				
Time Period/Direction	(A) ITE Trip Data (Age-Qualified)[a]	(B) Empirical Trip Data[b]	(C = A-B) Difference	(D) Traditional (Non-Age-Qualified) Residential Development[c]	(E = A-D) Difference
Average Weekday Daily:					
Entering	362	212		822	
Exiting	362	212		822	
Total	724	424	+300	1,644	-920
Weekday Morning Peak Hour:					
Entering	19	13		31	
Exiting	39	21		90	
Total	58	34	+24	121	-63
Weekday Evening Peak Hour:					
Entering	40	44		103	
Exiting	27	26		61	
Total	67	70	-3	164	-97

[a]Based on ITE LUC 251, *Senior Adult Housing – Single-Family* (162 units) and ITE LUC 252, *Senior Adult Housing – Multifamily* (8 Units).
[b]Based on trip rates derived from traffic counts conducted at The Villages at Weathervane located at 117 Clubhouse Drive in Weymouth on February 1st through 3rd, 2022 (Tuesday through Thursday, inclusive).
[c]Based on ITE LUC 210, *Single-Family Detached Housing* (170 units).

As can be seen in Table 5, using ITE data for a senior (age-qualified) residential community (Column A), the Project is expected to generate approximately 724 vehicle trips on an average weekday (two-way, 24-hour volume, or 362 vehicles entering and 362 exiting), with 58 vehicle trips (19 vehicles entering and 39 exiting) expected during the weekday morning peak-hour and 67 vehicle trips (40 vehicles entering and 27 exiting) expected during the weekday evening peak-hour. Using the empirical data (Column B), the Project is expected to generate approximately 424 vehicle trips on an average weekday (212 vehicles entering and 212 exiting), with 34 vehicle trips (13 vehicles entering and 21 exiting) expected during the weekday morning peak-hour and 70 vehicle trips (44 vehicles entering and 26 exiting) expected during the weekday evening peak-hour.

Given that the use of the ITE trip-generation statistics resulted in higher or comparable traffic volumes for the Project (Column C), the ITE data (Column A) was used to assess the potential impact of the Project on the transportation infrastructure.

In comparison to a traditional (non age-qualified) residential community (Column C), the Project is expected to generate 920 fewer vehicle trips on an average weekday, with 63 fewer vehicle trips expected during the weekday morning peak-hour and 97 fewer vehicle trips during the weekday evening peak-hour.

TRIP DISTRIBUTION AND ASSIGNMENT

The directional distribution of generated trips to and from the Project site was determined based on a review of Journey-to-Work data obtained from the U.S. Census for the Town of Pembroke, and then refined based on existing traffic patterns within the study area. The general trip distribution for the Project is graphically depicted on Figure 7. The additional traffic expected to be generated by the Project was assigned on the study area roadway network as shown on Figures 8 and 9 for the weekday morning and evening peak hours, respectively.

FUTURE TRAFFIC VOLUMES – BUILD CONDITION

The 2029 Build condition traffic volumes consist of the 2029 No-Build traffic volumes with the additional traffic expected to be generated by the Project added to them. The 2029 Build weekday morning and evening peak-hour traffic volumes are graphically depicted on Figures 10 and 11, respectively.

A summary of peak-hour projected traffic-volume changes outside of the study area that is the subject of this assessment is shown in Table 6. These changes are a result of the construction of the Project.

Table 6
PEAK-HOUR TRAFFIC-VOLUME INCREASES

Location/Peak Hour	2022 Existing	2029 No-Build	2029 Build	Traffic-Volume Increase Over No-Build	Percent Increase Over No-Build
Elm St., north of Water St.:					
Weekday Morning	441	486	511	25	5.1
Weekday Evening	554	618	648	30	4.9
Dwelley St., west of West Project Site Rd.:					
Weekday Morning	109	121	127	6	5.0
Weekday Evening	119	130	137	7	5.4
Oldham St., east of West Elm St.:					
Weekday Morning	469	512	531	19	3.8
Weekday Evening	584	641	663	22	3.4
Oldham St., west of Hazelwood Dr.:					
Weekday Morning	228	248	255	8	3.5
Weekday Evening	290	319	327	8	2.5

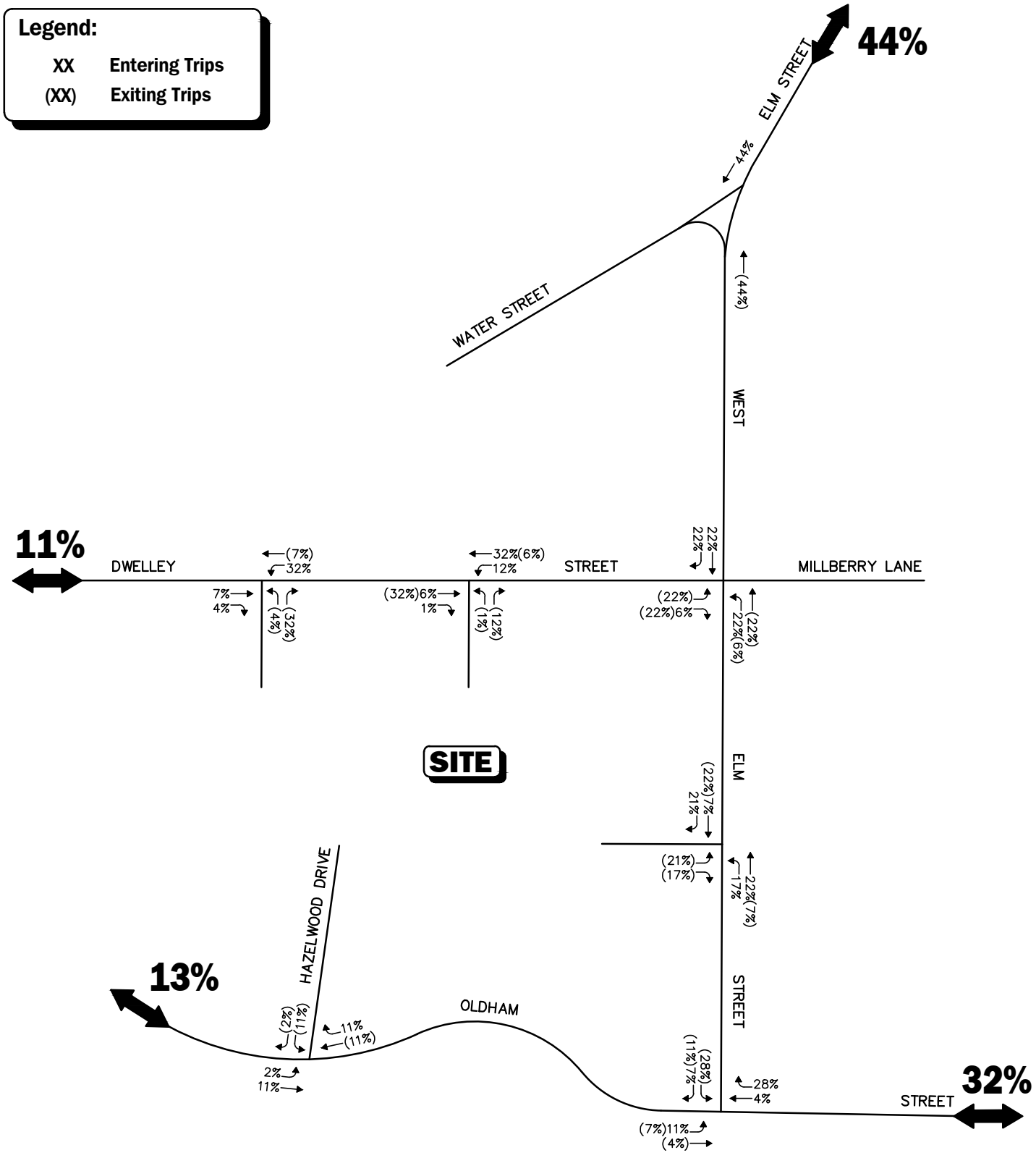

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Figure 7

Trip Distribution Map

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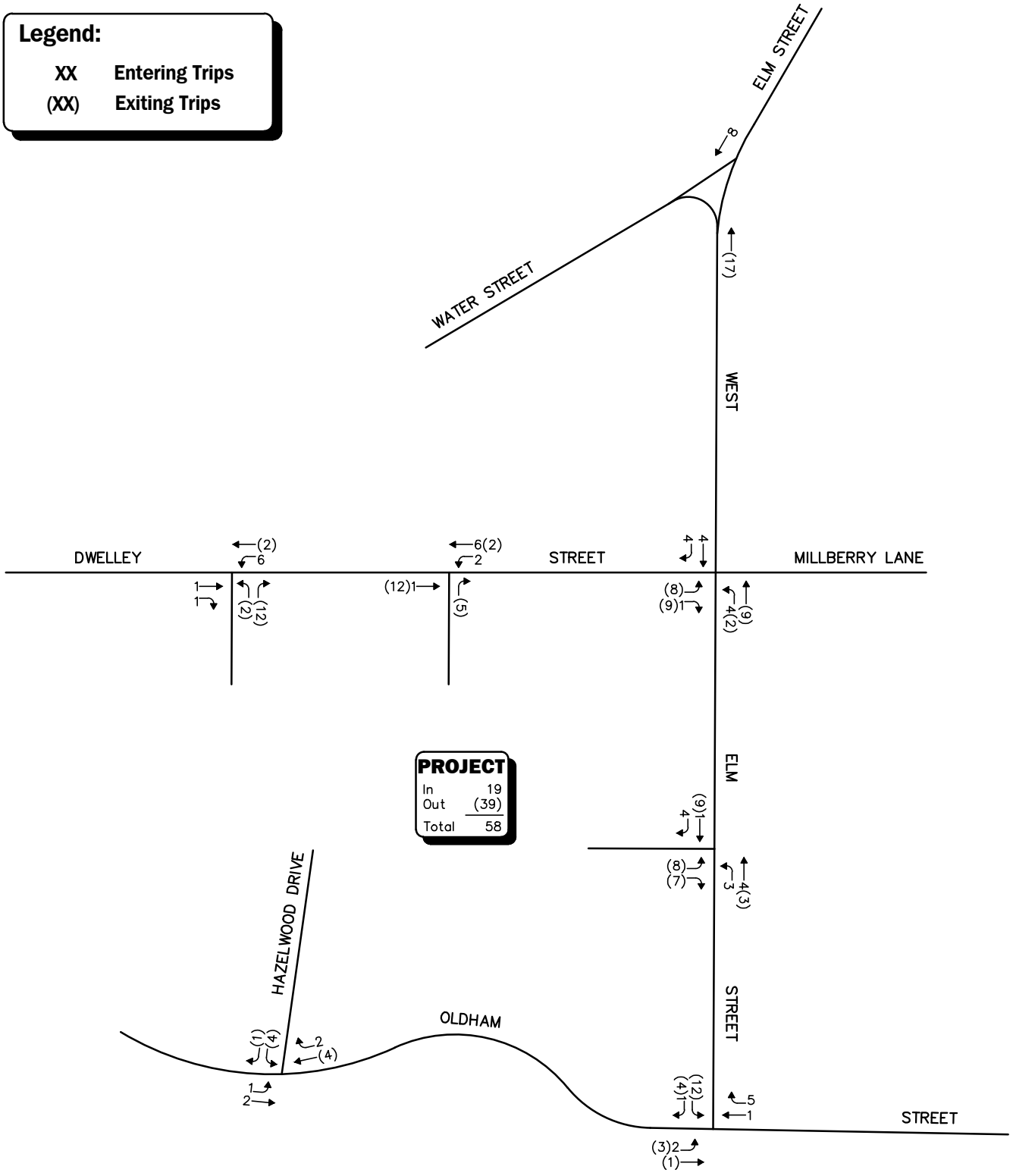

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Figure 8

Project Generated
Weekday Morning
Peak-Hour Traffic Volumes

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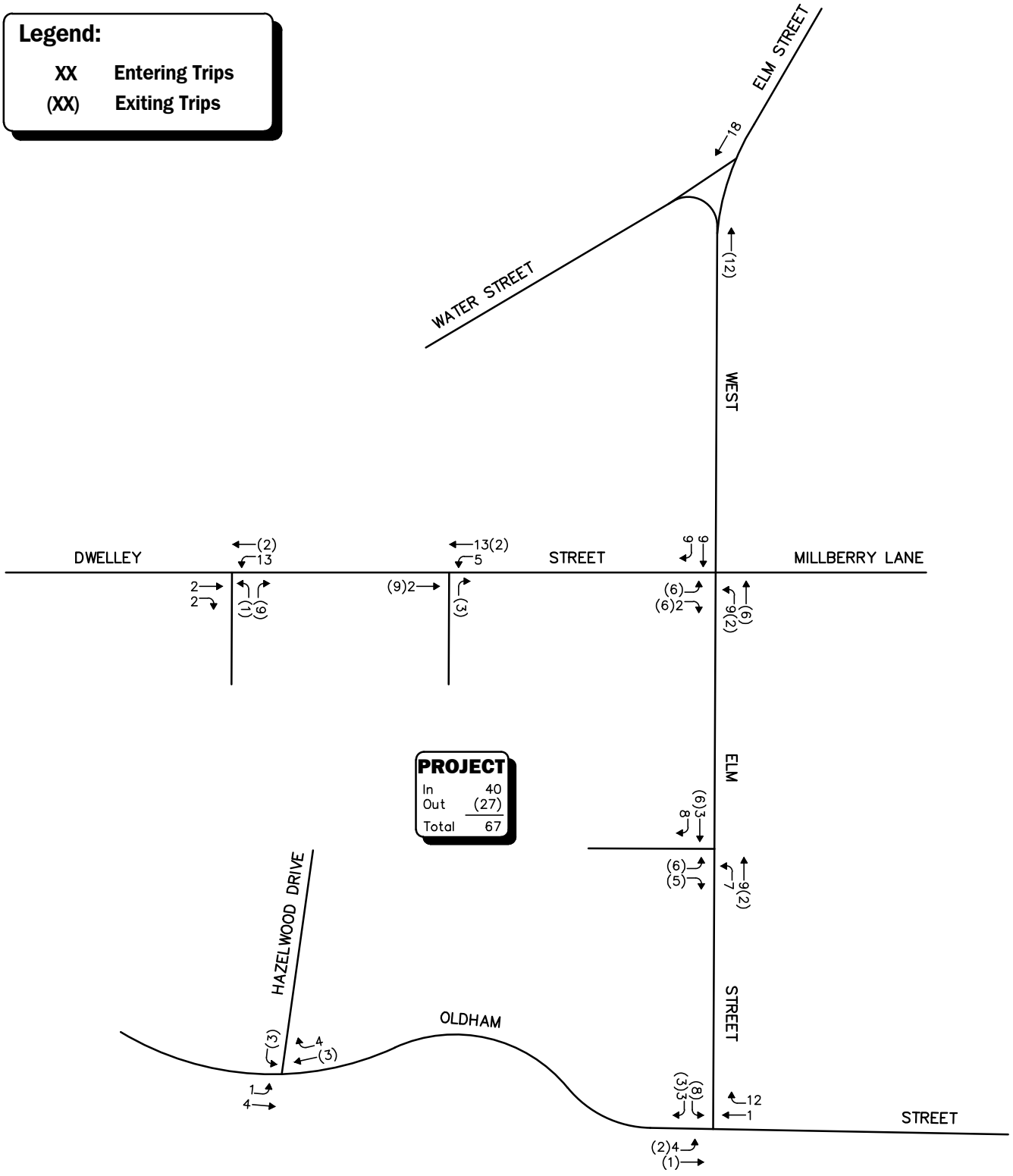

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Figure 9

Project Generated
Weekday Evening
Peak-Hour Traffic Volumes

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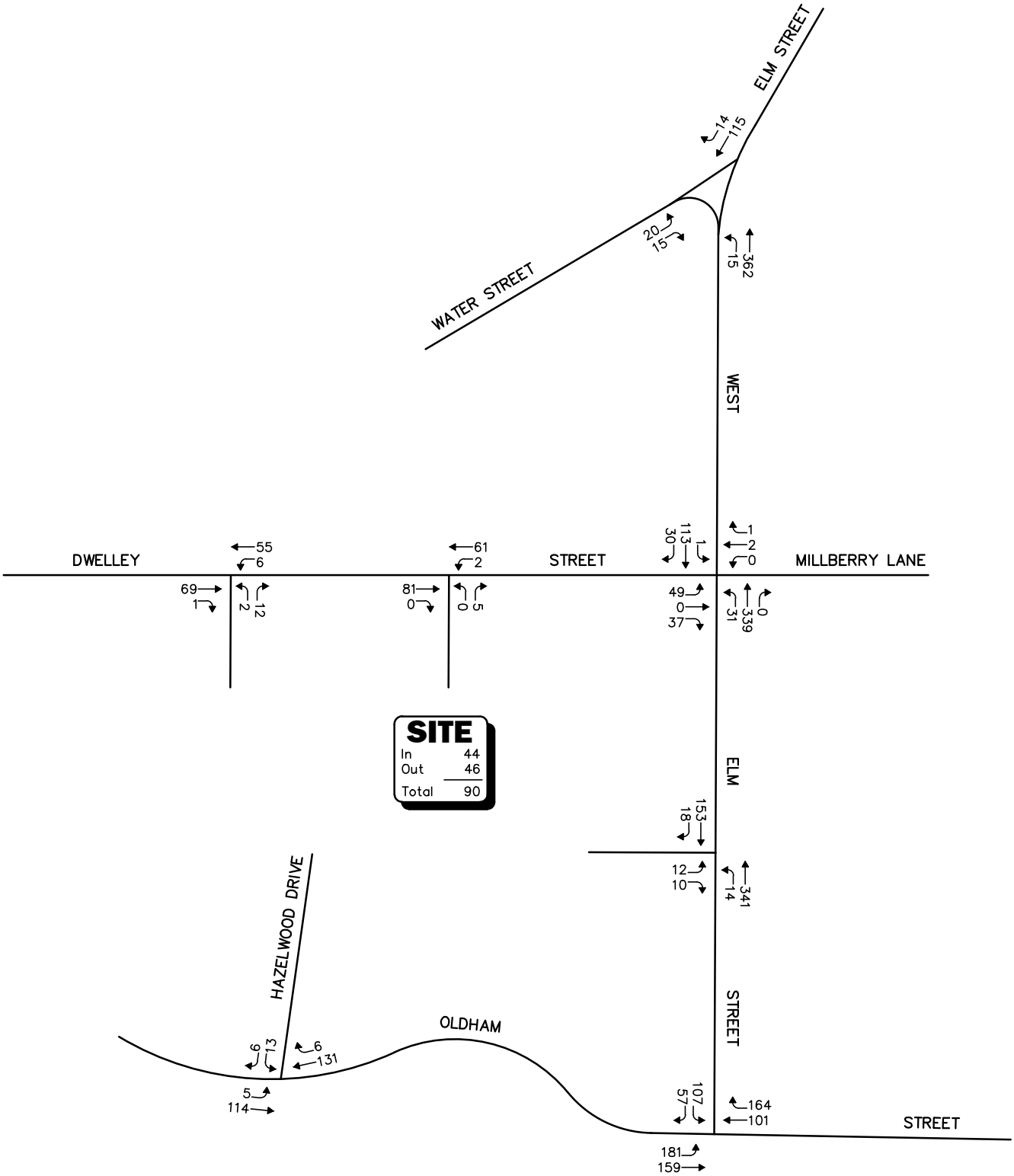

Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

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Figure 10

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2029 Build
Weekday Morning
Peak-Hour Traffic Volumes

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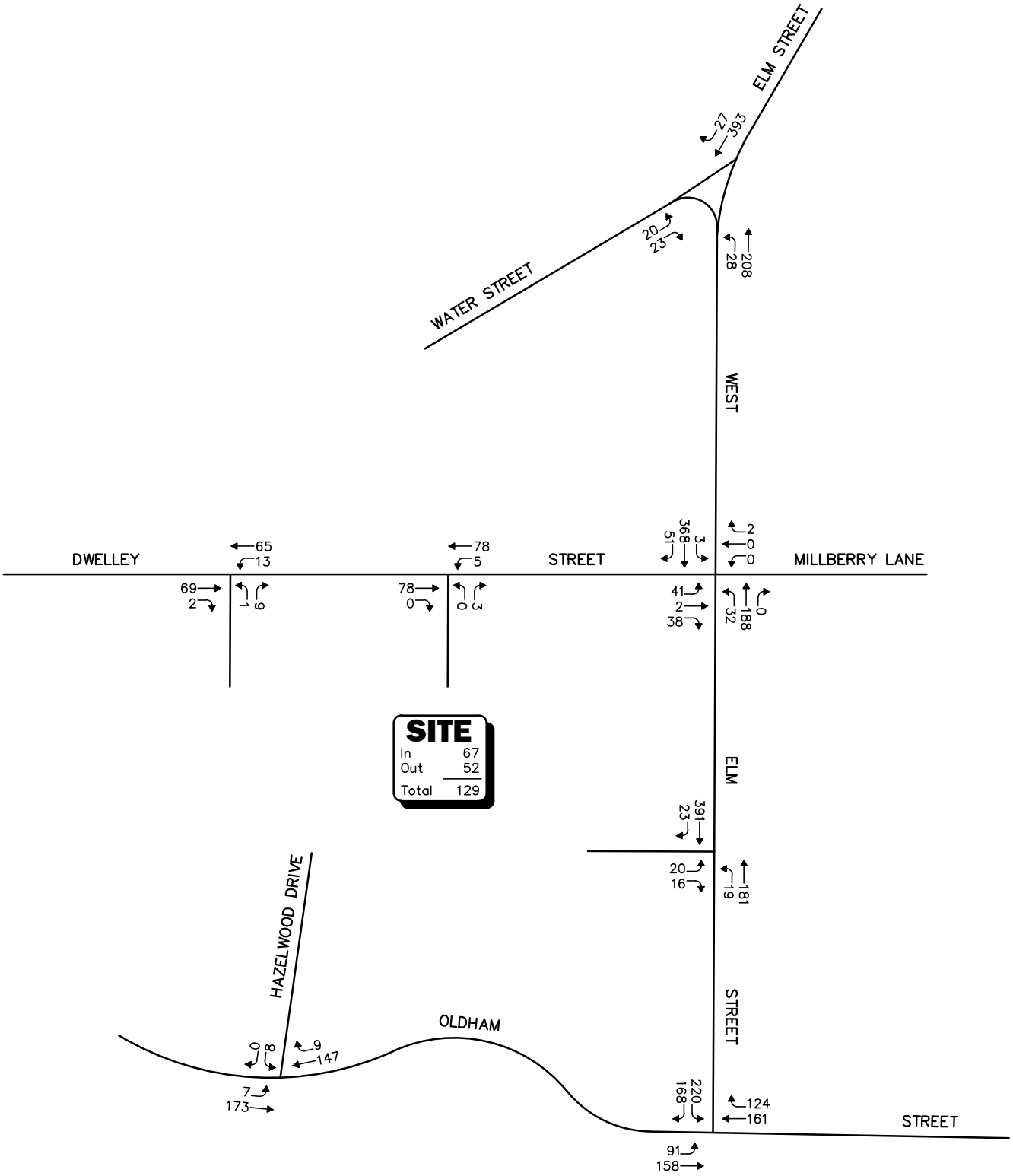

Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

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Figure 11

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2029 Build
Weekday Evening
Peak-Hour Traffic Volumes

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As shown in Table 6, Project-related traffic-volume increases outside of the study area relative to 2029 No-Build conditions are anticipated to range from 2.5 to 5.4 percent during the peak periods, with vehicle increases shown to range from 6 to 30 vehicles. ***When dispersed over the respective peak hours and to the roadway network that serves the Project site, the identified traffic volume increases outside of the immediate study area are not expected to result in a significant increase in motorist delays or vehicle queuing over anticipated future conditions without the Project (i.e., No-Build conditions).***

TRAFFIC OPERATIONS ANALYSIS

Measuring existing and future traffic volumes quantifies traffic flow within the study area. To assess quality of flow, roadway capacity and vehicle queue analyses were conducted under Existing, No-Build, and Build traffic-volume conditions. Capacity analyses provide an indication of how well the roadway facilities serve the traffic demands placed upon them, with vehicle queue analyses providing a secondary measure of the operational characteristics of an intersection or section of roadway under study.

METHODOLOGY

Levels of Service

A primary result of capacity analyses is the assignment of level of service to traffic facilities under various traffic-flow conditions.[9] The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six levels of service are defined for each type of facility. They are given letter designations from A to F, with level-of-service (LOS) A representing the best operating conditions and LOS F representing congested or constrained operating conditions.

Since the level of service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of levels of service, depending on the time of day, day of week, or period of year.

[9]The capacity analysis methodology is based on the concepts and procedures presented in the *Highway Capacity Manual;* Transportation Research Board; Washington, DC; 2010.

Unsignalized Intersections

The six levels of service for unsignalized intersections may be described as follows:

- *LOS A* represents a condition with little or no control delay to minor street traffic.
- *LOS B* represents a condition with short control delays to minor street traffic.
- *LOS C* represents a condition with average control delays to minor street traffic.
- *LOS D* represents a condition with long control delays to minor street traffic.
- *LOS E* represents operating conditions at or near capacity level, with very long control delays to minor street traffic.
- *LOS F* represents a condition where minor street demand volume exceeds capacity of an approach lane, with extreme control delays resulting.

The levels of service of unsignalized intersections are determined by application of a procedure described in the 2010 *Highway Capacity Manual.*[10] Level of service is measured in terms of average control delay. Mathematically, control delay is a function of the capacity and degree of saturation of the lane group and/or approach under study and is a quantification of motorist delay associated with traffic control devices such as traffic signals and STOP signs. Control delay includes the effects of initial deceleration delay approaching a STOP sign, stopped delay, queue move-up time, and final acceleration delay from a stopped condition. Definitions for level of service at unsignalized intersections are also given in the 2010 *Highway Capacity Manual*. Table 7 summarizes the relationship between level of service and average control delay for two-way stop controlled and all-way stop controlled intersections.

Table 7
LEVEL-OF-SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS[a]

Level-Of-Service by Volume-to-Capacity Ratio		Average Control Delay
v/c ≤ 1.0	v/c > 1.0	(Seconds Per Vehicle)
A	F	≤10.0
B	F	10.1 to 15.0
C	F	15.1 to 25.0
D	F	25.1 to 35.0
E	F	35.1 to 50.0
F	F	>50.0

[a]Source: *Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2010; page 19-2.

[10]*Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2010.

Vehicle Queue Analysis

Vehicle queue analyses are a direct measurement of an intersection's ability to process vehicles under various traffic control and volume scenarios and lane use arrangements. The vehicle queue analysis was performed using the Synchro® intersection capacity analysis software which is based upon the methodology and procedures presented in the 2010 *Highway Capacity Manual*. The Synchro® vehicle queue analysis methodology is a simulation based model which reports the number of vehicles that experience a delay of six seconds or more at an intersection. For signalized intersections, Synchro® reports both the average (50th percentile) the 95th percentile vehicle queue. For unsignalized intersections, Synchro® reports the 95th percentile vehicle queue. Vehicle queue lengths are a function of the capacity of the movement under study and the volume of traffic being processed by the intersection during the analysis period. The 95th percentile vehicle queue is the vehicle queue length that will be exceeded only 5 percent of the time, or approximately 3 minutes out of 60 minutes during the peak one hour of the day (during the remaining 57 minutes, the vehicle queue length will be less than the 95th percentile queue length).

ANALYSIS RESULTS

Level-of-service and vehicle queue analyses were conducted for 2022 Existing, 2029 No-Build, and 2029 Build conditions for the intersections within the study area. The results of the intersection capacity and vehicle queue analyses are summarized in Table 8, with the detailed analysis results presented in the Appendix.

The following is a summary of the level-of-service and vehicle queue analyses for the intersections within the study area. For context, we note that an LOS of "D" or better is generally defined as "acceptable" operating conditions.

Project-related impacts at the study area intersections are defined as follows:

Elm Street at Water Street

No change in level-of-service or vehicle queuing is predicted to occur for any movement over No-Build conditions, with all movements continuing to operate at LOS B or better and Project-related impacts defined as increase in average motorist delay of less than 1.0 seconds.

West Elm Street at Dwelley Street and Milbery Lane

No change in level-of-service or vehicle queuing is predicted to occur for any movement over No-Build conditions, with all movements continuing to operate at LOS C or better and Project-related impacts defined as increase in average motorist delay of up to 1.2 seconds.

West Elm Street at the Pembroke Country Club Main Driveway

No change in level-of-service is predicted to occur for any movement over No-Build conditions, with all movements continuing to operate at LOS B or better and Project-related impacts defined as increase in average motorist delay of less than 1.0 seconds and in vehicle queuing of up to one (1) vehicle.

Oldham Street at West Elm Street

No change in level-of-service is predicted to occur for any movement over No-Build conditions, with all movements continuing to operate at LOS D or better and Project-related impacts defined as increase in average motorist delay of up to 4.6 seconds and in vehicle queuing of up to one (1) vehicle.

Oldham Street at Hazelwood Drive

No change in level-of-service or vehicle queuing is predicted to occur for any movement over No-Build conditions, with all movements continuing to operate at LOS B or better and Project-related impacts defined as increase in average motorist delay of less than 1.0 seconds.

Dwelley Street at the East Project Site Roadway

All movements at the intersection are predicted to operate at LOS A during both peak hours with negligible vehicle queueing.

Dwelley Street at the West Project Site Roadway

All movements at the intersection are predicted to operate at LOS A during both peak hours with negligible vehicle queueing.

Table 8
UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

	2022 Existing				2029 No-Build				2029 Build			
Unsignalized Intersection/Peak Hour/Movement	Demand[a]	Delay[b]	LOS[c]	Queue[d] 95th	Demand	Delay	LOS	Queue 95th	Demand	Delay	LOS	Queue 95th
Elm St. at Water St.												
Weekday Morning:												
Water Street EB: LT/RT	32	11.1	B	0	35	11.1	B	0	35	11.7	B	0
Elm Street NB: LT/TH	333	0.3	A	0	360	0.3	A	0	377	0.3	A	0
Elm Street SB: TH/RT	103	0.0	A	0	121	0.0	A	0	129	0.0	A	0
Weekday Evening:												
Water Street EB: LT/RT	39	12.9	B	1	43	13.7	B	1	43	14.1	B	1
Elm Street NB: LT/TH	197	1.0	A	0	224	1.0	A	0	236	1.0	A	0
Elm Street SB: TH/RT	363	0.0	A	0	402	0.0	A	0	420	0.0	A	0
West Elm St. at Dwelley St. and Milbery Ln.												
Weekday Morning:												
Dwelley Street EB: LT/TH/RT	61	12.5	B	1	68	13.2	B	1	86	13.9	B	1
Milbery Lane WB: LT/TH/RT	3	12.1	B	0	3	12.6	B	0	3	12.9	B	0
West Elm Street NB: LT/TH/RT	327	0.5	A	0	355	0.5	A	0	370	0.6	A	0
West Elm Street SB: LT/TH/RT	115	0.1	A	0	136	0.1	A	0	144	0.1	A	0
Weekday Evening:												
Dwelley Street EB: LT/TH/RT	61	14.0	B	1	67	15.3	C	1	81	16.5	C	1
Milbery Lane WB: LT/TH/RT	2	9.1	A	0	2	9.3	A	0	2	9.3	A	0
West Elm Street NB: LT/TH/RT	176	0.8	A	0	203	0.8	A	0	220	1.2	A	0
West Elm Street SB: LT/TH/RT	362	0.1	A	0	404	0.1	A	0	422	0.1	A	0
West Elm St. at the Pembroke CC Main Dwy.												
Weekday Morning:												
Main Driveway EB: LT/RT	--	--	--	--	7	11.2	B	0	22	11.5	B	0
West Elm Street NB: LT/TH	--	--	--	--	345	0.2	A	0	355	0.3	A	0
West Elm Street SB: TH/RT	--	--	--	--	157	0.0	A	0	171	0.0	A	0
Weekday Evening:												
Main Driveway EB: LT/RT	--	--	--	--	24	12.8	B	0	36	13.5	B	1
West Elm Street NB: LT/TH	--	--	--	--	182	0.5	A	0	200	0.7	A	0
West Elm Street SB: TH/RT	--	--	--	--	397	0.0	A	0	414	0.0	A	0
Oldham St. at West Elm St.												
Weekday Morning:												
Oldham Street EB: LT/TH	308	4.1	A	1	334	4.1	A	1	340	4.2	A	1
Oldham Street WB: TH/RT	235	0.0	A	0	259	0.0	A	0	265	0.0	A	0
West Elm Street SB: LT/RT	134	16.1	C	2	147	18.5	C	2	164	20.4	C	2
Weekday Evening:												
Oldham Street EB: LT/TH	222	2.6	A	0	242	2.7	A	0	249	2.8	A	0
Oldham Street WB: TH/RT	247	0.0	A	0	272	0.0	A	0	285	0.0	A	0
West Elm Street SB: LT/RT	338	17.2	C	4	374	25.9	D	7	388	30.5	D	8

See notes at end of Table.

Table 8 (Continued)
UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

	2022 Existing				2029 No-Build				2029 Build			
Unsignalized Intersection/Peak Hour/Movement	Demand[a]	Delay[b]	LOS[c]	Queue[d] 95th	Demand	Delay	LOS	Queue 95th	Demand	Delay	LOS	Queue 95th
Oldham St. at Hazelwood Dr.												
Weekday Morning:												
Oldham Street EB: LT/TH	105	0.3	A	0	116	0.3	A	0	119	0.3	A	0
Oldham Street WB: TH/RT	122	0.0	A	0	131	0.0	A	0	137	0.0	A	0
Hazelwood Drive SB: LT/RT	14	9.9	A	0	14	10.1	B	0	19	10.3	B	0
Weekday Evening:												
Oldham Street EB: LT/TH	159	0.2	A	0	175	0.3	A	0	180	0.3	A	0
Oldham Street WB: TH/RT	135	0.0	A	0	149	0.0	A	0	156	0.0	A	0
Hazelwood Drive SB: LT/RT	5	10.7	B	0	5	11.0	B	0	8	11.2	B	0
Dwelley St. at the East Project Site Roadway.												
Weekday Morning:												
Dwelley Street EB: TH/RT	--	--	--	--	--	--	--	--	81	0.0	A	0
Dwelley Street WB: LT/TH	--	--	--	--	--	--	--	--	63	0.2	A	0
East Project Site Roadway NB: LT/RT	--	--	--	--	--	--	--	--	5	8.8	A	0
Weekday Evening:												
Dwelley Street EB: TH/RT	--	--	--	--	--	--	--	--	78	0.0	A	0
Dwelley Street WB: LT/TH	--	--	--	--	--	--	--	--	83	0.4	A	0
East Project Site Roadway NB: LT/RT	--	--	--	--	--	--	--	--	3	8.8	A	0
Dwelley St. at the West Project Site Roadway.												
Weekday Morning:												
Dwelley Street EB: TH/RT	--	--	--	--	--	--	--	--	70	0.0	A	0
Dwelley Street WB: LT/TH	--	--	--	--	--	--	--	--	61	0.7	A	0
West Project Site Roadway NB: LT/RT	--	--	--	--	--	--	--	--	14	8.9	A	0
Weekday Evening:												
Dwelley Street EB: TH/RT	--	--	--	--	--	--	--	--	71	0	A	0
Dwelley Street WB: LT/TH	--	--	--	--	--	--	--	--	78	1.2	A	0
West Project Site Roadway NB: LT/RT	--	--	--	--	--	--	--	--	10	8.9	A	0

[a]Demand in vehicles per hour.
[b]Average control delay per vehicle (in seconds).
[c]Level of service.
[d]Queue length in vehicles.
NB = northbound; SB = southbound; EB = eastbound; WB = westbound; LT = left-turning movements; TH = through movements; RT = right-turning movements.

SIGHT DISTANCE EVALUATION

Sight distance measurements were performed at the intersection of West Elm Street at the Pembroke Country Club driveway and at the Project site roadway intersections with Dwelley Street in accordance with MassDOT and American Association of State Highway and Transportation Officials (AASHTO)[11] requirements. Both stopping sight distance (SSD) and intersection sight distance (ISD) measurements were performed. In brief, SSD is the distance required by a vehicle traveling at the design speed of a roadway, on wet pavement, to stop prior to striking an object in its travel path. ISD or corner sight distance (CSD) is the sight distance required by a driver entering or crossing an intersecting roadway to perceive an on-coming vehicle and safely complete a turning or crossing maneuver with on-coming traffic. In accordance with AASHTO standards, if the measured ISD is at least equal to the required SSD value for the appropriate design speed, the intersection can operate in a safe manner. Table 9 presents the measured SSD and ISD at the subject intersections.

[11] *A Policy on Geometric Design of Highway and Streets,* 7th Edition; American Association of State Highway and Transportation Officials (AASHTO); Washington D.C.; 2018.

Table 9
SIGHT DISTANCE MEASUREMENTS[a]

Intersection/Sight Distance Measurement	Feet		
	Required Minimum (SSD)	Desirable (ISD)[b]	Measured
West Elm Street at the Pembroke Country Club Driveway			
Stopping Sight Distance:			
West Elm Street approaching from the north	305	--	500+
West Elm Street approaching from the south	305	--	491
Intersection Sight Distance:			
Looking to the north from the Pembroke CC Driveway	305	385	500+
Looking to the south from the Pembroke CC Driveway	305	445	447
Dwelley Street at the East Project Site Roadway			
Stopping Sight Distance:			
Dwelley Street approaching from the east	200	--	500+
Dwelley Street approaching from the west	200	--	500+
Intersection Sight Distance:			
Looking to the east from the Project Site Roadway	200	335	500+
Looking to the west from the Project Site Roadway	200	290	500+
Dwelley Street at the West Project Site Roadway			
Stopping Sight Distance:			
Dwelley Street approaching from the east	200	--	248
Dwelley Street approaching from the west	200	--	346
Intersection Sight Distance:			
Looking to the east from the Project Site Roadway	200	335	272
Looking to the west from the Project Site Roadway	200	290	375

[a]Recommended minimum values obtained from *A Policy on Geometric Design of Highways and Streets,* 7th Edition; American Association of State Highway and Transportation Officials (AASHTO); 2018; and based on a 40 mph approach speed along West Elm Street and a 30 mph approach speed along Dwelley Street.

[b]Values shown are the intersection sight distance for a vehicle turning right or left exiting a roadway under STOP control such that motorists approaching the intersection on the major street should not need to adjust their travel speed to less than 70 percent of their initial approach speed.

As can be seen in Table 9, the available lines of sight at the West Elm Street/Pembroke Country Club driveway intersection and at the Project site roadway intersections with Dwelley Street were found to exceed the recommended minimum sight distances to function in a safe manner (SSD) based on an appropriate approach speed.

Vehicles exiting the new roadway onto the cul-de-sac at the terminus of Hazelwood Drive will have clear line of sight to see vehicles traversing the raised island and along Hazelwood Drive for a distance of greater than 500 feet. In addition, lines of sight at the Oldham Street/Hazelwood Drive intersection were found to exceed 280 feet, which exceeds the minimum sight distance for safe operation for an approach speed of in excess of 35 mph along Oldham Street.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

VAI has conducted a TIA in order to determine the potential impacts on the transportation infrastructure associated with the proposed construction of an age-qualified residential community to be located within the Pembroke Country Club located at 94 West Elm Street in Pembroke, Massachusetts. The following specific areas have been evaluated as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; under existing and future conditions, both with and without the Project. Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the ITE,[12] the Project is expected to generate approximately 724 vehicle trips on an average weekday (two-way, 24-hour volume), with 58 vehicle trips expected during the weekday morning peak-hour and 67 vehicle trips expected during the weekday evening peak-hour;

2. Using empirical trip-generation data derived from traffic counts conducted at a similar age-qualified residential community (The Villages at Weathervane in Weymouth, Massachusetts), the Project was shown to generate approximately 424 vehicle trips on an average weekday, with 34 vehicle trips expected during the weekday morning peak-hour and 70 vehicle trips during the weekday evening peak-hour. Given that the use of the ITE trip-generation statistics resulted in higher or comparable traffic volumes for the Project, the ITE data was used to assess the potential impact of the Project on the transportation infrastructure;

3. When compared to a traditional (non age-qualified) residential community, the Project is expected to generate approximately 920 fewer vehicle trips on an average weekday, with 63 fewer vehicle trips expected during the weekday peak-hour and 97 fewer vehicle trips during the weekday evening peak-hour;

4. The Project will not result in a significant impact (increase) on motorist delays or vehicle queuing over Existing or anticipated future conditions without the Project (No-Build conditions), with no changes in levels of service shown to occur as a result of the Project and all of the movements at the study area intersections shown to continue to operate at

[12] Ibid 1.

LOS D or better with the addition of Project-related traffic, where an LOS of "D" or better is defined as "acceptable" traffic operations;

5. All movements exiting the Project site driveways are predicted to operate at LOS B or better during the peak hours with queues of up to one (1) vehicle;

6. No apparent safety deficiencies were noted with respect to the motor vehicle crash history at the study intersections; and

7. Lines of sight at the Project site driveways were found to exceed the recommended minimum sight distance to function in a safe manner based on the appropriate approach speeds.

RECOMMENDATIONS

A detailed transportation improvement program has been developed that is designed to provide safe and efficient access to the Project site and address any deficiencies identified at off-site locations evaluated in conjunction with this study. The following improvements have been recommended as a part of this evaluation and, where applicable, will be completed in conjunction with the Project subject to receipt of all necessary rights, permits, and approvals.

Project Access

Access to the Project will be provided as follows:

- ***Pembroke Country Club and Attached Residential Units (8 units)*** – Pembroke Country Club Drive which intersects the west side of West Elm Street.

- ***Pembroke Country Club Home Sites (117± units) -*** New roadway that will traverse a general north-south alignment between the existing Pembroke Country Club driveway and Dwelley Street at the location of the existing maintenance driveway for the Pembroke Country Club. The new roadway will include an access control gate at its intersection with the Pembroke Country Club driveway and at a point south of Dwelley Street that will limit the use of the roadway to residents, service/maintenance vehicles and emergency vehicles.

- ***Dwelley Street Residences (22± units) –*** New roadway that will intersect the south side of Dwelley Street opposite Maple Street.

- ***Hazelwood Drive Residences (23± units) –*** New roadway that will intersect north side of the cul-de-sac at the terminus of Hazelwood Drive.

In addition, 20-foot wide, gravel emergency vehicle access drives will be provided to connect the proposed roadways. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation:

- The Project site roadways should be a minimum of 24 feet in width and will be designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle.

- The emergency vehicle access drives should be constructed of a suitable material that will support travel by an emergency vehicle and should be secured in a manner that will restrict use of the drives to emergency vehicles only.

- Driveways to the residential units should be a minimum of 21 feet long measured between the garage door and the far edge of the sidewalk (edge closest to the residence) where a sidewalk is provided, and 23 feet measured between the garage door and the edge of the traveled-way in locations without a sidewalk.

- Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided. STOP-signs and marked STOP-lines should also be provided at major intersections located within the Project site.

- All signs and pavement markings to be installed within the Project site should conform to the applicable standards of the *Manual on Uniform Traffic Control Devices* (MUTCD).[13]

- Sidewalks should be provided along at least one side of the proposed roadways and extend to the intersecting public way (i.e., Dwelley Street, West Elm Street and Hazelwood Drive).

- Americans with Disabilities Act (ADA)-compliant wheelchair ramps should be provided at pedestrian crossings that are to be constructed or modified in conjunction with the Project.

- Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site roadways and at internal intersections should be designed and maintained so as not to restrict lines of sight.

- Snow accumulations (windrows) within sight triangle areas should be promptly removed where such accumulations would impede sight lines.

Off-Site

Independent of the Project, the following sign and pavement marking improvements should be considered:

- ***Elm Street at Water Street*** – Install marked STOP-lines to accompany the STOP-signs in order to define the desired stopping point.
- ***West Elm Street at the Pembroke Country Club Driveway*** – Install a marked STOP-line on the Pembroke Country Club Driveway approach.
- ***Oldham Street at Hazelwood Drive*** – Install a STOP-sign and marked STOP-line on the Hazelwood Drive approach.

[13]Ibid 2.

Transportation Demand Management

Public transportation services are provided within the study area by GATRA. GATRA provides on-demand bus service within the Town of Pembroke by way of the GATRA GO Explore transit service. In addition to fixed route bus services, GATRA also provides demand response (Dial-A-Ride) services for people with disabilities and seniors in member communities.

In an effort to encourage the use of alternative modes of transportation to single-occupant vehicles (SOVs), the follow Transportation Demand Management (TDM) measures will be implemented as part of the Project:

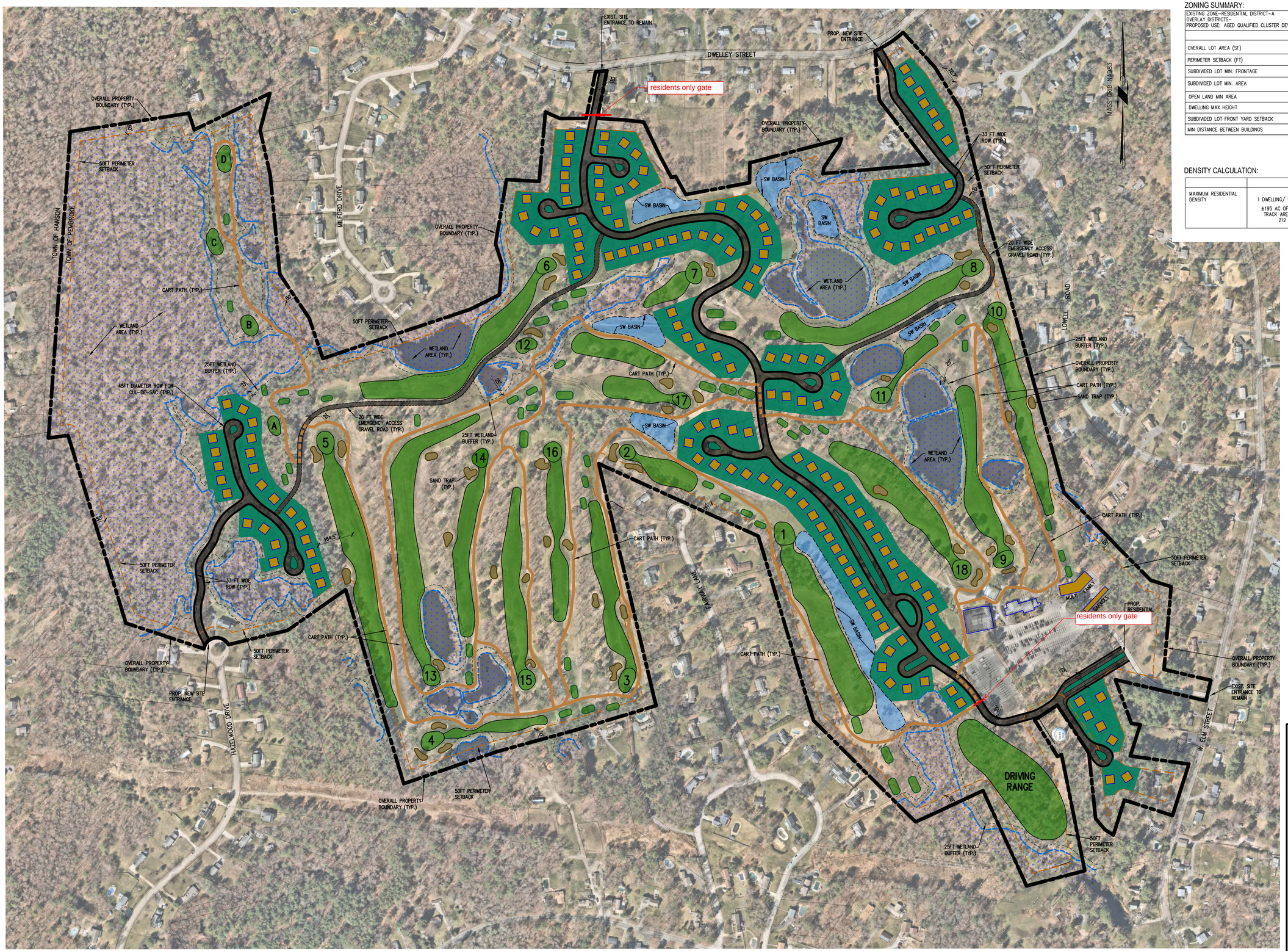
- A transportation coordinator will be assigned for the Project to coordinate the TDM program;
- Information regarding public transportation services, maps, schedules, and fare information will be made available to residents;
- A "welcome packet" will be provided to residents detailing available public transportation services and bicycle and walking alternatives, including services offered by the Pembroke Council on Aging (COA);
- Pedestrian accommodations will be incorporated within the Project site and consist of walkways and paths that will connect to public ways; and
- Secure bicycle parking will be provided for residents and visitors at appropriate locations within the Project site.

With implementation of the aforementioned recommendations, safe and efficient access will continue to be provided to the Project site and the Project can be accommodated within the confines of the existing and improved transportation system.

APPENDIX

PROJECT SITE PLAN
AUTOMATIC TRAFFIC RECORDER COUNT DATA
TURNING MOVEMENT COUNT DATA
WEATHERVANE TRAFFIC COUNTS
SEASONAL ADJUSTMENT DATA
COVID ADJUSTMENT
PUBLIC TRANSPORTATION SCHEDULES
VEHICLE TRAVEL SPEED DATA
MASSDOT CRASH RATE WORKSHEETS AND HIGH CRASH LOCATION MAPPING
GENERAL BACKGROUND TRAFFIC GROWTH
ADDITIONAL NO-BUILD TRIPS
TRIP-GENERATION CALCULATIONS
JOURNEY TO WORK TRIP DISTRIBUTIONS
CAPACITY ANALYSIS WORKSHEETS

PROJECT SITE PLAN



ZONING SUMMARY:

EXISTING ZONE-RESIDENTIAL DISTRICT-A OVERLAY DISTRICTS- PROPOSED USE: AGED QUALIFIED CLUSTER DEVELOPMENT -SECTION V 13.		
	REQUIRED	PROPOSED
OVERALL LOT AREA (SF)	1,306,800 SF (30 AC)	TOTAL=10,761,566 SF (247 AC)
PERIMETER SETBACK (FT)	50'	50'
SUBDIVIDED LOT MIN. FRONTAGE	N/A	N/A
SUBDIVIDED LOT MIN. AREA	N/A	N/A
OPEN LAND MIN AREA	50% OF TOTAL TRACK AREA	±180 AC OF OPEN LAND=±72%
DWELLING MAX HEIGHT	2.5 STORIES	2.5 STORIES
SUBDIVIDED LOT FRONT YARD SETBACK	18 FT	MORE OR EQUAL TO 18 FT
MIN DISTANCE BETWEEN BUILDINGS	20 FT	MORE OR EQUAL TO 20 FT

DENSITY CALCULATION:

	REQUIRED	PROPOSED
MAXIMUM RESIDENTIAL DENSITY	1 DWELLING/ 40,000 SF OF UPLAND ±195 AC OF UPLAND WITHIN TOTAL TRACK AREA THEREFORE MAX OF 212 UNITS ALLOWED	170 RESIDENTIAL UNITS

170 UNITS
PROPOSED AQV CONCEPT PLAN
PEMBROKE COUNTRY CLUB
PEMBROKE, MA 02359

DATE: 09-24-2021

200 100 0 200 400

SCALE: 1"=200'

Crocker Design Group
2 SHARP STREET, UNIT B
HINGHAM, MA 02043
P: 781-919-0808

C:\2021\Crocker Design Group, LLC\Gabriel Crocker - Projects\100-364 Pembroke - Country Club\dwg\Concept Plans_3-8 SUBDIVISION PLAN AQV.dwg, Subdivision - Buildings, Jun 07, 2022 09:14

AUTOMATIC TRAFFIC RECORDER COUNT DATA

Location : West Elm Street 91240001
Location : South of Pembroke CC
City/State: Pembroke, MA

1/24/2022	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Week Average	
Time	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,	SB,	NB,
12:00 AM	*	*	1	3	4	3	*	*	*	*	*	*	*	*	2	3
1:00	*	*	3	2	1	1	*	*	*	*	*	*	*	*	2	2
2:00	*	*	1	4	0	2	*	*	*	*	*	*	*	*	0	3
3:00	*	*	1	11	2	11	*	*	*	*	*	*	*	*	2	11
4:00	*	*	7	63	3	52	*	*	*	*	*	*	*	*	5	58
5:00	*	*	10	132	5	137	*	*	*	*	*	*	*	*	8	134
6:00	*	*	28	178	31	166	*	*	*	*	*	*	*	*	30	172
7:00	*	*	81	258	82	286	*	*	*	*	*	*	*	*	82	272
8:00	*	*	78	264	55	227	*	*	*	*	*	*	*	*	66	246
9:00	*	*	59	150	83	195	*	*	*	*	*	*	*	*	71	172
10:00	*	*	66	130	76	143	*	*	*	*	*	*	*	*	71	136
11:00	*	*	76	155	95	140	*	*	*	*	*	*	*	*	86	148
12:00 PM	*	*	91	134	120	156	*	*	*	*	*	*	*	*	106	145
1:00	*	*	114	124	114	147	*	*	*	*	*	*	*	*	114	136
2:00	*	*	149	139	156	140	*	*	*	*	*	*	*	*	152	140
3:00	*	*	194	172	221	158	*	*	*	*	*	*	*	*	208	165
4:00	*	*	230	154	213	140	*	*	*	*	*	*	*	*	222	147
5:00	*	*	234	145	210	146	*	*	*	*	*	*	*	*	222	146
6:00	*	*	128	107	128	102	*	*	*	*	*	*	*	*	128	104
7:00	*	*	90	57	80	77	*	*	*	*	*	*	*	*	85	67
8:00	*	*	49	59	68	57	*	*	*	*	*	*	*	*	58	58
9:00	*	*	37	33	45	32	*	*	*	*	*	*	*	*	41	32
10:00	*	*	30	17	12	15	*	*	*	*	*	*	*	*	21	16
11:00	*	*	10	14	6	10	*	*	*	*	*	*	*	*	8	12
Total	0	0	1767	2505	1810	2543	0	0	0	0	0	0	0	0	1790	2525
Day	0		4272		4353		0		0		0		0		4315	
AM Peak			7:00	8:00	11:00	7:00									11:00	7:00
Volume			81	264	95	286									86	272
PM Peak			5:00	3:00	3:00	3:00									4:00	3:00
Volume			234	172	221	158									222	165
Comb Total	0		4272		4353		0		0		0		0		4315	
ADT	ADT: 4,312		AADT: 4,312													

Location : West Elm Street 91240001
Location : South of Pembroke CC
City/State: Pembroke, MA

1/25/2022	SB,		Hour Totals		NB,		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	20			2	41				
12:15	0	22			0	32				
12:30	1	19			1	28				
12:45	0	30	1	91	0	33	3	134	4	225
1:00	1	26			2	26				
1:15	2	37			0	33				
1:30	0	20			0	35				
1:45	0	31	3	114	0	30	2	124	5	238
2:00	0	25			1	28				
2:15	0	35			1	39				
2:30	0	34			0	35				
2:45	1	55	1	149	2	37	4	139	5	288
3:00	1	46			3	42				
3:15	0	50			1	39				
3:30	0	48			2	45				
3:45	0	50	1	194	5	46	11	172	12	366
4:00	0	70			3	37				
4:15	1	55			13	42				
4:30	4	58			16	35				
4:45	2	47	7	230	31	40	63	154	70	384
5:00	0	51			24	39				
5:15	2	63			35	42				
5:30	4	61			32	40				
5:45	4	59	10	234	41	24	132	145	142	379
6:00	3	39			34	29				
6:15	9	29			45	28				
6:30	4	37			50	27				
6:45	12	23	28	128	49	23	178	107	206	235
7:00	22	17			49	14				
7:15	10	19			60	23				
7:30	23	28			78	14				
7:45	26	26	81	90	71	6	258	57	339	147
8:00	21	11			67	14				
8:15	24	16			67	23				
8:30	14	9			66	15				
8:45	19	13	78	49	64	7	264	59	342	108
9:00	17	13			38	10				
9:15	12	11			42	8				
9:30	11	8			43	10				
9:45	19	5	59	37	27	5	150	33	209	70
10:00	9	7			34	6				
10:15	20	10			25	7				
10:30	21	11			32	2				
10:45	16	2	66	30	39	2	130	17	196	47
11:00	15	2			44	3				
11:15	13	5			36	3				
11:30	24	1			39	4				
11:45	24	2	76	10	36	4	155	14	231	24
Total	411	1356			1350	1155			1761	2511
Percent	23.3%	76.7%			53.9%	46.1%			41.2%	58.8%

Location : West Elm Street 91240001
Location : South of Pembroke CC
City/State: Pembroke, MA

1/26/2022	SB,		Hour Totals		NB,		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	2	20			0	39				
12:15	1	34			0	36				
12:30	1	39			3	32				
12:45	0	27	4	120	0	49	3	156	7	276
1:00	1	30			0	40				
1:15	0	35			0	29				
1:30	0	23			0	40				
1:45	0	26	1	114	1	38	1	147	2	261
2:00	0	41			0	30				
2:15	0	38			0	44				
2:30	0	32			1	32				
2:45	0	45	0	156	1	34	2	140	2	296
3:00	0	50			3	39				
3:15	1	48			1	34				
3:30	0	65			1	45				
3:45	1	58	2	221	6	40	11	158	13	379
4:00	0	47			3	28				
4:15	2	54			10	46				
4:30	1	64			18	30				
4:45	0	48	3	213	21	36	52	140	55	353
5:00	0	47			27	50				
5:15	1	80			34	32				
5:30	1	50			32	33				
5:45	3	33	5	210	44	31	137	146	142	356
6:00	1	52			32	30				
6:15	6	31			38	34				
6:30	6	17			46	17				
6:45	18	28	31	128	50	21	166	102	197	230
7:00	18	31			46	20				
7:15	22	17			80	23				
7:30	25	18			83	13				
7:45	17	14	82	80	77	21	286	77	368	157
8:00	13	17			49	16				
8:15	18	17			62	12				
8:30	16	18			64	18				
8:45	8	16	55	68	52	11	227	57	282	125
9:00	23	16			41	7				
9:15	27	10			69	12				
9:30	15	8			44	6				
9:45	18	11	83	45	41	7	195	32	278	77
10:00	24	7			37	6				
10:15	18	3			37	2				
10:30	18	0			35	4				
10:45	16	2	76	12	34	3	143	15	219	27
11:00	20	2			36	3				
11:15	21	0			28	1				
11:30	26	4			42	4				
11:45	28	0	95	6	34	2	140	10	235	16
Total	437	1373			1363	1180			1800	2553
Percent	24.1%	75.9%			53.6%	46.4%			41.4%	58.6%
Grand Total	848	2729			2713	2335			3561	5064
Percent	23.7%	76.3%			53.7%	46.3%			41.3%	58.7%
ADT		ADT: 4,312		AADT: 4,312						

Location : Dwelley Street 91240002
Location : West of West Elm Street
City/State: Pembroke, MA

1/24/2022	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Week Average	
Time	WB,	EB,	WB,	EB,	WB,	EB,	WB,	EB,	WB,	EB,	WB,	EB,	WB,	EB,	WB,	EB,
12:00 AM	*	*	3	3	2	3	*	*	*	*	*	*	*	*	2	3
1:00	*	*	2	2	1	0	*	*	*	*	*	*	*	*	2	1
2:00	*	*	1	1	0	3	*	*	*	*	*	*	*	*	0	2
3:00	*	*	2	3	1	1	*	*	*	*	*	*	*	*	2	2
4:00	*	*	1	11	0	7	*	*	*	*	*	*	*	*	0	9
5:00	*	*	2	13	2	14	*	*	*	*	*	*	*	*	2	14
6:00	*	*	9	22	8	25	*	*	*	*	*	*	*	*	8	24
7:00	*	*	36	47	34	55	*	*	*	*	*	*	*	*	35	51
8:00	*	*	34	51	32	50	*	*	*	*	*	*	*	*	33	50
9:00	*	*	22	33	25	37	*	*	*	*	*	*	*	*	24	35
10:00	*	*	26	29	25	35	*	*	*	*	*	*	*	*	26	32
11:00	*	*	28	39	32	32	*	*	*	*	*	*	*	*	30	36
12:00 PM	*	*	40	35	21	36	*	*	*	*	*	*	*	*	30	36
1:00	*	*	30	33	30	35	*	*	*	*	*	*	*	*	30	34
2:00	*	*	39	32	34	32	*	*	*	*	*	*	*	*	36	32
3:00	*	*	53	42	50	44	*	*	*	*	*	*	*	*	52	43
4:00	*	*	58	41	39	52	*	*	*	*	*	*	*	*	48	46
5:00	*	*	40	59	45	34	*	*	*	*	*	*	*	*	42	46
6:00	*	*	26	39	21	26	*	*	*	*	*	*	*	*	24	32
7:00	*	*	21	18	33	24	*	*	*	*	*	*	*	*	27	21
8:00	*	*	22	9	23	8	*	*	*	*	*	*	*	*	22	8
9:00	*	*	16	13	11	5	*	*	*	*	*	*	*	*	14	9
10:00	*	*	4	3	5	6	*	*	*	*	*	*	*	*	4	4
11:00	*	*	6	2	8	4	*	*	*	*	*	*	*	*	7	3
Total	0	0	521	580	482	568	0	0	0	0	0	0	0	0	500	573
Day	0		1101		1050		0		0		0		0		1073	
AM Peak			7:00	8:00	7:00	7:00									7:00	7:00
Volume			36	51	34	55									35	51
PM Peak			4:00	5:00	3:00	4:00									3:00	4:00
Volume			58	59	50	52									52	46
Comb Total	0		1101		1050		0		0		0		0		1073	
ADT	ADT: 1,076		AADT: 1,076													

Location : Dwelley Street 91240002
Location : West of West Elm Street
City/State: Pembroke, MA

1/25/2022	WB,		Hour Totals		EB,		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	1	11			1	10				
12:15	0	11			0	13				
12:30	2	8			2	6				
12:45	0	10	3	40	0	6	3	35	6	75
1:00	0	6			0	8				
1:15	1	9			1	4				
1:30	1	5			1	7				
1:45	0	10	2	30	0	14	2	33	4	63
2:00	0	5			0	6				
2:15	0	7			1	6				
2:30	0	7			0	11				
2:45	1	20	1	39	0	9	1	32	2	71
3:00	0	15			1	11				
3:15	1	15			0	7				
3:30	0	16			2	11				
3:45	1	7	2	53	0	13	3	42	5	95
4:00	0	14			1	11				
4:15	0	16			1	9				
4:30	1	11			3	10				
4:45	0	17	1	58	6	11	11	41	12	99
5:00	0	11			1	12				
5:15	0	8			4	19				
5:30	0	13			1	13				
5:45	2	8	2	40	7	15	13	59	15	99
6:00	1	7			1	9				
6:15	2	5			6	13				
6:30	2	8			7	9				
6:45	4	6	9	26	8	8	22	39	31	65
7:00	4	11			12	4				
7:15	10	4			12	7				
7:30	13	4			11	4				
7:45	9	2	36	21	12	3	47	18	83	39
8:00	7	3			15	3				
8:15	13	9			17	1				
8:30	9	7			9	2				
8:45	5	3	34	22	10	3	51	9	85	31
9:00	3	2			6	2				
9:15	11	8			10	4				
9:30	6	4			7	2				
9:45	2	2	22	16	10	5	33	13	55	29
10:00	8	1			8	2				
10:15	10	1			5	1				
10:30	2	2			5	0				
10:45	6	0	26	4	11	0	29	3	55	7
11:00	6	2			6	0				
11:15	6	1			11	1				
11:30	8	2			8	0				
11:45	8	1	28	6	14	1	39	2	67	8
Total	166	355			254	326			420	681
Percent	31.9%	68.1%			43.8%	56.2%			38.1%	61.9%

Location : Dwelley Street 91240002
Location : West of West Elm Street
City/State: Pembroke, MA

1/26/2022	WB,		Hour Totals		EB,		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	8			1	7				
12:15	1	3			0	12				
12:30	0	3			1	7				
12:45	1	7	2	21	1	10	3	36	5	57
1:00	0	4			0	8				
1:15	0	9			0	8				
1:30	0	4			0	8				
1:45	1	13	1	30	0	11	0	35	1	65
2:00	0	6			1	7				
2:15	0	10			2	8				
2:30	0	9			0	7				
2:45	0	9	0	34	0	10	3	32	3	66
3:00	1	8			0	18				
3:15	0	13			1	7				
3:30	0	13			0	11				
3:45	0	16	1	50	0	8	1	44	2	94
4:00	0	14			0	10				
4:15	0	12			0	15				
4:30	0	5			3	11				
4:45	0	8	0	39	4	16	7	52	7	91
5:00	2	13			2	10				
5:15	0	21			3	9				
5:30	0	8			3	5				
5:45	0	3	2	45	6	10	14	34	16	79
6:00	1	10			2	8				
6:15	3	4			6	5				
6:30	0	3			8	8				
6:45	4	4	8	21	9	5	25	26	33	47
7:00	4	13			17	4				
7:15	9	9			14	7				
7:30	12	5			12	8				
7:45	9	6	34	33	12	5	55	24	89	57
8:00	11	5			13	3				
8:15	5	9			11	1				
8:30	7	4			16	1				
8:45	9	5	32	23	10	3	50	8	82	31
9:00	10	2			7	1				
9:15	6	4			8	1				
9:30	3	2			13	2				
9:45	6	3	25	11	9	1	37	5	62	16
10:00	5	3			10	0				
10:15	7	0			8	2				
10:30	6	2			12	3				
10:45	7	0	25	5	5	1	35	6	60	11
11:00	7	3			4	2				
11:15	9	1			11	0				
11:30	8	2			8	0				
11:45	8	2	32	8	9	2	32	4	64	12
Total	162	320			262	306			424	626
Percent	33.6%	66.4%			46.1%	53.9%			40.4%	59.6%
Grand Total	328	675			516	632			844	1307
Percent	32.7%	67.3%			44.9%	55.1%			39.2%	60.8%
ADT		ADT: 1,076		AADT: 1,076						

Location : Oldham Street 91240003
Location : East of West Elm Street
City/State: Pembroke, MA

1/25/2022	EB,		Hour Totals		WB,		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	31			0	42				
12:15	2	28			1	35				
12:30	1	33			0	42				
12:45	0	42	3	134	1	30	2	149	5	283
1:00	1	32			2	30				
1:15	1	42			1	39				
1:30	1	30			1	35				
1:45	1	33	4	137	1	33	5	137	9	274
2:00	0	37			2	37				
2:15	0	38			2	53				
2:30	0	62			0	37				
2:45	0	69	0	206	1	51	5	178	5	384
3:00	1	68			2	52				
3:15	1	63			1	59				
3:30	2	58			2	65				
3:45	1	58	5	247	2	61	7	237	12	484
4:00	4	80			1	54				
4:15	2	65			6	64				
4:30	6	66			5	52				
4:45	3	79	15	290	10	50	22	220	37	510
5:00	5	68			14	66				
5:15	5	70			16	60				
5:30	7	64			19	51				
5:45	12	74	29	276	9	44	58	221	87	497
6:00	16	41			23	52				
6:15	20	43			32	28				
6:30	21	35			30	30				
6:45	48	39	105	158	44	25	129	135	234	293
7:00	55	25			35	25				
7:15	33	20			50	34				
7:30	46	23			50	24				
7:45	54	18	188	86	61	14	196	97	384	183
8:00	51	16			48	16				
8:15	44	15			62	26				
8:30	40	17			48	21				
8:45	61	15	196	63	57	16	215	79	411	142
9:00	30	8			33	15				
9:15	25	11			39	19				
9:30	25	9			39	13				
9:45	32	5	112	33	25	6	136	53	248	86
10:00	28	5			44	7				
10:15	31	11			30	2				
10:30	36	10			35	5				
10:45	33	1	128	27	31	4	140	18	268	45
11:00	36	1			55	6				
11:15	27	2			42	2				
11:30	35	4			35	4				
11:45	40	0	138	7	41	6	173	18	311	25
Total	923	1664			1088	1542			2011	3206
Percent	35.7%	64.3%			41.4%	58.6%			38.5%	61.5%

Location : Oldham Street 91240003
Location : East of West Elm Street
City/State: Pembroke, MA

1/26/2022	EB,		Hour Totals		WB,		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	34			1	33				
12:15	3	29			1	39				
12:30	0	43			2	39				
12:45	0	33	3	139	2	49	6	160	9	299
1:00	2	41			0	35				
1:15	0	40			0	27				
1:30	0	40			0	41				
1:45	1	50	3	171	1	37	1	140	4	311
2:00	1	46			3	37				
2:15	0	39			0	53				
2:30	0	56			0	39				
2:45	0	56	1	197	1	57	4	186	5	383
3:00	1	56			0	52				
3:15	1	61			2	53				
3:30	1	75			0	58				
3:45	1	65	4	257	4	62	6	225	10	482
4:00	4	61			1	55				
4:15	0	62			4	67				
4:30	2	70			4	43				
4:45	2	67	8	260	7	61	16	226	24	486
5:00	1	58			16	68				
5:15	11	79			22	43				
5:30	3	78			14	40				
5:45	13	48	28	263	16	37	68	188	96	451
6:00	14	38			18	41				
6:15	29	31			34	41				
6:30	33	33			29	23				
6:45	35	36	111	138	35	25	116	130	227	268
7:00	61	29			28	36				
7:15	38	31			58	28				
7:30	45	36			55	11				
7:45	55	27	199	123	44	16	185	91	384	214
8:00	46	13			48	26				
8:15	48	17			49	17				
8:30	35	18			50	24				
8:45	37	13	166	61	52	13	199	80	365	141
9:00	50	13			40	17				
9:15	35	10			59	18				
9:30	33	11			36	12				
9:45	47	9	165	43	41	16	176	63	341	106
10:00	32	7			35	14				
10:15	28	2			34	7				
10:30	38	3			30	3				
10:45	23	1	121	13	36	9	135	33	256	46
11:00	31	2			31	4				
11:15	29	5			25	5				
11:30	41	1			36	3				
11:45	42	1	143	9	35	3	127	15	270	24
Total	952	1674			1039	1537			1991	3211
Percent	36.3%	63.7%			40.3%	59.7%			38.3%	61.7%
Grand Total	1875	3338			2127	3079			4002	6417
Percent	36.0%	64.0%			40.9%	59.1%			38.4%	61.6%
ADT		ADT: 5,217		AADT: 5,217						

Location : Oldham Street 91240003
Location : East of West Elm Street
City/State: Pembroke, MA

1/24/2022	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Week Average	
Time	EB,	WB,	EB,	WB,	EB,	WB,	EB,	WB,	EB,	WB,	EB,	WB,	EB,	WB,	EB,	WB,
12:00 AM	*	*	3	2	3	6	*	*	*	*	*	*	*	*	3	4
1:00	*	*	4	5	3	1	*	*	*	*	*	*	*	*	4	3
2:00	*	*	0	5	1	4	*	*	*	*	*	*	*	*	0	4
3:00	*	*	5	7	4	6	*	*	*	*	*	*	*	*	4	6
4:00	*	*	15	22	8	16	*	*	*	*	*	*	*	*	12	19
5:00	*	*	29	58	28	68	*	*	*	*	*	*	*	*	28	63
6:00	*	*	105	129	111	116	*	*	*	*	*	*	*	*	108	122
7:00	*	*	188	196	199	185	*	*	*	*	*	*	*	*	194	190
8:00	*	*	196	215	166	199	*	*	*	*	*	*	*	*	181	207
9:00	*	*	112	136	165	176	*	*	*	*	*	*	*	*	138	156
10:00	*	*	128	140	121	135	*	*	*	*	*	*	*	*	124	138
11:00	*	*	138	173	143	127	*	*	*	*	*	*	*	*	140	150
12:00 PM	*	*	134	149	139	160	*	*	*	*	*	*	*	*	136	154
1:00	*	*	137	137	171	140	*	*	*	*	*	*	*	*	154	138
2:00	*	*	206	178	197	186	*	*	*	*	*	*	*	*	202	182
3:00	*	*	247	237	257	225	*	*	*	*	*	*	*	*	252	231
4:00	*	*	290	220	260	226	*	*	*	*	*	*	*	*	275	223
5:00	*	*	276	221	263	188	*	*	*	*	*	*	*	*	270	204
6:00	*	*	158	135	138	130	*	*	*	*	*	*	*	*	148	132
7:00	*	*	86	97	123	91	*	*	*	*	*	*	*	*	104	94
8:00	*	*	63	79	61	80	*	*	*	*	*	*	*	*	62	80
9:00	*	*	33	53	43	63	*	*	*	*	*	*	*	*	38	58
10:00	*	*	27	18	13	33	*	*	*	*	*	*	*	*	20	26
11:00	*	*	7	18	9	15	*	*	*	*	*	*	*	*	8	16
Total	0	0	2587	2630	2626	2576	0	0	0	0	0	0	0	0	2605	2600
Day	0		5217		5202		0		0		0		0		5205	
AM Peak			8:00	8:00	7:00	8:00									7:00	8:00
Volume			196	215	199	199									194	207
PM Peak			4:00	3:00	5:00	4:00									4:00	3:00
Volume			290	237	263	226									275	231
Comb Total	0		5217		5202		0		0		0		0		5205	
ADT	ADT: 5,217		AADT: 5,217													

TURNING MOVEMENT COUNT DATA

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 1

Groups Printed- Cars - Trucks

	Elm St From North		Elm St From South		Water St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	8	4	1	51	4	0	68
07:15 AM	13	3	0	72	3	0	91
07:30 AM	18	2	3	79	4	5	111
07:45 AM	32	2	3	72	7	2	118
Total	71	11	7	274	18	7	388
08:00 AM	18	4	5	80	3	1	111
08:15 AM	17	4	2	71	4	4	102
08:30 AM	36	1	4	62	2	3	108
08:45 AM	24	3	4	63	5	0	99
Total	95	12	15	276	14	8	420
Grand Total	166	23	22	550	32	15	808
Apprch %	87.8	12.2	3.8	96.2	68.1	31.9	
Total %	20.5	2.8	2.7	68.1	4	1.9	
Cars	165	22	21	548	30	14	800
% Cars	99.4	95.7	95.5	99.6	93.8	93.3	99
Trucks	1	1	1	2	2	1	8
% Trucks	0.6	4.3	4.5	0.4	6.2	6.7	1

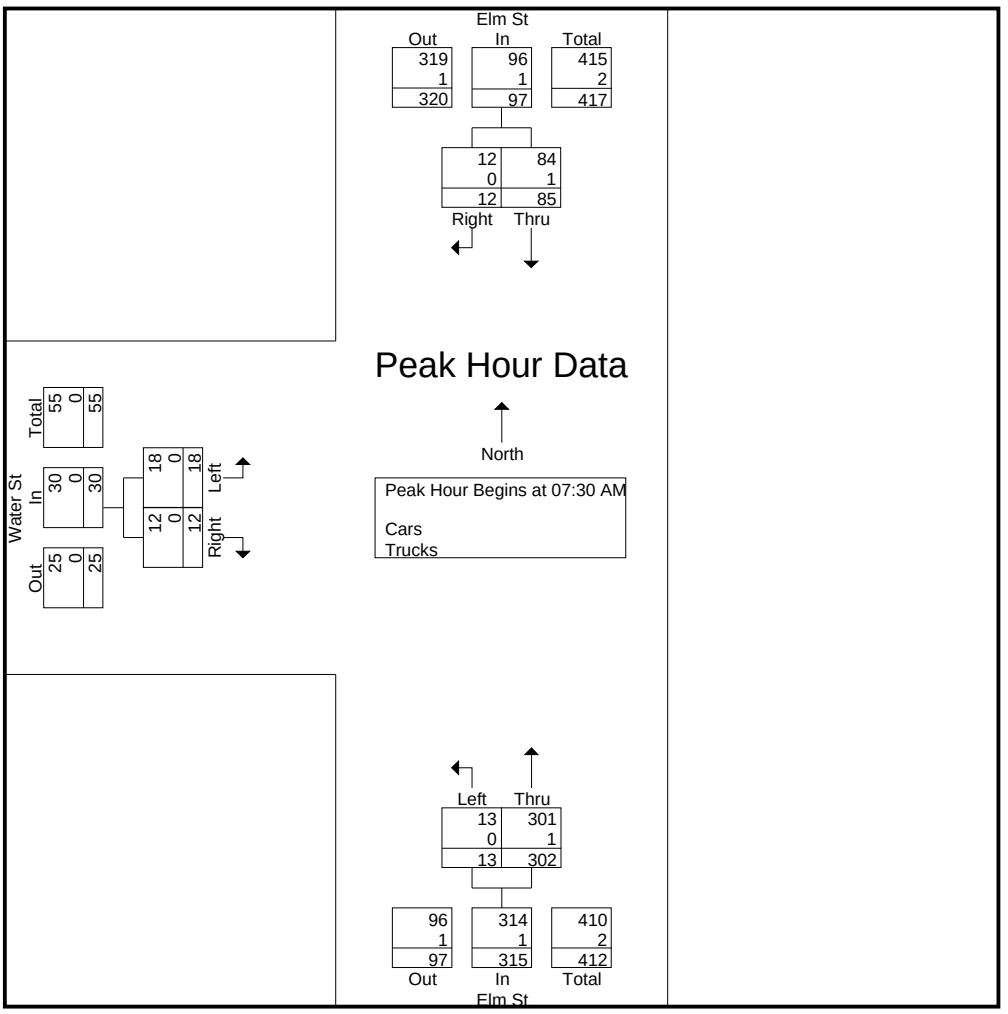
	Elm St From North			Elm St From South			Water St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	18	2	20	3	79	82	4	**5**	**9**	111
07:45 AM	**32**	2	**34**	3	72	75	**7**	2	9	**118**
08:00 AM	18	**4**	22	**5**	**80**	**85**	3	1	4	111
08:15 AM	17	4	21	2	71	73	4	4	8	102
Total Volume	85	12	97	13	302	315	18	12	30	442
% App. Total	87.6	12.4		4.1	95.9		60	40		
PHF	.664	.750	.713	.650	.944	.926	.643	.600	.833	.936
Cars	84	12	96	13	301	314	18	12	30	440
% Cars	98.8	100	99.0	100	99.7	99.7	100	100	100	99.5
Trucks	1	0	1	0	1	1	0	0	0	2
% Trucks	1.2	0	1.0	0	0.3	0.3	0	0	0	0.5

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

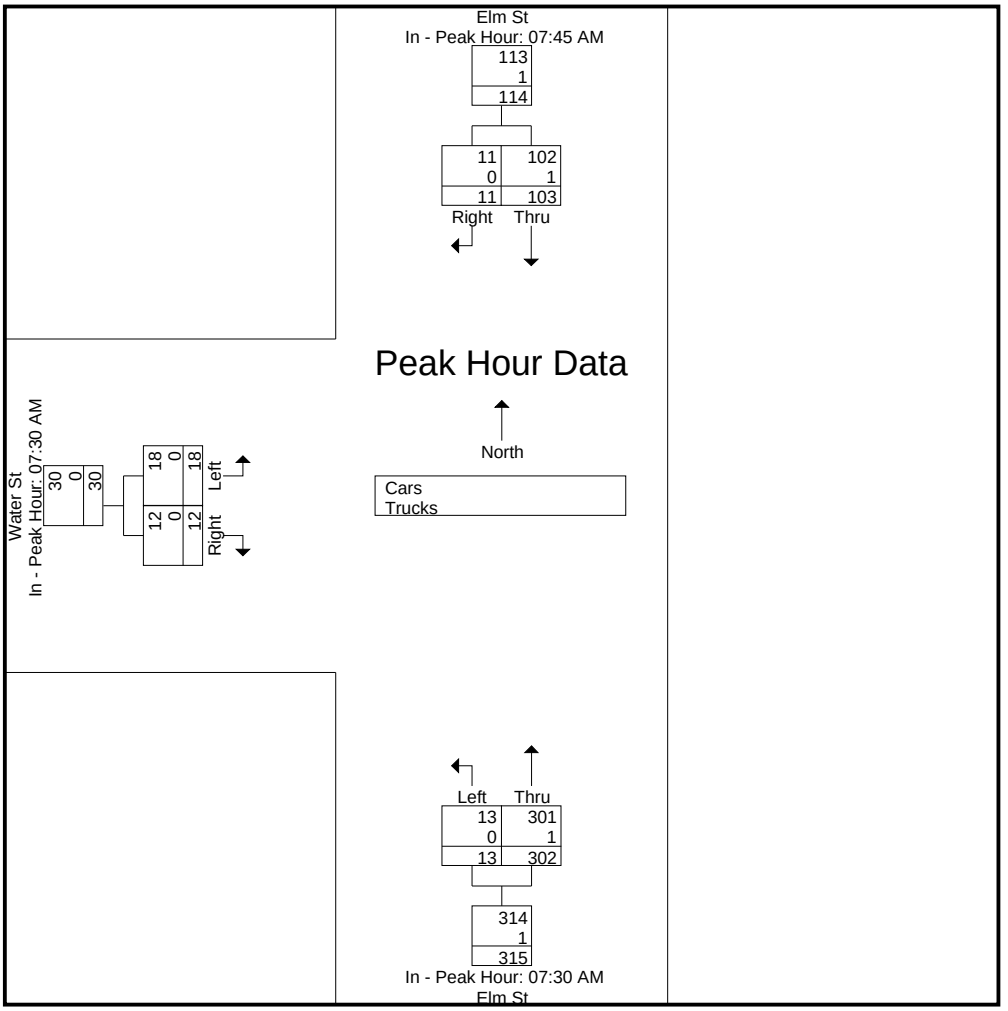
	07:45 AM			07:30 AM			07:30 AM		
+0 mins.	32	2	34	3	79	82	4	**5**	**9**
+15 mins.	18	**4**	22	3	72	75	**7**	2	9
+30 mins.	17	4	21	**5**	**80**	**85**	3	1	4
+45 mins.	**36**	1	**37**	2	71	73	4	4	8
Total Volume	103	11	114	13	302	315	18	12	30
% App. Total	90.4	9.6		4.1	95.9		60	40	
PHF	.715	.688	.770	.650	.944	.926	.643	.600	.833
Cars	102	11	113	13	301	314	18	12	30
% Cars	99	100	99.1	100	99.7	99.7	100	100	100
Trucks	1	0	1	0	1	1	0	0	0
% Trucks	1	0	0.9	0	0.3	0.3	0	0	0

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022

Groups Printed- Cars

	Elm St From North		Elm St From South		Water St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	8	3	1	51	3	0	66
07:15 AM	13	3	0	72	3	0	91
07:30 AM	18	2	3	79	4	5	111
07:45 AM	31	2	3	72	7	2	117
Total	70	10	7	274	17	7	385
08:00 AM	18	4	5	79	3	1	110
08:15 AM	17	4	2	71	4	4	102
08:30 AM	36	1	3	61	2	2	105
08:45 AM	24	3	4	63	4	0	98
Total	95	12	14	274	13	7	415
Grand Total	165	22	21	548	30	14	800
Apprch %	88.2	11.8	3.7	96.3	68.2	31.8	
Total %	20.6	2.8	2.6	68.5	3.8	1.8	

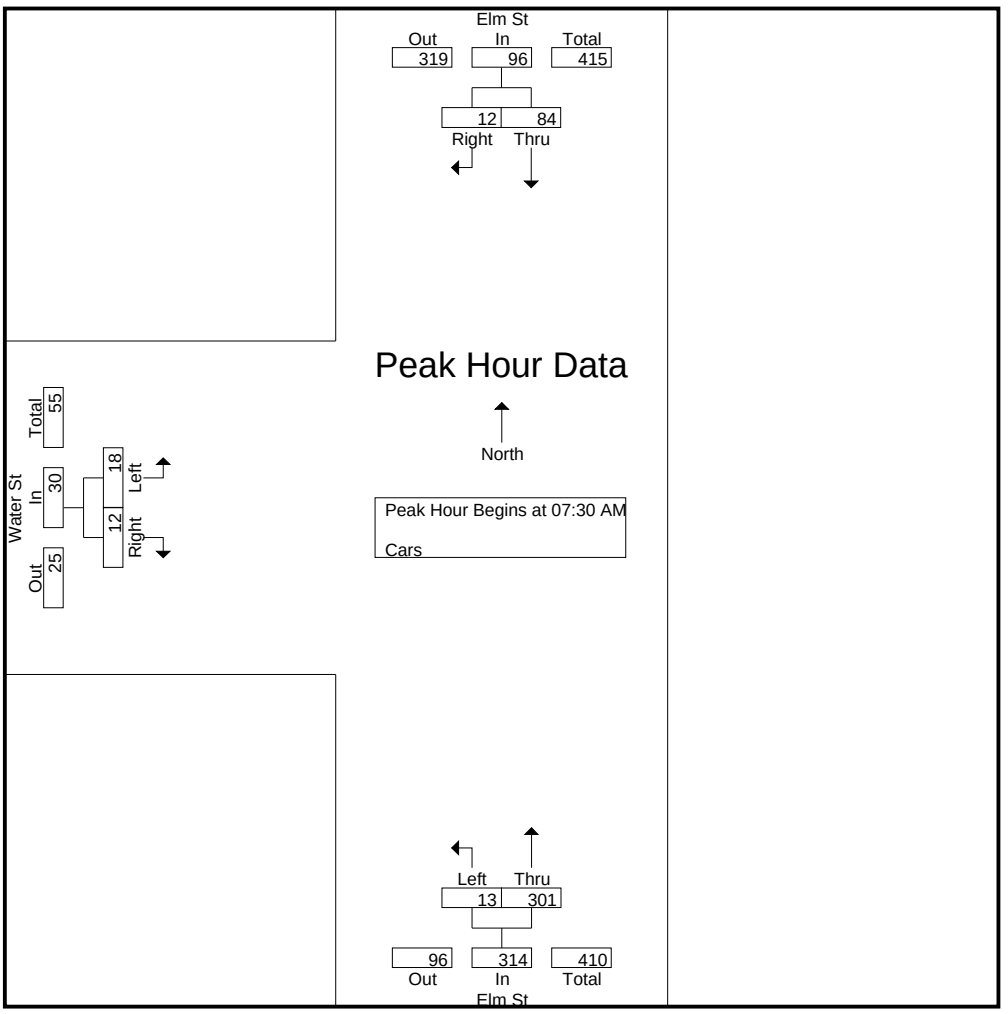
	Elm St From North			Elm St From South			Water St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	18	2	20	3	**79**	82	4	**5**	**9**	111
07:45 AM	**31**	2	**33**	3	72	75	**7**	2	9	**117**
08:00 AM	18	**4**	22	**5**	79	**84**	3	1	4	110
08:15 AM	17	4	21	2	71	73	4	4	8	102
Total Volume	84	12	96	13	301	314	18	12	30	440
% App. Total	87.5	12.5		4.1	95.9		60	40		
PHF	.677	.750	.727	.650	.953	.935	.643	.600	.833	.940

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 5



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

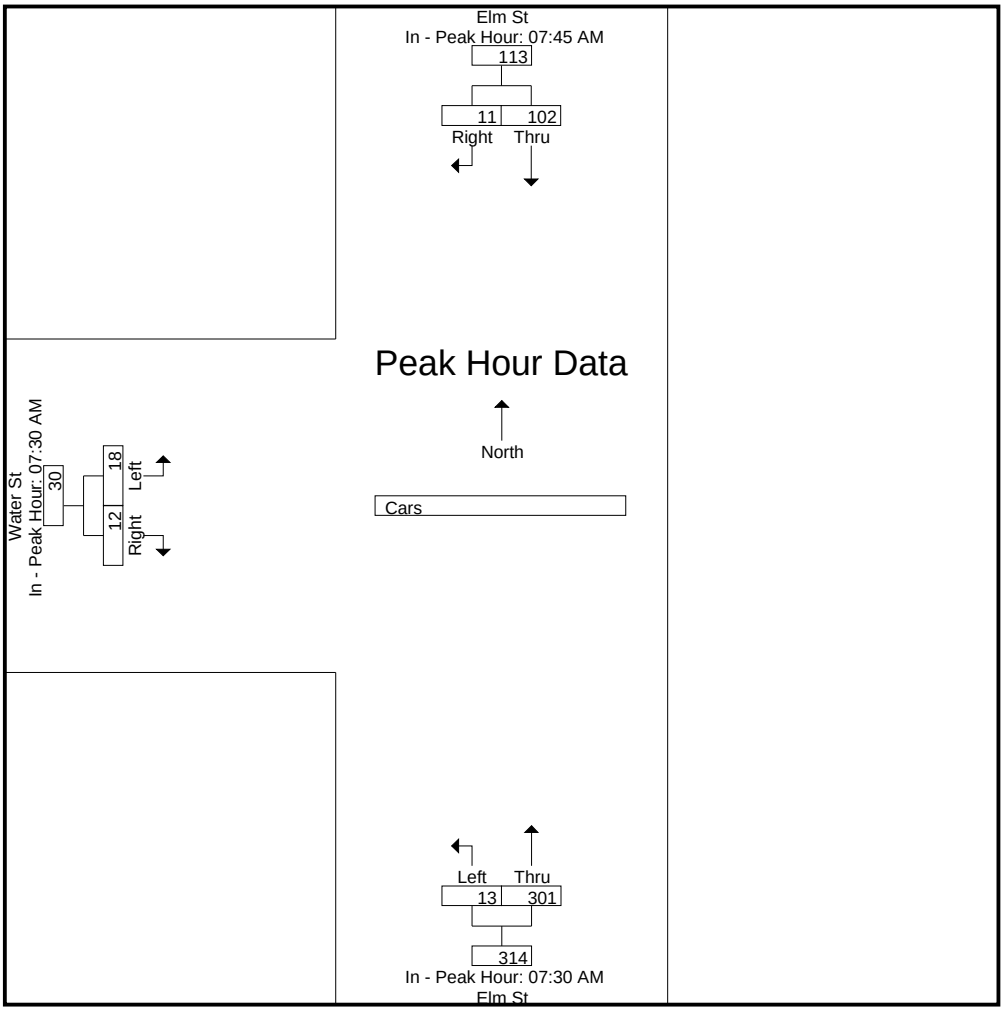
	07:45 AM			07:30 AM			07:30 AM		
+0 mins.	31	2	33	3	**79**	82	4	**5**	**9**
+15 mins.	18	**4**	22	3	72	75	**7**	2	9
+30 mins.	17	4	21	**5**	79	**84**	3	1	4
+45 mins.	**36**	1	**37**	2	71	73	4	4	8
Total Volume	102	11	113	13	301	314	18	12	30
% App. Total	90.3	9.7		4.1	95.9		60	40	
PHF	.708	.688	.764	.650	.953	.935	.643	.600	.833

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022

Groups Printed- Trucks

	Elm St From North		Elm St From South		Water St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	0	1	0	0	1	0	2
07:15 AM	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0
07:45 AM	1	0	0	0	0	0	1
Total	1	1	0	0	1	0	3
08:00 AM	0	0	0	1	0	0	1
08:15 AM	0	0	0	0	0	0	0
08:30 AM	0	0	1	1	0	1	3
08:45 AM	0	0	0	0	1	0	1
Total	0	0	1	2	1	1	5
Grand Total	1	1	1	2	2	1	8
Apprch %	50	50	33.3	66.7	66.7	33.3	
Total %	12.5	12.5	12.5	25	25	12.5	

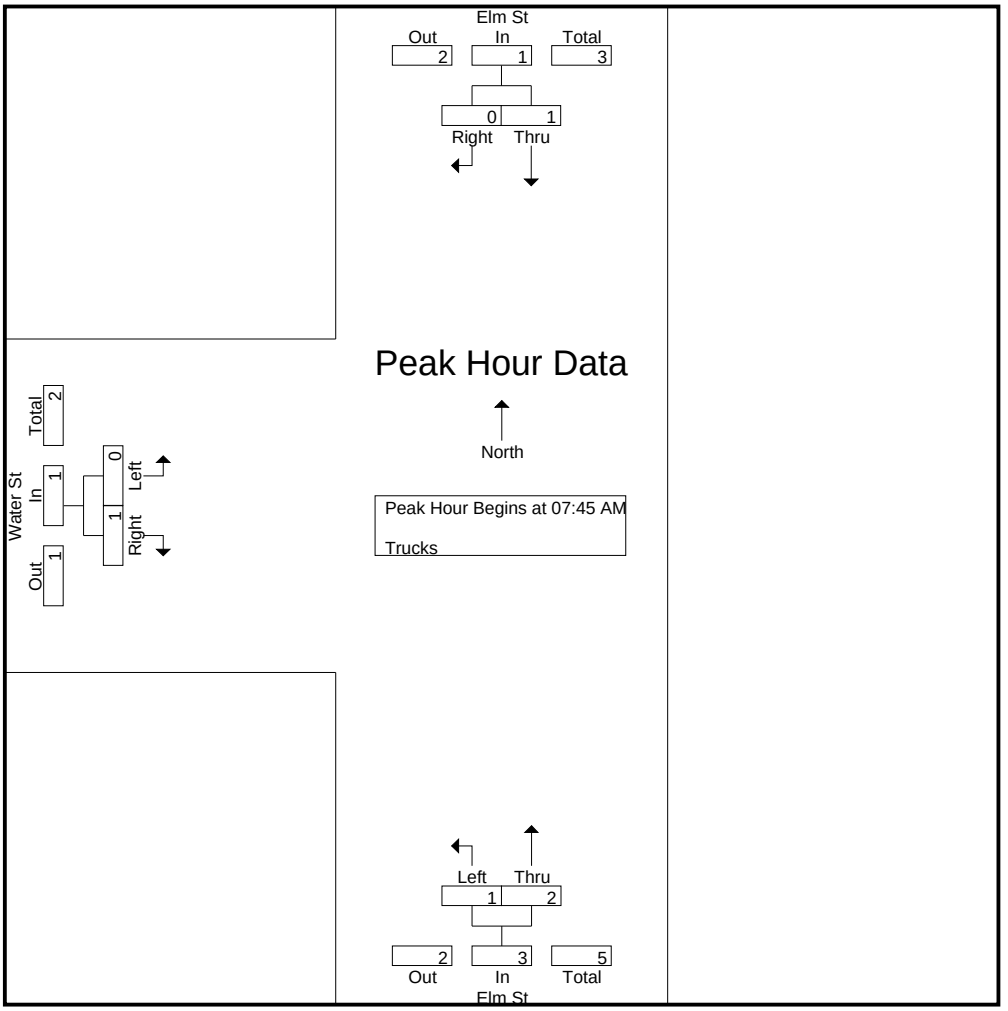
	Elm St From North			Elm St From South			Water St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	**1**	0	**1**	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	**1**	1	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	**1**	1	**2**	0	**1**	**1**	**3**
Total Volume	1	0	1	1	2	3	0	1	1	5
% App. Total	100	0		33.3	66.7		0	100		
PHF	.250	.000	.250	.250	.500	.375	.000	.250	.250	.417

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 8



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

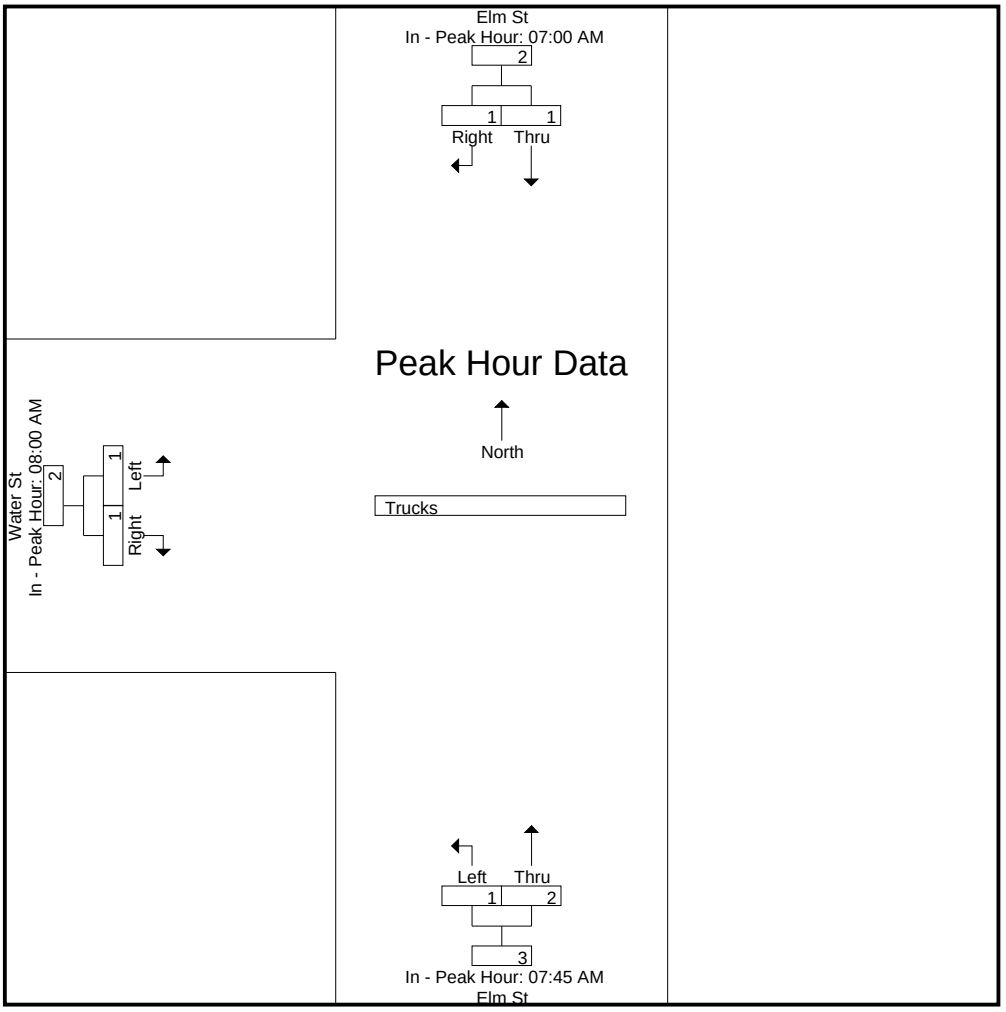
	07:00 AM			07:45 AM			08:00 AM		
+0 mins.	0	**1**	**1**	0	0	0	0	0	0
+15 mins.	0	0	0	0	**1**	1	0	0	0
+30 mins.	0	0	0	0	0	0	0	**1**	**1**
+45 mins.	**1**	0	1	**1**	1	**2**	**1**	0	1
Total Volume	1	1	2	1	2	3	1	1	2
% App. Total	50	50		33.3	66.7		50	50	
PHF	.250	.250	.500	.250	.500	.375	.250	.250	.500

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022

Groups Printed- Bikes Peds

	Elm St From North			Elm St From South			Water St From West					
Start Time	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0				
Total %										0	0	

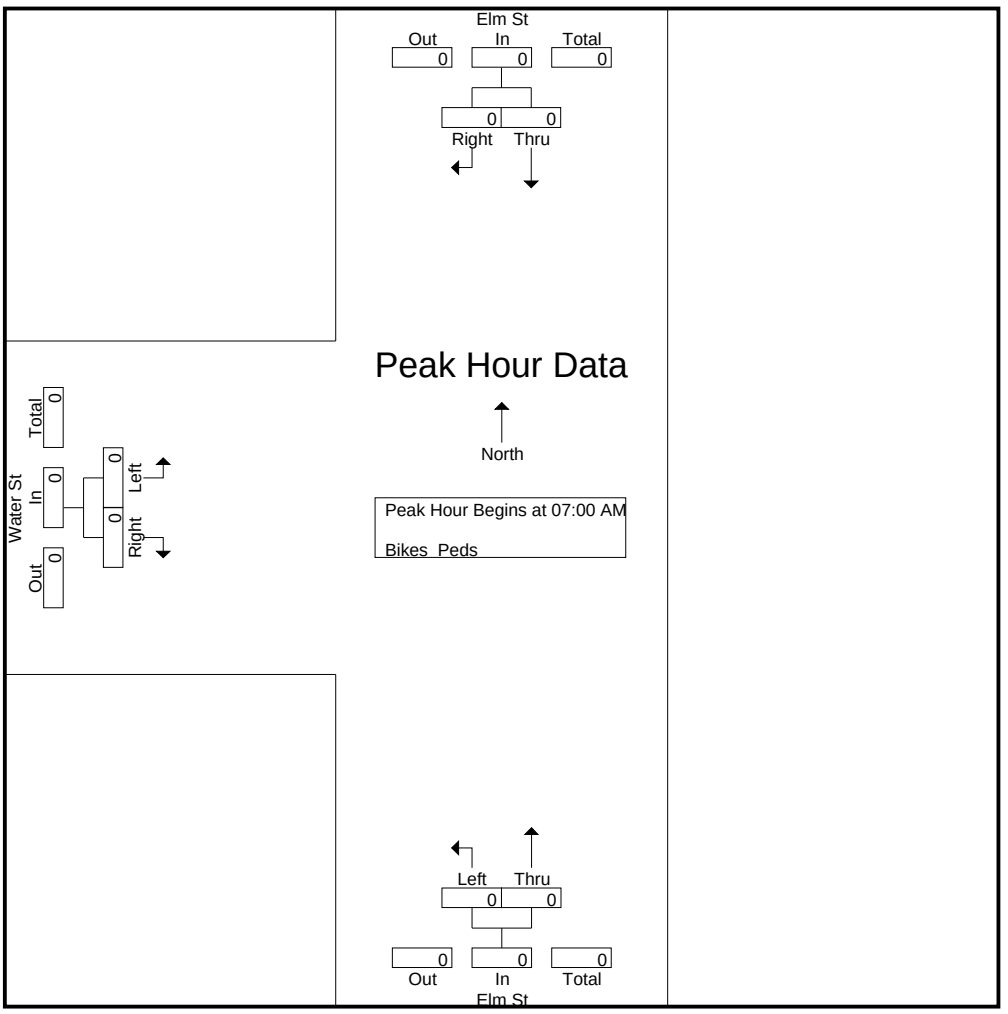
	Elm St From North			Elm St From South			Water St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 11



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

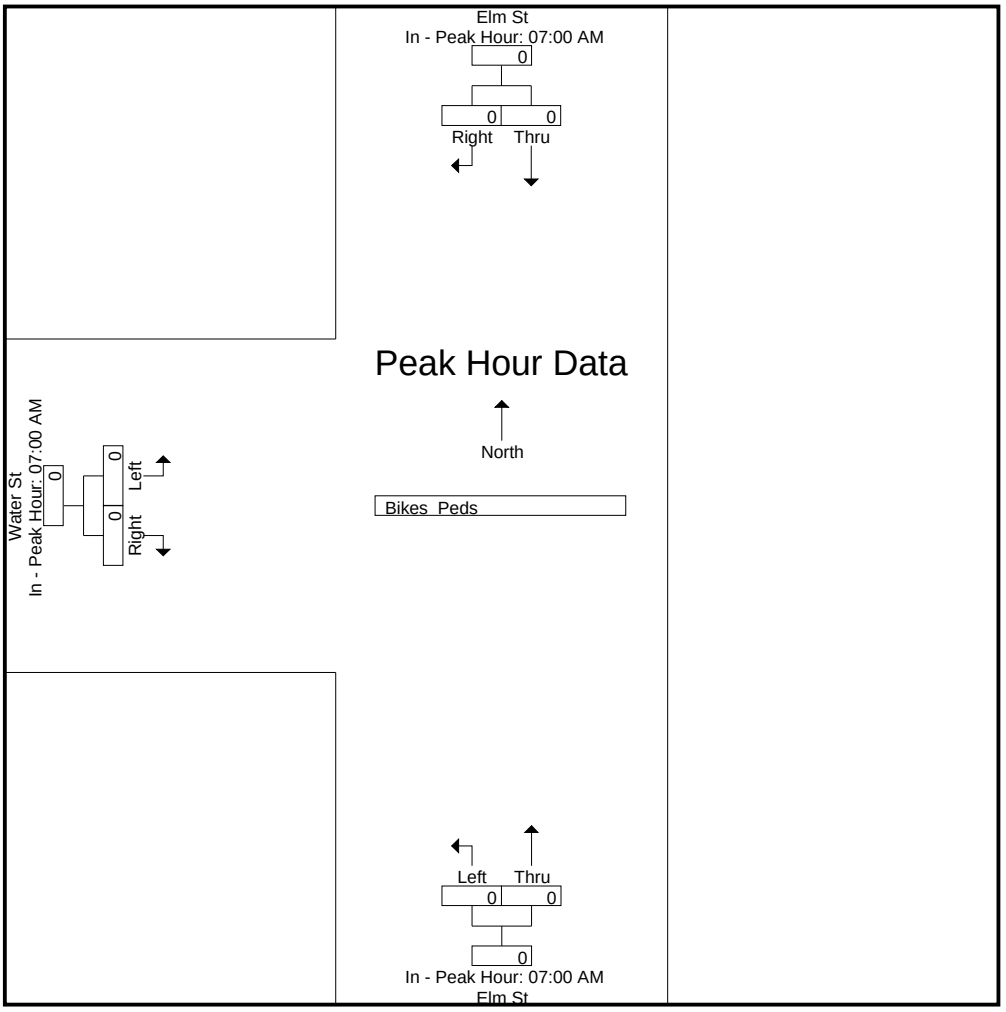
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts
978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 12



Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022

Groups Printed- Cars - Trucks

	Elm St From North		Elm St From South		Water St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	68	4	4	44	5	1	126
04:15 PM	85	3	4	48	1	2	143
04:30 PM	85	6	3	36	3	5	138
04:45 PM	75	4	5	43	4	2	133
Total	313	17	16	171	13	10	540
05:00 PM	76	4	6	35	7	7	135
05:15 PM	84	10	10	49	4	5	162
05:30 PM	85	2	1	28	5	5	126
05:45 PM	81	3	3	31	3	3	124
Total	326	19	20	143	19	20	547
06:00 PM	7	0	0	4	0	0	11
Grand Total	646	36	36	318	32	30	1098
Apprch %	94.7	5.3	10.2	89.8	51.6	48.4	
Total %	58.8	3.3	3.3	29	2.9	2.7	
Cars	646	36	36	318	32	30	1098
% Cars	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0

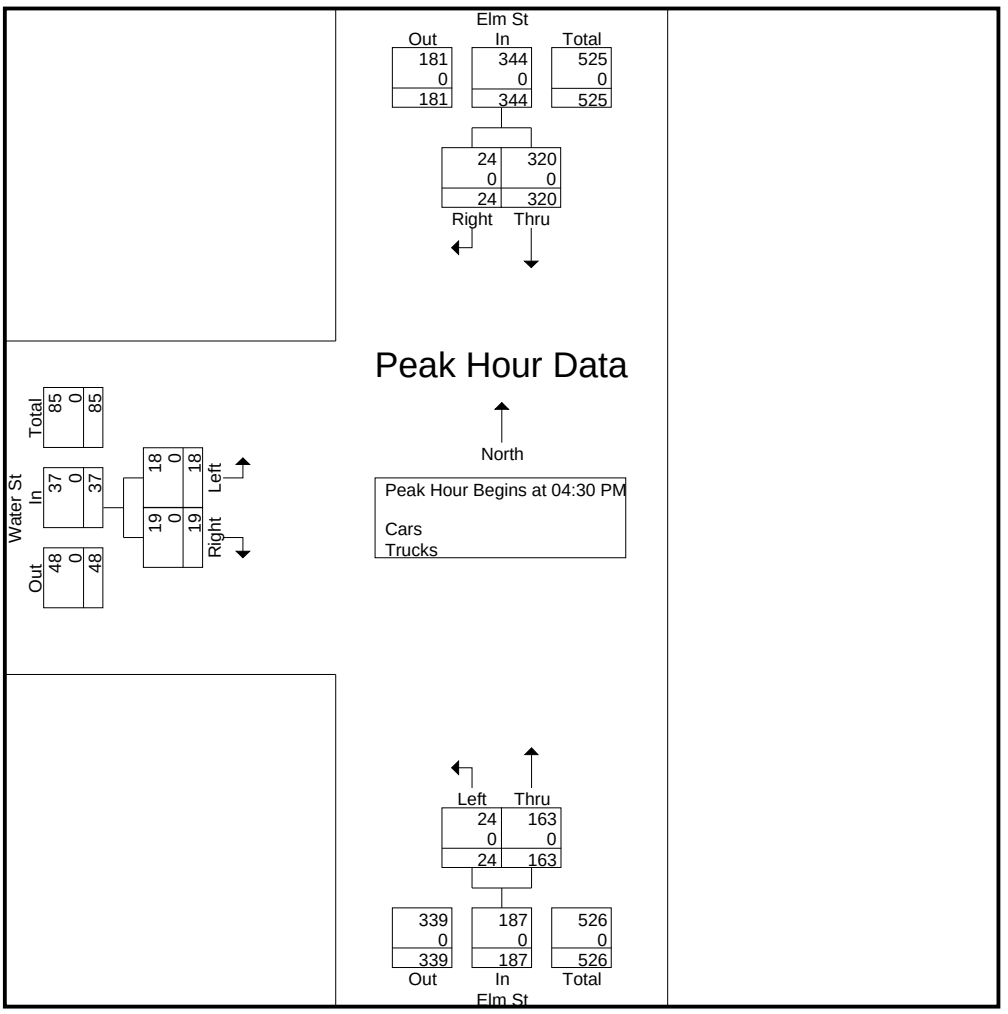
	Elm St From North			Elm St From South			Water St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**85**	6	91	3	36	39	3	5	8	138
04:45 PM	75	4	79	5	43	48	4	2	6	133
05:00 PM	76	4	80	6	35	41	**7**	**7**	**14**	135
05:15 PM	84	**10**	**94**	**10**	**49**	**59**	4	5	9	**162**
Total Volume	320	24	344	24	163	187	18	19	37	568
% App. Total	93	7		12.8	87.2		48.6	51.4		
PHF	.941	.600	.915	.600	.832	.792	.643	.679	.661	.877
Cars	320	24	344	24	163	187	18	19	37	568
% Cars	100	100	100	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 06:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

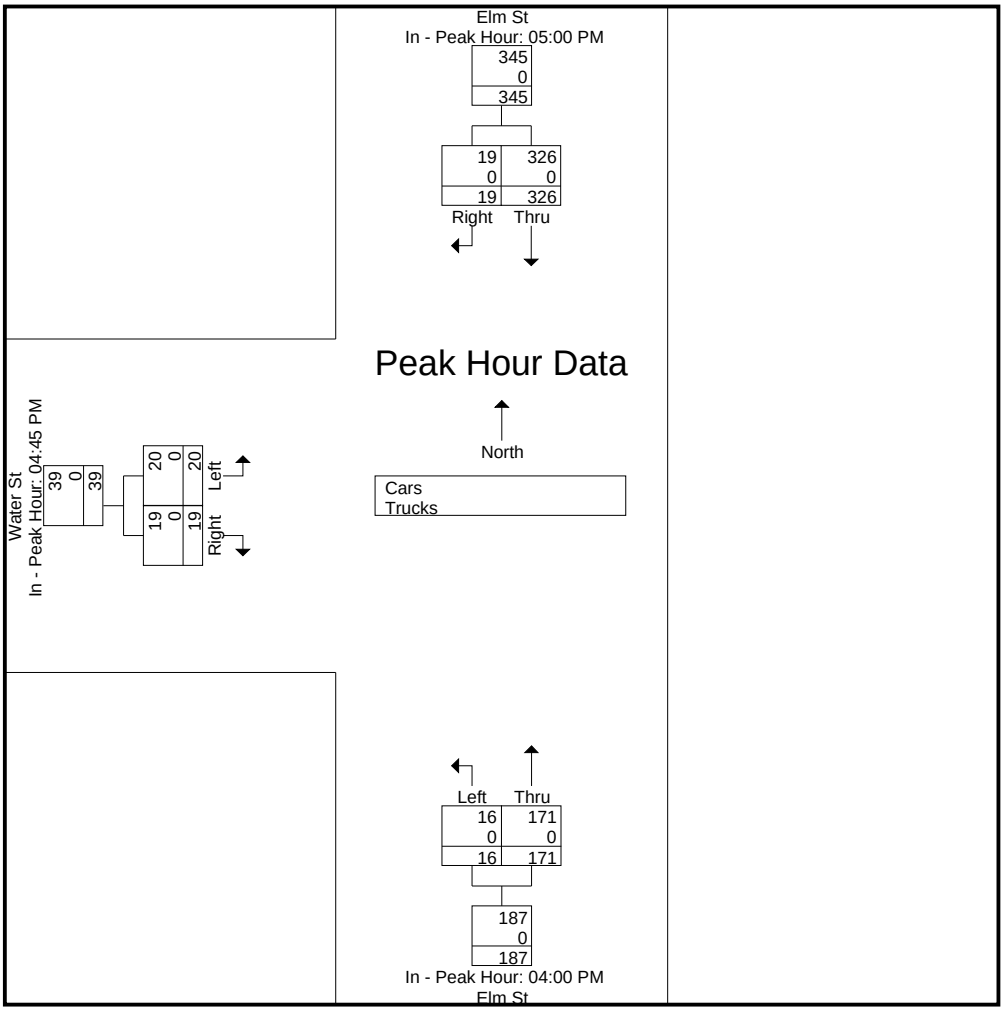
	05:00 PM			04:00 PM			04:45 PM		
+0 mins.	76	4	80	4	44	48	4	2	6
+15 mins.	84	**10**	**94**	4	**48**	**52**	**7**	**7**	**14**
+30 mins.	**85**	2	87	3	36	39	4	5	9
+45 mins.	81	3	84	**5**	43	48	5	5	10
Total Volume	326	19	345	16	171	187	20	19	39
% App. Total	94.5	5.5		8.6	91.4		51.3	48.7	
PHF	.959	.475	.918	.800	.891	.899	.714	.679	.696
Cars	326	19	345	16	171	187	20	19	39
% Cars	100	100	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 4

Groups Printed- Cars

	Elm St From North		Elm St From South		Water St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	68	4	4	44	5	1	126
04:15 PM	85	3	4	48	1	2	143
04:30 PM	85	6	3	36	3	5	138
04:45 PM	75	4	5	43	4	2	133
Total	313	17	16	171	13	10	540
05:00 PM	76	4	6	35	7	7	135
05:15 PM	84	10	10	49	4	5	162
05:30 PM	85	2	1	28	5	5	126
05:45 PM	81	3	3	31	3	3	124
Total	326	19	20	143	19	20	547
06:00 PM	7	0	0	4	0	0	11
Grand Total	646	36	36	318	32	30	1098
Apprch %	94.7	5.3	10.2	89.8	51.6	48.4	
Total %	58.8	3.3	3.3	29	2.9	2.7	

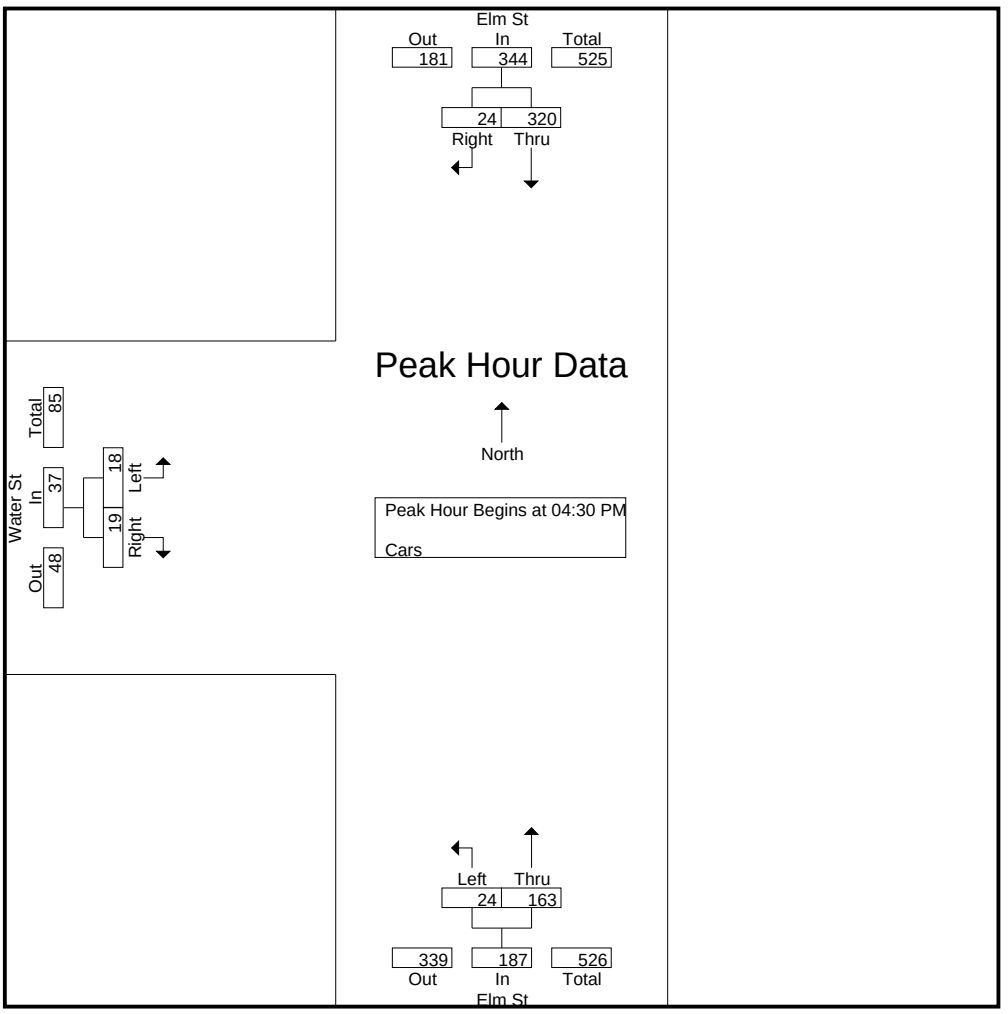
	Elm St From North			Elm St From South			Water St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**85**	6	91	3	36	39	3	5	8	138
04:45 PM	75	4	79	5	43	48	4	2	6	133
05:00 PM	76	4	80	6	35	41	**7**	**7**	**14**	135
05:15 PM	84	**10**	**94**	**10**	**49**	**59**	4	5	9	**162**
Total Volume	320	24	344	24	163	187	18	19	37	568
% App. Total	93	7		12.8	87.2		48.6	51.4		
PHF	.941	.600	.915	.600	.832	.792	.643	.679	.661	.877

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 5



Peak Hour Analysis From 04:00 PM to 06:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

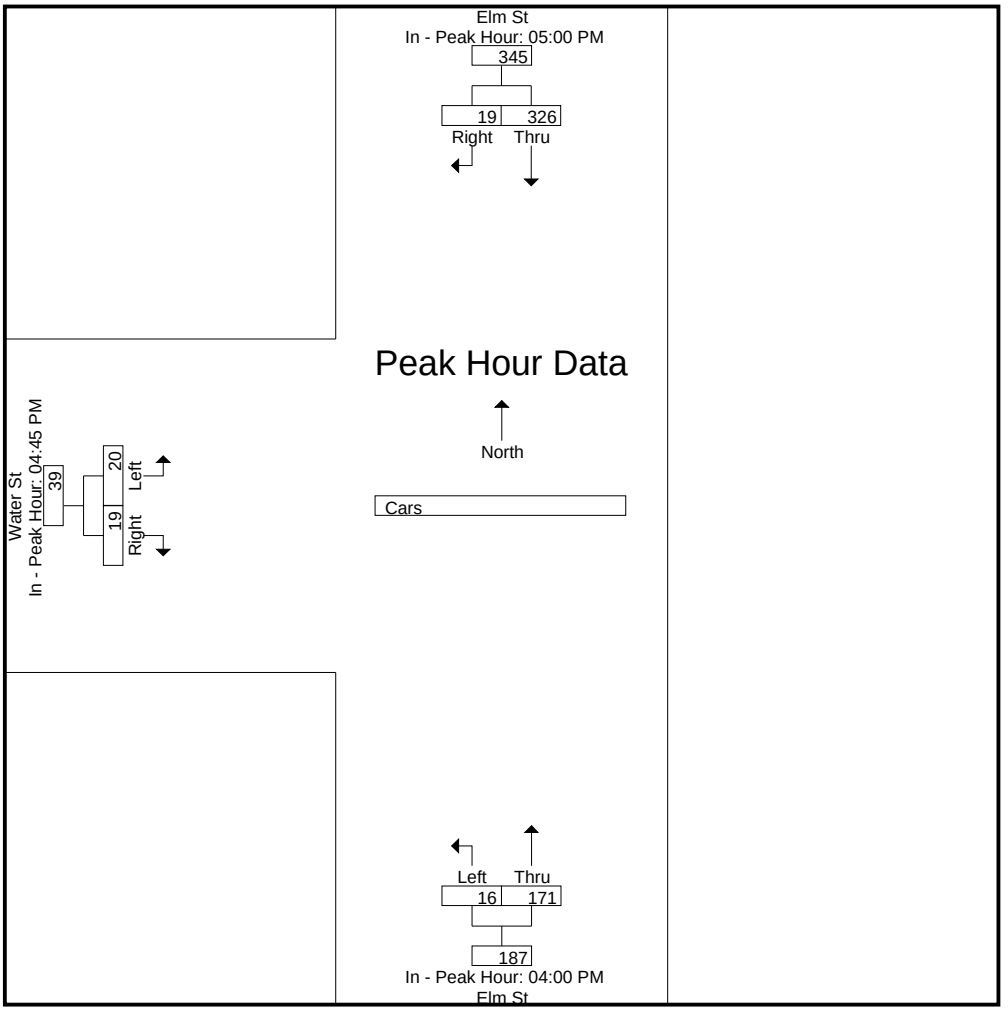
	05:00 PM			04:00 PM			04:45 PM		
+0 mins.	76	4	80	4	44	48	4	2	6
+15 mins.	84	**10**	**94**	4	**48**	**52**	**7**	**7**	**14**
+30 mins.	**85**	2	87	3	36	39	4	5	9
+45 mins.	81	3	84	**5**	43	48	5	5	10
Total Volume	326	19	345	16	171	187	20	19	39
% App. Total	94.5	5.5		8.6	91.4		51.3	48.7	
PHF	.959	.475	.918	.800	.891	.899	.714	.679	.696

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022

Groups Printed- Trucks

	Elm St From North		Elm St From South		Water St From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	
Total %							

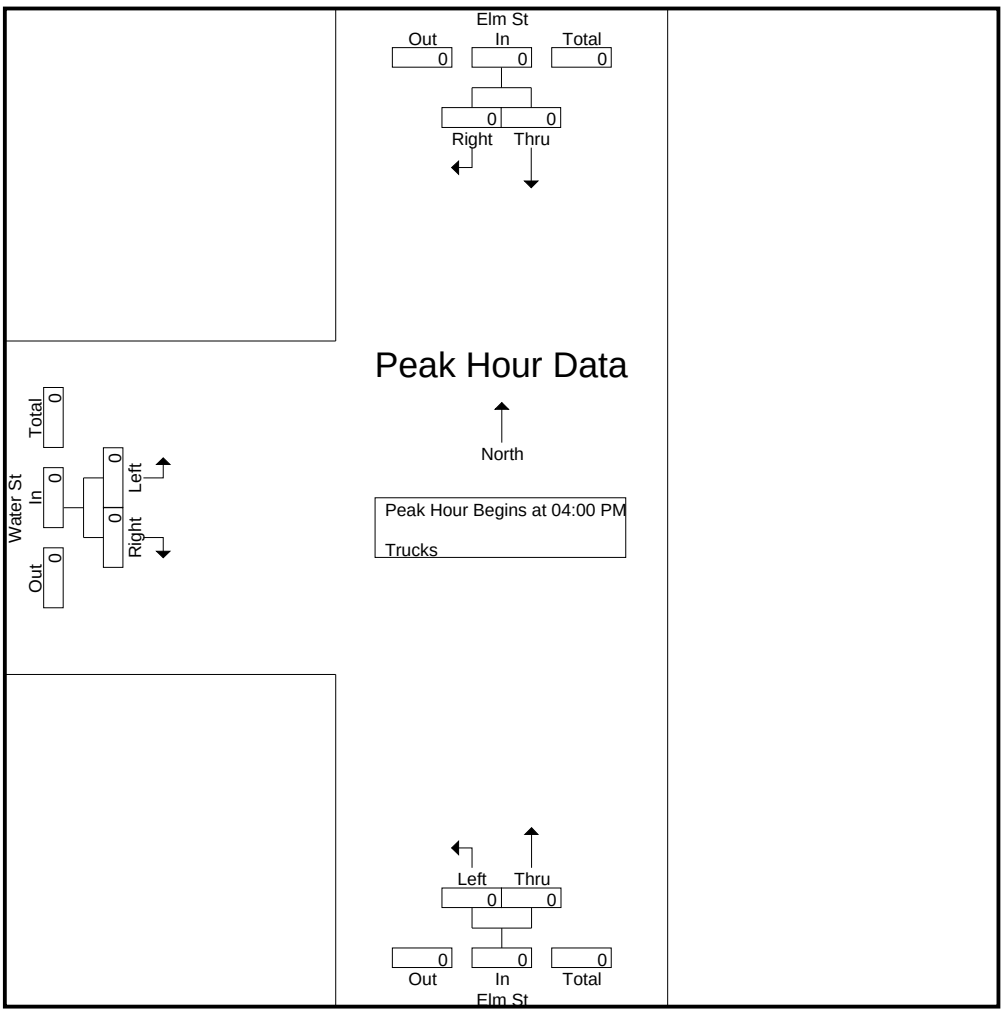
	Elm St From North			Elm St From South			Water St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 8



Peak Hour Analysis From 04:00 PM to 06:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

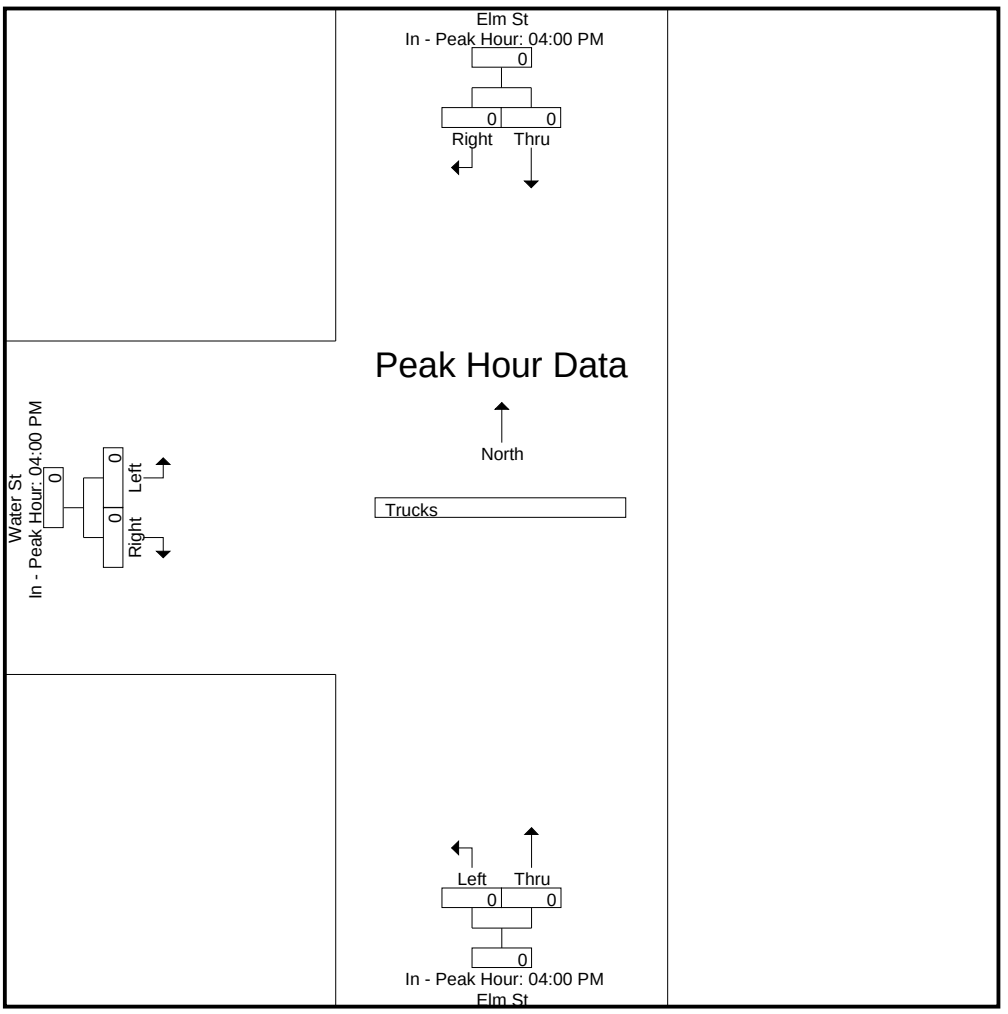
	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022

Groups Printed- Bikes Peds

	Elm St From North			Elm St From South			Water St From West					
Start Time	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0				
Total %										0	0	

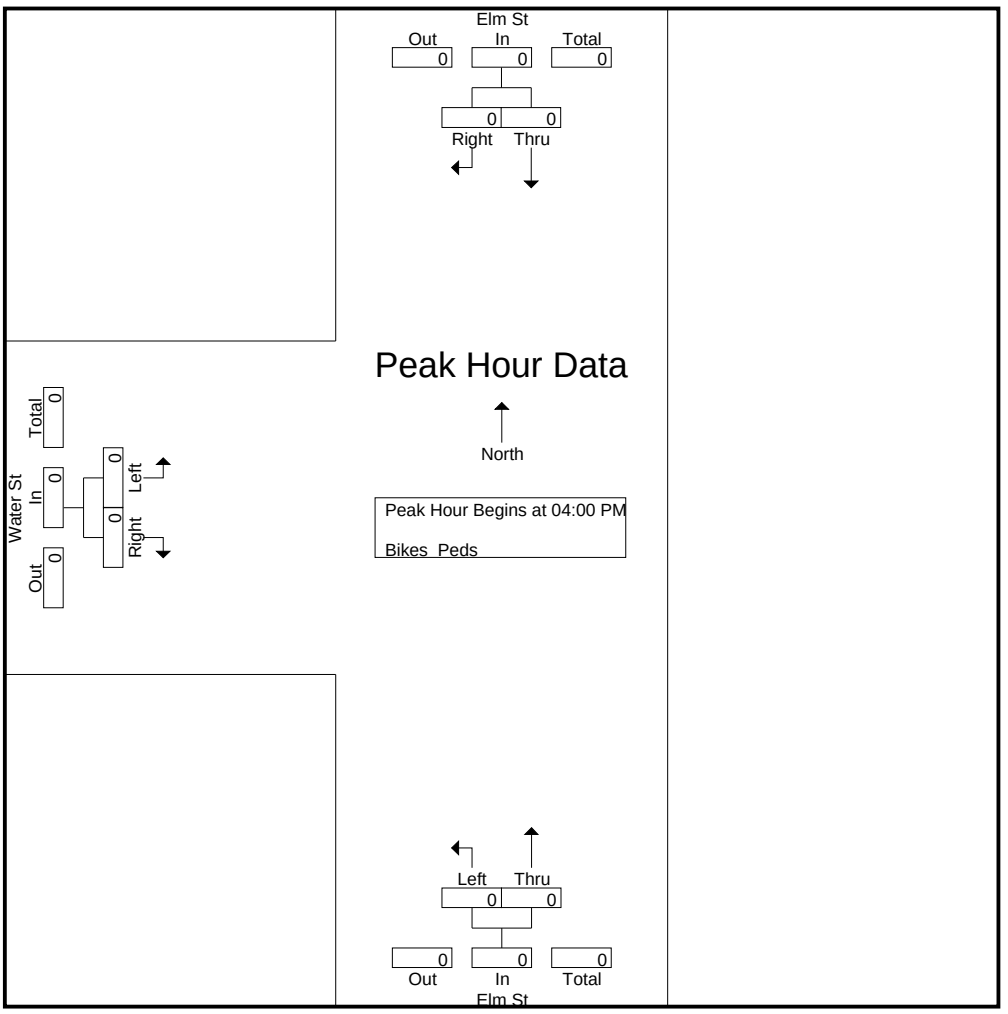
	Elm St From North			Elm St From South			Water St From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 11



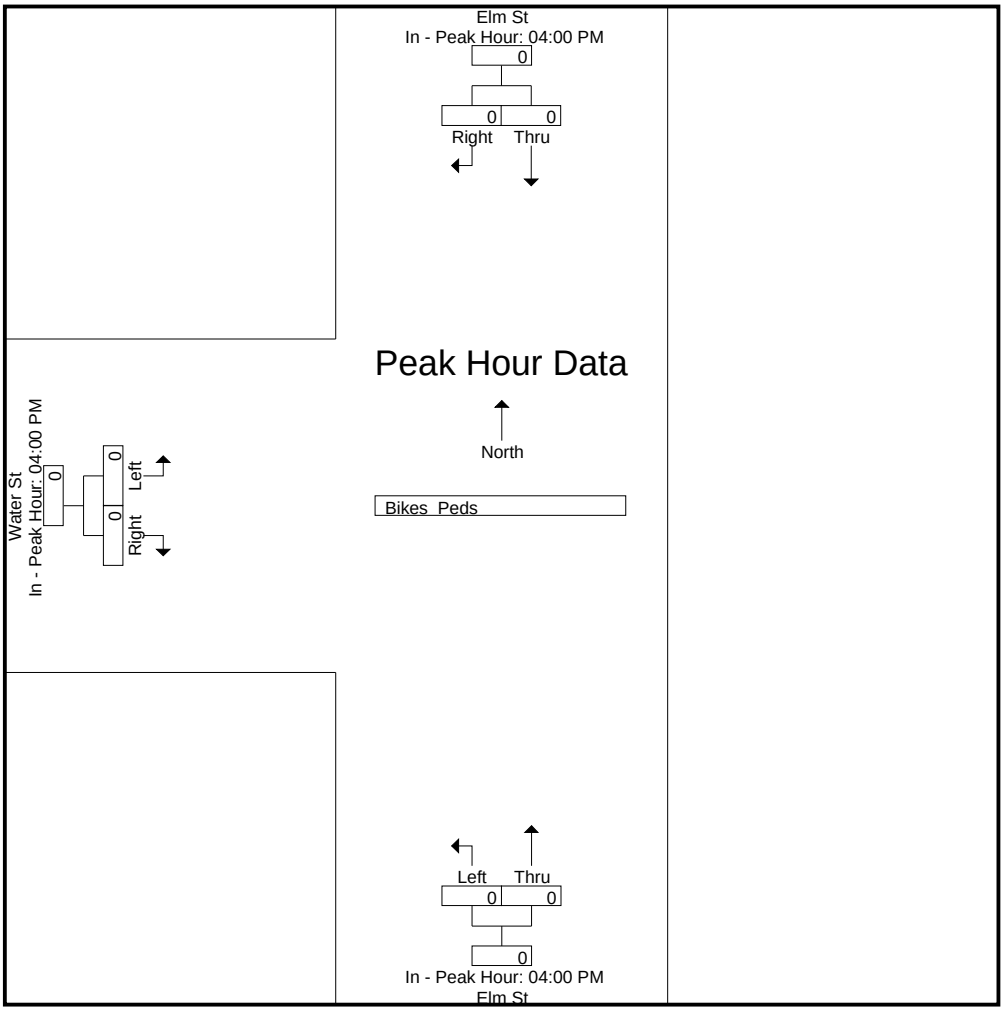
Peak Hour Analysis From 04:00 PM to 06:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts
978-664-2565

N/S Street : Elm Street
E/W Street : Water Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240001
Site Code : 91240001
Start Date : 2/1/2022
Page No : 12



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022

Groups Printed- Cars - Trucks

	W. Elm St From North		W. Elm St From South		Pembroke Country Club From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	32	0	0	49	0	0	81
07:15 AM	13	0	0	60	0	0	73
07:30 AM	33	0	0	79	0	0	112
07:45 AM	35	0	0	70	0	0	105
Total	113	0	0	258	0	0	371
08:00 AM	26	0	0	67	0	0	93
08:15 AM	27	0	0	67	0	0	94
08:30 AM	21	0	0	65	0	0	86
08:45 AM	26	0	0	65	0	0	91
Total	100	0	0	264	0	0	364
Grand Total	213	0	0	522	0	0	735
Apprch %	100	0	0	100	0	0	
Total %	29	0	0	71	0	0	
Cars	208	0	0	515	0	0	723
% Cars	97.7	0	0	98.7	0	0	98.4
Trucks	5	0	0	7	0	0	12
% Trucks	2.3	0	0	1.3	0	0	1.6

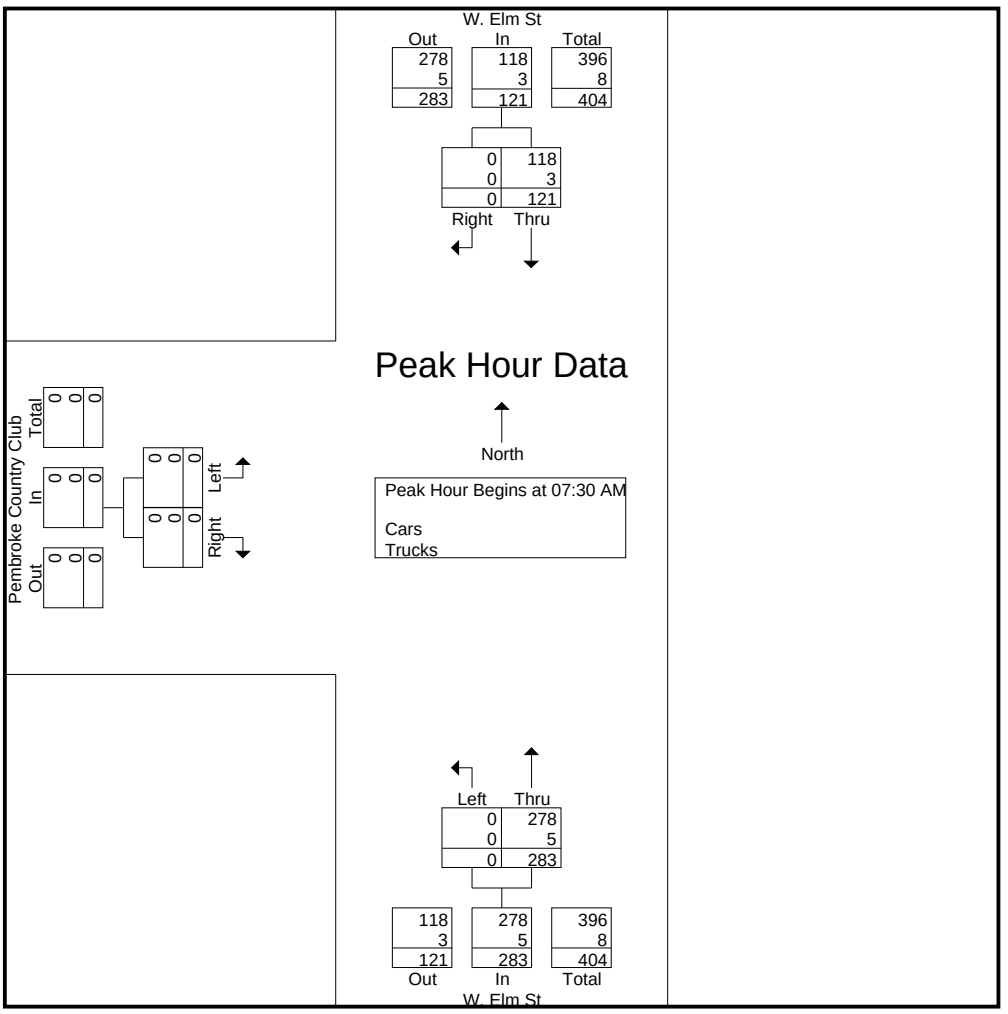
	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	33	0	33	0	**79**	**79**	0	0	0	**112**
07:45 AM	**35**	0	**35**	0	70	70	0	0	0	105
08:00 AM	26	0	26	0	67	67	0	0	0	93
08:15 AM	27	0	27	0	67	67	0	0	0	94
Total Volume	121	0	121	0	283	283	0	0	0	404
% App. Total	100	0		0	100		0	0		
PHF	.864	.000	.864	.000	.896	.896	.000	.000	.000	.902
Cars	118	0	118	0	278	278	0	0	0	396
% Cars	97.5	0	97.5	0	98.2	98.2	0	0	0	98.0
Trucks	3	0	3	0	5	5	0	0	0	8
% Trucks	2.5	0	2.5	0	1.8	1.8	0	0	0	2.0

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

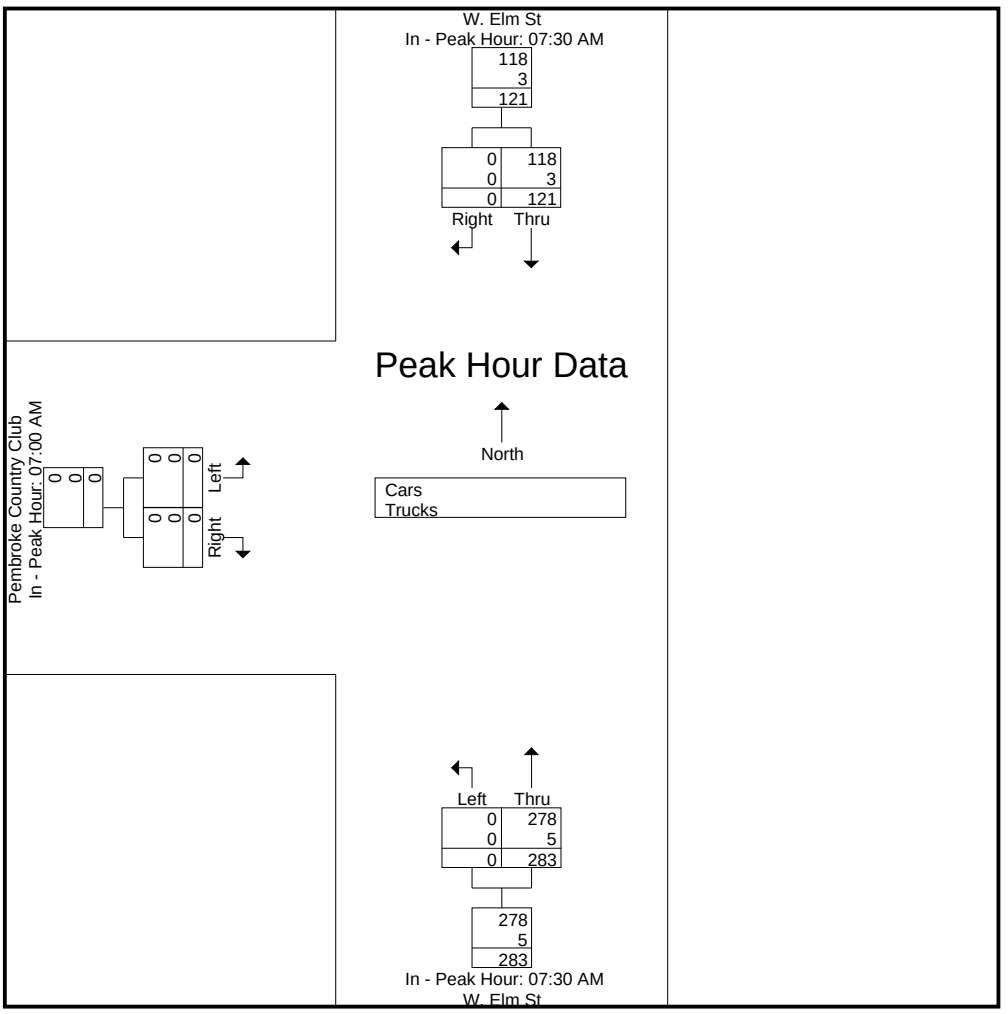
	07:30 AM			07:30 AM			07:00 AM		
+0 mins.	33	0	33	0	**79**	**79**	0	0	0
+15 mins.	**35**	0	**35**	0	70	70	0	0	0
+30 mins.	26	0	26	0	67	67	0	0	0
+45 mins.	27	0	27	0	67	67	0	0	0
Total Volume	121	0	121	0	283	283	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.864	.000	.864	.000	.896	.896	.000	.000	.000
Cars	118	0	118	0	278	278	0	0	0
% Cars	97.5	0	97.5	0	98.2	98.2	0	0	0
Trucks	3	0	3	0	5	5	0	0	0
% Trucks	2.5	0	2.5	0	1.8	1.8	0	0	0

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 4

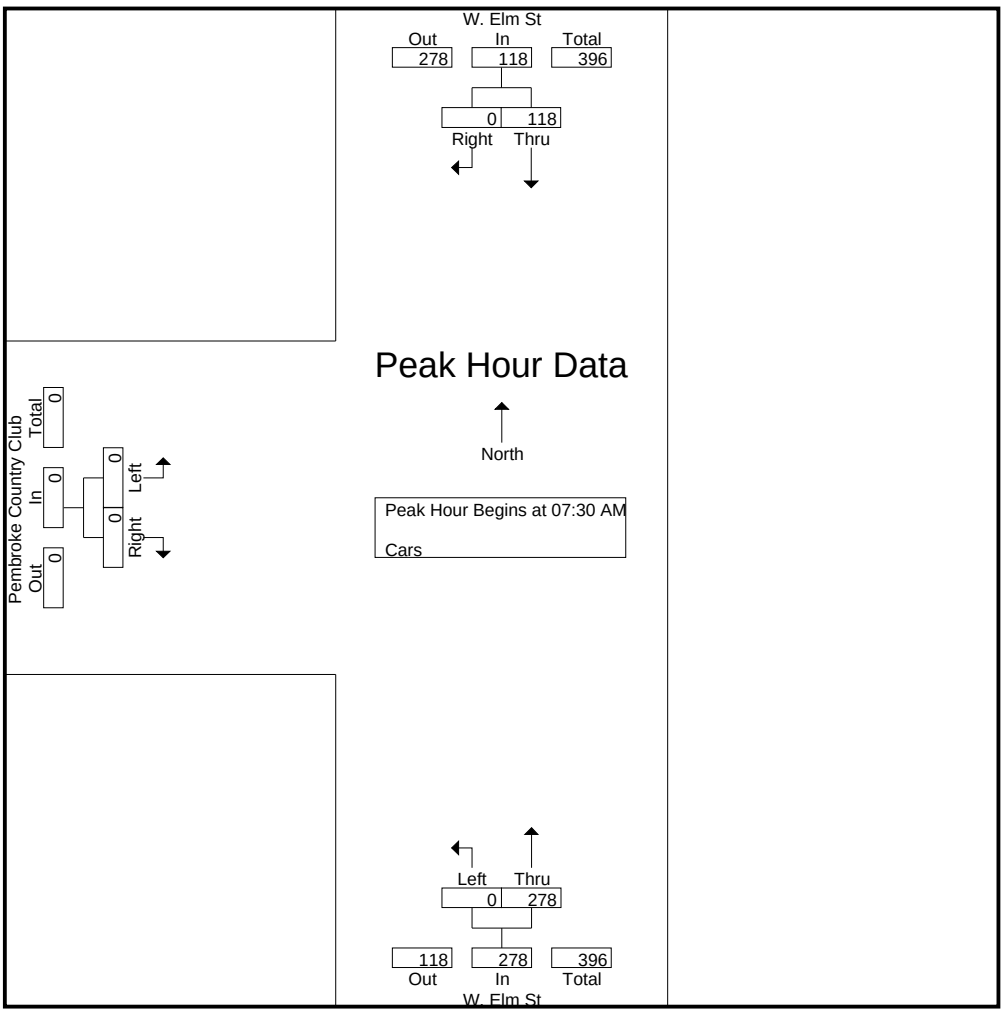
Groups Printed- Cars

	W. Elm St From North		W. Elm St From South		Pembroke Country Club From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	31	0	0	49	0	0	80
07:15 AM	13	0	0	60	0	0	73
07:30 AM	33	0	0	79	0	0	112
07:45 AM	34	0	0	68	0	0	102
Total	111	0	0	256	0	0	367
08:00 AM	25	0	0	65	0	0	90
08:15 AM	26	0	0	66	0	0	92
08:30 AM	21	0	0	64	0	0	85
08:45 AM	25	0	0	64	0	0	89
Total	97	0	0	259	0	0	356
Grand Total	208	0	0	515	0	0	723
Apprch %	100	0	0	100	0	0	
Total %	28.8	0	0	71.2	0	0	

	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	33	0	33	0	**79**	**79**	0	0	0	**112**
07:45 AM	**34**	0	**34**	0	68	68	0	0	0	102
08:00 AM	25	0	25	0	65	65	0	0	0	90
08:15 AM	26	0	26	0	66	66	0	0	0	92
Total Volume	118	0	118	0	278	278	0	0	0	396
% App. Total	100	0		0	100		0	0		
PHF	.868	.000	.868	.000	.880	.880	.000	.000	.000	.884

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 5



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

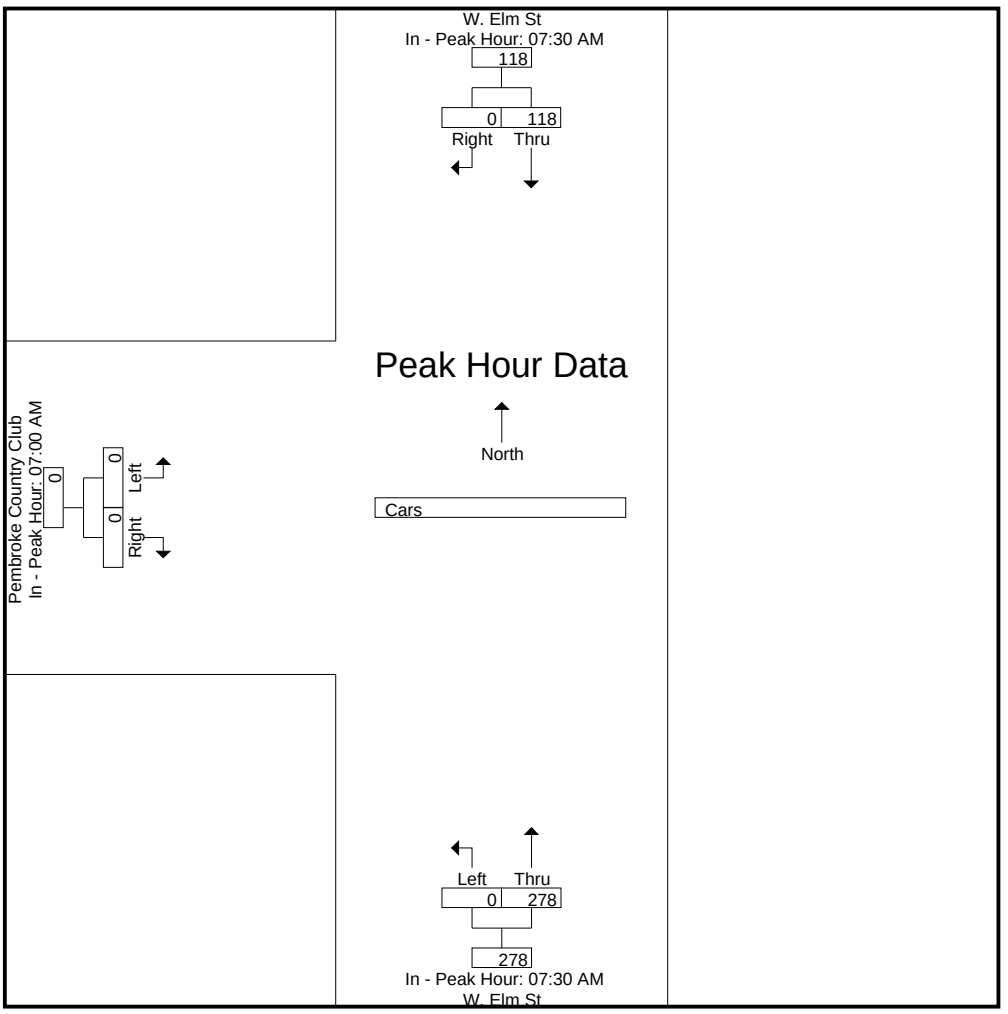
	07:30 AM			07:30 AM			07:00 AM		
+0 mins.	33	0	33	0	**79**	**79**	0	0	0
+15 mins.	**34**	0	**34**	0	68	68	0	0	0
+30 mins.	25	0	25	0	65	65	0	0	0
+45 mins.	26	0	26	0	66	66	0	0	0
Total Volume	118	0	118	0	278	278	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.868	.000	.868	.000	.880	.880	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022

Groups Printed- Trucks

	W. Elm St From North		W. Elm St From South		Pembroke Country Club From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
07:00 AM	1	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0
07:45 AM	1	0	0	2	0	0	3
Total	2	0	0	2	0	0	4
08:00 AM	1	0	0	2	0	0	3
08:15 AM	1	0	0	1	0	0	2
08:30 AM	0	0	0	1	0	0	1
08:45 AM	1	0	0	1	0	0	2
Total	3	0	0	5	0	0	8
Grand Total	5	0	0	7	0	0	12
Apprch %	100	0	0	100	0	0	
Total %	41.7	0	0	58.3	0	0	

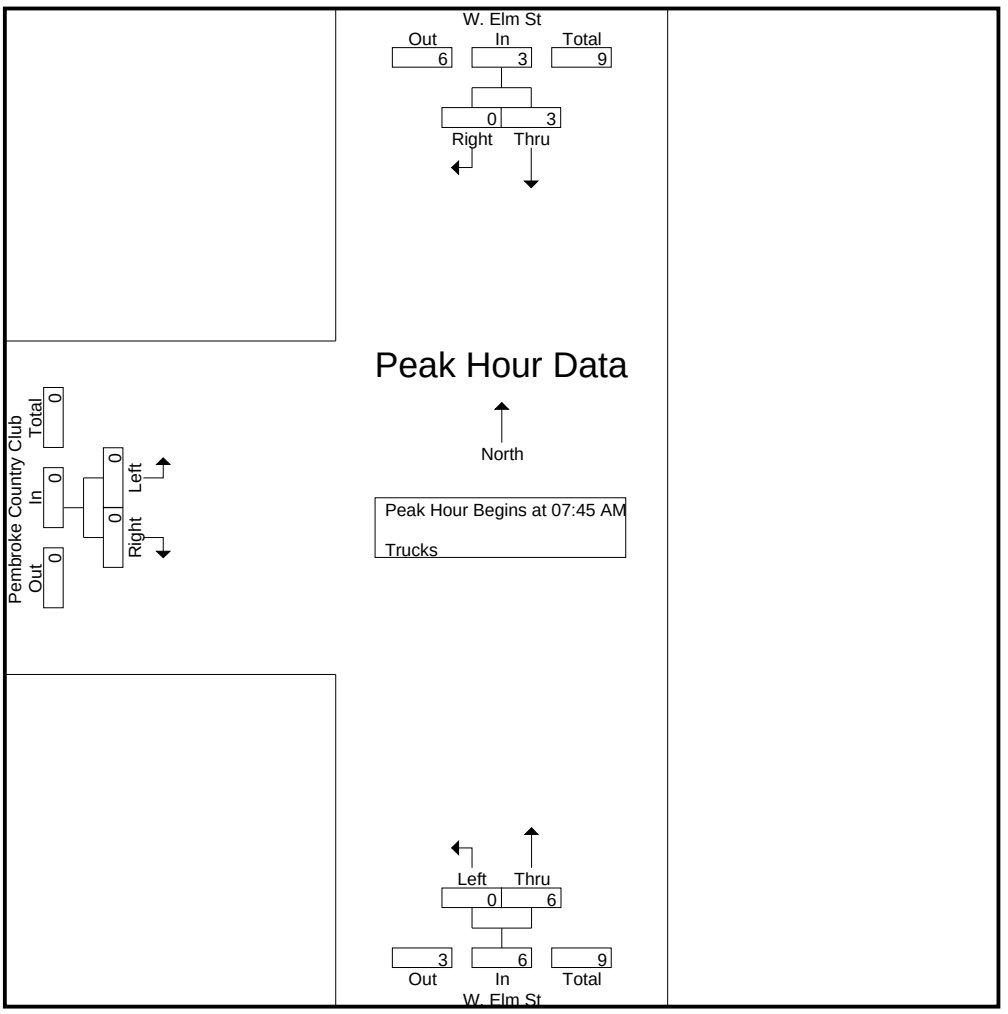
	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	**1**	0	**1**	0	**2**	**2**	0	0	0	**3**
08:00 AM	1	0	1	0	2	2	0	0	0	3
08:15 AM	1	0	1	0	1	1	0	0	0	2
08:30 AM	0	0	0	0	1	1	0	0	0	1
Total Volume	3	0	3	0	6	6	0	0	0	9
% App. Total	100	0		0	100		0	0		
PHF	.750	.000	.750	.000	.750	.750	.000	.000	.000	.750

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 8



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

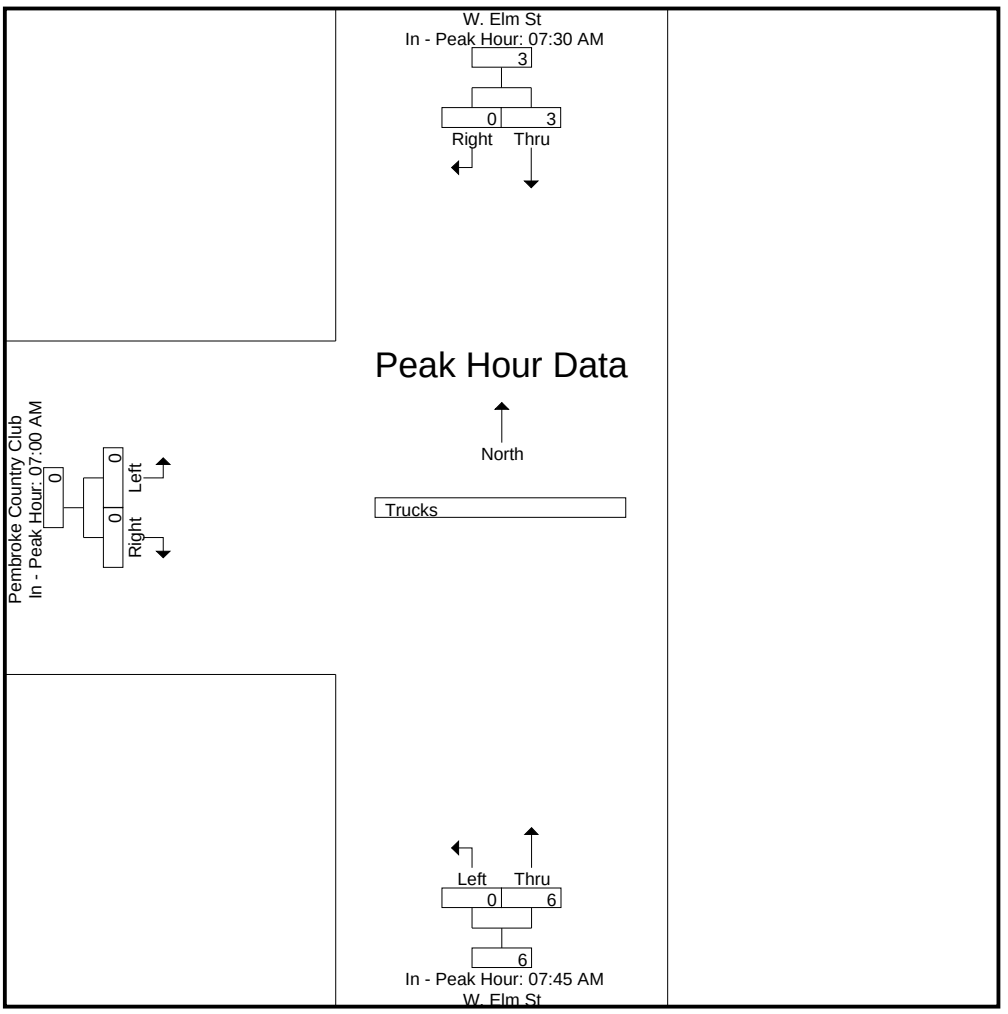
	07:30 AM			07:45 AM			07:00 AM		
+0 mins.	0	0	0	0	**2**	**2**	0	0	0
+15 mins.	**1**	0	**1**	0	2	2	0	0	0
+30 mins.	1	0	1	0	1	1	0	0	0
+45 mins.	1	0	1	0	1	1	0	0	0
Total Volume	3	0	3	0	6	6	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.750	.000	.750	.000	.750	.750	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022

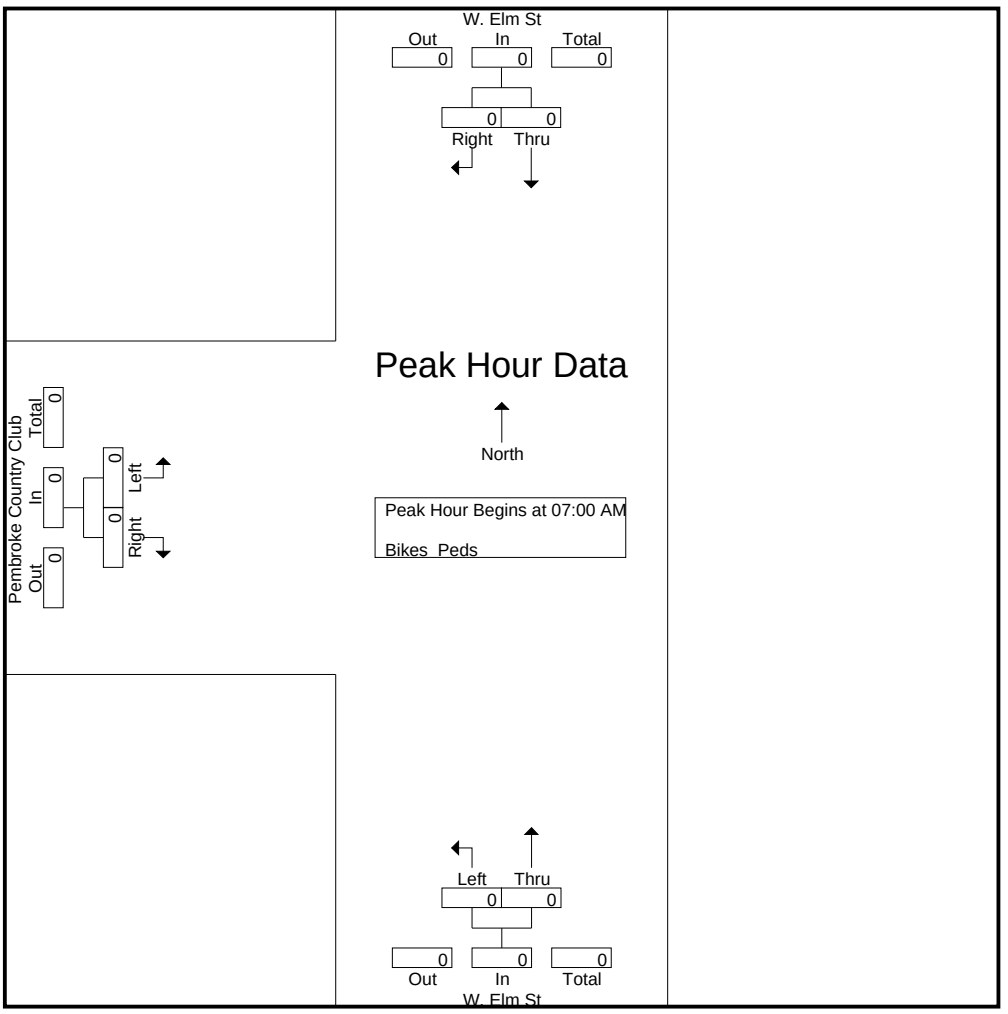
Groups Printed- Bikes Peds

	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West					
Start Time	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0				
Total %										0	0	

	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 11



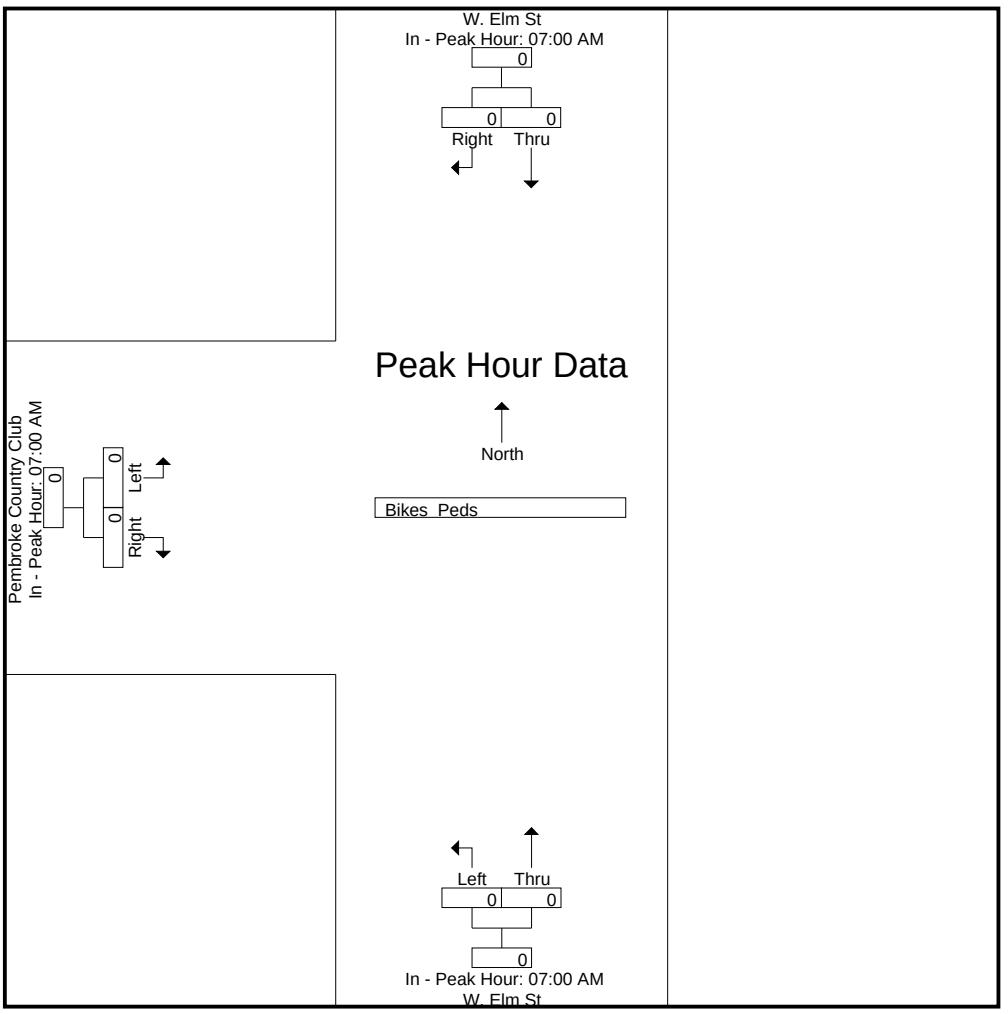
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts
978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 12



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 1

Groups Printed- Cars - Trucks

	W. Elm St From North		W. Elm St From South		Pembroke Country Club From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	92	1	0	35	1	0	129
04:15 PM	76	0	0	43	0	0	119
04:30 PM	81	0	0	34	0	0	115
04:45 PM	63	0	0	40	0	0	103
Total	312	1	0	152	1	0	466
05:00 PM	70	0	0	40	0	0	110
05:15 PM	79	0	0	42	0	0	121
05:30 PM	92	0	0	40	0	0	132
05:45 PM	83	0	0	22	0	0	105
Total	324	0	0	144	0	0	468
Grand Total	636	1	0	296	1	0	934
Apprch %	99.8	0.2	0	100	100	0	
Total %	68.1	0.1	0	31.7	0.1	0	
Cars	631	1	0	295	1	0	928
% Cars	99.2	100	0	99.7	100	0	99.4
Trucks	5	0	0	1	0	0	6
% Trucks	0.8	0	0	0.3	0	0	0.6

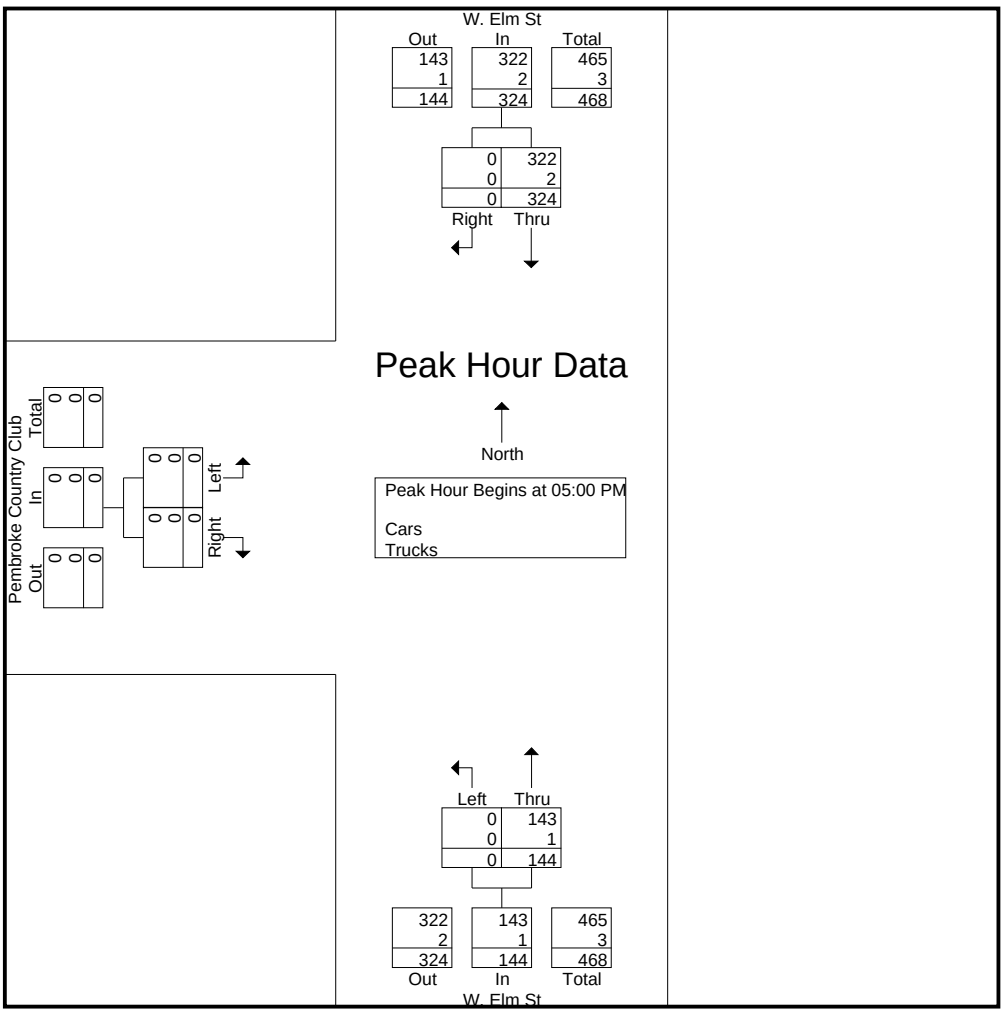
	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	70	0	70	0	40	40	0	0	0	110
05:15 PM	79	0	79	0	**42**	**42**	0	0	0	121
05:30 PM	**92**	0	**92**	0	40	40	0	0	0	**132**
05:45 PM	83	0	83	0	22	22	0	0	0	105
Total Volume	324	0	324	0	144	144	0	0	0	468
% App. Total	100	0		0	100		0	0		
PHF	.880	.000	.880	.000	.857	.857	.000	.000	.000	.886
Cars	322	0	322	0	143	143	0	0	0	465
% Cars	99.4	0	99.4	0	99.3	99.3	0	0	0	99.4
Trucks	2	0	2	0	1	1	0	0	0	3
% Trucks	0.6	0	0.6	0	0.7	0.7	0	0	0	0.6

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

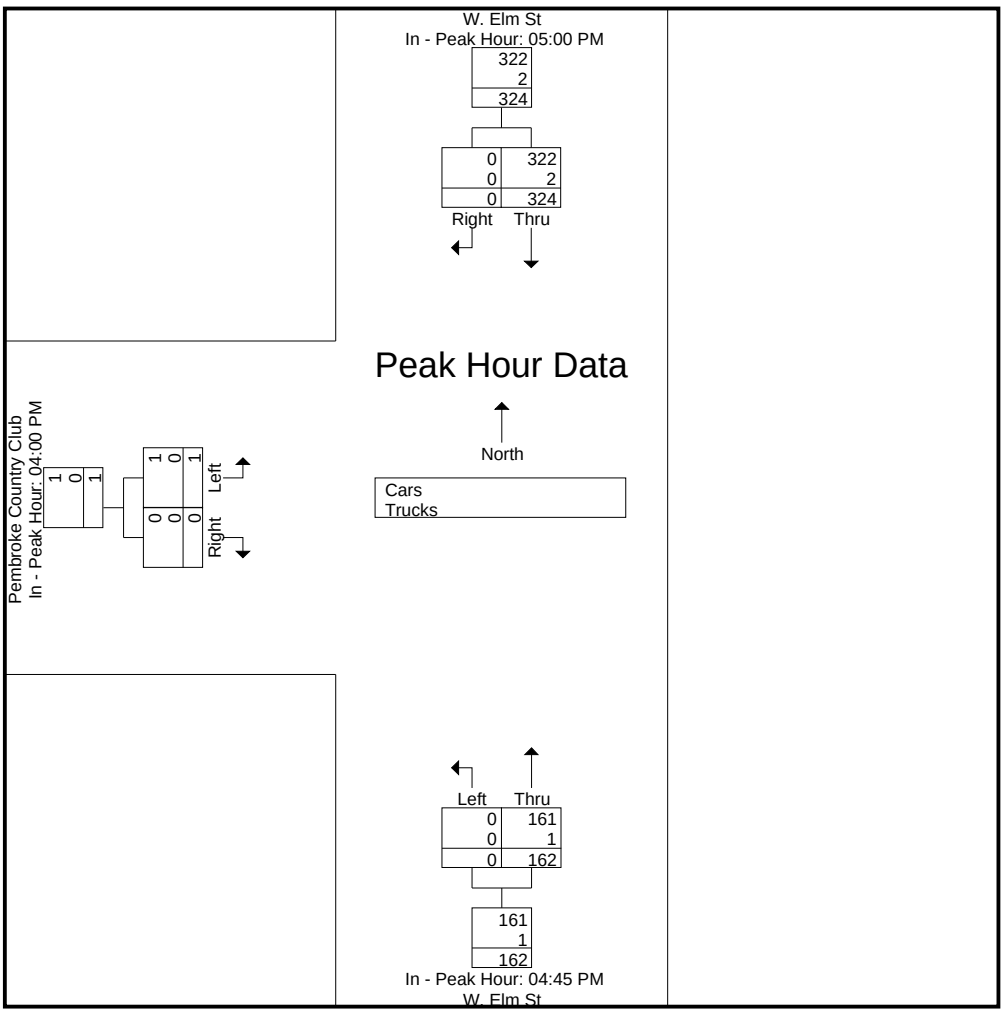
	05:00 PM			04:45 PM			04:00 PM		
+0 mins.	70	0	70	0	40	40	**1**	0	**1**
+15 mins.	79	0	79	0	40	40	0	0	0
+30 mins.	**92**	0	**92**	0	**42**	**42**	0	0	0
+45 mins.	83	0	83	0	40	40	0	0	0
Total Volume	324	0	324	0	162	162	1	0	1
% App. Total	100	0		0	100		100	0	
PHF	.880	.000	.880	.000	.964	.964	.250	.000	.250
Cars	322	0	322	0	161	161	1	0	1
% Cars	99.4	0	99.4	0	99.4	99.4	100	0	100
Trucks	2	0	2	0	1	1	0	0	0
% Trucks	0.6	0	0.6	0	0.6	0.6	0	0	0

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 4

Groups Printed- Cars

	W. Elm St From North		W. Elm St From South		Pembroke Country Club From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	89	1	0	35	1	0	126
04:15 PM	76	0	0	43	0	0	119
04:30 PM	81	0	0	34	0	0	115
04:45 PM	63	0	0	40	0	0	103
Total	309	1	0	152	1	0	463
05:00 PM	69	0	0	39	0	0	108
05:15 PM	78	0	0	42	0	0	120
05:30 PM	92	0	0	40	0	0	132
05:45 PM	83	0	0	22	0	0	105
Total	322	0	0	143	0	0	465
Grand Total	631	1	0	295	1	0	928
Apprch %	99.8	0.2	0	100	100	0	
Total %	68	0.1	0	31.8	0.1	0	

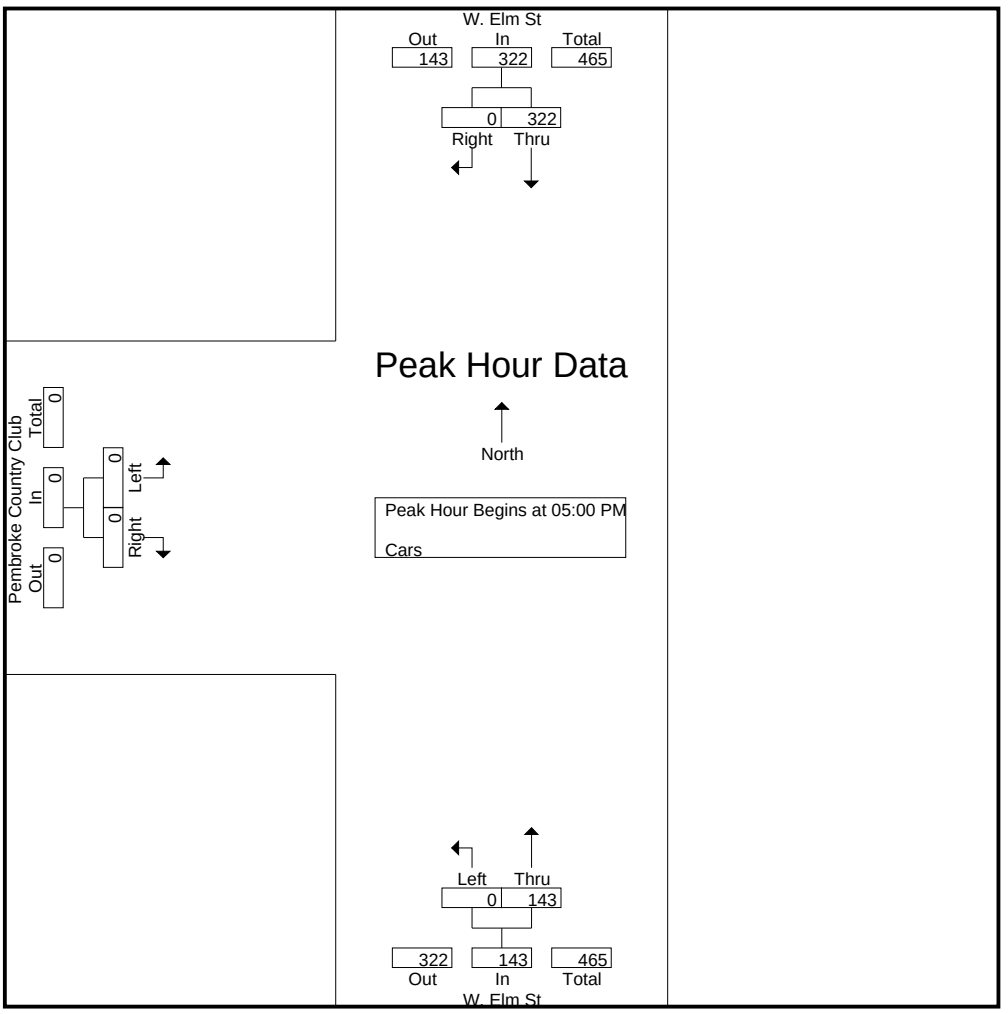
	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	69	0	69	0	39	39	0	0	0	108
05:15 PM	78	0	78	0	**42**	**42**	0	0	0	120
05:30 PM	**92**	0	**92**	0	40	40	0	0	0	**132**
05:45 PM	83	0	83	0	22	22	0	0	0	105
Total Volume	322	0	322	0	143	143	0	0	0	465
% App. Total	100	0		0	100		0	0		
PHF	.875	.000	.875	.000	.851	.851	.000	.000	.000	.881

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 5



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

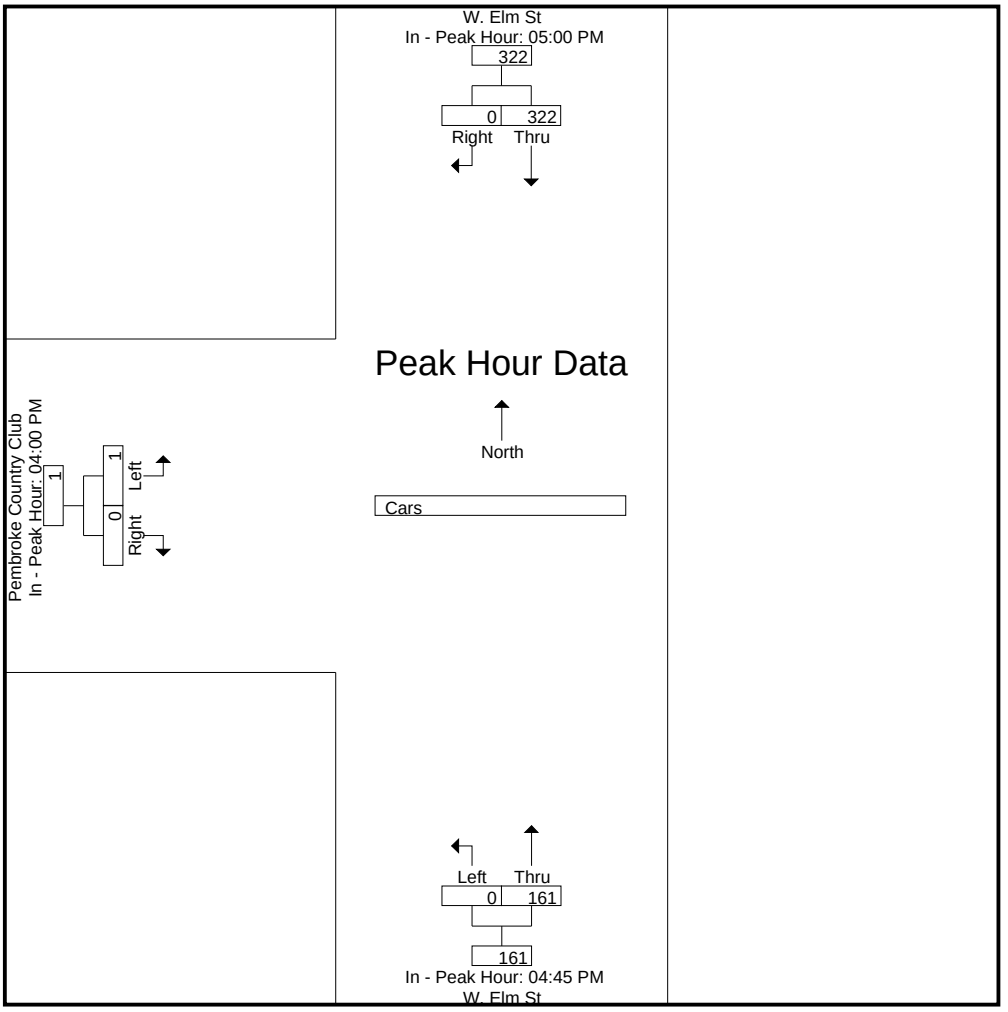
	05:00 PM			04:45 PM			04:00 PM		
+0 mins.	69	0	69	0	40	40	**1**	0	**1**
+15 mins.	78	0	78	0	39	39	0	0	0
+30 mins.	**92**	0	**92**	0	**42**	**42**	0	0	0
+45 mins.	83	0	83	0	40	40	0	0	0
Total Volume	322	0	322	0	161	161	1	0	1
% App. Total	100	0		0	100		100	0	
PHF	.875	.000	.875	.000	.958	.958	.250	.000	.250

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 7

Groups Printed- Trucks

	W. Elm St From North		W. Elm St From South		Pembroke Country Club From West		
Start Time	Thru	Right	Left	Thru	Left	Right	Int. Total
04:00 PM	3	0	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0
Total	3	0	0	0	0	0	3
05:00 PM	1	0	0	1	0	0	2
05:15 PM	1	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	2	0	0	1	0	0	3
Grand Total	5	0	0	1	0	0	6
Apprch %	100	0	0	100	0	0	
Total %	83.3	0	0	16.7	0	0	

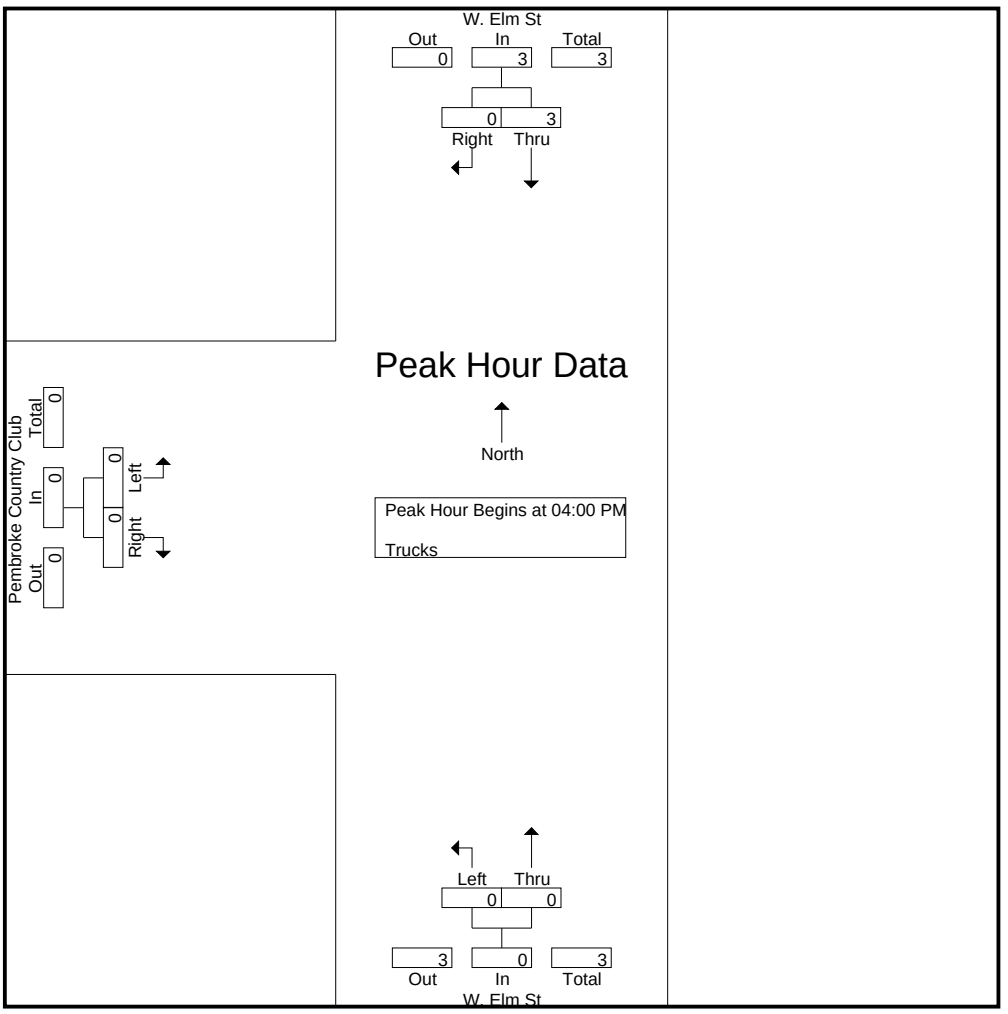
	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	**3**	0	**3**	0	0	0	0	0	0	**3**
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	3	0	3	0	0	0	0	0	0	3
% App. Total	100	0		0	0		0	0		
PHF	.250	.000	.250	.000	.000	.000	.000	.000	.000	.250

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 8

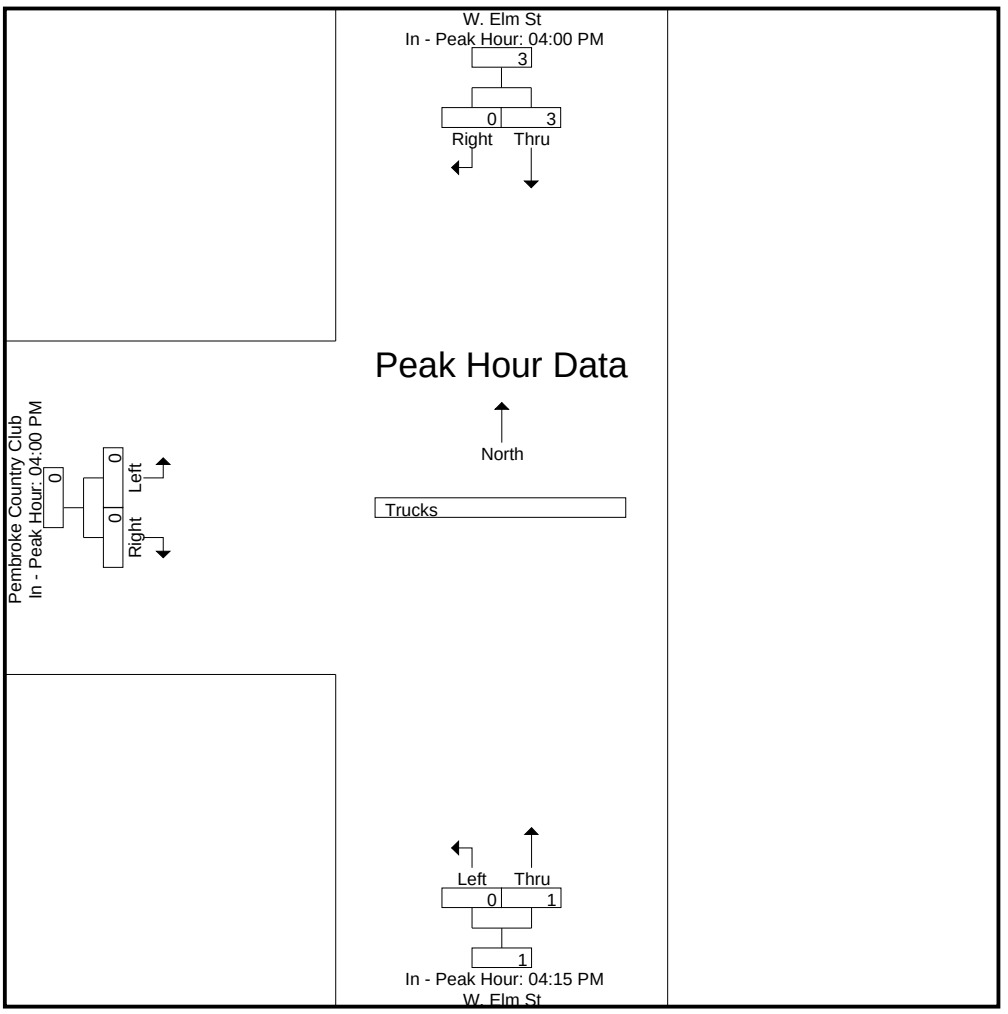


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:15 PM			04:00 PM		
+0 mins.	**3**	0	**3**	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	**1**	**1**	0	0	0
Total Volume	3	0	3	0	1	1	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022

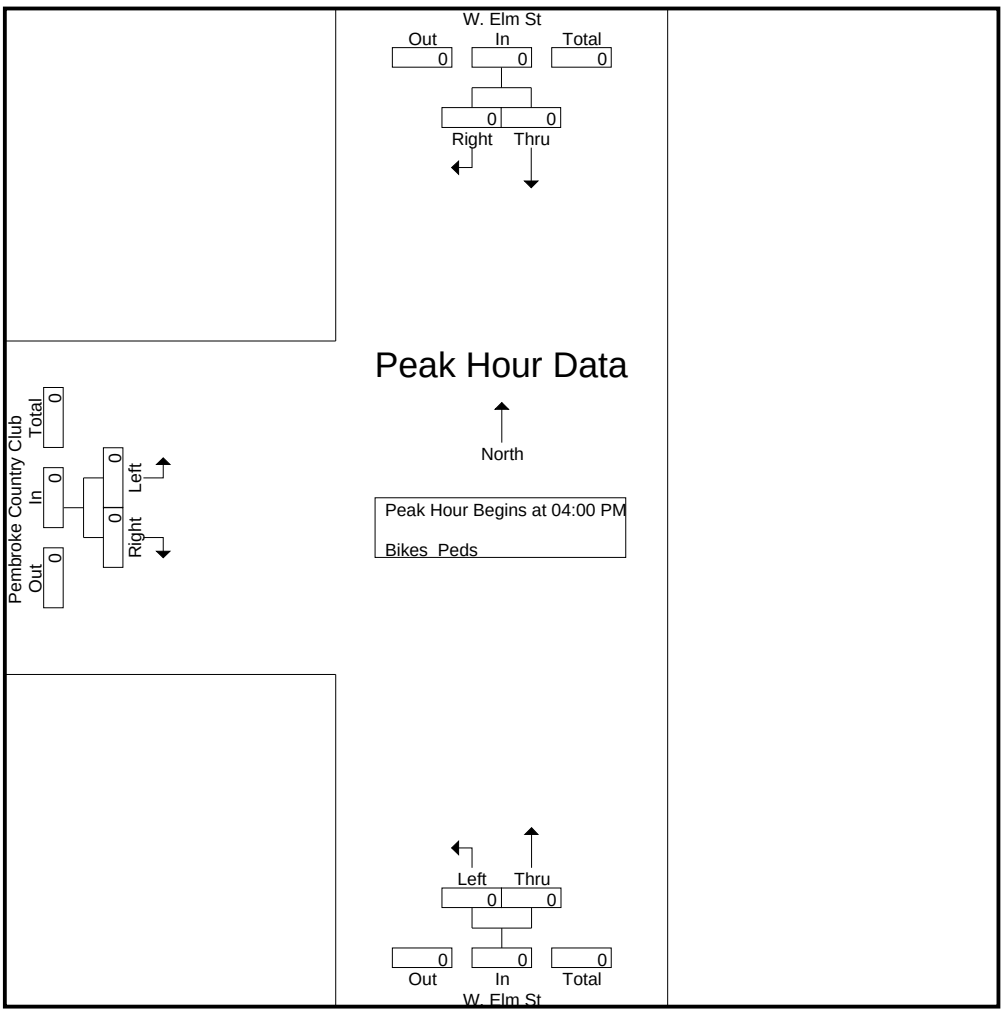
Groups Printed- Bikes Peds

	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West					
Start Time	Thru	Right	Peds	Left	Thru	Peds	Left	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0				
Total %										0	0	

	W. Elm St From North			W. Elm St From South			Pembroke Country Club From West			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 11



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

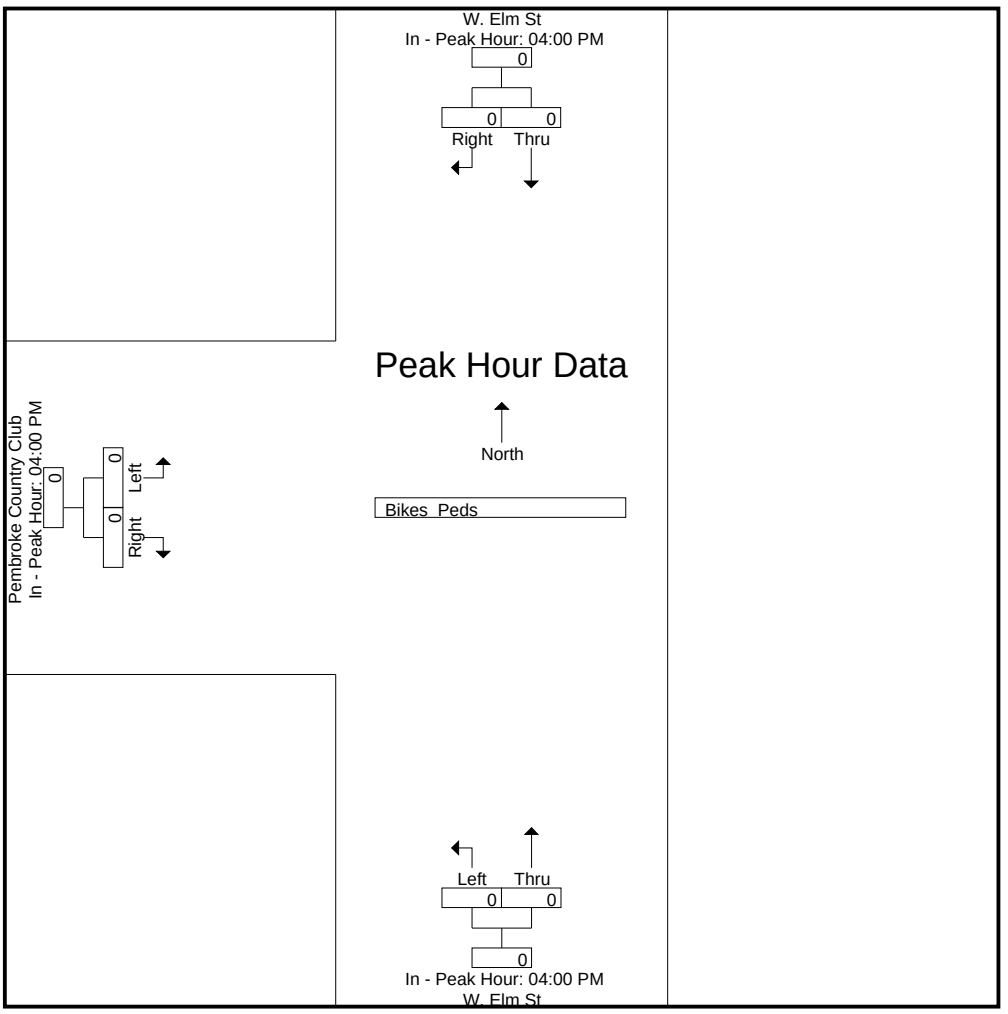
	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Pembroke Country Club
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240002
Site Code : 91240002
Start Date : 1/25/2022
Page No : 12



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 1

Groups Printed- Cars - Trucks

	W. Elm St From North			Milbery Ln From East			W. Elm St From South			Dwelley St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	0	22	3	0	0	2	2	47	0	6	0	6	88
07:15 AM	0	12	4	0	0	0	6	59	0	9	0	4	94
07:30 AM	1	25	5	0	2	0	7	79	0	5	0	6	130
07:45 AM	0	22	6	0	0	0	3	71	0	7	0	5	114
Total	1	81	18	0	2	2	18	256	0	27	0	21	426
08:00 AM	0	17	5	0	0	0	2	65	0	10	0	6	105
08:15 AM	0	18	6	0	0	1	8	62	0	13	0	4	112
08:30 AM	0	19	5	0	0	2	4	61	0	6	0	3	100
08:45 AM	0	18	4	0	0	1	2	69	0	3	0	6	103
Total	0	72	20	0	0	4	16	257	0	32	0	19	420
Grand Total	1	153	38	0	2	6	34	513	0	59	0	40	846
Apprch %	0.5	79.7	19.8	0	25	75	6.2	93.8	0	59.6	0	40.4	
Total %	0.1	18.1	4.5	0	0.2	0.7	4	60.6	0	7	0	4.7	
Cars	1	150	37	0	2	6	33	507	0	58	0	38	832
% Cars	100	98	97.4	0	100	100	97.1	98.8	0	98.3	0	95	98.3
Trucks	0	3	1	0	0	0	1	6	0	1	0	2	14
% Trucks	0	2	2.6	0	0	0	2.9	1.2	0	1.7	0	5	1.7

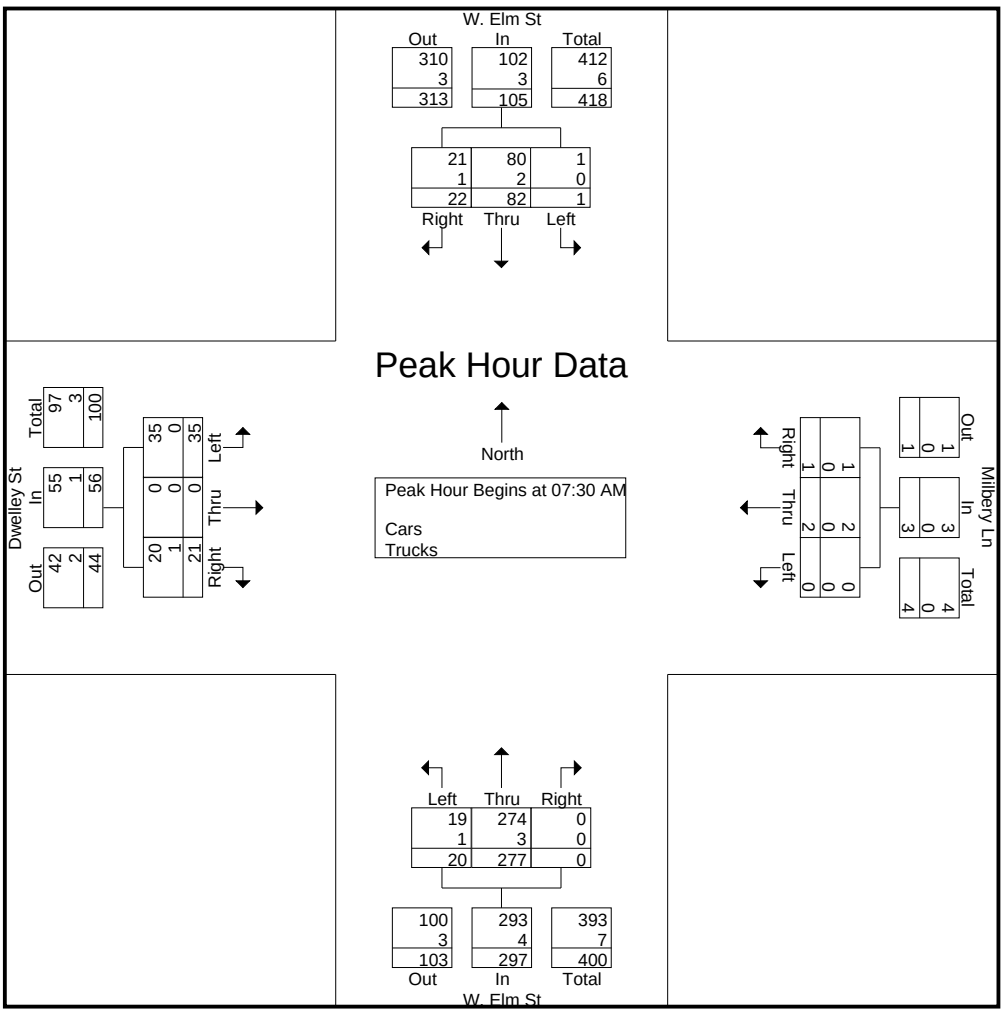
	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**1**	**25**	5	**31**	0	**2**	0	**2**	7	**79**	0	**86**	5	0	**6**	11	**130**
07:45 AM	0	22	**6**	28	0	0	0	0	3	71	0	74	7	0	5	12	114
08:00 AM	0	17	5	22	0	0	0	0	2	65	0	67	10	0	6	16	105
08:15 AM	0	18	6	24	0	0	**1**	1	**8**	62	0	70	**13**	0	4	**17**	112
Total Volume	1	82	22	105	0	2	1	3	20	277	0	297	35	0	21	56	461
% App. Total	1	78.1	21		0	66.7	33.3		6.7	93.3	0		62.5	0	37.5		
PHF	.250	.820	.917	.847	.000	.250	.250	.375	.625	.877	.000	.863	.673	.000	.875	.824	.887
Cars	1	80	21	102	0	2	1	3	19	274	0	293	35	0	20	55	453
% Cars	100	97.6	95.5	97.1	0	100	100	100	95.0	98.9	0	98.7	100	0	95.2	98.2	98.3
Trucks	0	2	1	3	0	0	0	0	1	3	0	4	0	0	1	1	8
% Trucks	0	2.4	4.5	2.9	0	0	0	0	5.0	1.1	0	1.3	0	0	4.8	1.8	1.7

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

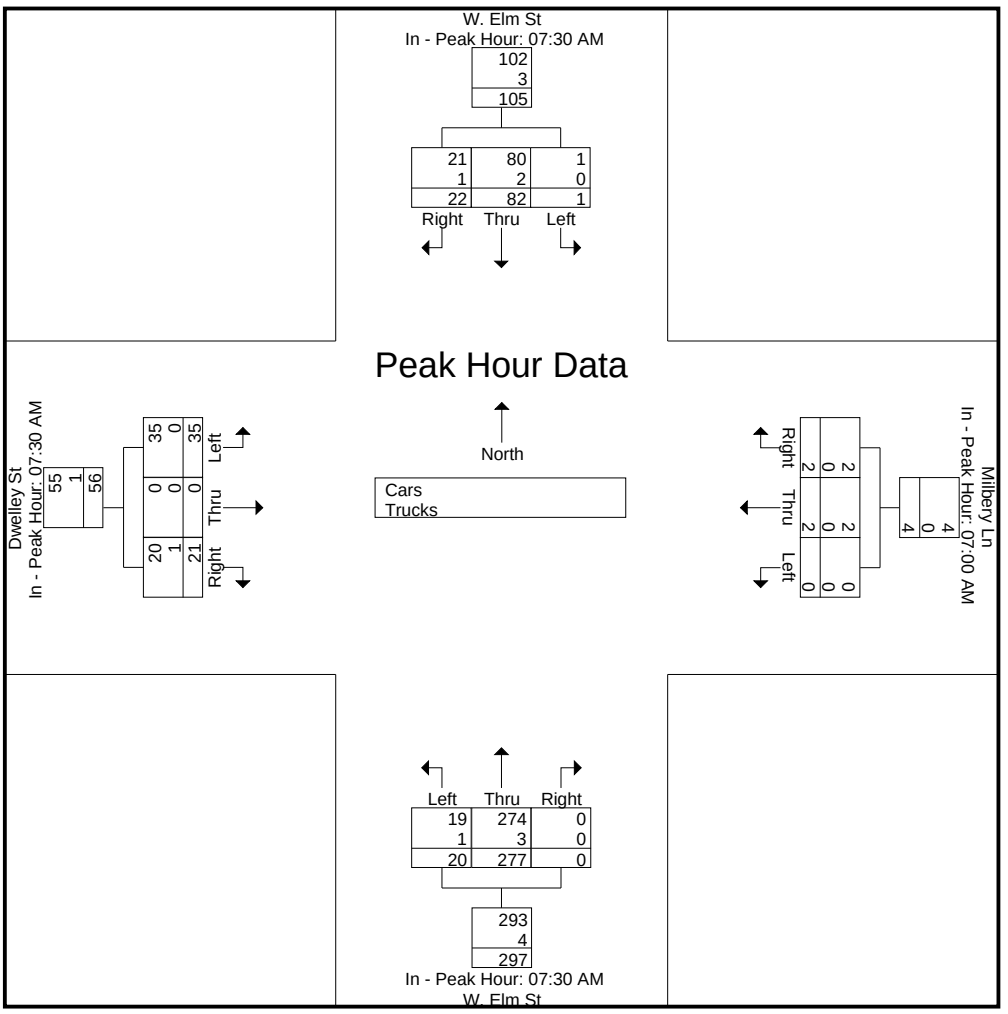
	07:30 AM				07:00 AM				07:30 AM				07:30 AM			
+0 mins.	**1**	**25**	5	**31**	0	0	**2**	**2**	7	**79**	0	**86**	5	0	**6**	11
+15 mins.	0	22	**6**	28	0	0	0	0	3	71	0	74	7	0	5	12
+30 mins.	0	17	5	22	0	**2**	0	2	2	65	0	67	10	0	6	16
+45 mins.	0	18	6	24	0	0	0	0	**8**	62	0	70	**13**	0	4	**17**
Total Volume	1	82	22	105	0	2	2	4	20	277	0	297	35	0	21	56
% App. Total	1	78.1	21		0	50	50		6.7	93.3	0		62.5	0	37.5	
PHF	.250	.820	.917	.847	.000	.250	.250	.500	.625	.877	.000	.863	.673	.000	.875	.824
Cars	1	80	21	102	0	2	2	4	19	274	0	293	35	0	20	55
% Cars	100	97.6	95.5	97.1	0	100	100	100	95	98.9	0	98.7	100	0	95.2	98.2
Trucks	0	2	1	3	0	0	0	0	1	3	0	4	0	0	1	1
% Trucks	0	2.4	4.5	2.9	0	0	0	0	5	1.1	0	1.3	0	0	4.8	1.8

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 4

Groups Printed- Cars

	W. Elm St From North			Milbery Ln From East			W. Elm St From South			Dwelley St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	0	22	3	0	0	2	2	47	0	5	0	5	86
07:15 AM	0	12	4	0	0	0	6	59	0	9	0	4	94
07:30 AM	1	25	5	0	2	0	7	79	0	5	0	6	130
07:45 AM	0	21	5	0	0	0	3	70	0	7	0	5	111
Total	1	80	17	0	2	2	18	255	0	26	0	20	421
08:00 AM	0	17	5	0	0	0	1	64	0	10	0	5	102
08:15 AM	0	17	6	0	0	1	8	61	0	13	0	4	110
08:30 AM	0	18	5	0	0	2	4	59	0	6	0	3	97
08:45 AM	0	18	4	0	0	1	2	68	0	3	0	6	102
Total	0	70	20	0	0	4	15	252	0	32	0	18	411
Grand Total	1	150	37	0	2	6	33	507	0	58	0	38	832
Apprch %	0.5	79.8	19.7	0	25	75	6.1	93.9	0	60.4	0	39.6	
Total %	0.1	18	4.4	0	0.2	0.7	4	60.9	0	7	0	4.6	

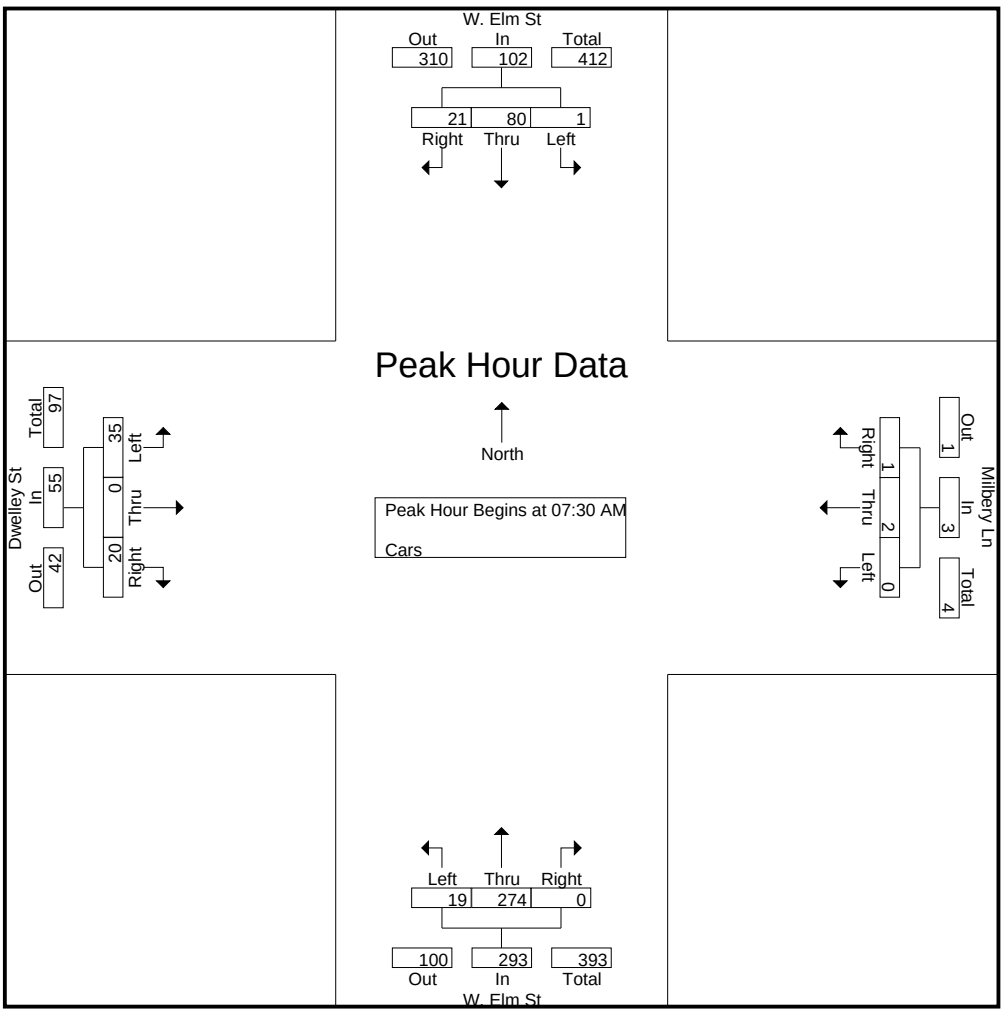
	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**1**	**25**	5	**31**	0	**2**	0	**2**	7	**79**	0	**86**	5	0	**6**	11	**130**
07:45 AM	0	21	5	26	0	0	0	0	3	70	0	73	7	0	5	12	111
08:00 AM	0	17	5	22	0	0	0	0	1	64	0	65	10	0	5	15	102
08:15 AM	0	17	**6**	23	0	0	**1**	1	**8**	61	0	69	**13**	0	4	**17**	110
Total Volume	1	80	21	102	0	2	1	3	19	274	0	293	35	0	20	55	453
% App. Total	1	78.4	20.6		0	66.7	33.3		6.5	93.5	0		63.6	0	36.4		
PHF	.250	.800	.875	.823	.000	.250	.250	.375	.594	.867	.000	.852	.673	.000	.833	.809	.871

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 5



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

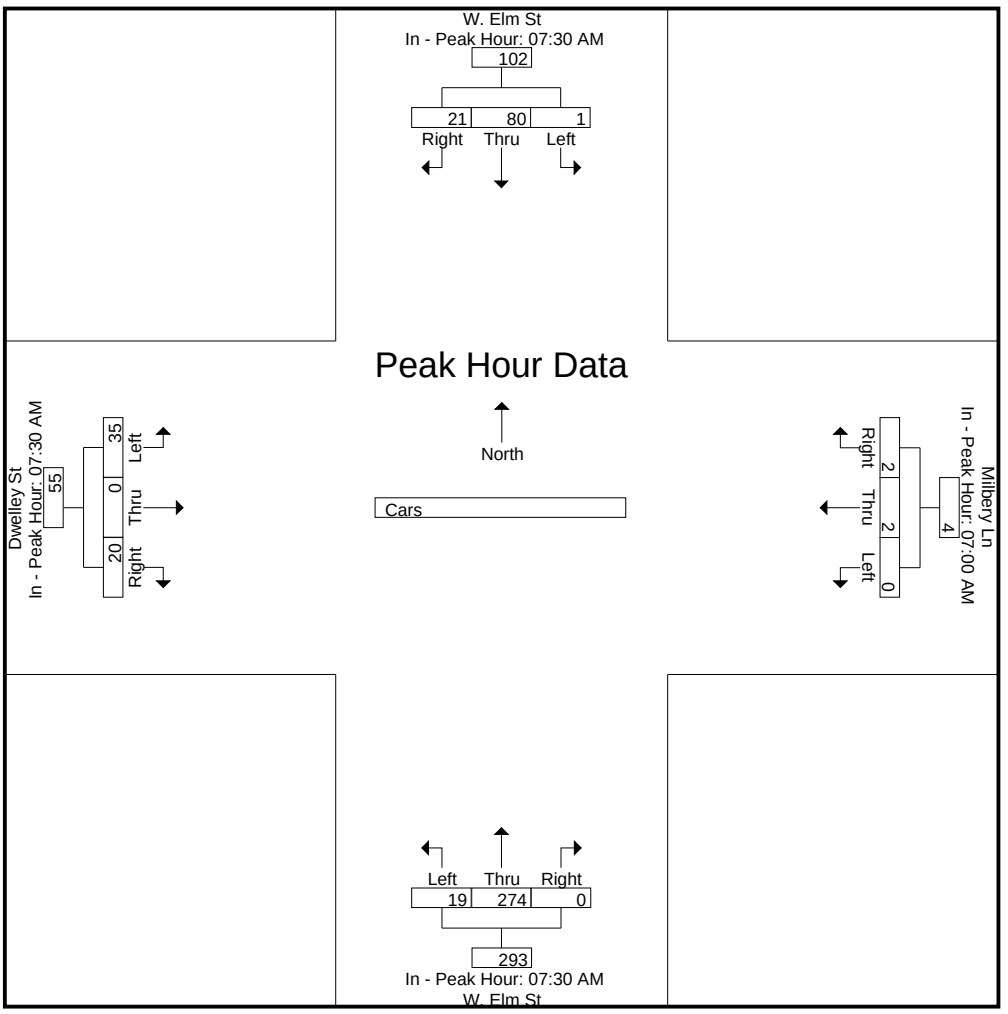
	07:30 AM				07:00 AM				07:30 AM				07:30 AM			
+0 mins.	**1**	**25**	5	**31**	0	0	**2**	**2**	7	**79**	0	**86**	5	0	**6**	11
+15 mins.	0	21	5	26	0	0	0	0	3	70	0	73	7	0	5	12
+30 mins.	0	17	5	22	0	**2**	0	2	1	64	0	65	10	0	5	15
+45 mins.	0	17	**6**	23	0	0	0	0	**8**	61	0	69	**13**	0	4	**17**
Total Volume	1	80	21	102	0	2	2	4	19	274	0	293	35	0	20	55
% App. Total	1	78.4	20.6		0	50	50		6.5	93.5	0		63.6	0	36.4	
PHF	.250	.800	.875	.823	.000	.250	.250	.500	.594	.867	.000	.852	.673	.000	.833	.809

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 7

Groups Printed- Trucks

	W. Elm St From North			Milbery Ln From East			W. Elm St From South			Dwelley St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	1	0	0	0	0	1	0	0	0	0	3
Total	0	1	1	0	0	0	0	1	0	1	0	1	5
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	1	3
08:15 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
08:30 AM	0	1	0	0	0	0	0	2	0	0	0	0	3
08:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	2	0	0	0	0	1	5	0	0	0	1	9
Grand Total	0	3	1	0	0	0	1	6	0	1	0	2	14
Apprch %	0	75	25	0	0	0	14.3	85.7	0	33.3	0	66.7	
Total %	0	21.4	7.1	0	0	0	7.1	42.9	0	7.1	0	14.3	

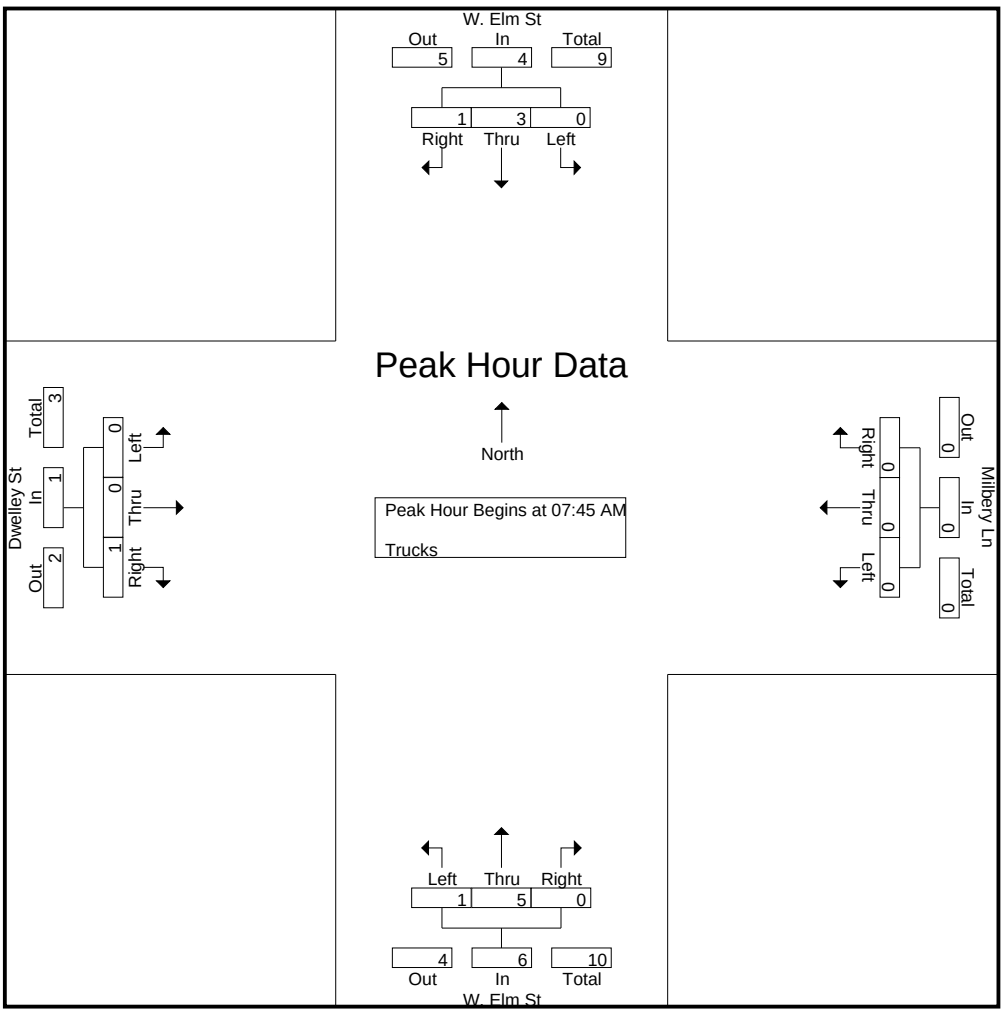
	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**1**	**1**	**2**	0	0	0	0	0	1	0	1	0	0	0	0	**3**
08:00 AM	0	0	0	0	0	0	0	0	**1**	1	0	**2**	0	0	**1**	**1**	3
08:15 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:30 AM	0	1	0	1	0	0	0	0	0	**2**	0	2	0	0	0	0	3
Total Volume	0	3	1	4	0	0	0	0	1	5	0	6	0	0	1	1	11
% App. Total	0	75	25		0	0	0		16.7	83.3	0		0	0	100		
PHF	.000	.750	.250	.500	.000	.000	.000	.000	.250	.625	.000	.750	.000	.000	.250	.250	.917

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 8



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

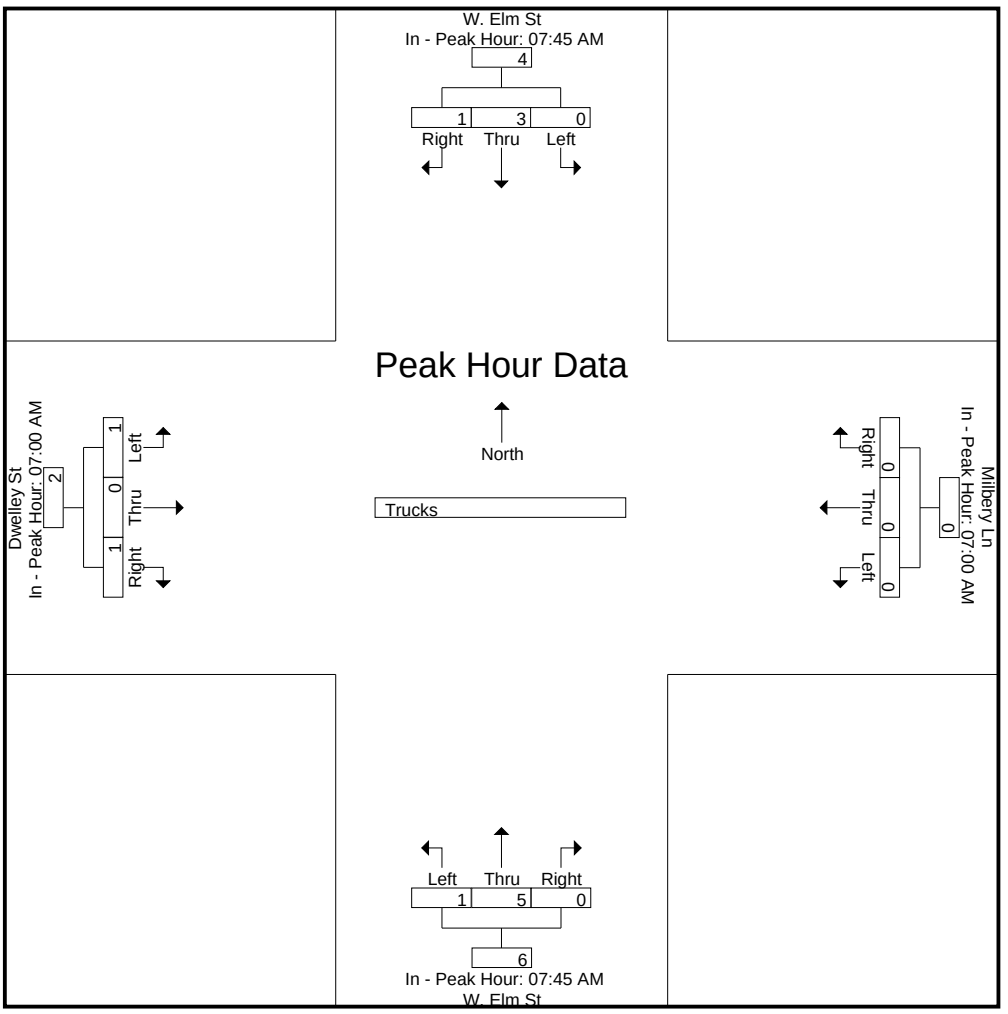
	07:45 AM				07:00 AM				07:45 AM				07:00 AM			
+0 mins.	0	**1**	**1**	**2**	0	0	0	0	0	1	0	1	**1**	0	**1**	**2**
+15 mins.	0	0	0	0	0	0	0	0	**1**	1	0	**2**	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	**2**	0	2	0	0	0	0
Total Volume	0	3	1	4	0	0	0	0	1	5	0	6	1	0	1	2
% App. Total	0	75	25		0	0	0		16.7	83.3	0		50	0	50	
PHF	.000	.750	.250	.500	.000	.000	.000	.000	.250	.625	.000	.750	.250	.000	.250	.250

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 10

Groups Printed- Bikes Peds

	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0		0	0	0		0	0	0				
Total %																	0	0	

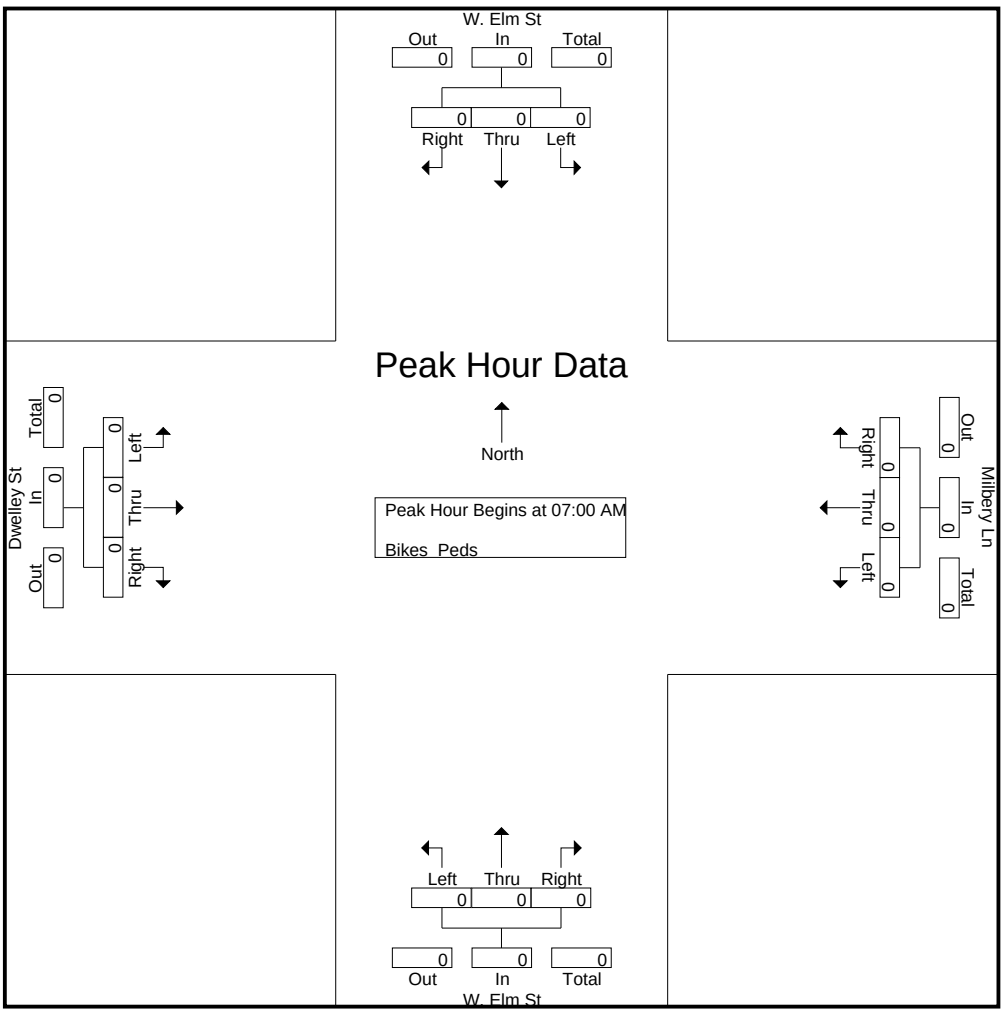
	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 11



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

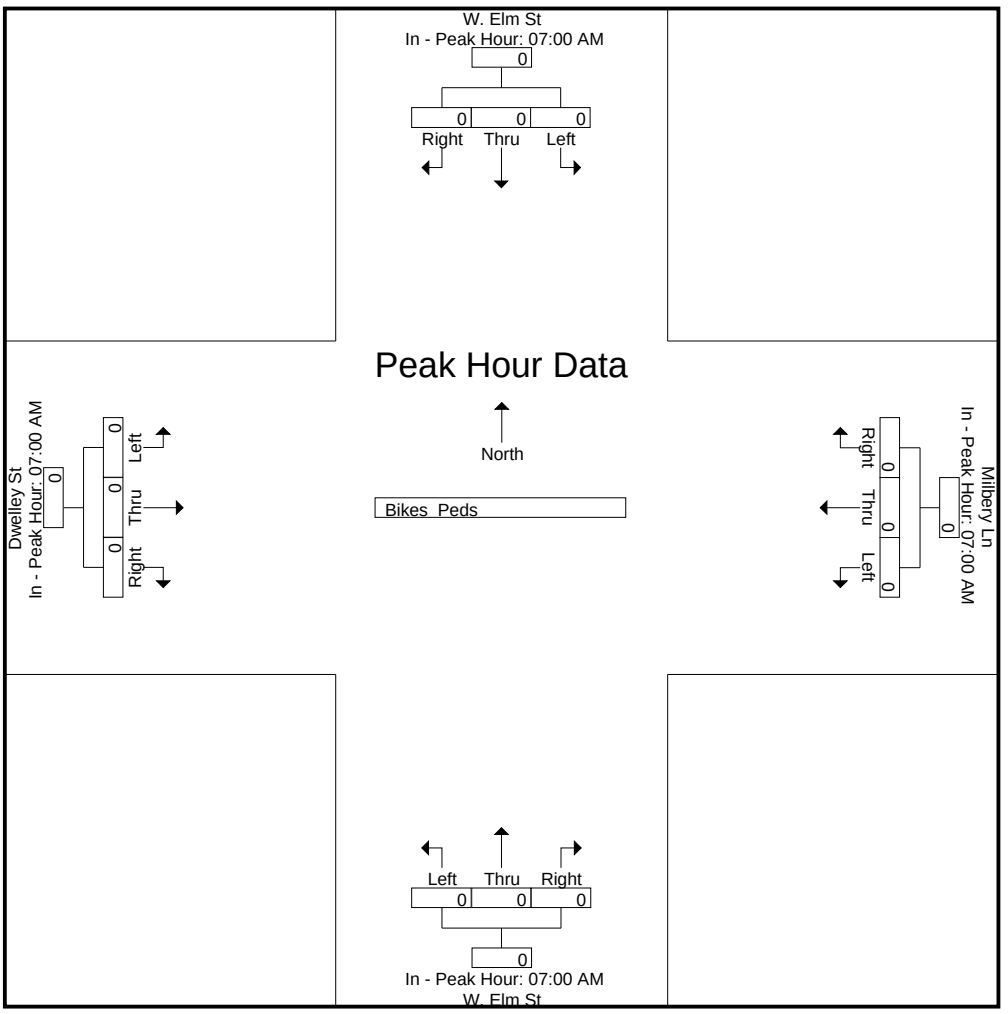
	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 12



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 1

Groups Printed- Cars - Trucks

	W. Elm St From North			Milbery Ln From East			W. Elm St From South			Dwelley St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
04:00 PM	0	80	7	0	0	0	8	25	0	7	0	4	131
04:15 PM	1	75	9	0	0	0	7	36	0	4	0	5	137
04:30 PM	1	73	8	0	0	0	4	32	0	6	0	4	128
04:45 PM	0	68	13	0	0	0	5	36	0	7	1	3	133
Total	2	296	37	0	0	0	24	129	0	24	1	16	529
05:00 PM	0	69	6	0	0	0	6	35	0	7	0	6	129
05:15 PM	1	74	7	0	0	1	2	42	0	11	1	7	146
05:30 PM	2	82	10	0	0	1	3	31	0	5	0	8	142
05:45 PM	1	76	6	0	0	1	4	19	0	9	0	7	123
Total	4	301	29	0	0	3	15	127	0	32	1	28	540
Grand Total	6	597	66	0	0	3	39	256	0	56	2	44	1069
Apprch %	0.9	89.2	9.9	0	0	100	13.2	86.8	0	54.9	2	43.1	
Total %	0.6	55.8	6.2	0	0	0.3	3.6	23.9	0	5.2	0.2	4.1	
Cars	6	597	66	0	0	3	39	255	0	56	2	44	1068
% Cars	100	100	100	0	0	100	100	99.6	0	100	100	100	99.9
Trucks	0	0	0	0	0	0	0	1	0	0	0	0	1
% Trucks	0	0	0	0	0	0	0	0.4	0	0	0	0	0.1

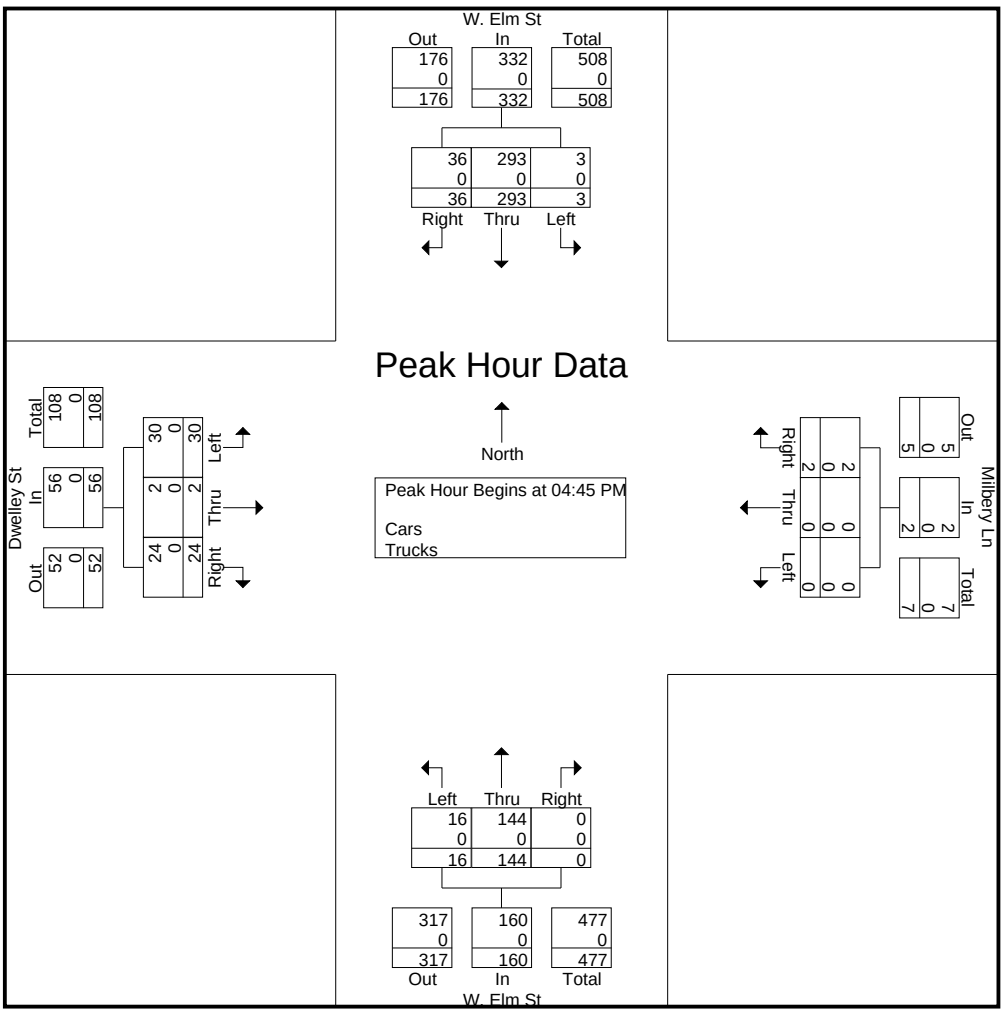
	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	68	**13**	81	0	0	0	0	5	36	0	41	7	**1**	3	11	133
05:00 PM	0	69	6	75	0	0	0	0	**6**	35	0	41	7	0	6	13	129
05:15 PM	1	74	7	82	0	0	**1**	**1**	2	**42**	0	**44**	**11**	1	7	**19**	**146**
05:30 PM	**2**	**82**	10	**94**	0	0	1	1	3	31	0	34	5	0	**8**	13	142
Total Volume	3	293	36	332	0	0	2	2	16	144	0	160	30	2	24	56	550
% App. Total	0.9	88.3	10.8		0	0	100		10	90	0		53.6	3.6	42.9		
PHF	.375	.893	.692	.883	.000	.000	.500	.500	.667	.857	.000	.909	.682	.500	.750	.737	.942
Cars	3	293	36	332	0	0	2	2	16	144	0	160	30	2	24	56	550
% Cars	100	100	100	100	0	0	100	100	100	100	0	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

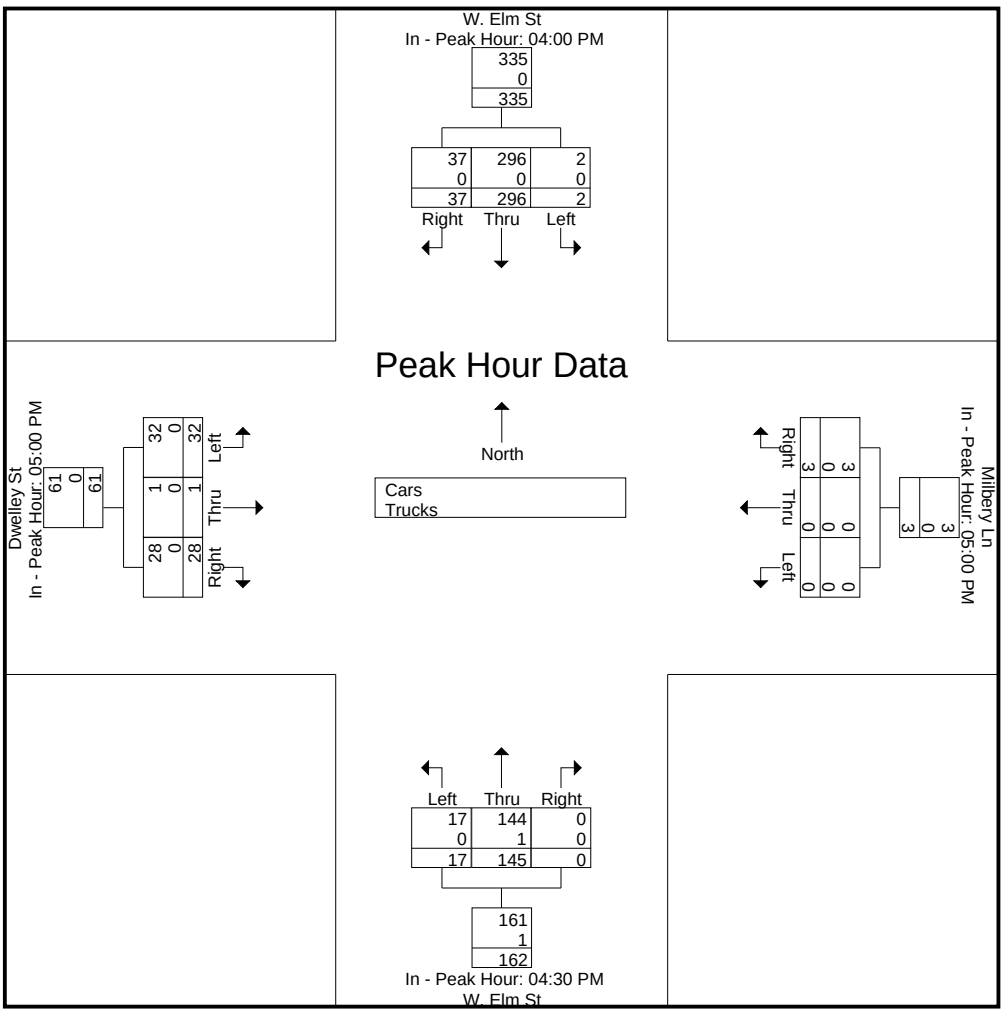
	04:00 PM				05:00 PM				04:30 PM				05:00 PM			
+0 mins.	0	**80**	7	**87**	0	0	0	0	4	32	0	36	7	0	6	13
+15 mins.	**1**	75	9	85	0	0	**1**	**1**	5	36	0	41	**11**	**1**	7	**19**
+30 mins.	1	73	8	82	0	0	1	1	**6**	35	0	41	5	0	**8**	13
+45 mins.	0	68	**13**	81	0	0	1	1	2	**42**	0	**44**	9	0	7	16
Total Volume	2	296	37	335	0	0	3	3	17	145	0	162	32	1	28	61
% App. Total	0.6	88.4	11		0	0	100		10.5	89.5	0		52.5	1.6	45.9	
PHF	.500	.925	.712	.963	.000	.000	.750	.750	.708	.863	.000	.920	.727	.250	.875	.803
Cars	2	296	37	335	0	0	3	3	17	144	0	161	32	1	28	61
% Cars	100	100	100	100	0	0	100	100	100	99.3	0	99.4	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0.7	0	0.6	0	0	0	0

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 4

Groups Printed- Cars

	W. Elm St From North			Milbery Ln From East			W. Elm St From South			Dwelley St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
04:00 PM	0	80	7	0	0	0	8	25	0	7	0	4	131
04:15 PM	1	75	9	0	0	0	7	36	0	4	0	5	137
04:30 PM	1	73	8	0	0	0	4	31	0	6	0	4	127
04:45 PM	0	68	13	0	0	0	5	36	0	7	1	3	133
Total	2	296	37	0	0	0	24	128	0	24	1	16	528
05:00 PM	0	69	6	0	0	0	6	35	0	7	0	6	129
05:15 PM	1	74	7	0	0	1	2	42	0	11	1	7	146
05:30 PM	2	82	10	0	0	1	3	31	0	5	0	8	142
05:45 PM	1	76	6	0	0	1	4	19	0	9	0	7	123
Total	4	301	29	0	0	3	15	127	0	32	1	28	540
Grand Total	6	597	66	0	0	3	39	255	0	56	2	44	1068
Apprch %	0.9	89.2	9.9	0	0	100	13.3	86.7	0	54.9	2	43.1	
Total %	0.6	55.9	6.2	0	0	0.3	3.7	23.9	0	5.2	0.2	4.1	

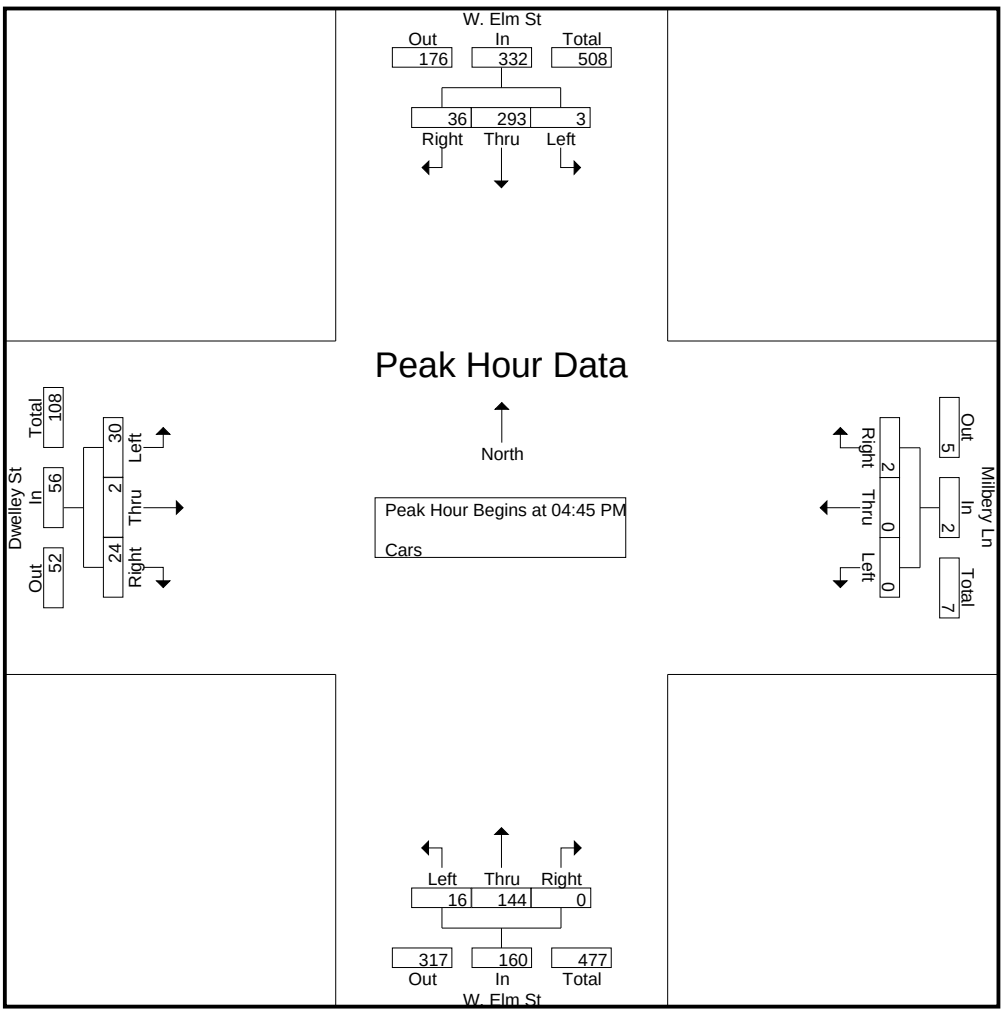
	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	68	**13**	81	0	0	0	0	5	36	0	41	7	**1**	3	11	133
05:00 PM	0	69	6	75	0	0	0	0	**6**	35	0	41	7	0	6	13	129
05:15 PM	1	74	7	82	0	0	**1**	**1**	2	**42**	0	**44**	**11**	1	7	**19**	**146**
05:30 PM	**2**	**82**	10	**94**	0	0	1	1	3	31	0	34	5	0	**8**	13	142
Total Volume	3	293	36	332	0	0	2	2	16	144	0	160	30	2	24	56	550
% App. Total	0.9	88.3	10.8		0	0	100		10	90	0		53.6	3.6	42.9		
PHF	.375	.893	.692	.883	.000	.000	.500	.500	.667	.857	.000	.909	.682	.500	.750	.737	.942

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 5



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

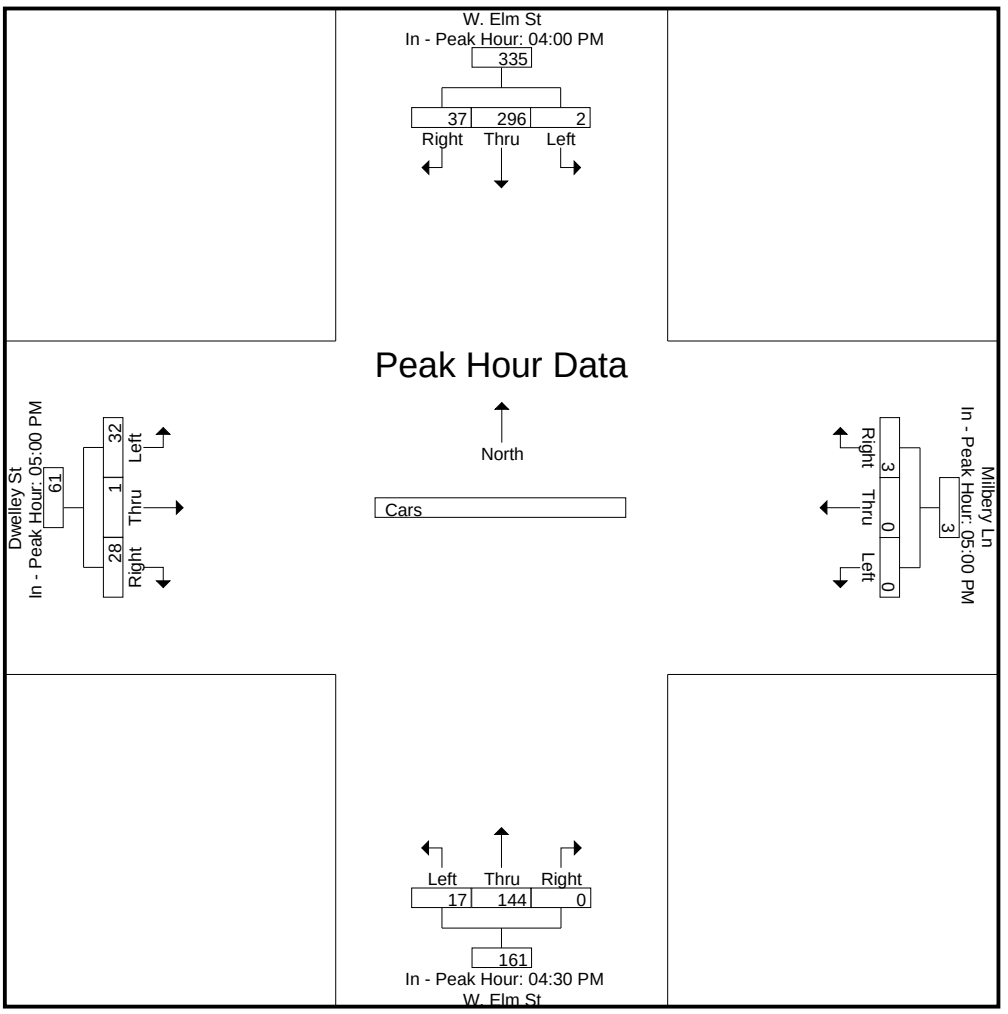
	04:00 PM				05:00 PM				04:30 PM				05:00 PM			
+0 mins.	0	**80**	7	**87**	0	0	0	0	4	31	0	35	7	0	6	13
+15 mins.	**1**	75	9	85	0	0	**1**	**1**	5	36	0	41	**11**	**1**	7	**19**
+30 mins.	1	73	8	82	0	0	1	1	**6**	35	0	41	5	0	**8**	13
+45 mins.	0	68	**13**	81	0	0	1	1	2	**42**	0	**44**	9	0	7	16
Total Volume	2	296	37	335	0	0	3	3	17	144	0	161	32	1	28	61
% App. Total	0.6	88.4	11		0	0	100		10.6	89.4	0		52.5	1.6	45.9	
PHF	.500	.925	.712	.963	.000	.000	.750	.750	.708	.857	.000	.915	.727	.250	.875	.803

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 7

Groups Printed- Trucks

	W. Elm St From North			Milbery Ln From East			W. Elm St From South			Dwelley St From West			
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	1	0	0	0	0	1
Apprch %	0	0	0	0	0	0	0	100	0	0	0	0	
Total %	0	0	0	0	0	0	0	100	0	0	0	0	

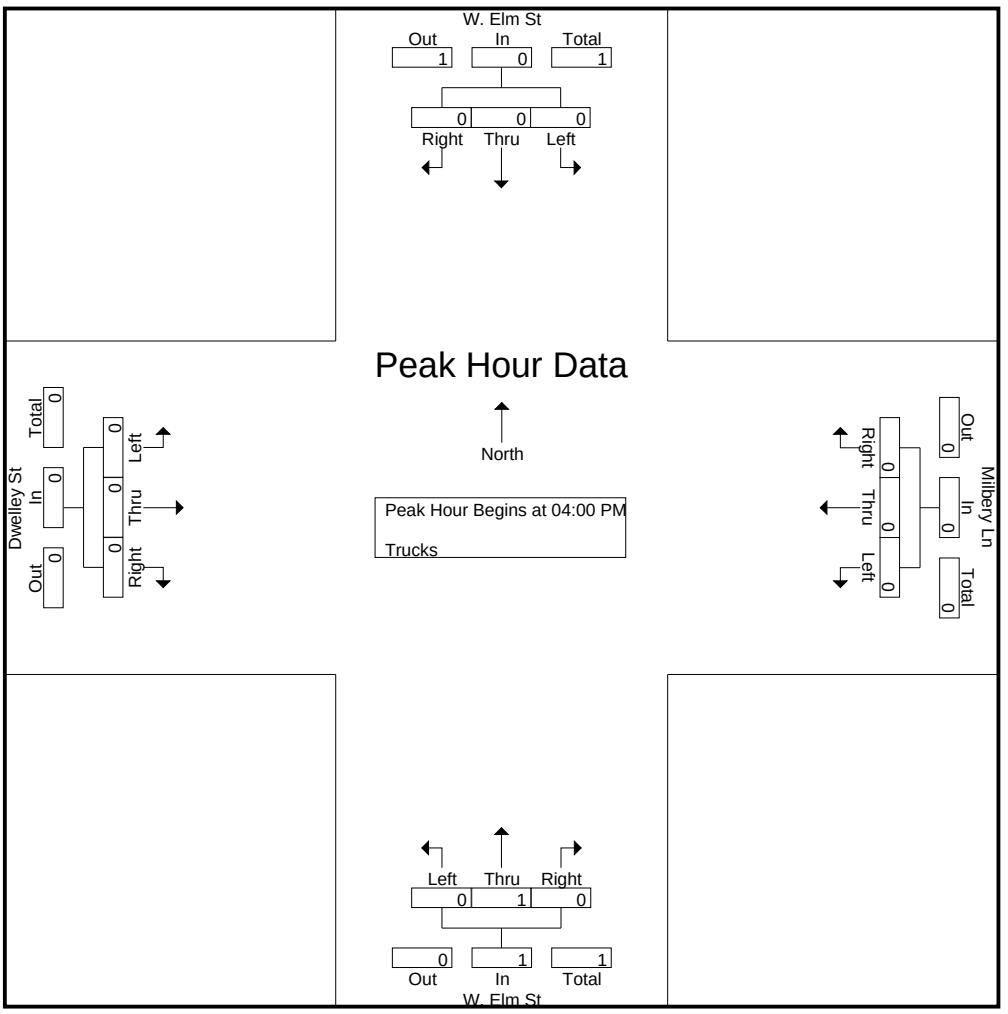
	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.250

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 8



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

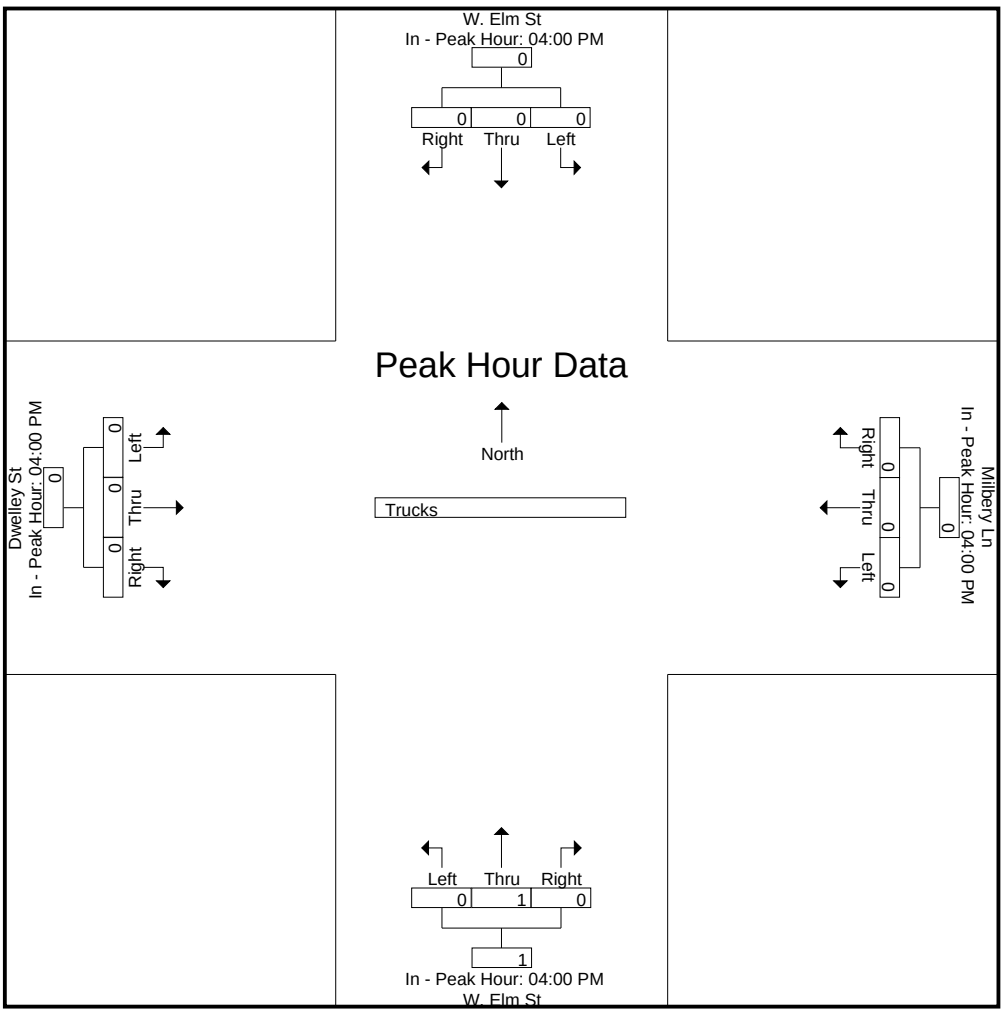
	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 10

Groups Printed- Bikes Peds

	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West						
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Apprch %	0	0	0		0	0	0		0	0	0		100	0	0				
Total %	0	0	0		0	0	0		0	0	0		100	0	0		0	100	

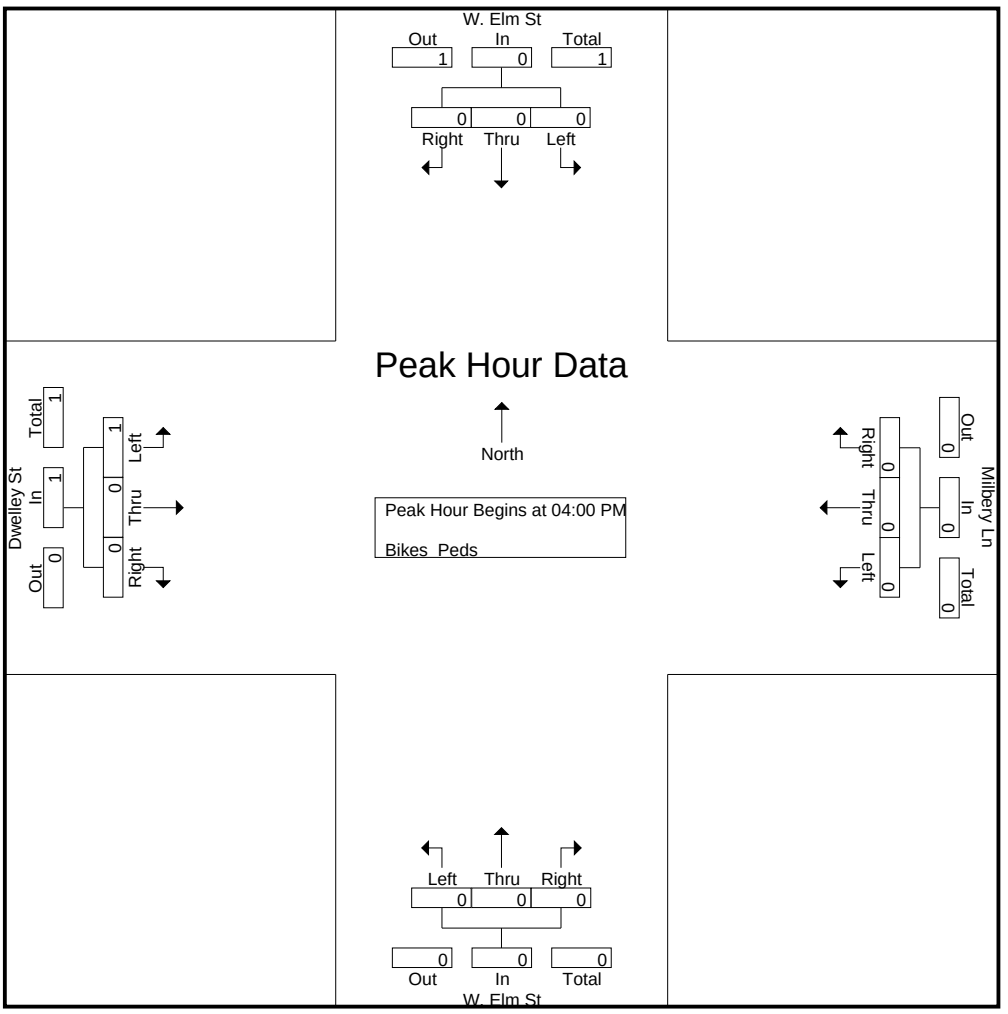
	W. Elm St From North				Milbery Ln From East				W. Elm St From South				Dwelley St From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**	**1**
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% App. Total	0	0	0		0	0	0		0	0	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.250

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 11



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

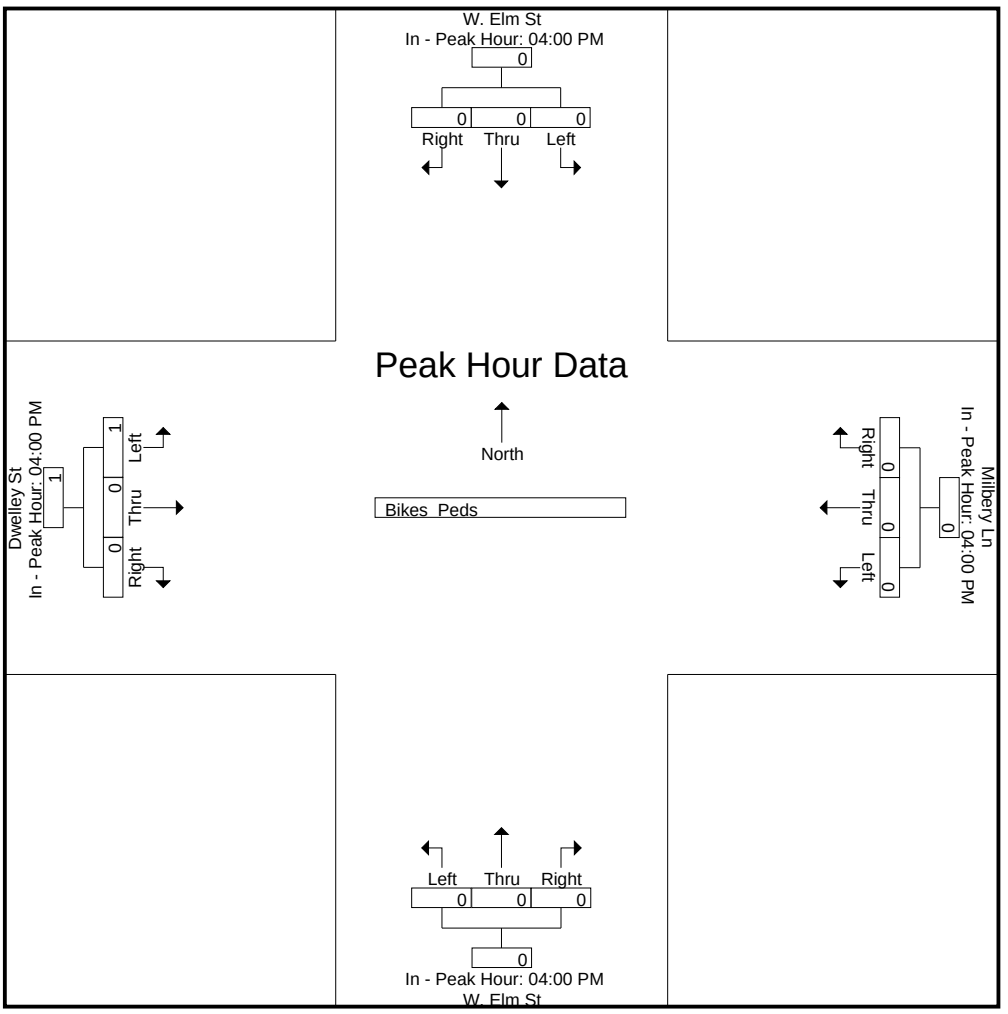
	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
% App. Total	0	0	0		0	0	0		0	0	0		100	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Milbery Ln / Dwelley St
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240003
Site Code : 91240003
Start Date : 1/25/2022
Page No : 12



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 1

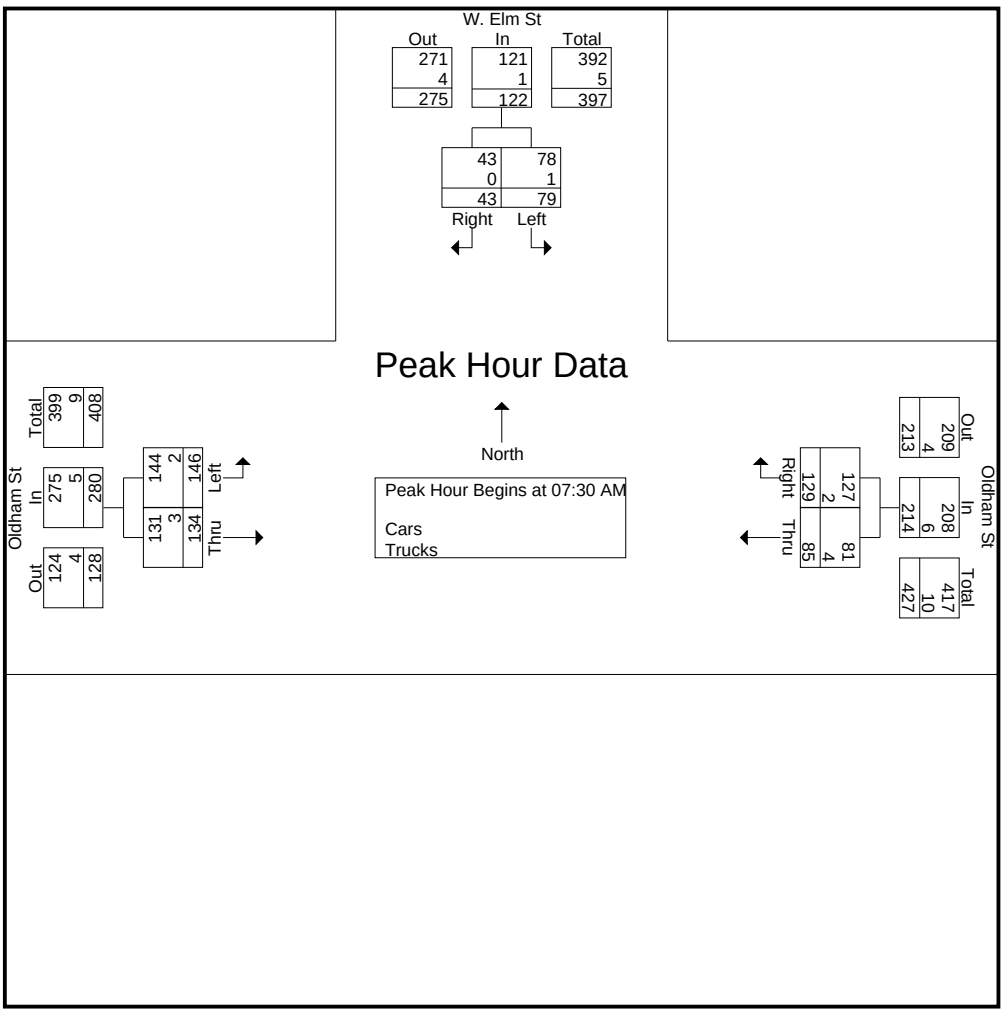
Groups Printed- Cars - Trucks

	W. Elm St From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	26	9	17	16	30	30	128
07:15 AM	9	5	18	32	25	29	118
07:30 AM	21	13	15	35	45	29	158
07:45 AM	20	13	25	28	40	42	168
Total	76	40	75	111	140	130	572
08:00 AM	17	9	23	29	36	37	151
08:15 AM	21	8	22	37	25	26	139
08:30 AM	7	9	16	30	34	34	130
08:45 AM	21	8	24	35	29	40	157
Total	66	34	85	131	124	137	577
Grand Total	142	74	160	242	264	267	1149
Apprch %	65.7	34.3	39.8	60.2	49.7	50.3	
Total %	12.4	6.4	13.9	21.1	23	23.2	
Cars	139	74	156	240	260	263	1132
% Cars	97.9	100	97.5	99.2	98.5	98.5	98.5
Trucks	3	0	4	2	4	4	17
% Trucks	2.1	0	2.5	0.8	1.5	1.5	1.5

	W. Elm St From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	**21**	**13**	**34**	15	35	50	**45**	29	74	158
07:45 AM	20	13	33	**25**	28	53	40	**42**	**82**	**168**
08:00 AM	17	9	26	23	29	52	36	37	73	151
08:15 AM	21	8	29	22	**37**	**59**	25	26	51	139
Total Volume	79	43	122	85	129	214	146	134	280	616
% App. Total	64.8	35.2		39.7	60.3		52.1	47.9		
PHF	.940	.827	.897	.850	.872	.907	.811	.798	.854	.917
Cars	78	43	121	81	127	208	144	131	275	604
% Cars	98.7	100	99.2	95.3	98.4	97.2	98.6	97.8	98.2	98.1
Trucks	1	0	1	4	2	6	2	3	5	12
% Trucks	1.3	0	0.8	4.7	1.6	2.8	1.4	2.2	1.8	1.9

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

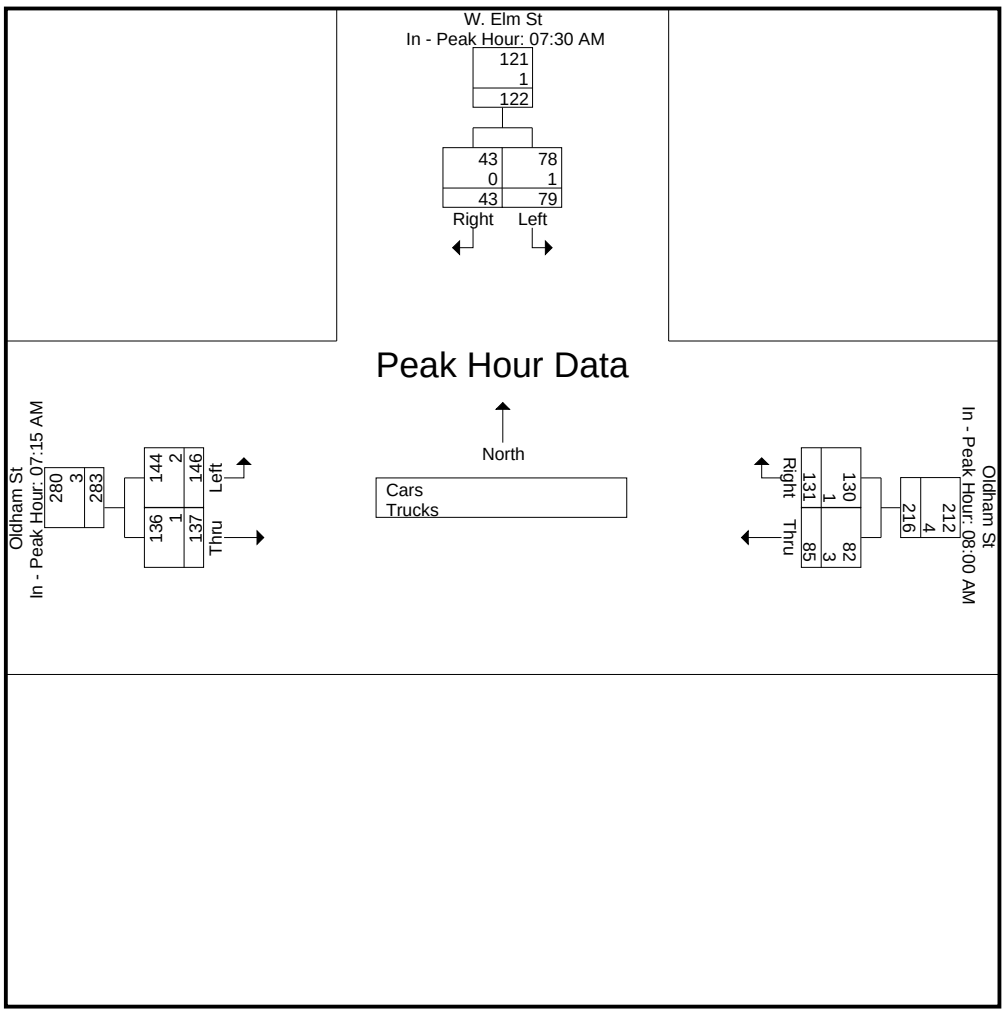
	07:30 AM			08:00 AM			07:15 AM		
+0 mins.	**21**	**13**	**34**	23	29	52	25	29	54
+15 mins.	20	13	33	22	**37**	**59**	**45**	29	74
+30 mins.	17	9	26	16	30	46	40	**42**	**82**
+45 mins.	21	8	29	**24**	35	59	36	37	73
Total Volume	79	43	122	85	131	216	146	137	283
% App. Total	64.8	35.2		39.4	60.6		51.6	48.4	
PHF	.940	.827	.897	.885	.885	.915	.811	.815	.863
Cars	78	43	121	82	130	212	144	136	280
% Cars	98.7	100	99.2	96.5	99.2	98.1	98.6	99.3	98.9
Trucks	1	0	1	3	1	4	2	1	3
% Trucks	1.3	0	0.8	3.5	0.8	1.9	1.4	0.7	1.1

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 4

Groups Printed- Cars

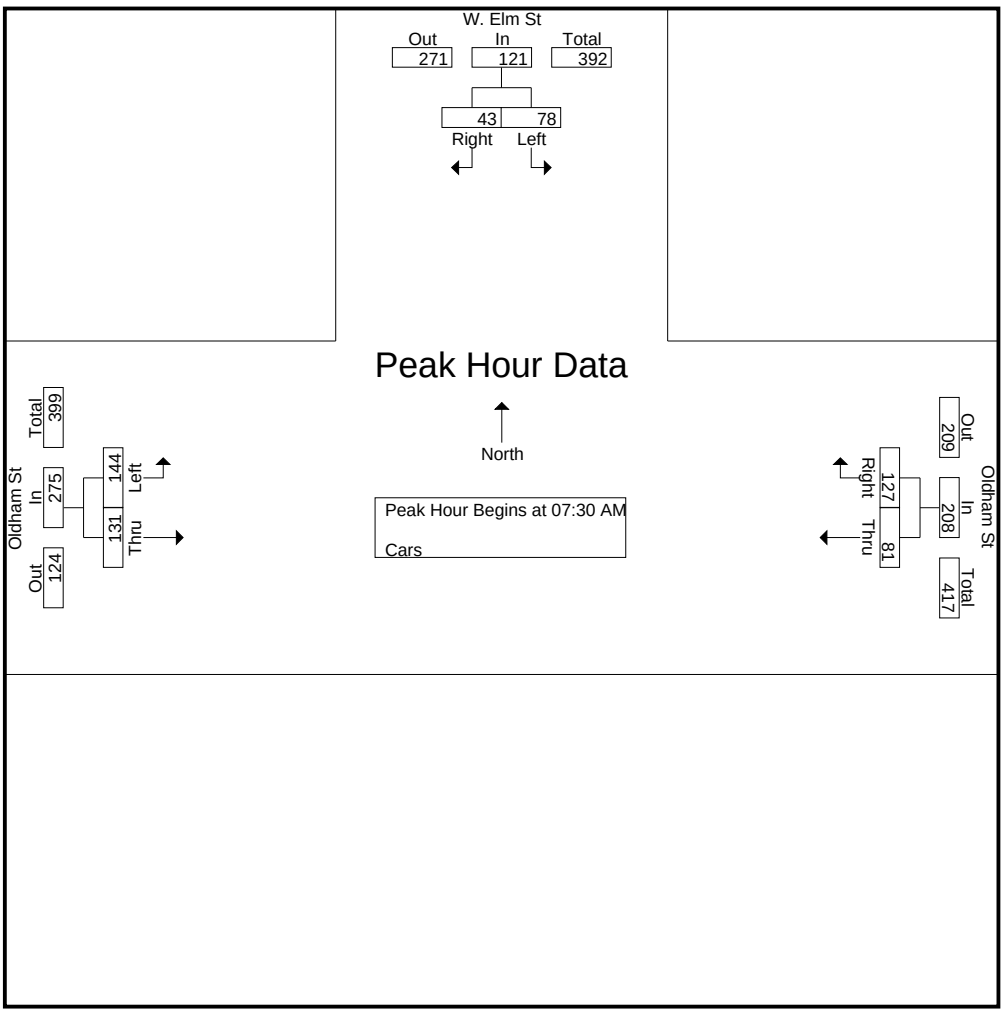
	W. Elm St From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	25	9	17	16	30	29	126
07:15 AM	9	5	18	32	25	29	118
07:30 AM	21	13	15	35	45	29	158
07:45 AM	20	13	24	27	40	42	166
Total	75	40	74	110	140	129	568
08:00 AM	17	9	22	29	34	36	147
08:15 AM	20	8	20	36	25	24	133
08:30 AM	7	9	16	30	33	34	129
08:45 AM	20	8	24	35	28	40	155
Total	64	34	82	130	120	134	564
Grand Total	139	74	156	240	260	263	1132
Apprch %	65.3	34.7	39.4	60.6	49.7	50.3	
Total %	12.3	6.5	13.8	21.2	23	23.2	

	W. Elm St From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	**21**	**13**	**34**	15	35	50	**45**	29	74	158
07:45 AM	20	13	33	**24**	27	51	40	**42**	**82**	**166**
08:00 AM	17	9	26	22	29	51	34	36	70	147
08:15 AM	20	8	28	20	**36**	**56**	25	24	49	133
Total Volume	78	43	121	81	127	208	144	131	275	604
% App. Total	64.5	35.5		38.9	61.1		52.4	47.6		
PHF	.929	.827	.890	.844	.882	.929	.800	.780	.838	.910

Accurate Counts
978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 5



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

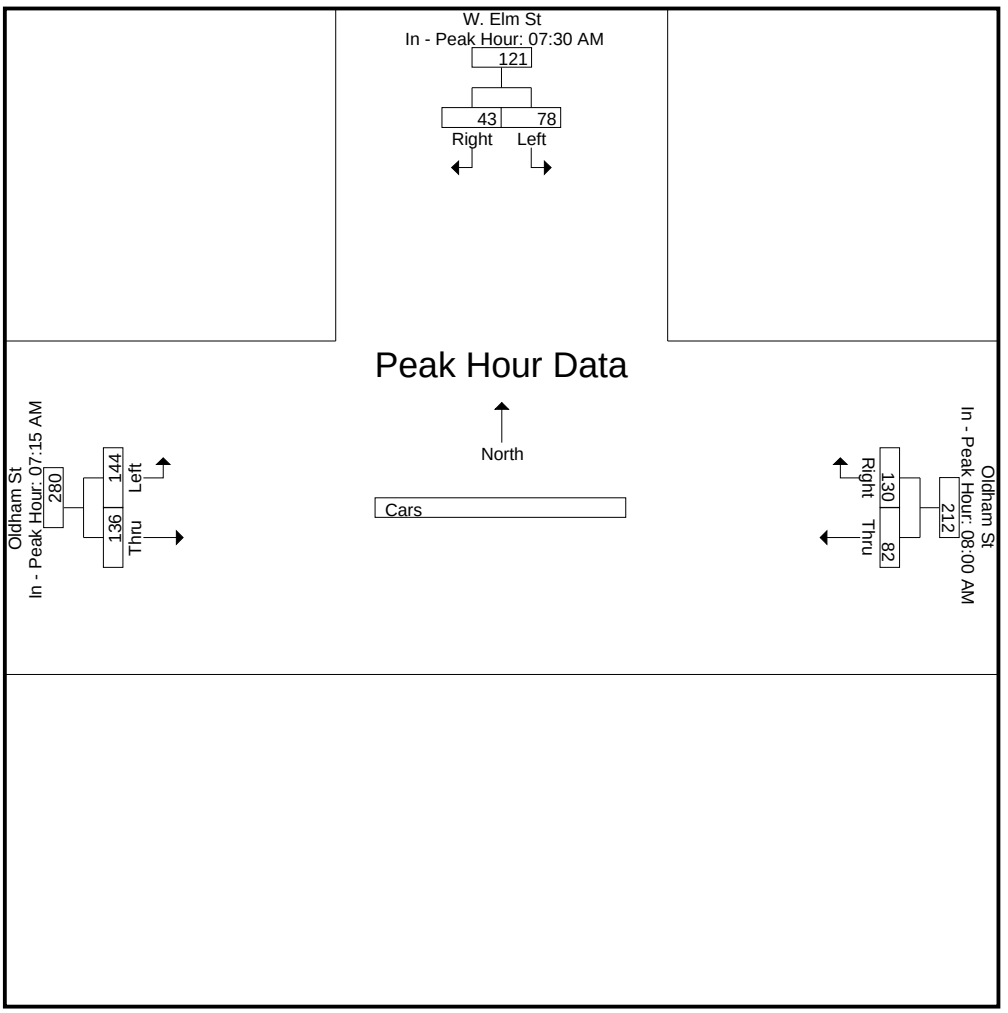
	07:30 AM			08:00 AM			07:15 AM		
+0 mins.	**21**	**13**	**34**	22	29	51	25	29	54
+15 mins.	20	13	33	20	**36**	56	**45**	29	74
+30 mins.	17	9	26	16	30	46	40	**42**	**82**
+45 mins.	20	8	28	**24**	35	**59**	34	36	70
Total Volume	78	43	121	82	130	212	144	136	280
% App. Total	64.5	35.5		38.7	61.3		51.4	48.6	
PHF	.929	.827	.890	.854	.903	.898	.800	.810	.854

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022

Groups Printed- Trucks

	W. Elm St From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	1	0	0	0	0	1	2
07:15 AM	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0
07:45 AM	0	0	1	1	0	0	2
Total	1	0	1	1	0	1	4
08:00 AM	0	0	1	0	2	1	4
08:15 AM	1	0	2	1	0	2	6
08:30 AM	0	0	0	0	1	0	1
08:45 AM	1	0	0	0	1	0	2
Total	2	0	3	1	4	3	13
Grand Total	3	0	4	2	4	4	17
Apprch %	100	0	66.7	33.3	50	50	
Total %	17.6	0	23.5	11.8	23.5	23.5	

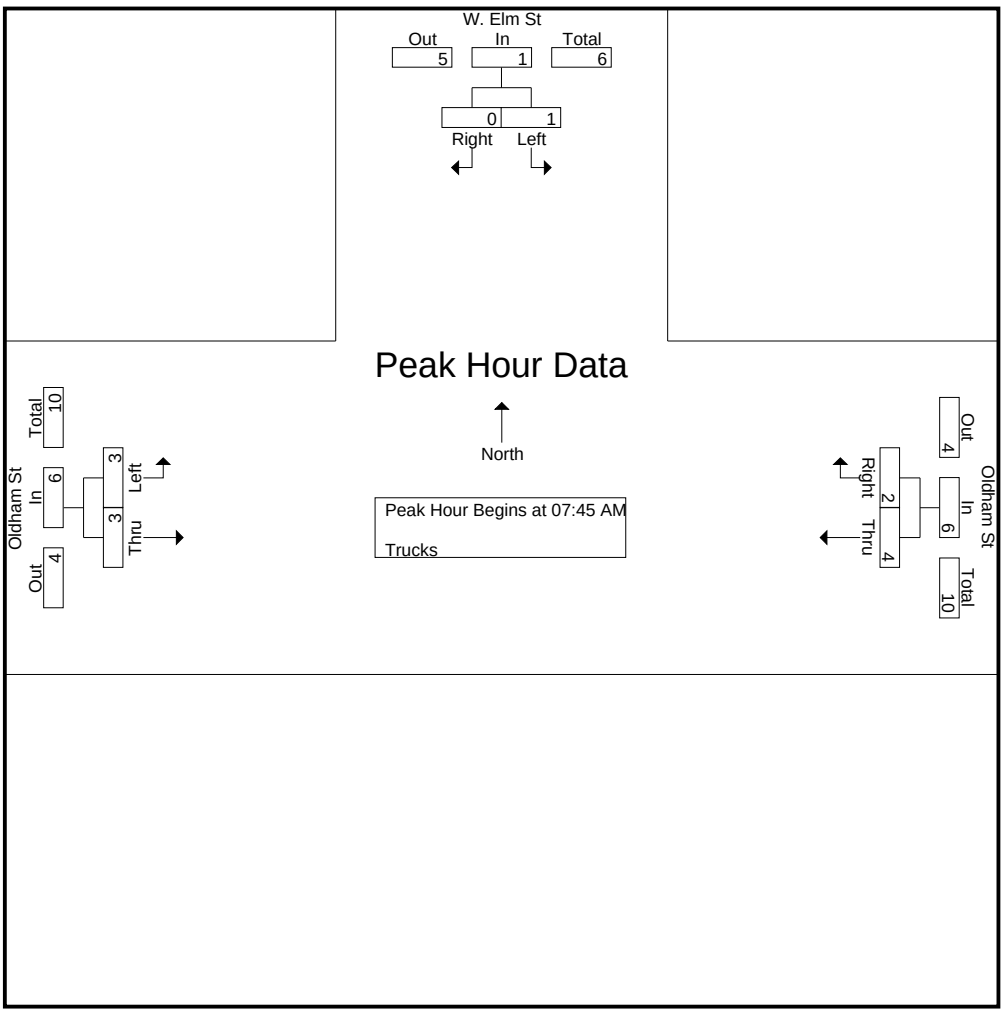
	W. Elm St From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	1	**1**	2	0	0	0	2
08:00 AM	0	0	0	1	0	1	**2**	1	**3**	4
08:15 AM	**1**	0	**1**	**2**	1	**3**	0	**2**	2	**6**
08:30 AM	0	0	0	0	0	0	1	0	1	1
Total Volume	1	0	1	4	2	6	3	3	6	13
% App. Total	100	0		66.7	33.3		50	50		
PHF	.250	.000	.250	.500	.500	.500	.375	.375	.500	.542

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 8

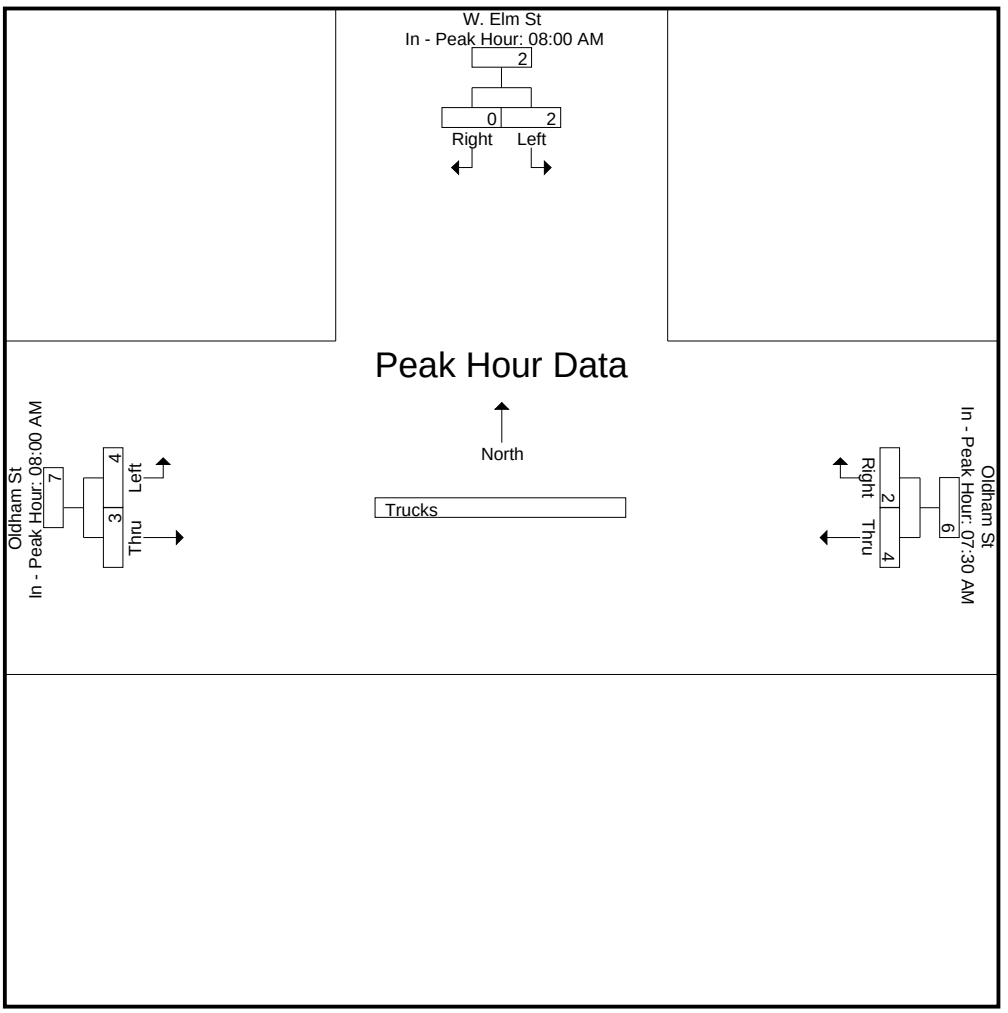


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:30 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	**2**	1	**3**
+15 mins.	**1**	0	**1**	1	**1**	2	0	**2**	2
+30 mins.	0	0	0	1	0	1	1	0	1
+45 mins.	1	0	1	**2**	1	**3**	1	0	1
Total Volume	2	0	2	4	2	6	4	3	7
% App. Total	100	0		66.7	33.3		57.1	42.9	
PHF	.500	.000	.500	.500	.500	.500	.500	.375	.583

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022

Groups Printed- Bikes Peds

	W. Elm St From North			Oldham St From East			Oldham St From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0				
Total %										0	0	

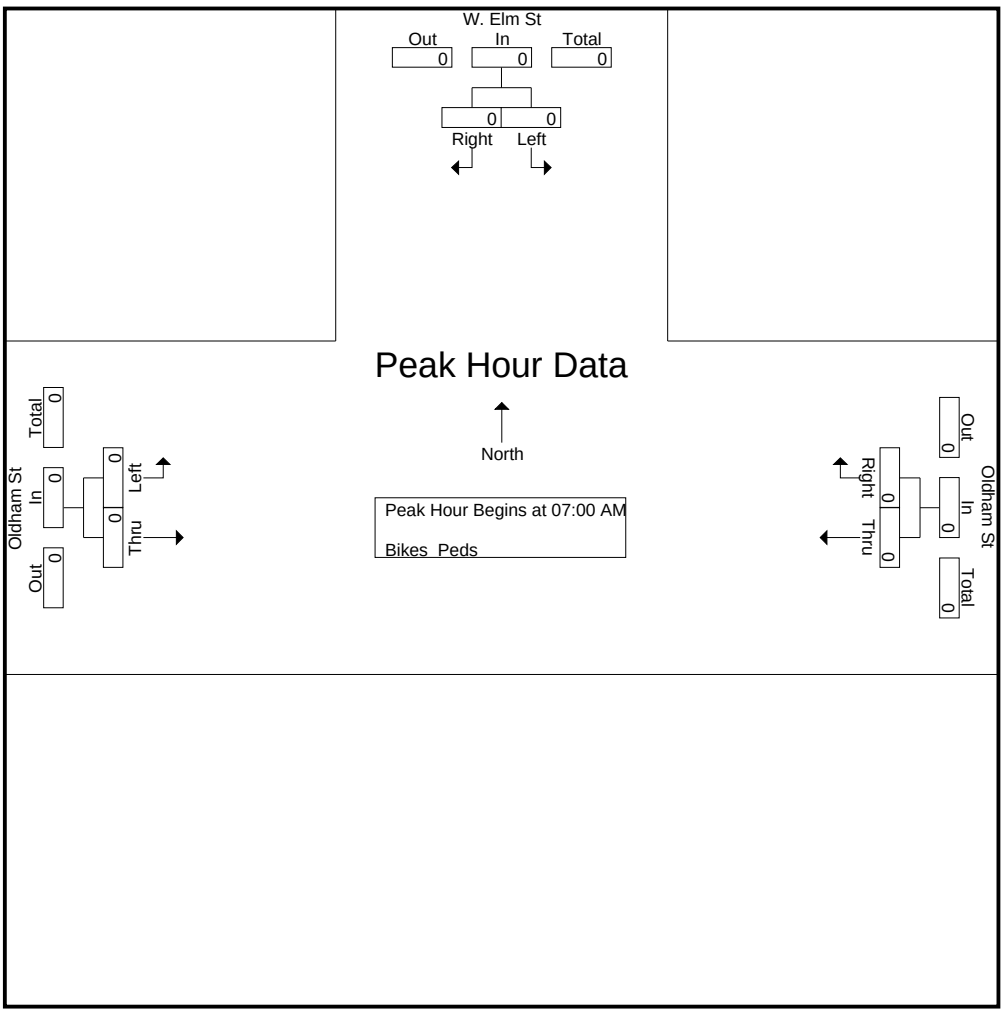
	W. Elm St From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 11



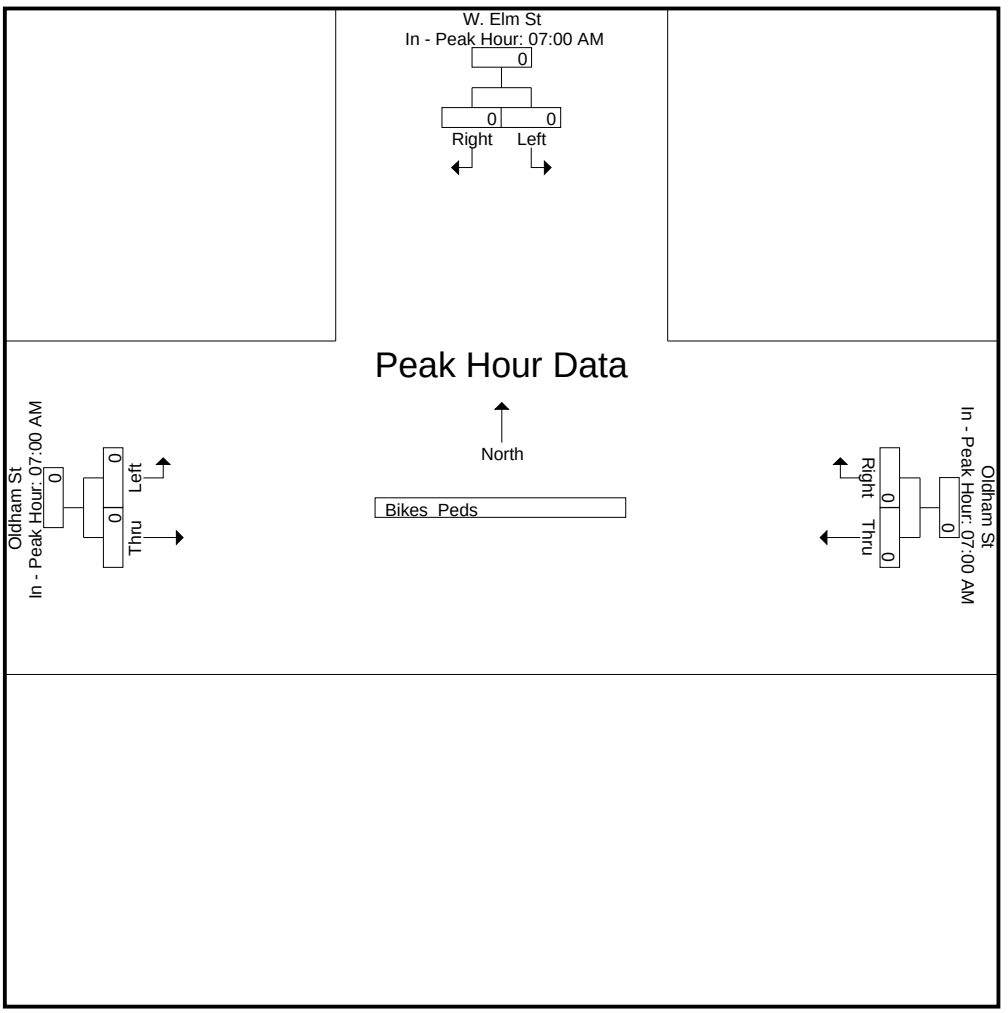
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts
978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 12



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 1

Groups Printed- Cars - Trucks

	W. Elm St From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
04:00 PM	52	39	33	22	14	30	190
04:15 PM	34	41	39	26	19	36	195
04:30 PM	42	37	30	21	14	32	176
04:45 PM	46	17	34	19	22	35	173
Total	174	134	136	88	69	133	734
05:00 PM	40	29	40	24	19	30	182
05:15 PM	50	29	41	24	16	22	182
05:30 PM	47	38	28	22	16	21	172
05:45 PM	54	36	30	16	9	23	168
Total	191	132	139	86	60	96	704
Grand Total	365	266	275	174	129	229	1438
Apprch %	57.8	42.2	61.2	38.8	36	64	
Total %	25.4	18.5	19.1	12.1	9	15.9	
Cars	363	266	272	174	129	227	1431
% Cars	99.5	100	98.9	100	100	99.1	99.5
Trucks	2	0	3	0	0	2	7
% Trucks	0.5	0	1.1	0	0	0.9	0.5

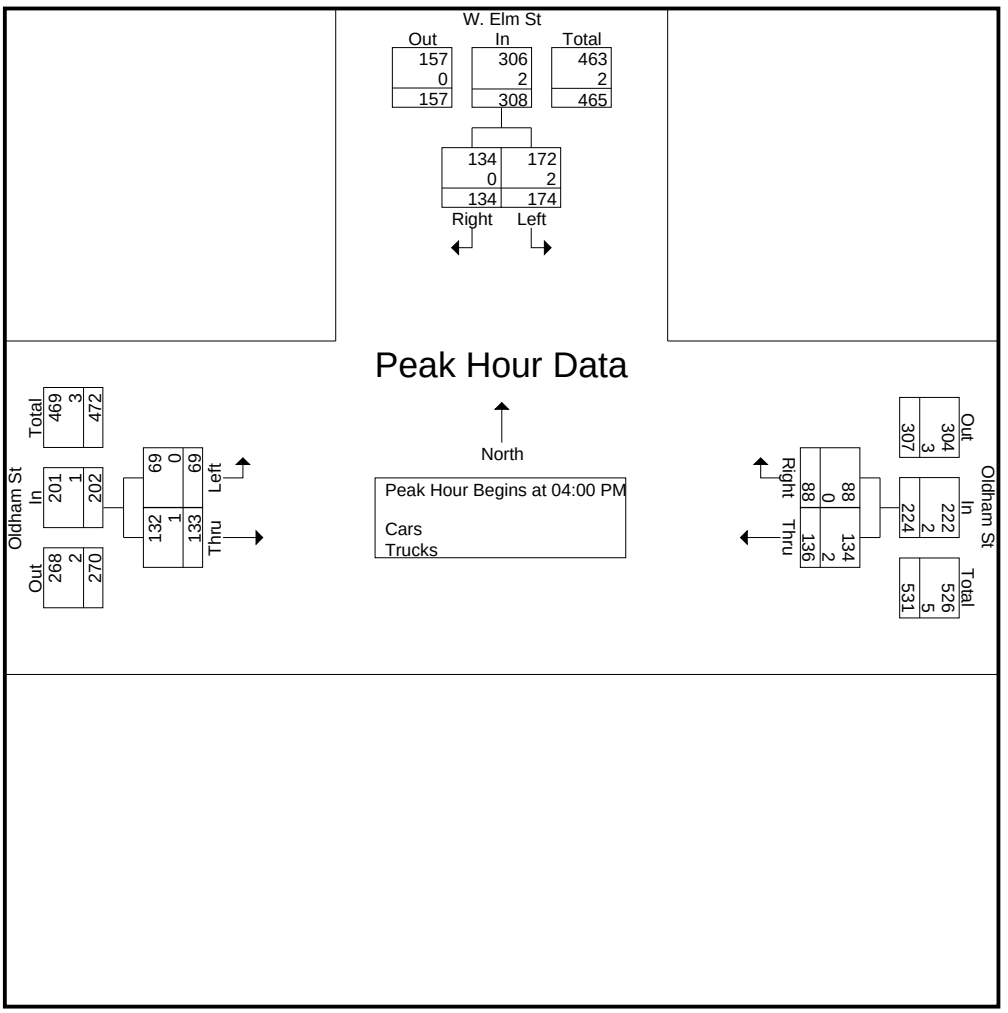
	W. Elm St From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	**52**	39	**91**	33	22	55	14	30	44	190
04:15 PM	34	**41**	75	**39**	**26**	**65**	19	**36**	55	**195**
04:30 PM	42	37	79	30	21	51	14	32	46	176
04:45 PM	46	17	63	34	19	53	**22**	35	**57**	173
Total Volume	174	134	308	136	88	224	69	133	202	734
% App. Total	56.5	43.5		60.7	39.3		34.2	65.8		
PHF	.837	.817	.846	.872	.846	.862	.784	.924	.886	.941
Cars	172	134	306	134	88	222	69	132	201	729
% Cars	98.9	100	99.4	98.5	100	99.1	100	99.2	99.5	99.3
Trucks	2	0	2	2	0	2	0	1	1	5
% Trucks	1.1	0	0.6	1.5	0	0.9	0	0.8	0.5	0.7

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 2



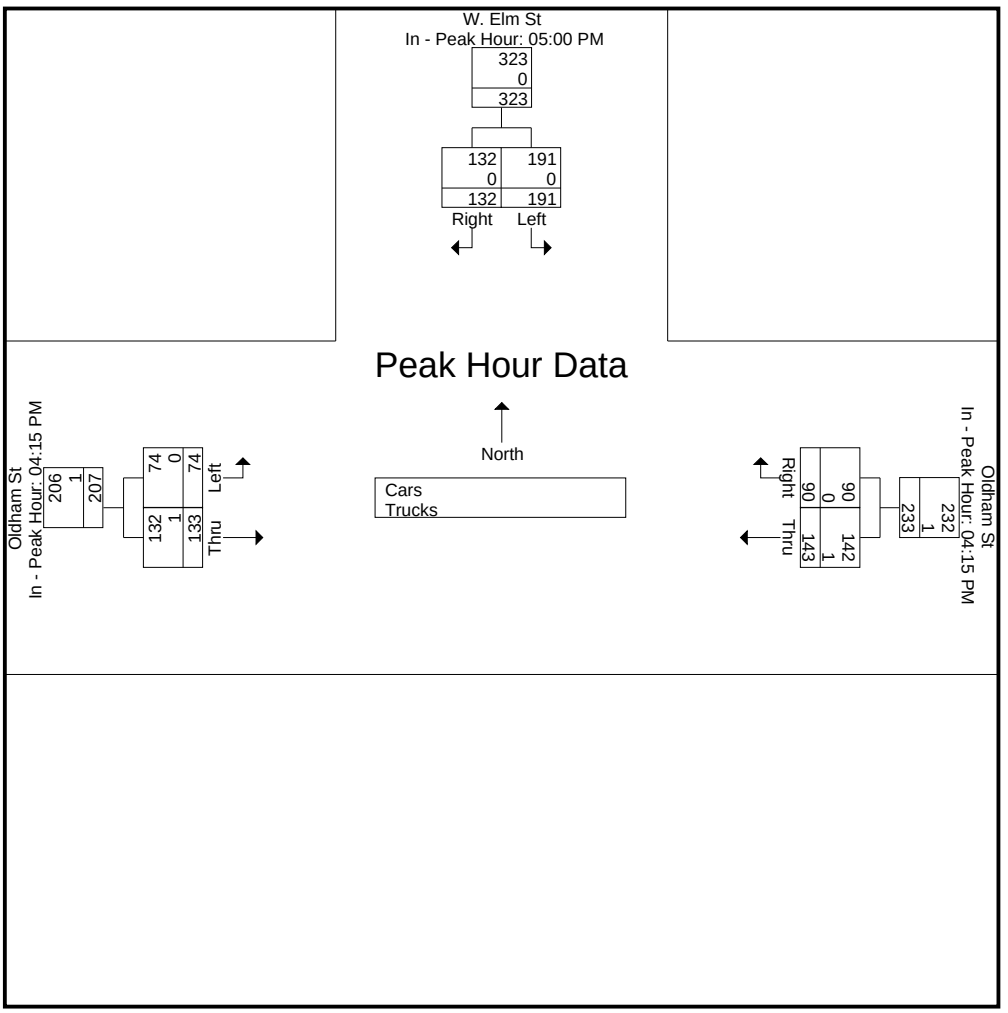
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:15 PM			04:15 PM		
+0 mins.	40	29	69	39	**26**	**65**	19	**36**	55
+15 mins.	50	29	79	30	21	51	14	32	46
+30 mins.	47	**38**	85	34	19	53	**22**	35	**57**
+45 mins.	**54**	36	**90**	**40**	24	64	19	30	49
Total Volume	191	132	323	143	90	233	74	133	207
% App. Total	59.1	40.9		61.4	38.6		35.7	64.3	
PHF	.884	.868	.897	.894	.865	.896	.841	.924	.908
Cars	191	132	323	142	90	232	74	132	206
% Cars	100	100	100	99.3	100	99.6	100	99.2	99.5
Trucks	0	0	0	1	0	1	0	1	1
% Trucks	0	0	0	0.7	0	0.4	0	0.8	0.5

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 4

Groups Printed- Cars

	W. Elm St From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
04:00 PM	50	39	32	22	14	30	187
04:15 PM	34	41	38	26	19	35	193
04:30 PM	42	37	30	21	14	32	176
04:45 PM	46	17	34	19	22	35	173
Total	172	134	134	88	69	132	729
05:00 PM	40	29	40	24	19	30	182
05:15 PM	50	29	41	24	16	21	181
05:30 PM	47	38	28	22	16	21	172
05:45 PM	54	36	29	16	9	23	167
Total	191	132	138	86	60	95	702
Grand Total	363	266	272	174	129	227	1431
Apprch %	57.7	42.3	61	39	36.2	63.8	
Total %	25.4	18.6	19	12.2	9	15.9	

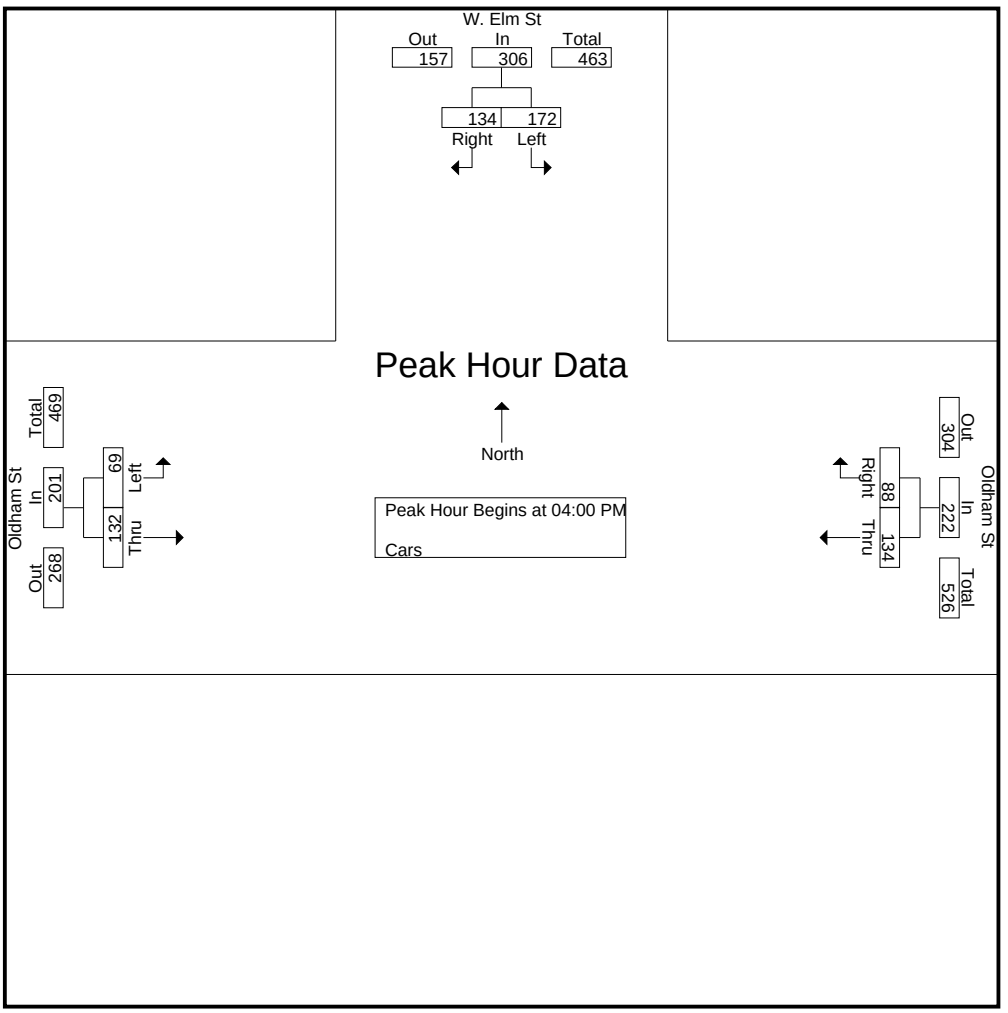
	W. Elm St From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	**50**	39	**89**	32	22	54	14	30	44	187
04:15 PM	34	**41**	75	**38**	**26**	**64**	19	**35**	54	**193**
04:30 PM	42	37	79	30	21	51	14	32	46	176
04:45 PM	46	17	63	34	19	53	**22**	35	**57**	173
Total Volume	172	134	306	134	88	222	69	132	201	729
% App. Total	56.2	43.8		60.4	39.6		34.3	65.7		
PHF	.860	.817	.860	.882	.846	.867	.784	.943	.882	.944

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 5



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

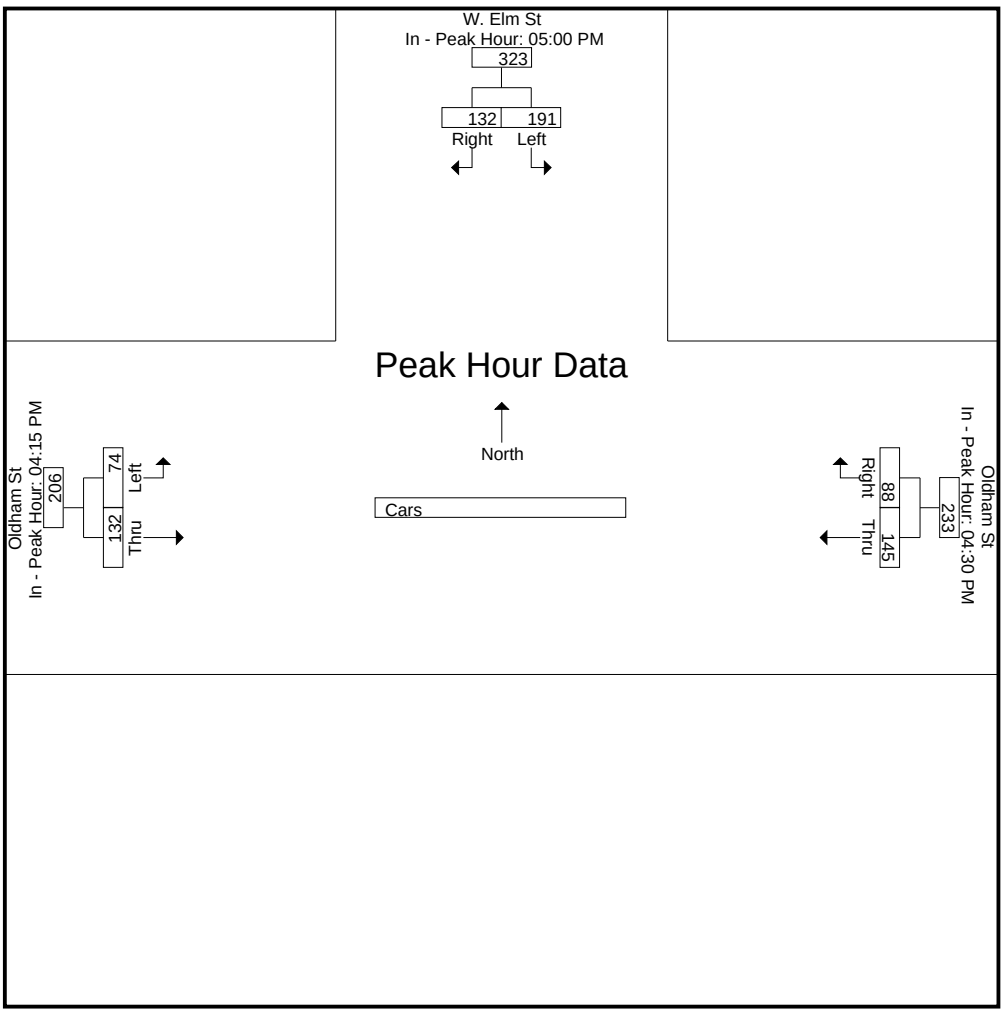
	05:00 PM			04:30 PM			04:15 PM		
+0 mins.	40	29	69	30	21	51	19	**35**	54
+15 mins.	50	29	79	34	19	53	14	32	46
+30 mins.	47	**38**	85	40	**24**	64	**22**	35	**57**
+45 mins.	**54**	36	**90**	**41**	24	**65**	19	30	49
Total Volume	191	132	323	145	88	233	74	132	206
% App. Total	59.1	40.9		62.2	37.8		35.9	64.1	
PHF	.884	.868	.897	.884	.917	.896	.841	.943	.904

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022

Groups Printed- Trucks

	W. Elm St From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
04:00 PM	2	0	1	0	0	0	3
04:15 PM	0	0	1	0	0	1	2
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0
Total	2	0	2	0	0	1	5
05:00 PM	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	1	1
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	1	0	0	0	1
Total	0	0	1	0	0	1	2
Grand Total	2	0	3	0	0	2	7
Apprch %	100	0	100	0	0	100	
Total %	28.6	0	42.9	0	0	28.6	

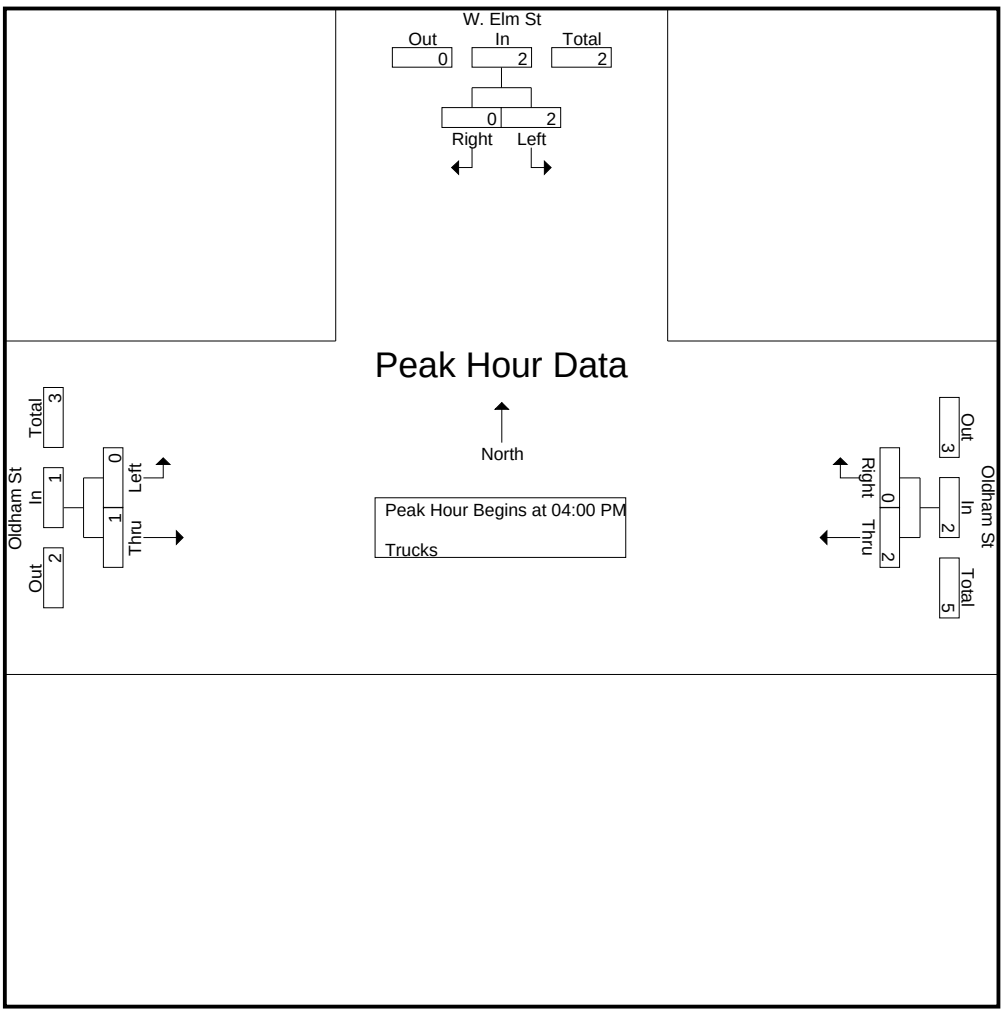
	W. Elm St From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	**2**	0	**2**	**1**	0	**1**	0	0	0	**3**
04:15 PM	0	0	0	1	0	1	0	**1**	**1**	2
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	2	0	2	2	0	2	0	1	1	5
% App. Total	100	0		100	0		0	100		
PHF	.250	.000	.250	.500	.000	.500	.000	.250	.250	.417

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 8



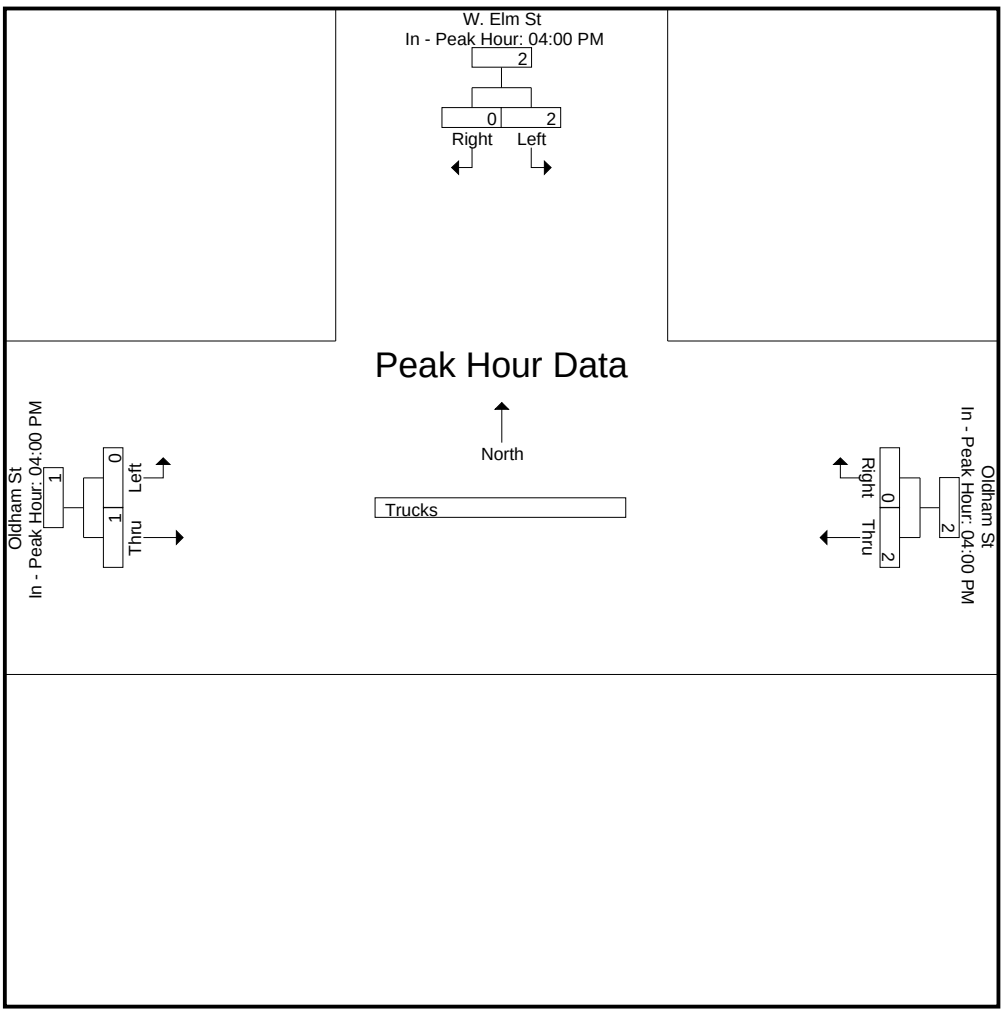
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	**2**	0	**2**	**1**	0	**1**	0	0	0
+15 mins.	0	0	0	1	0	1	0	**1**	**1**
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	2	0	2	2	0	2	0	1	1
% App. Total	100	0		100	0		0	100	
PHF	.250	.000	.250	.500	.000	.500	.000	.250	.250

Accurate Counts
978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 10

Groups Printed- Bikes Peds

	W. Elm St From North			Oldham St From East			Oldham St From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0				
Total %										0	0	

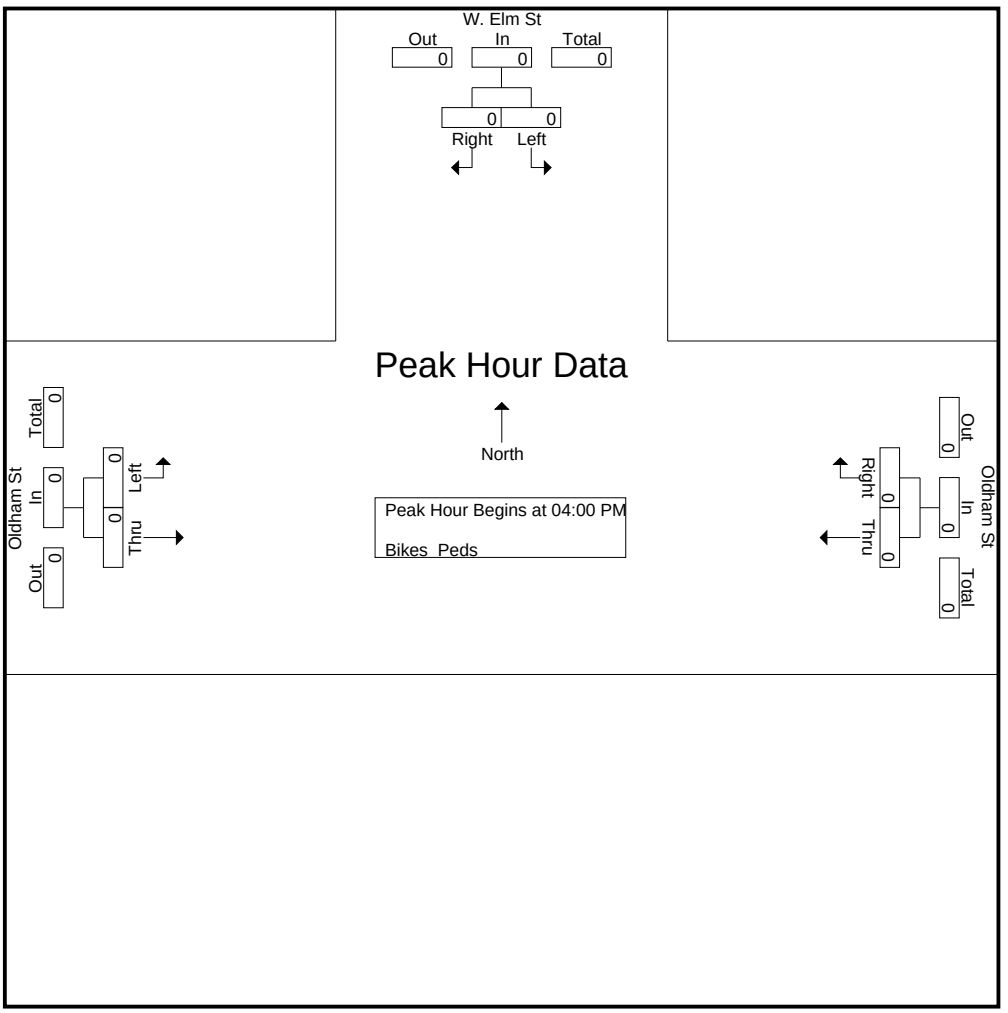
	W. Elm St From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 11



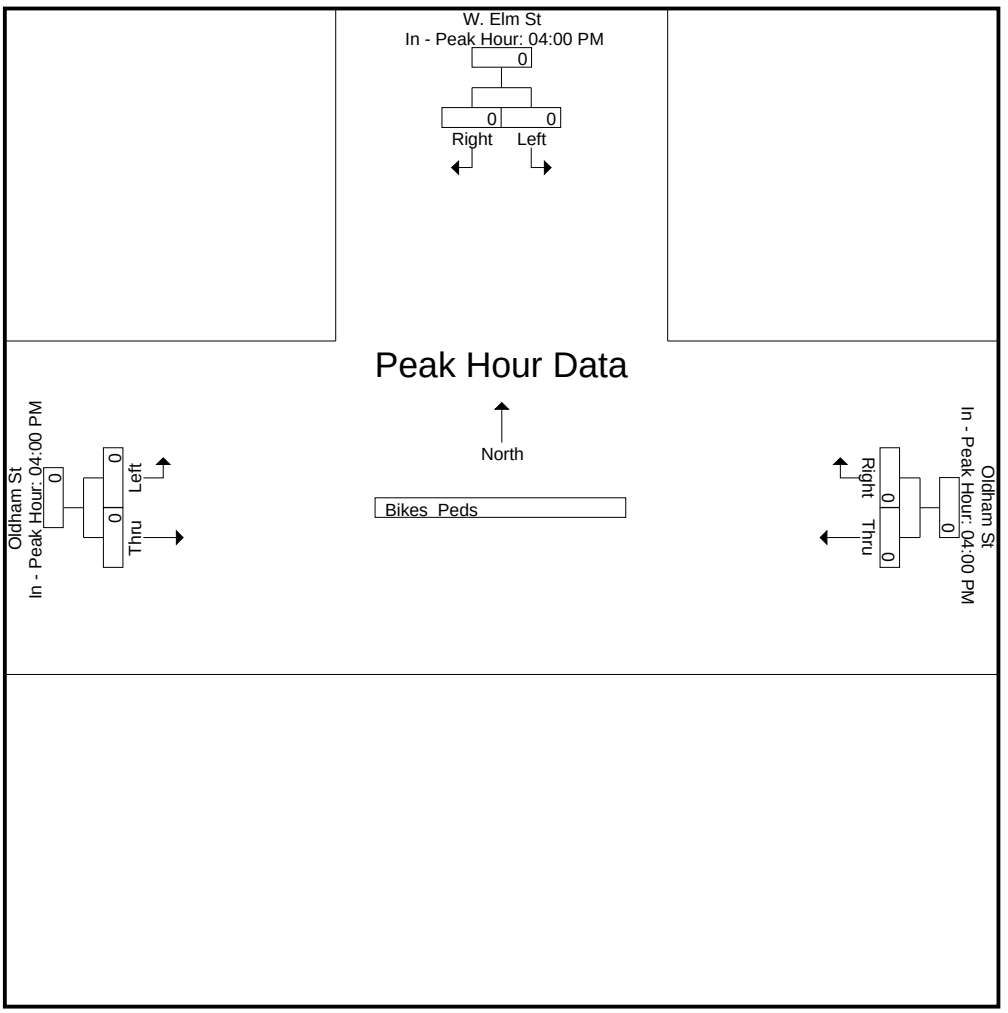
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts
978-664-2565

N/S Street : W. Elm Street
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240004
Site Code : 91240004
Start Date : 1/25/2022
Page No : 12



Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 1

Groups Printed- Cars - Trucks

	Hazelwood Dr From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	2	2	23	0	0	21	48
07:15 AM	2	0	24	0	1	20	47
07:30 AM	1	1	24	0	1	26	53
07:45 AM	2	3	33	3	1	22	64
Total	7	6	104	3	3	89	212
08:00 AM	3	1	26	1	1	24	56
08:15 AM	3	0	28	0	0	15	46
08:30 AM	2	1	14	1	0	31	49
08:45 AM	3	1	27	1	0	27	59
Total	11	3	95	3	1	97	210
Grand Total	18	9	199	6	4	186	422
Apprch %	66.7	33.3	97.1	2.9	2.1	97.9	
Total %	4.3	2.1	47.2	1.4	0.9	44.1	
Cars	17	9	198	4	4	185	417
% Cars	94.4	100	99.5	66.7	100	99.5	98.8
Trucks	1	0	1	2	0	1	5
% Trucks	5.6	0	0.5	33.3	0	0.5	1.2

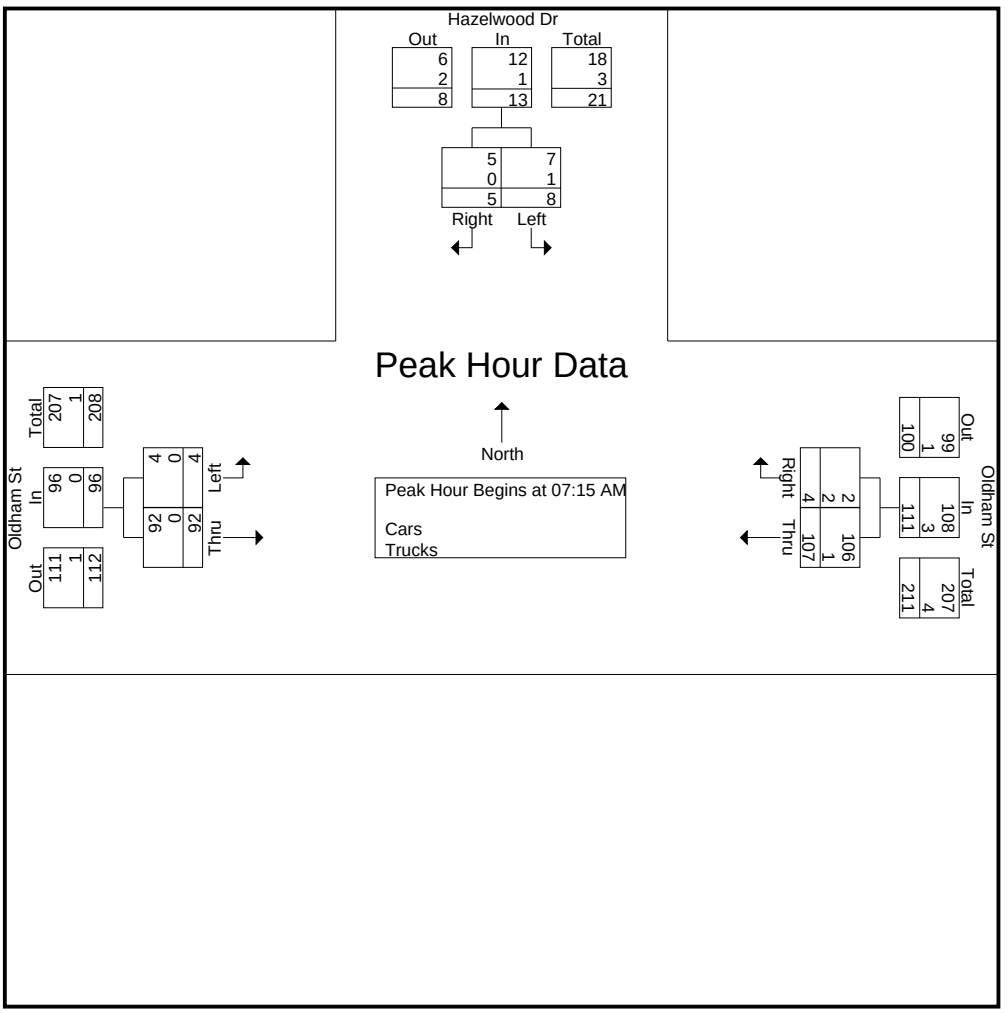
	Hazelwood Dr From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	2	0	2	24	0	24	**1**	20	21	47
07:30 AM	1	1	2	24	0	24	1	**26**	**27**	53
07:45 AM	2	**3**	**5**	**33**	**3**	**36**	1	22	23	**64**
08:00 AM	**3**	1	4	26	1	27	1	24	25	56
Total Volume	8	5	13	107	4	111	4	92	96	220
% App. Total	61.5	38.5		96.4	3.6		4.2	95.8		
PHF	.667	.417	.650	.811	.333	.771	1.00	.885	.889	.859
Cars	7	5	12	106	2	108	4	92	96	216
% Cars	87.5	100	92.3	99.1	50.0	97.3	100	100	100	98.2
Trucks	1	0	1	1	2	3	0	0	0	4
% Trucks	12.5	0	7.7	0.9	50.0	2.7	0	0	0	1.8

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

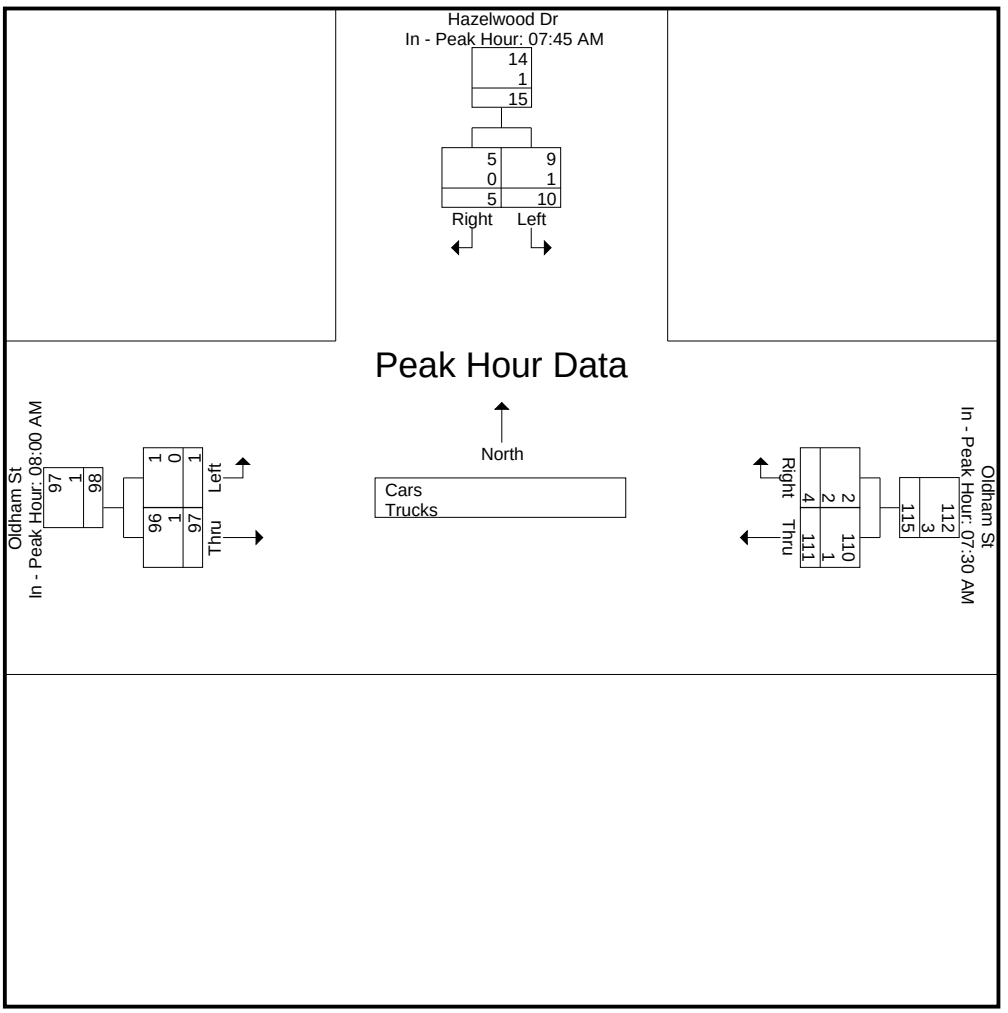
	07:45 AM			07:30 AM			08:00 AM		
+0 mins.	2	**3**	**5**	24	0	24	**1**	24	25
+15 mins.	**3**	1	4	**33**	**3**	**36**	0	15	15
+30 mins.	3	0	3	26	1	27	0	**31**	**31**
+45 mins.	2	1	3	28	0	28	0	27	27
Total Volume	10	5	15	111	4	115	1	97	98
% App. Total	66.7	33.3		96.5	3.5		1	99	
PHF	.833	.417	.750	.841	.333	.799	.250	.782	.790
Cars	9	5	14	110	2	112	1	96	97
% Cars	90	100	93.3	99.1	50	97.4	100	99	99
Trucks	1	0	1	1	2	3	0	1	1
% Trucks	10	0	6.7	0.9	50	2.6	0	1	1

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 4

Groups Printed- Cars

	Hazelwood Dr From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	2	2	23	0	0	21	48
07:15 AM	2	0	24	0	1	20	47
07:30 AM	1	1	24	0	1	26	53
07:45 AM	2	3	32	1	1	22	61
Total	7	6	103	1	3	89	209
08:00 AM	2	1	26	1	1	24	55
08:15 AM	3	0	28	0	0	14	45
08:30 AM	2	1	14	1	0	31	49
08:45 AM	3	1	27	1	0	27	59
Total	10	3	95	3	1	96	208
Grand Total	17	9	198	4	4	185	417
Apprch %	65.4	34.6	98	2	2.1	97.9	
Total %	4.1	2.2	47.5	1	1	44.4	

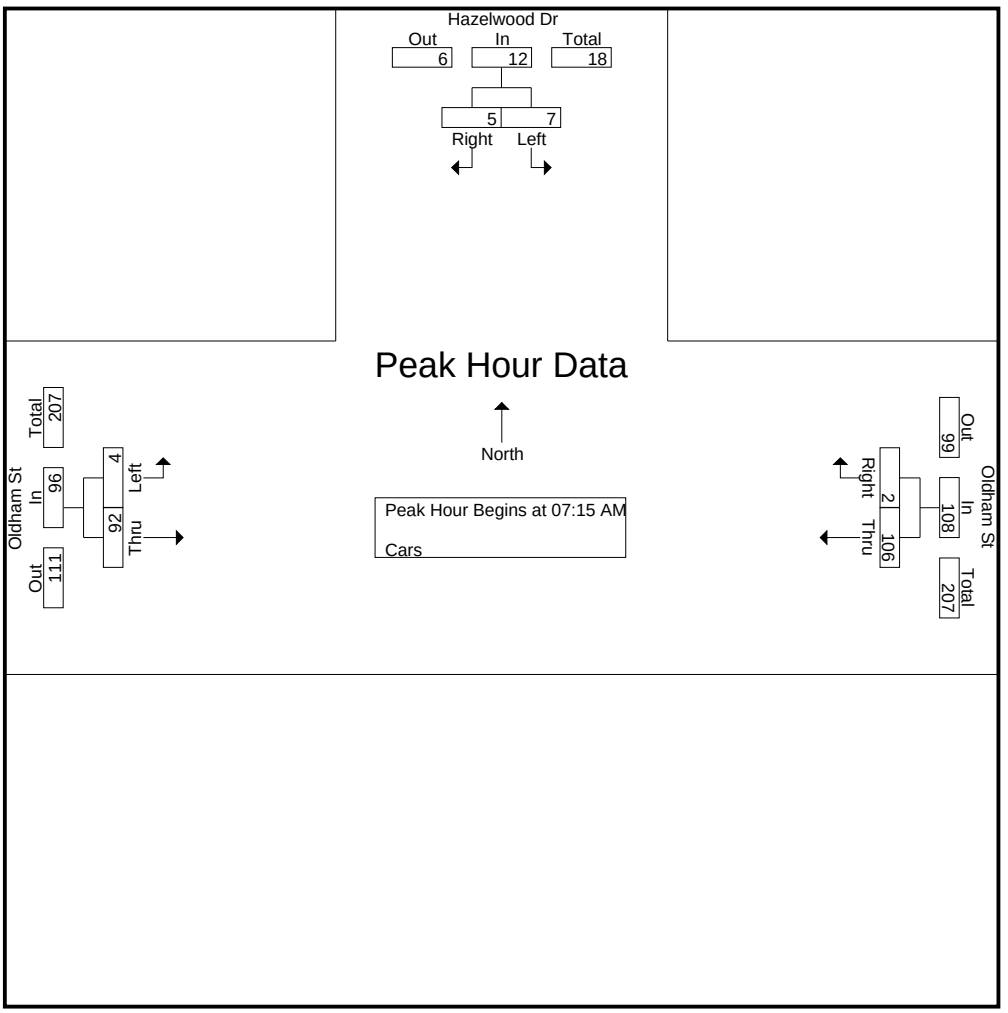
	Hazelwood Dr From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	**2**	0	2	24	0	24	**1**	20	21	47
07:30 AM	1	1	2	24	0	24	1	**26**	**27**	53
07:45 AM	2	**3**	**5**	**32**	**1**	**33**	1	22	23	**61**
08:00 AM	2	1	3	26	1	27	1	24	25	55
Total Volume	7	5	12	106	2	108	4	92	96	216
% App. Total	58.3	41.7		98.1	1.9		4.2	95.8		
PHF	.875	.417	.600	.828	.500	.818	1.00	.885	.889	.885

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 5



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

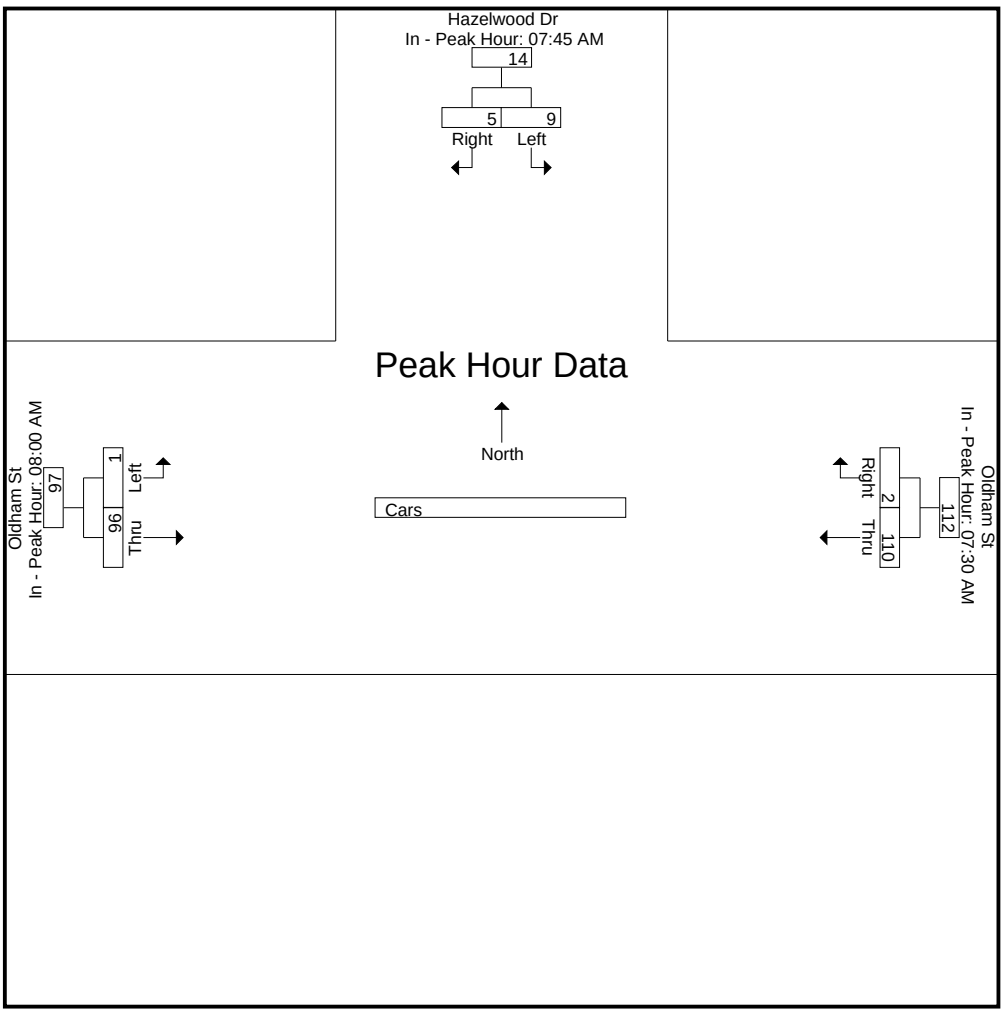
	07:45 AM			07:30 AM			08:00 AM		
+0 mins.	2	**3**	**5**	24	0	24	**1**	24	25
+15 mins.	2	1	3	**32**	**1**	**33**	0	14	14
+30 mins.	**3**	0	3	26	1	27	0	**31**	**31**
+45 mins.	2	1	3	28	0	28	0	27	27
Total Volume	9	5	14	110	2	112	1	96	97
% App. Total	64.3	35.7		98.2	1.8		1	99	
PHF	.750	.417	.700	.859	.500	.848	.250	.774	.782

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022

Groups Printed- Trucks

	Hazelwood Dr From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
07:00 AM	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0
07:45 AM	0	0	1	2	0	0	3
Total	0	0	1	2	0	0	3
08:00 AM	1	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0
Total	1	0	0	0	0	1	2
Grand Total	1	0	1	2	0	1	5
Apprch %	100	0	33.3	66.7	0	100	
Total %	20	0	20	40	0	20	

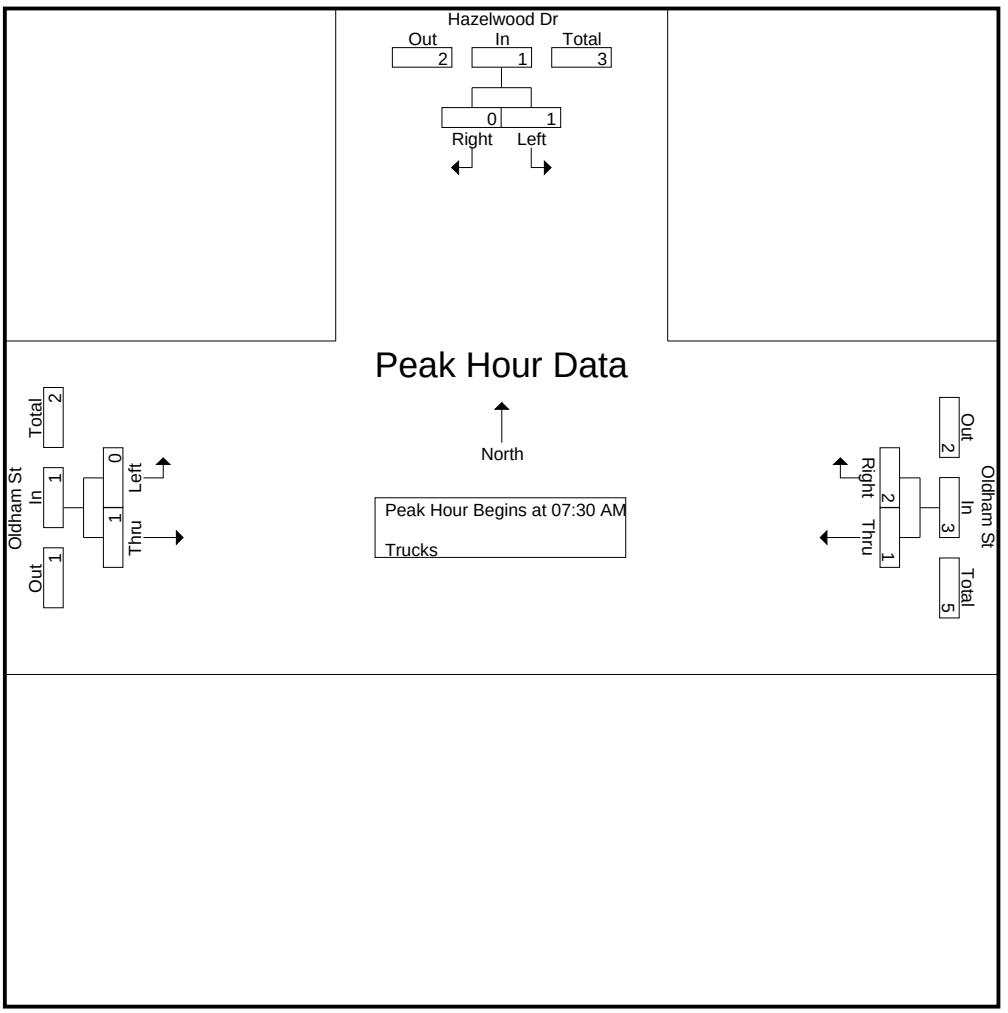
	Hazelwood Dr From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	**1**	**2**	**3**	0	0	0	**3**
08:00 AM	**1**	0	**1**	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	**1**	**1**	1
Total Volume	1	0	1	1	2	3	0	1	1	5
% App. Total	100	0		33.3	66.7		0	100		
PHF	.250	.000	.250	.250	.250	.250	.000	.250	.250	.417

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 8



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

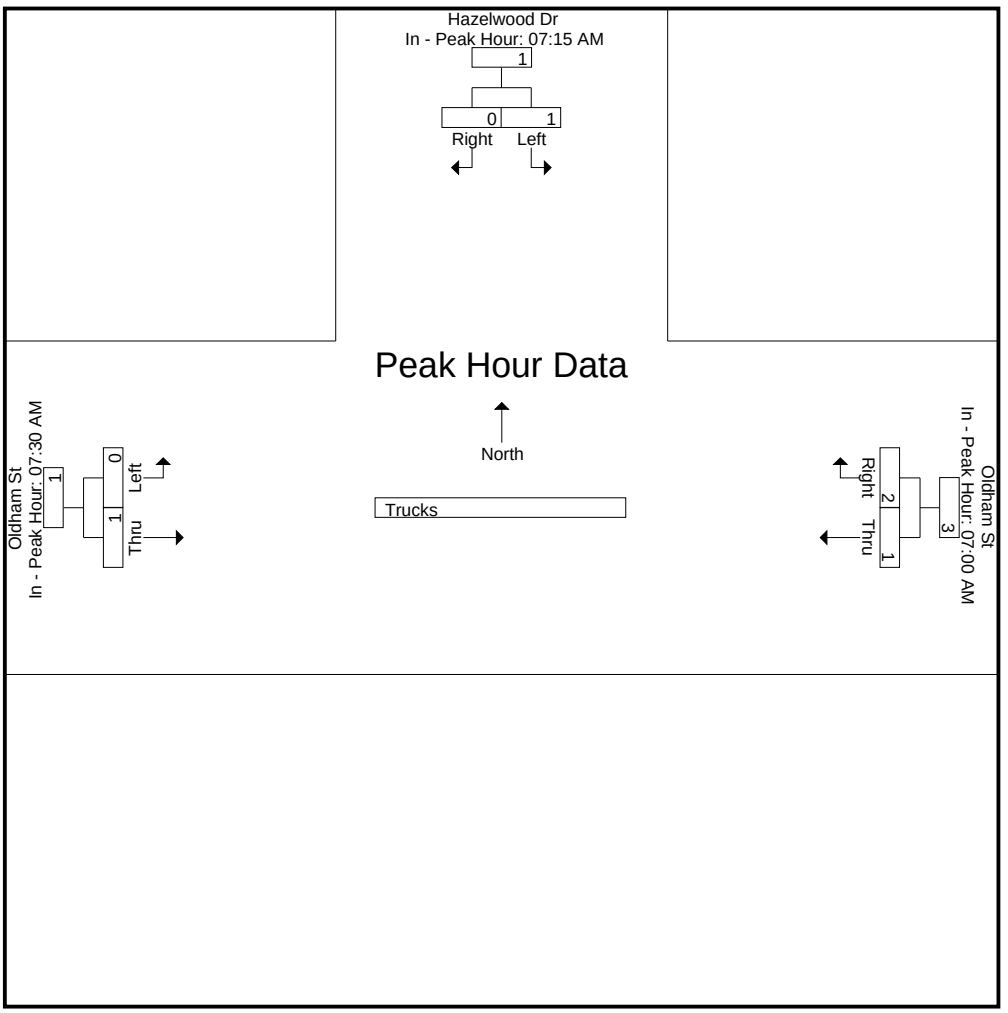
	07:15 AM			07:00 AM			07:30 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	**1**	0	**1**	**1**	**2**	**3**	0	**1**	**1**
Total Volume	1	0	1	1	2	3	0	1	1
% App. Total	100	0		33.3	66.7		0	100	
PHF	.250	.000	.250	.250	.250	.250	.000	.250	.250

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022

Groups Printed- Bikes Peds

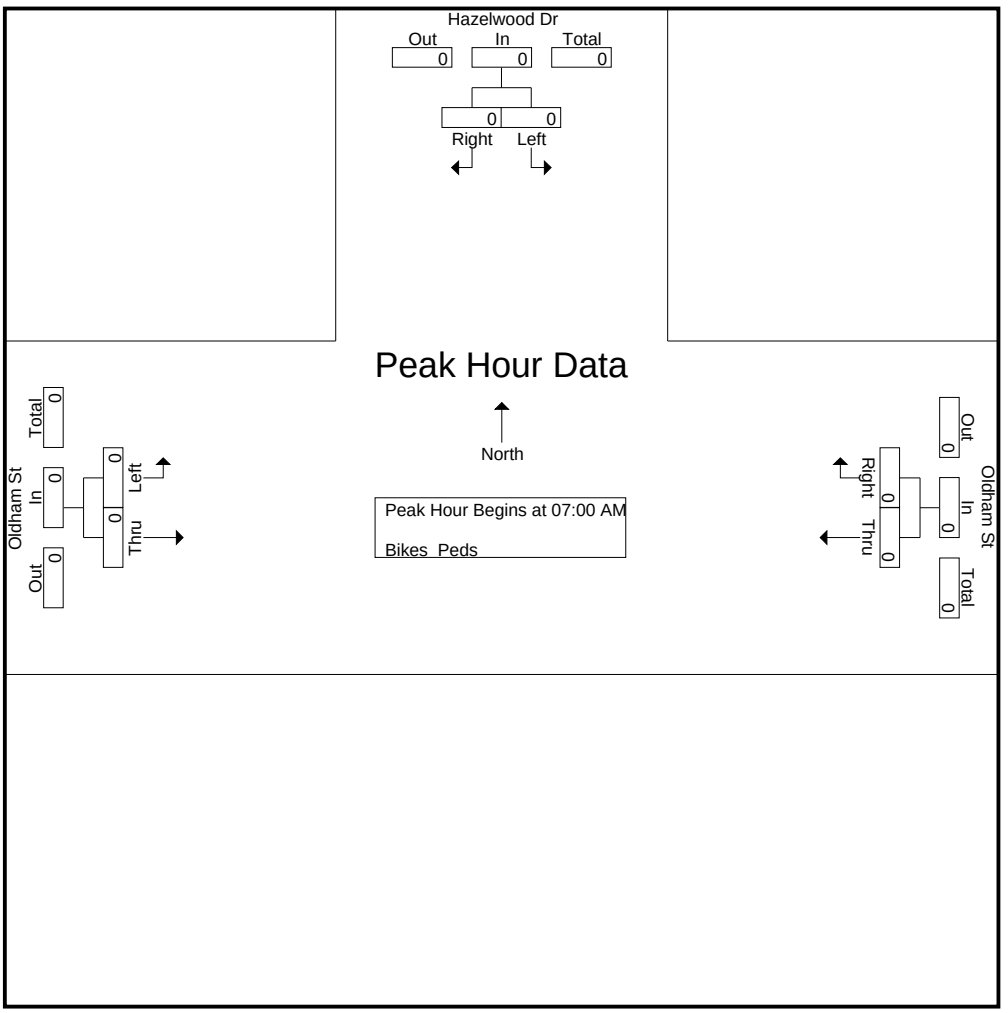
	Hazelwood Dr From North			Oldham St From East			Oldham St From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	0	0	1	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	0	0	1	0	1
Grand Total	0	0	0	0	0	1	0	0	0	1	0	1
Apprch %	0	0		0	0		0	0				
Total %										100	0	

	Hazelwood Dr From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts
978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 11



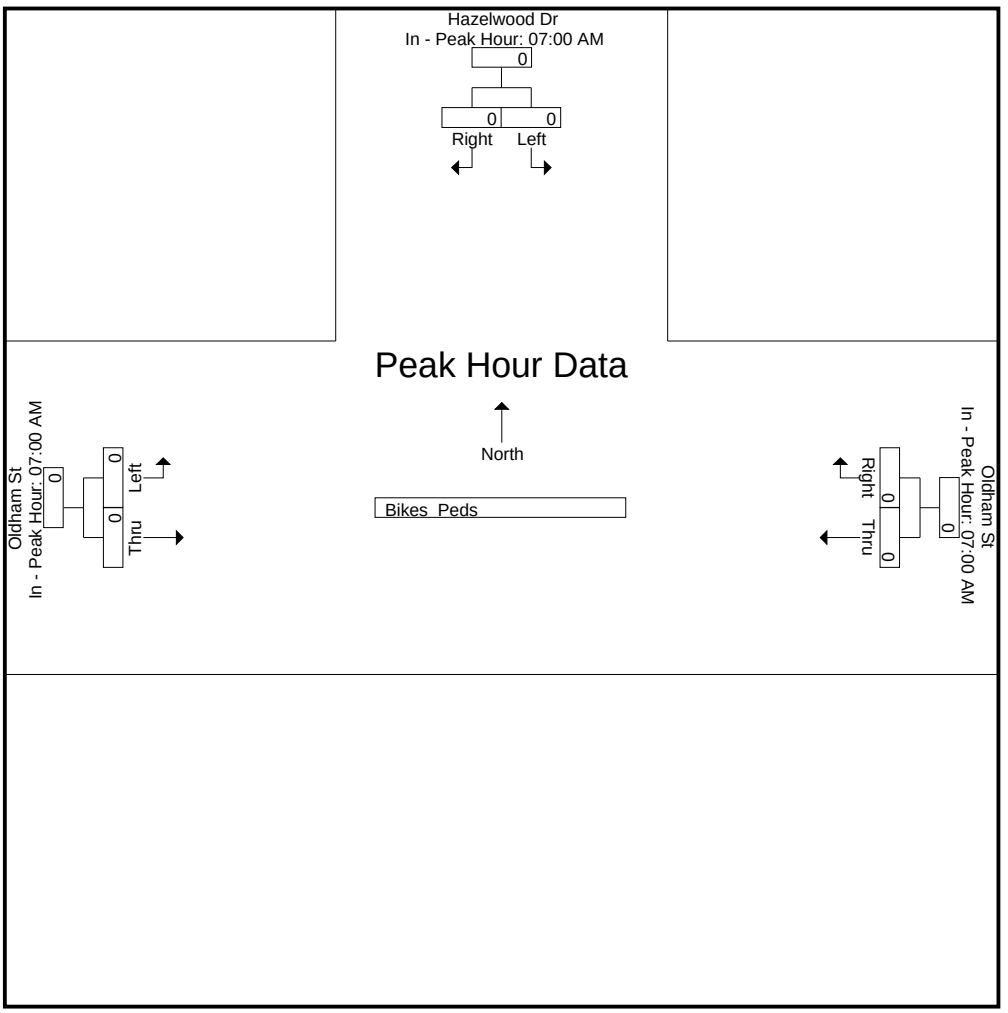
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts
978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 12



Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022

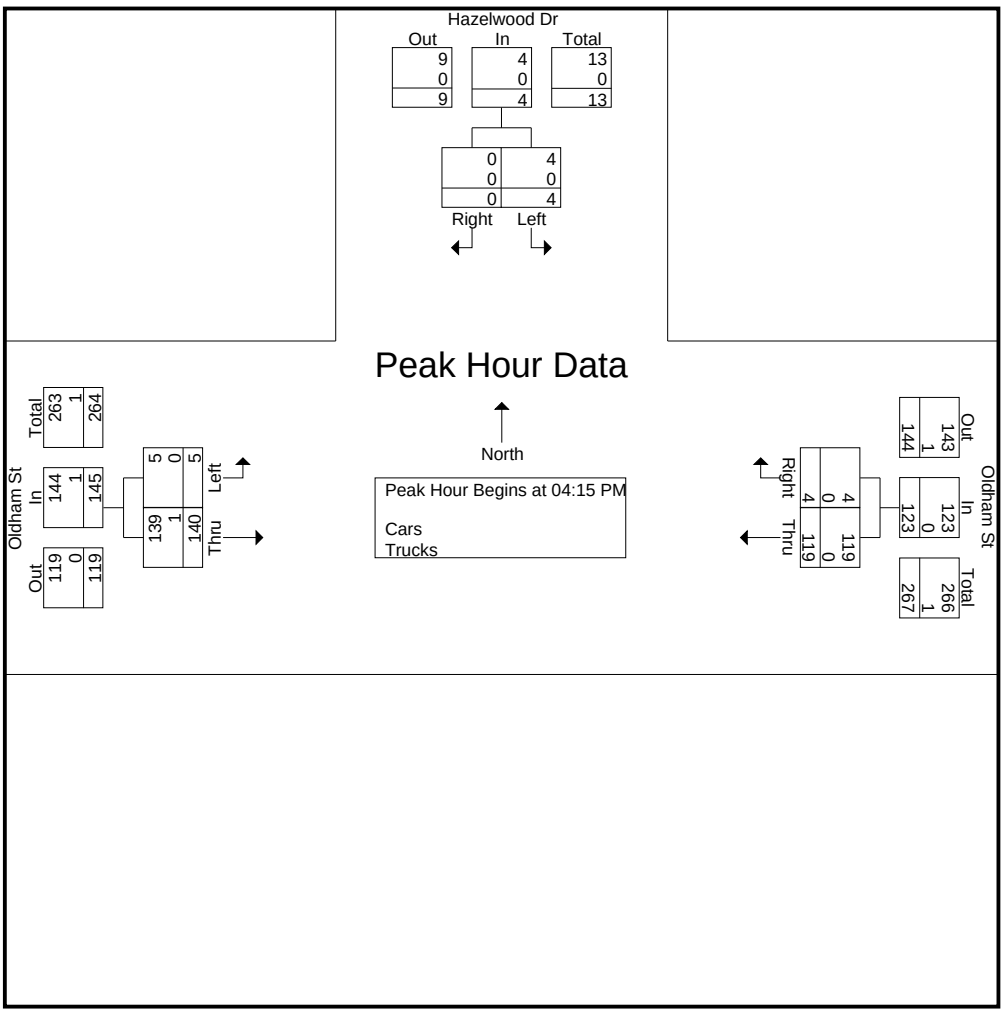
Groups Printed- Cars - Trucks

	Hazelwood Dr From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
04:00 PM	3	3	30	1	1	25	63
04:15 PM	3	0	23	1	0	40	67
04:30 PM	0	0	29	1	2	30	62
04:45 PM	1	0	30	1	1	40	73
Total	7	3	112	4	4	135	265
05:00 PM	0	0	37	1	2	30	70
05:15 PM	1	0	32	2	1	26	62
05:30 PM	1	0	24	2	2	21	50
05:45 PM	1	0	15	1	3	21	41
Total	3	0	108	6	8	98	223
Grand Total	10	3	220	10	12	233	488
Apprch %	76.9	23.1	95.7	4.3	4.9	95.1	
Total %	2	0.6	45.1	2	2.5	47.7	
Cars	10	3	219	10	12	230	484
% Cars	100	100	99.5	100	100	98.7	99.2
Trucks	0	0	1	0	0	3	4
% Trucks	0	0	0.5	0	0	1.3	0.8

	Hazelwood Dr From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	**3**	0	**3**	23	**1**	24	0	**40**	40	67
04:30 PM	0	0	0	29	1	30	**2**	30	32	62
04:45 PM	1	0	1	30	1	31	1	40	**41**	**73**
05:00 PM	0	0	0	**37**	1	**38**	2	30	32	70
Total Volume	4	0	4	119	4	123	5	140	145	272
% App. Total	100	0		96.7	3.3		3.4	96.6		
PHF	.333	.000	.333	.804	1.00	.809	.625	.875	.884	.932
Cars	4	0	4	119	4	123	5	139	144	271
% Cars	100	0	100	100	100	100	100	99.3	99.3	99.6
Trucks	0	0	0	0	0	0	0	1	1	1
% Trucks	0	0	0	0	0	0	0	0.7	0.7	0.4

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

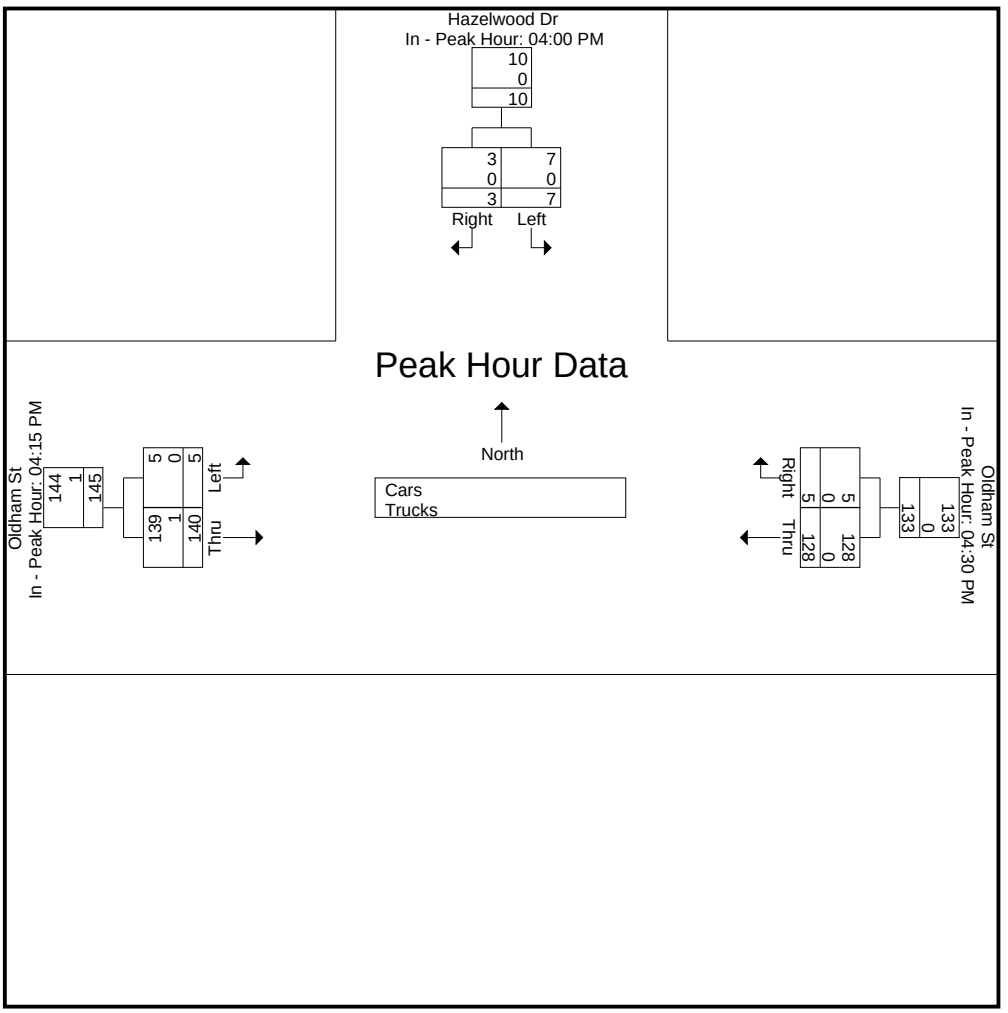
	04:00 PM			04:30 PM			04:15 PM		
+0 mins.	**3**	**3**	**6**	29	1	30	0	**40**	40
+15 mins.	3	0	3	30	1	31	**2**	30	32
+30 mins.	0	0	0	**37**	1	**38**	1	40	**41**
+45 mins.	1	0	1	32	**2**	34	2	30	32
Total Volume	7	3	10	128	5	133	5	140	145
% App. Total	70	30		96.2	3.8		3.4	96.6	
PHF	.583	.250	.417	.865	.625	.875	.625	.875	.884
Cars	7	3	10	128	5	133	5	139	144
% Cars	100	100	100	100	100	100	100	99.3	99.3
Trucks	0	0	0	0	0	0	0	1	1
% Trucks	0	0	0	0	0	0	0	0.7	0.7

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 3



Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022

Groups Printed- Cars

	Hazelwood Dr From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
04:00 PM	3	3	29	1	1	25	62
04:15 PM	3	0	23	1	0	39	66
04:30 PM	0	0	29	1	2	30	62
04:45 PM	1	0	30	1	1	40	73
Total	7	3	111	4	4	134	263
05:00 PM	0	0	37	1	2	30	70
05:15 PM	1	0	32	2	1	24	60
05:30 PM	1	0	24	2	2	21	50
05:45 PM	1	0	15	1	3	21	41
Total	3	0	108	6	8	96	221
Grand Total	10	3	219	10	12	230	484
Apprch %	76.9	23.1	95.6	4.4	5	95	
Total %	2.1	0.6	45.2	2.1	2.5	47.5	

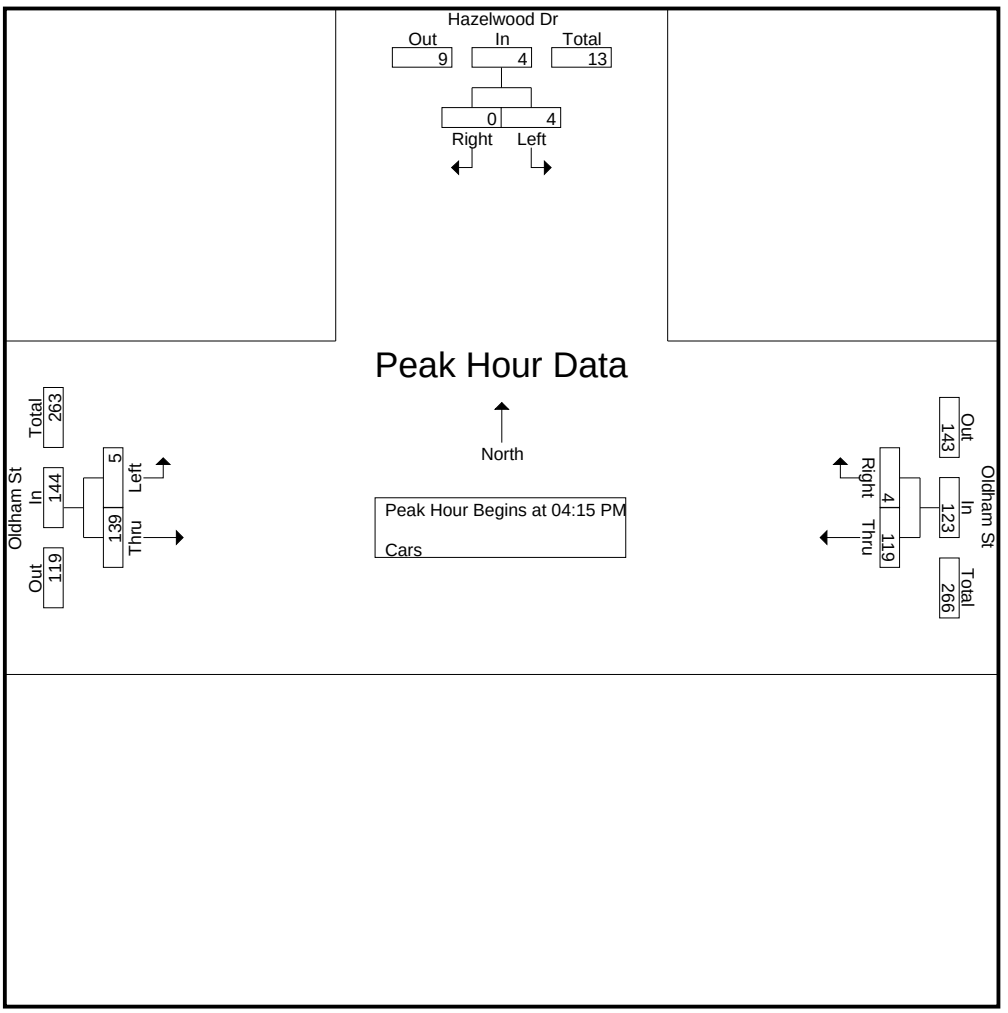
	Hazelwood Dr From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	**3**	0	**3**	23	**1**	24	0	39	39	66
04:30 PM	0	0	0	29	1	30	**2**	30	32	62
04:45 PM	1	0	1	30	1	31	1	**40**	**41**	**73**
05:00 PM	0	0	0	**37**	1	**38**	2	30	32	70
Total Volume	4	0	4	119	4	123	5	139	144	271
% App. Total	100	0		96.7	3.3		3.5	96.5		
PHF	.333	.000	.333	.804	1.00	.809	.625	.869	.878	.928

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 5



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

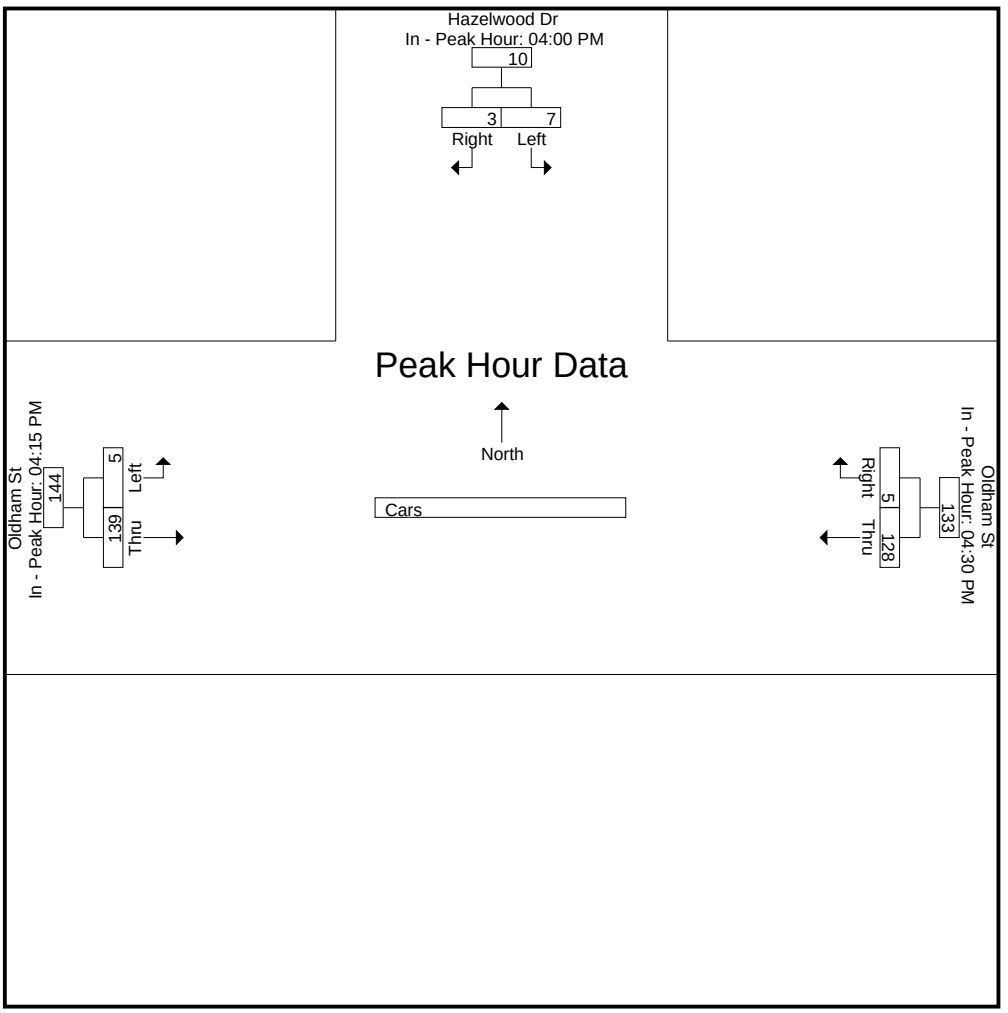
	04:00 PM			04:30 PM			04:15 PM		
+0 mins.	**3**	**3**	**6**	29	1	30	0	39	39
+15 mins.	3	0	3	30	1	31	**2**	30	32
+30 mins.	0	0	0	**37**	1	**38**	1	**40**	**41**
+45 mins.	1	0	1	32	**2**	34	2	30	32
Total Volume	7	3	10	128	5	133	5	139	144
% App. Total	70	30		96.2	3.8		3.5	96.5	
PHF	.583	.250	.417	.865	.625	.875	.625	.869	.878

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 6



Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022

Groups Printed- Trucks

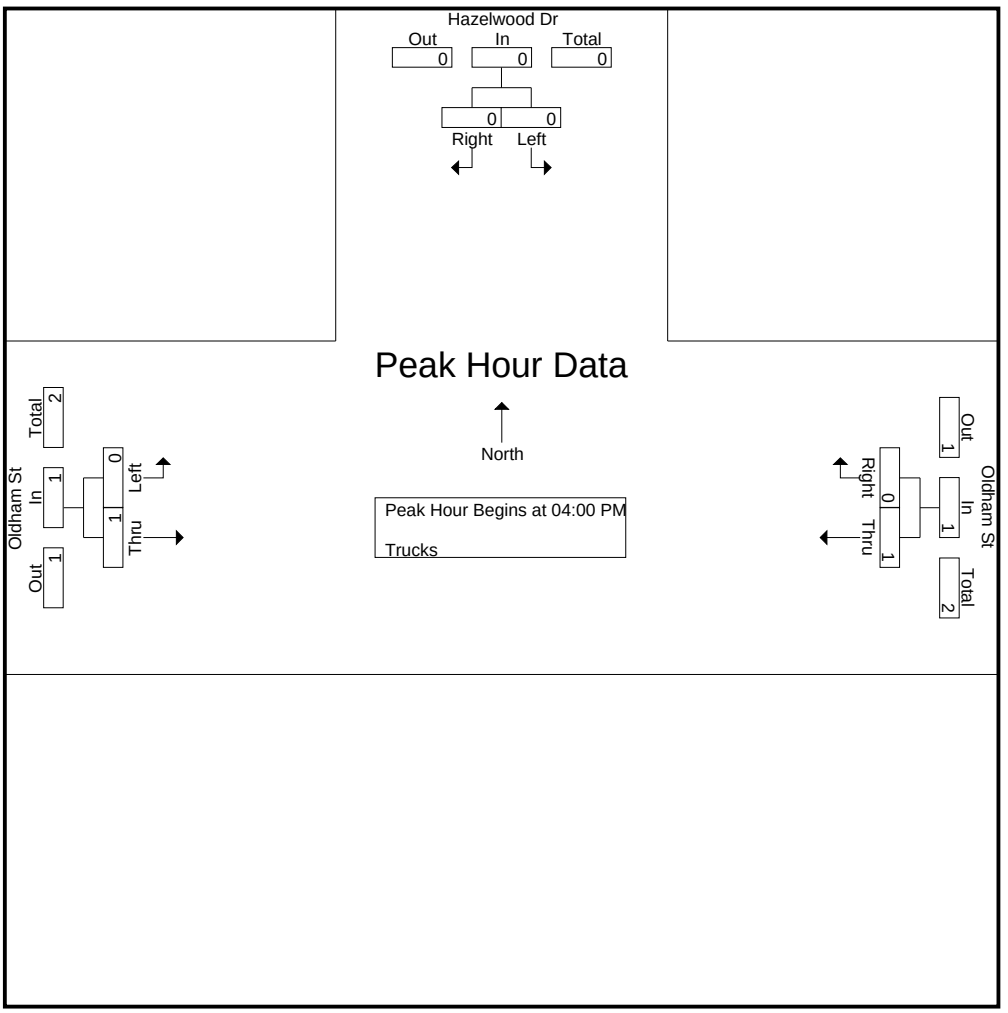
	Hazelwood Dr From North		Oldham St From East		Oldham St From West		
Start Time	Left	Right	Thru	Right	Left	Thru	Int. Total
04:00 PM	0	0	1	0	0	0	1
04:15 PM	0	0	0	0	0	1	1
04:30 PM	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0
Total	0	0	1	0	0	1	2
05:00 PM	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	2	2
05:30 PM	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0
Total	0	0	0	0	0	2	2
Grand Total	0	0	1	0	0	3	4
Apprch %	0	0	100	0	0	100	
Total %	0	0	25	0	0	75	

	Hazelwood Dr From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	**1**	0	**1**	0	0	0	**1**
04:15 PM	0	0	0	0	0	0	0	**1**	**1**	1
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	1	0	1	1	2
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.250	.000	.250	.000	.250	.250	.500

Accurate Counts
978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 8



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

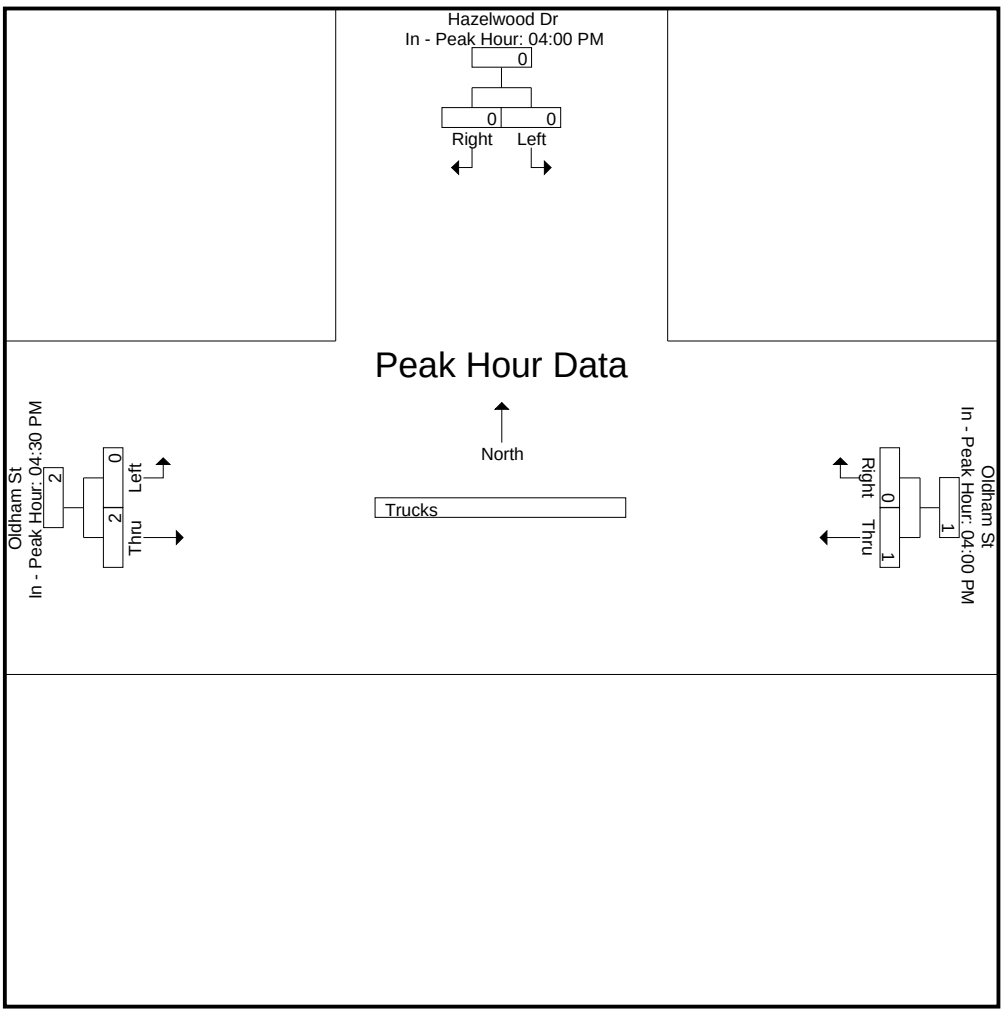
	04:00 PM			04:00 PM			04:30 PM		
+0 mins.	0	0	0	**1**	0	**1**	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	**2**	**2**
Total Volume	0	0	0	1	0	1	0	2	2
% App. Total	0	0		100	0		0	100	
PHF	.000	.000	.000	.250	.000	.250	.000	.250	.250

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 9



Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022

Groups Printed- Bikes Peds

	Hazelwood Dr From North			Oldham St From East			Oldham St From West					
Start Time	Left	Right	Peds	Thru	Right	Peds	Left	Thru	Peds	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	1	1	0	1
04:15 PM	0	0	1	0	0	1	0	0	0	2	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	1	0	0	1	3	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	1	0	0	0	0	0	0	1	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	0	0	0	0	0	1	0	1
Grand Total	0	0	2	0	0	1	0	0	1	4	0	4
Apprch %	0	0		0	0		0	0				
Total %										100	0	

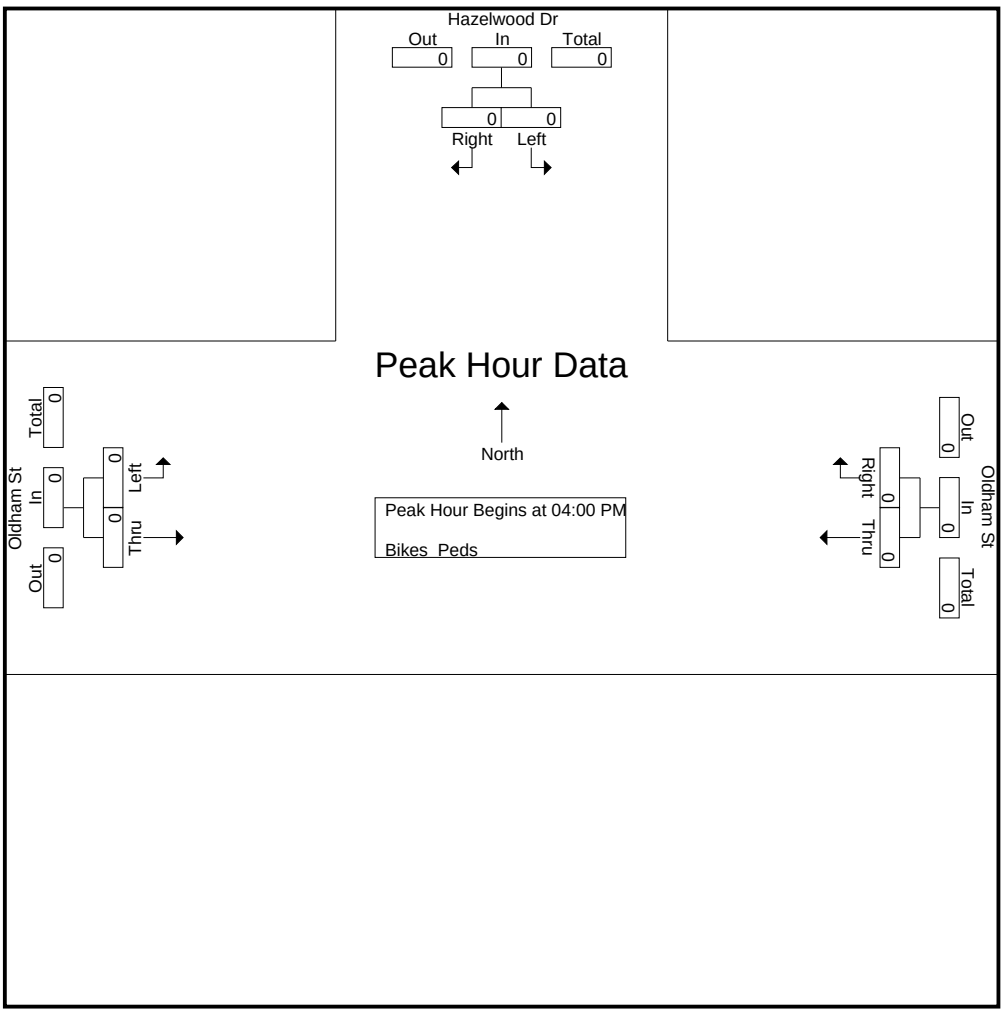
	Hazelwood Dr From North			Oldham St From East			Oldham St From West			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Accurate Counts

978-664-2565

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 11

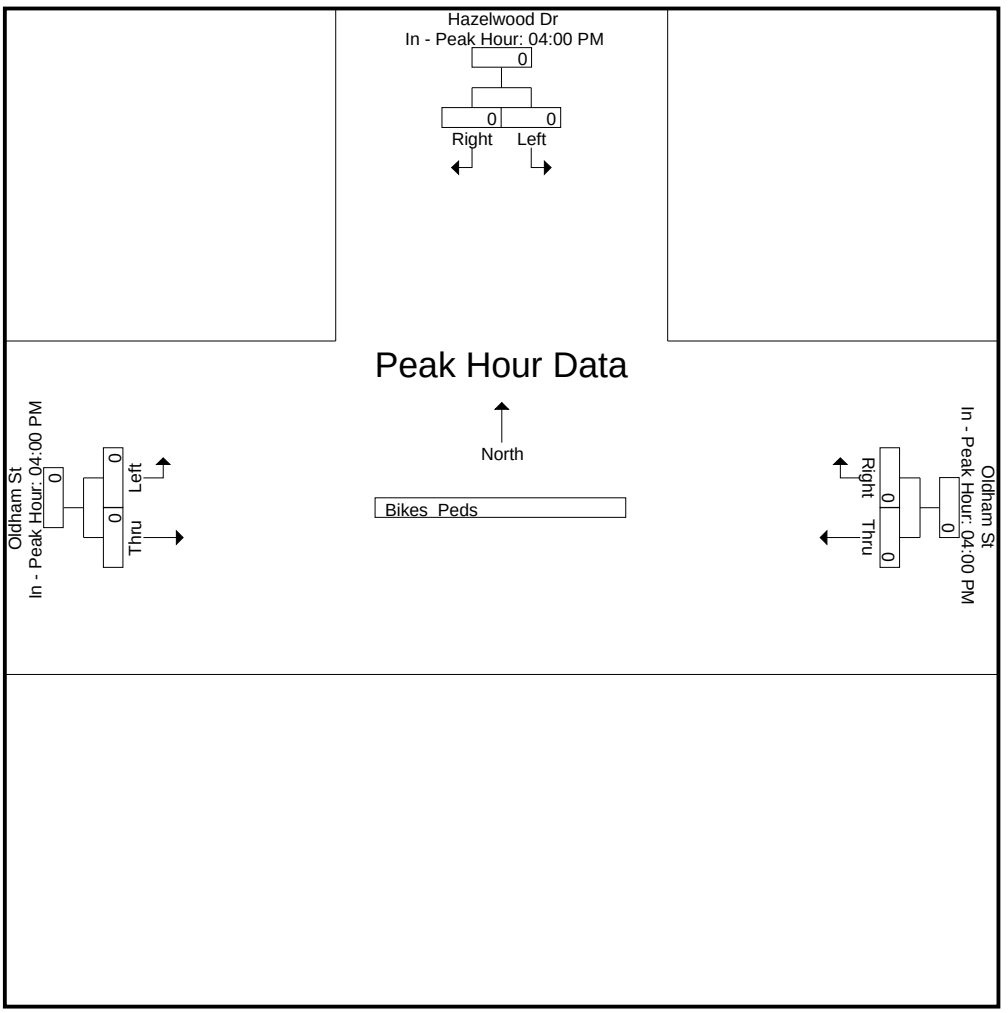


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

N/S Street : Hazelwood Drive
E/W Street : Oldham Street
City/State : Pembroke, MA
Weather : Cloudy

File Name : 91240005
Site Code : 91240005
Start Date : 1/25/2022
Page No : 12



WEATHERVANE TRAFFIC COUNTS

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: NB,

1/28/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	2	2	0	0	0	0	4
1:00	0	0	0	0	0	1	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	1	0	1
6:00	0	0	0	0	1	1	0	0	0	2
7:00	0	0	0	0	2	2	0	0	0	4
8:00	0	1	2	1	3	4	2	0	0	13
9:00	0	0	0	4	7	8	1	0	0	20
10:00	0	0	0	5	8	10	2	0	0	25
11:00	0	0	0	4	11	13	5	0	0	33
12:00 PM	0	0	0	7	35	14	5	2	0	63
1:00	0	0	1	2	15	13	4	0	1	36
2:00	0	0	0	2	15	10	1	1	0	29
3:00	0	0	1	3	19	17	5	0	0	45
4:00	0	0	0	6	17	15	4	1	0	43
5:00	0	0	1	4	19	10	5	0	0	39
6:00	0	0	0	9	16	17	3	0	1	46
7:00	0	0	0	10	19	17	0	0	0	46
8:00	0	0	0	3	14	7	1	0	0	25
9:00	0	0	0	0	3	3	1	0	0	7
10:00	0	0	1	0	6	0	1	0	0	8
11:00	0	0	0	1	0	0	0	0	0	1
Total	0	1	6	63	212	162	40	5	2	491
Percent			Percentile	15th	50th	85th	95th			
			Speed	20	25	29	32			

Mean Speed (Average)	24.9
10 MPH Pace Speed	20-29
Number in Pace	372
Percent in Pace	75.8%
Number > 25 MPH	209
Percent > 25 MPH	42.6%

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: NB,

1/29/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	1	0	0	0	0	0	1
2:00	0	0	0	0	1	0	0	0	0	1
3:00	0	0	3	0	1	0	0	0	0	4
4:00	0	0	2	2	0	0	0	0	0	4
5:00	0	0	1	3	0	0	0	0	0	4
6:00	0	0	2	4	0	0	0	0	0	6
7:00	0	0	0	0	0	0	0	0	0	0
8:00	0	0	3	0	0	0	0	0	0	3
9:00	0	0	1	3	1	0	0	0	0	5
10:00	0	0	2	3	0	0	0	0	0	5
11:00	0	0	2	0	0	0	0	0	0	2
12:00 PM	0	1	1	3	0	0	0	0	0	5
1:00	0	0	2	1	0	0	0	0	0	3
2:00	0	0	2	3	0	0	0	0	0	5
3:00	0	1	1	0	0	0	0	0	0	2
4:00	0	0	2	2	0	1	0	0	0	5
5:00	0	0	0	2	0	0	0	0	0	2
6:00	0	0	0	2	0	0	0	0	0	2
7:00	0	0	3	1	0	0	0	0	0	4
8:00	0	0	0	1	1	0	0	0	0	2
9:00	0	0	0	1	0	0	0	0	0	1
10:00	0	0	1	0	0	1	0	0	0	2
11:00	0	0	0	1	0	0	0	0	0	1
Total	0	2	28	33	4	2	0	0	0	69
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			

Mean Speed (Average)	15.8
10 MPH Pace Speed	10-19
Number in Pace	60
Percent in Pace	87.0%
Number > 25 MPH	2
Percent > 25 MPH	2.9%

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: NB,

1/30/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	1	0	0	0	0	0	1
4:00	0	0	0	0	1	0	0	0	0	1
5:00	0	0	1	0	0	0	0	0	0	1
6:00	0	0	0	4	0	0	0	0	0	4
7:00	0	1	2	2	0	0	1	0	0	6
8:00	0	0	2	1	2	0	0	0	0	5
9:00	0	0	2	0	4	1	0	0	0	7
10:00	0	1	2	2	9	0	0	0	0	14
11:00	0	0	2	9	15	3	0	0	0	29
12:00 PM	0	0	1	10	26	4	4	0	0	45
1:00	0	0	1	9	12	9	2	0	0	33
2:00	0	0	0	1	6	8	0	0	0	15
3:00	0	0	0	3	10	10	1	1	0	25
4:00	0	0	4	2	12	10	1	0	0	29
5:00	0	0	0	1	10	6	0	0	0	17
6:00	0	0	0	2	4	1	0	0	0	7
7:00	0	0	1	5	9	1	0	0	0	16
8:00	0	0	0	1	1	0	0	0	0	2
9:00	0	0	0	3	3	1	1	0	0	8
10:00	0	0	0	0	0	0	1	0	0	1
11:00	0	0	0	0	3	0	0	0	0	3
Total	0	2	18	56	127	54	11	1	0	269
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			

Mean Speed (Average)	22.2
10 MPH Pace Speed	16-25
Number in Pace	183
Percent in Pace	68.0%
Number > 25 MPH	66
Percent > 25 MPH	24.5%

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: NB,

1/31/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	2	0	0	0	0	0	2
1:00	0	0	0	0	1	1	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	1	0	0	0	1
5:00	0	0	0	0	0	0	0	0	0	0
6:00	0	0	0	1	2	0	0	0	0	3
7:00	0	0	0	1	5	2	0	0	0	8
8:00	0	0	1	0	2	2	0	0	0	5
9:00	0	1	0	4	8	2	0	0	0	15
10:00	0	0	3	4	8	5	0	0	0	20
11:00	0	1	1	3	7	6	2	0	1	21
12:00 PM	0	0	1	7	21	12	2	0	0	43
1:00	0	0	0	6	13	6	0	0	0	25
2:00	0	0	0	4	16	8	0	1	0	29
3:00	0	0	1	7	9	6	1	0	0	24
4:00	0	0	3	8	14	8	0	0	0	33
5:00	0	0	2	8	15	4	2	0	0	31
6:00	0	0	1	9	7	8	1	0	0	26
7:00	0	0	0	6	5	5	2	0	0	18
8:00	0	0	0	0	3	1	0	0	0	4
9:00	0	0	0	1	1	4	0	0	0	6
10:00	0	0	0	0	2	3	0	0	0	5
11:00	0	0	0	0	3	1	0	0	0	4
Total	0	2	13	71	142	85	10	1	1	325
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			

Mean Speed (Average)	23.0
10 MPH Pace Speed	20-29
Number in Pace	227
Percent in Pace	69.8%
Number > 25 MPH	97
Percent > 25 MPH	29.8%

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: NB,

2/1/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	1	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	0	0	0
6:00	0	1	0	2	1	0	0	0	0	4
7:00	0	0	0	1	3	0	0	0	0	4
8:00	0	0	0	1	9	6	0	0	0	16
9:00	0	0	0	4	11	6	1	0	0	22
10:00	0	0	1	0	9	9	0	0	0	19
11:00	0	0	0	6	7	8	2	0	0	23
12:00 PM	0	0	1	6	15	11	1	0	0	34
1:00	0	1	0	5	18	9	1	1	0	35
2:00	0	0	1	7	20	8	0	0	0	36
3:00	0	0	0	3	8	13	3	0	1	28
4:00	0	0	0	5	12	10	3	2	0	32
5:00	0	1	1	1	13	8	4	0	0	28
6:00	0	0	0	2	11	6	2	0	0	21
7:00	0	0	0	7	9	5	2	0	0	23
8:00	0	0	1	2	2	4	0	0	0	9
9:00	0	0	0	0	3	1	0	1	0	5
10:00	0	0	0	1	0	2	0	0	0	3
11:00	0	0	0	1	4	0	1	0	0	6
Total	0	3	5	54	156	106	20	4	1	349
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			

Mean Speed (Average)	24.1
10 MPH Pace Speed	20-29
Number in Pace	261
Percent in Pace	74.8%
Number > 25 MPH	131
Percent > 25 MPH	37.5%

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: NB,

2/2/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	1	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	0	0	0
6:00	0	0	0	2	0	2	0	1	0	5
7:00	0	0	0	1	1	3	1	0	0	6
8:00	0	0	0	0	2	4	0	1	0	7
9:00	0	0	0	3	13	5	0	1	0	22
10:00	0	0	0	1	12	7	1	1	0	22
11:00	0	0	0	4	13	9	0	0	0	26
12:00 PM	0	0	1	7	15	19	2	0	0	44
1:00	0	0	1	6	14	11	0	0	0	32
2:00	0	0	0	4	14	15	2	0	0	35
3:00	0	0	4	4	15	6	2	0	0	31
4:00	0	0	0	2	15	15	1	0	0	33
5:00	0	0	0	8	19	15	1	0	0	43
6:00	0	0	0	10	18	3	0	0	0	31
7:00	0	0	0	1	11	5	2	0	0	19
8:00	0	0	0	3	5	2	0	1	0	11
9:00	0	0	0	2	8	3	0	0	0	13
10:00	0	0	0	1	2	2	0	0	0	5
11:00	0	0	0	0	1	0	0	0	0	1
Total	0	0	6	60	178	126	12	5	0	387
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			

Mean Speed (Average)	23.8
10 MPH Pace Speed	20-29
Number in Pace	303
Percent in Pace	78.3%
Number > 25 MPH	143
Percent > 25 MPH	37.0%

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: NB,

2/3/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	1	1	0	0	0	0	2
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	1	0	0	0	1
6:00	0	0	0	1	0	0	0	0	0	1
7:00	0	0	1	0	3	0	0	0	0	4
8:00	0	0	0	4	3	3	1	0	0	11
9:00	0	0	0	4	8	3	2	0	0	17
10:00	0	0	0	3	8	3	1	0	0	15
11:00	0	0	0	2	13	8	1	0	0	24
12:00 PM	0	0	0	0	11	13	3	0	0	27
1:00	0	0	0	4	17	17	1	1	0	40
2:00	0	0	0	1	20	7	3	0	0	31
3:00	0	0	0	2	13	7	3	1	1	27
4:00	0	0	2	1	16	16	5	1	0	41
5:00	0	1	0	5	18	16	2	0	0	42
6:00	0	0	0	3	21	13	1	0	0	38
7:00	0	0	0	4	18	9	0	0	0	31
8:00	0	0	0	2	1	6	1	0	0	10
9:00	0	1	0	1	3	0	0	0	0	5
10:00	0	0	0	0	3	0	0	0	0	3
11:00	0	0	0	0	1	1	0	0	0	2
Total	0	2	3	38	178	123	24	3	1	372
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			
			Mean Speed (Average)	24.6						
			10 MPH Pace Speed	20-29						
			Number in Pace	299						
			Percent in Pace	80.4%						
			Number > 25 MPH	151						
			Percent > 25 MPH	40.6%						
Overall Stats			Percentile	15th	50th	85th	95th			
			Speed	20	25	29	32			
			Mean Speed (Average)	23.7						
			10 MPH Pace Speed	20-29						
			Number in Pace	1649						
			Percent in Pace	72.9%						
			Number > 25 MPH	799						
			Percent > 25 MPH	35.3%						

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	1/28/2022		NB,	Hour Totals	
Time	Friday	Morning	Afternoon	Morning	Afternon
12:00		2	15		
12:15		0	21		
12:30		0	11		
12:45		2	16	4	63
1:00		0	11		
1:15		0	7		
1:30		1	10		
1:45		0	8	1	36
2:00		0	5		
2:15		0	7		
2:30		0	8		
2:45		0	9	0	29
3:00		0	10		
3:15		0	3		
3:30		0	16		
3:45		0	16	0	45
4:00		0	10		
4:15		0	10		
4:30		0	10		
4:45		0	13	0	43
5:00		0	9		
5:15		0	5		
5:30		1	12		
5:45		0	13	1	39
6:00		0	11		
6:15		2	15		
6:30		0	11		
6:45		0	9	2	46
7:00		0	16		
7:15		0	11		
7:30		3	6		
7:45		1	13	4	46
8:00		1	11		
8:15		1	6		
8:30		6	5		
8:45		5	3	13	25
9:00		4	2		
9:15		5	2		
9:30		3	1		
9:45		8	2	20	7
10:00		7	3		
10:15		6	1		
10:30		5	3		
10:45		7	1	25	8
11:00		8	0		
11:15		6	0		
11:30		9	0		
11:45		10	1	33	1
Total		103	388		
Percent		21.0%	79.0%		

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	1/29/2022		NB,		Hour Totals	
Time	Saturday	Morning	Afternoon	Morning	Afternon	
12:00		0	0			
12:15		0	1			
12:30		0	2			
12:45		0	2	0	5	
1:00		0	1			
1:15		0	1			
1:30		0	1			
1:45		1	0	1	3	
2:00		1	1			
2:15		0	2			
2:30		0	1			
2:45		0	1	1	5	
3:00		0	1			
3:15		2	1			
3:30		2	0			
3:45		0	0	4	2	
4:00		2	2			
4:15		0	0			
4:30		1	2			
4:45		1	1	4	5	
5:00		0	0			
5:15		0	0			
5:30		2	1			
5:45		2	1	4	2	
6:00		2	0			
6:15		3	1			
6:30		1	1			
6:45		0	0	6	2	
7:00		0	0			
7:15		0	0			
7:30		0	0			
7:45		0	4	0	4	
8:00		0	1			
8:15		1	1			
8:30		1	0			
8:45		1	0	3	2	
9:00		2	0			
9:15		0	0			
9:30		1	1			
9:45		2	0	5	1	
10:00		4	2			
10:15		1	0			
10:30		0	0			
10:45		0	0	5	2	
11:00		0	1			
11:15		0	0			
11:30		1	0			
11:45		1	0	2	1	
Total		35	34			
Percent		50.7%	49.3%			

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	1/30/2022		NB,	Hour Totals	
Time	Sunday	Morning	Afternoon	Morning	Afternon
12:00		0	6		
12:15		0	11		
12:30		0	14		
12:45		0	14	0	45
1:00		0	6		
1:15		0	11		
1:30		0	8		
1:45		0	8	0	33
2:00		0	3		
2:15		0	5		
2:30		0	4		
2:45		0	3	0	15
3:00		0	8		
3:15		0	9		
3:30		1	3		
3:45		0	5	1	25
4:00		0	10		
4:15		0	5		
4:30		1	6		
4:45		0	8	1	29
5:00		1	5		
5:15		0	3		
5:30		0	5		
5:45		0	4	1	17
6:00		0	1		
6:15		1	1		
6:30		0	5		
6:45		3	0	4	7
7:00		2	2		
7:15		0	4		
7:30		2	4		
7:45		2	6	6	16
8:00		4	0		
8:15		0	1		
8:30		1	0		
8:45		0	1	5	2
9:00		4	3		
9:15		3	3		
9:30		0	1		
9:45		0	1	7	8
10:00		4	0		
10:15		0	0		
10:30		6	1		
10:45		4	0	14	1
11:00		6	0		
11:15		6	1		
11:30		8	2		
11:45		9	0	29	3
Total		68	201		
Percent		25.3%	74.7%		

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	1/31/2022		NB,	Hour Totals	
Time	Monday	Morning	Afternoon	Morning	Afternon
12:00		2	14		
12:15		0	10		
12:30		0	10		
12:45		0	9	2	43
1:00		1	5		
1:15		1	6		
1:30		0	2		
1:45		0	12	2	25
2:00		0	8		
2:15		0	6		
2:30		0	9		
2:45		0	6	0	29
3:00		0	7		
3:15		0	5		
3:30		0	7		
3:45		0	5	0	24
4:00		0	9		
4:15		0	9		
4:30		1	8		
4:45		0	7	1	33
5:00		0	4		
5:15		0	5		
5:30		0	13		
5:45		0	9	0	31
6:00		1	5		
6:15		0	11		
6:30		0	3		
6:45		2	7	3	26
7:00		0	10		
7:15		1	3		
7:30		3	1		
7:45		4	4	8	18
8:00		1	0		
8:15		1	3		
8:30		2	0		
8:45		1	1	5	4
9:00		1	4		
9:15		3	1		
9:30		7	1		
9:45		4	0	15	6
10:00		2	0		
10:15		8	1		
10:30		4	2		
10:45		6	2	20	5
11:00		6	2		
11:15		5	2		
11:30		5	0		
11:45		5	0	21	4
Total		77	248		
Percent		23.7%	76.3%		

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	2/1/2022		NB,	Hour Totals	
Time	Tuesday	Morning	Afternoon	Morning	Afternon
12:00		0	8		
12:15		0	8		
12:30		0	7		
12:45		0	11	0	34
1:00		0	7		
1:15		0	9		
1:30		0	8		
1:45		1	11	1	35
2:00		0	10		
2:15		0	3		
2:30		0	13		
2:45		0	10	0	36
3:00		0	3		
3:15		0	6		
3:30		0	10		
3:45		0	9	0	28
4:00		0	8		
4:15		0	10		
4:30		0	3		
4:45		0	11	0	32
5:00		0	8		
5:15		0	6		
5:30		0	5		
5:45		0	9	0	28
6:00		1	8		
6:15		1	1		
6:30		1	7		
6:45		1	5	4	21
7:00		0	7		
7:15		1	8		
7:30		3	7		
7:45		0	1	4	23
8:00		5	4		
8:15		3	1		
8:30		2	3		
8:45		6	1	16	9
9:00		3	1		
9:15		2	2		
9:30		6	2		
9:45		11	0	22	5
10:00		6	0		
10:15		3	0		
10:30		6	0		
10:45		4	3	19	3
11:00		8	4		
11:15		2	1		
11:30		6	0		
11:45		7	1	23	6
Total		89	260		
Percent		25.5%	74.5%		

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	2/2/2022		NB,	Hour Totals	
Time	Wednesday	Morning	Afternoon	Morning	Afternon
12:00		0	10		
12:15		0	12		
12:30		0	10		
12:45		0	12	0	44
1:00		0	11		
1:15		0	10		
1:30		1	5		
1:45		0	6	1	32
2:00		0	6		
2:15		0	11		
2:30		0	11		
2:45		0	7	0	35
3:00		0	3		
3:15		0	6		
3:30		0	12		
3:45		0	10	0	31
4:00		0	7		
4:15		0	8		
4:30		0	11		
4:45		0	7	0	33
5:00		0	5		
5:15		0	12		
5:30		0	11		
5:45		0	15	0	43
6:00		1	16		
6:15		1	6		
6:30		2	7		
6:45		1	2	5	31
7:00		0	8		
7:15		1	4		
7:30		1	5		
7:45		4	2	6	19
8:00		1	6		
8:15		1	2		
8:30		2	1		
8:45		3	2	7	11
9:00		6	4		
9:15		0	6		
9:30		8	3		
9:45		8	0	22	13
10:00		6	4		
10:15		9	0		
10:30		3	0		
10:45		4	1	22	5
11:00		6	1		
11:15		5	0		
11:30		9	0		
11:45		6	0	26	1
Total		89	298		
Percent		23.0%	77.0%		

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

Time	2/3/2022 Thursday	NB, Morning	Afternoon	Hour Totals Morning	Afternon
12:00		0	2		
12:15		0	8		
12:30		0	8		
12:45		0	9	0	27
1:00		0	9		
1:15		0	15		
1:30		0	10		
1:45		2	6	2	40
2:00		0	6		
2:15		0	10		
2:30		0	8		
2:45		0	7	0	31
3:00		0	5		
3:15		0	5		
3:30		0	7		
3:45		0	10	0	27
4:00		0	14		
4:15		0	9		
4:30		0	6		
4:45		0	12	0	41
5:00		0	9		
5:15		0	14		
5:30		0	7		
5:45		1	12	1	42
6:00		0	12		
6:15		0	14		
6:30		1	6		
6:45		0	6	1	38
7:00		1	13		
7:15		0	12		
7:30		1	4		
7:45		2	2	4	31
8:00		3	1		
8:15		1	4		
8:30		1	3		
8:45		6	2	11	10
9:00		1	1		
9:15		4	1		
9:30		6	2		
9:45		6	1	17	5
10:00		4	0		
10:15		4	1		
10:30		6	1		
10:45		1	1	15	3
11:00		7	1		
11:15		6	0		
11:30		7	0		
11:45		4	1	24	2
Total		75	297		
Percent		20.2%	79.8%		
Grand Total		536	1726		
Percent		23.7%	76.3%		
ADT		ADT: 323		AADT: 323	

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

1/24/2022	1/24/22	1/25/22	1/26/2022	1/27/2022	1/28/2022	1/29/2022	1/30/2022	Average	
Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon - Fri	Mon - Sun
12:00 AM	*	*	*	*	4	0	0	4	1
1:00	*	*	*	*	1	1	0	1	1
2:00	*	*	*	*	0	1	0	0	0
3:00	*	*	*	*	0	4	1	0	2
4:00	*	*	*	*	0	4	1	0	2
5:00	*	*	*	*	1	4	1	1	2
6:00	*	*	*	*	2	6	4	2	4
7:00	*	*	*	*	4	0	6	4	3
8:00	*	*	*	*	13	3	5	13	7
9:00	*	*	*	*	20	5	7	20	11
10:00	*	*	*	*	25	5	14	25	15
11:00	*	*	*	*	33	2	29	33	21
12:00 PM	*	*	*	*	63	5	45	63	38
1:00	*	*	*	*	36	3	33	36	24
2:00	*	*	*	*	29	5	15	29	16
3:00	*	*	*	*	45	2	25	45	24
4:00	*	*	*	*	43	5	29	43	26
5:00	*	*	*	*	39	2	17	39	19
6:00	*	*	*	*	46	2	7	46	18
7:00	*	*	*	*	46	4	16	46	22
8:00	*	*	*	*	25	2	2	25	10
9:00	*	*	*	*	7	1	8	7	5
10:00	*	*	*	*	8	2	1	8	4
11:00	*	*	*	*	1	1	3	1	2
Total	0	0	0	0	491	69	269	491	277
Percent	0.0%	0.0%	0.0%	0.0%	59.2%	8.3%	32.4%		
AM Peak					11:00	6:00	11:00	11:00	11:00
Volume					33	6	29	33	21
PM Peak					12:00 PM	12:00 PM	12:00 PM	12:00 PM	12:00 PM
Volume					63	5	45	63	38

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

1/31/2022	1/31/22	2/1/22	2/2/2022	2/3/2022	2/4/2022	2/5/2022	2/6/2022	Average	
Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon - Fri	Mon - Sun
12:00 AM	2	0	0	0	*	*	*	0	0
1:00	2	1	1	2	*	*	*	2	2
2:00	0	0	0	0	*	*	*	0	0
3:00	0	0	0	0	*	*	*	0	0
4:00	1	0	0	0	*	*	*	0	0
5:00	0	0	0	1	*	*	*	0	0
6:00	3	4	5	1	*	*	*	3	3
7:00	8	4	6	4	*	*	*	6	6
8:00	5	16	7	11	*	*	*	10	10
9:00	15	22	22	17	*	*	*	19	19
10:00	20	19	22	15	*	*	*	19	19
11:00	21	23	26	24	*	*	*	24	24
12:00 PM	43	34	44	27	*	*	*	37	37
1:00	25	35	32	40	*	*	*	33	33
2:00	29	36	35	31	*	*	*	33	33
3:00	24	28	31	27	*	*	*	28	28
4:00	33	32	33	41	*	*	*	35	35
5:00	31	28	43	42	*	*	*	36	36
6:00	26	21	31	38	*	*	*	29	29
7:00	18	23	19	31	*	*	*	23	23
8:00	4	9	11	10	*	*	*	8	8
9:00	6	5	13	5	*	*	*	7	7
10:00	5	3	5	3	*	*	*	4	4
11:00	4	6	1	2	*	*	*	3	3
Total	325	349	387	372	0	0	0	359	359
Percent	22.7%	24.4%	27.0%	26.0%	0.0%	0.0%	0.0%		
AM Peak	11:00	11:00	11:00	11:00				11:00	11:00
Volume	21	23	26	24				24	24
PM Peak	12:00 PM	2:00	12:00 PM	5:00				12:00 PM	12:00 PM
Volume	43	36	44	42				37	37

Location : Weathervane Drive NB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

2/7/2022	2/7/22	2/8/22	2/9/2022	2/10/2022	2/11/2022	2/12/2022	2/13/2022	Average	
Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon - Fri	Mon - Sun

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: SB,

1/28/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	1	1	0	0	0	2
1:00	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	2	0	0	2
6:00	0	0	0	0	0	1	0	0	0	1
7:00	0	0	0	0	3	4	4	0	0	11
8:00	0	0	0	4	5	13	5	1	0	28
9:00	0	0	1	1	9	21	6	0	0	38
10:00	0	0	1	2	10	18	7	0	0	38
11:00	0	0	0	1	10	15	6	1	0	33
12:00 PM	0	0	0	1	10	16	7	0	1	35
1:00	0	0	0	0	13	12	7	2	0	34
2:00	0	0	0	2	6	27	5	2	0	42
3:00	0	0	0	1	3	14	9	1	1	29
4:00	0	0	0	1	7	12	3	2	0	25
5:00	0	0	1	4	8	8	4	2	0	27
6:00	0	0	0	3	7	10	7	0	1	28
7:00	0	0	0	0	6	11	1	0	0	18
8:00	0	0	0	0	5	6	1	1	0	13
9:00	0	0	0	1	10	16	2	0	0	29
10:00	0	0	0	1	7	11	4	0	0	23
11:00	0	0	0	1	5	7	2	0	0	15
Total	0	0	3	23	125	223	82	12	3	471
Percent			Percentile	15th	50th	85th	95th			
			Speed	23	27	31	34			

Mean Speed (Average)	27.5
10 MPH Pace Speed	20-29
Number in Pace	344
Percent in Pace	73.0%
Number > 25 MPH	320
Percent > 25 MPH	67.9%

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: SB,

1/29/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	1	0	9	7	0	0	0	17
1:00	0	0	0	1	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	1	2	1	0	0	0	0	4
4:00	0	0	0	2	0	0	0	0	0	2
5:00	0	0	0	0	1	0	0	0	0	1
6:00	0	0	3	0	2	0	0	0	0	5
7:00	0	0	1	0	0	0	0	0	0	1
8:00	0	0	0	3	0	0	0	0	0	3
9:00	0	0	0	4	1	0	0	0	0	5
10:00	0	0	1	3	0	0	0	0	0	4
11:00	0	0	1	2	0	0	0	0	0	3
12:00 PM	0	0	0	4	0	0	0	0	0	4
1:00	0	0	0	3	0	0	0	0	0	3
2:00	0	0	1	5	0	0	0	0	0	6
3:00	0	0	1	1	0	0	0	0	0	2
4:00	0	0	2	4	0	0	0	0	0	6
5:00	0	0	1	0	0	1	0	0	0	2
6:00	0	0	1	1	0	0	0	0	0	2
7:00	0	0	1	1	0	0	0	0	0	2
8:00	0	0	1	2	1	0	0	0	0	4
9:00	0	0	0	2	2	0	0	0	0	4
10:00	0	0	0	1	0	1	0	0	0	2
11:00	0	0	0	0	1	0	0	0	0	1
Total	0	0	16	41	18	9	0	0	0	84
Percent			Percentile	15th	50th	85th	95th			
			Speed	15	20	25	29			

Mean Speed (Average)	18.7
10 MPH Pace Speed	14-23
Number in Pace	59
Percent in Pace	70.2%
Number > 25 MPH	9
Percent > 25 MPH	10.7%

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: SB,

1/30/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	1	0	0	0	0	1
5:00	0	0	0	0	0	0	0	0	0	0
6:00	0	0	2	1	1	0	0	0	0	4
7:00	0	0	1	0	2	0	0	0	0	3
8:00	0	1	1	0	3	0	0	0	0	5
9:00	0	1	1	0	8	1	0	0	0	11
10:00	0	0	1	3	3	1	0	0	0	8
11:00	0	0	0	7	8	3	0	0	0	18
12:00 PM	0	0	0	7	11	6	0	0	0	24
1:00	0	0	0	2	9	6	2	0	0	19
2:00	0	0	0	16	14	7	0	0	0	37
3:00	0	2	1	10	26	6	1	0	0	46
4:00	0	2	1	2	16	4	1	0	0	26
5:00	0	0	0	8	3	4	0	0	0	15
6:00	0	0	0	3	12	3	0	0	0	18
7:00	0	0	0	3	4	1	1	0	0	9
8:00	0	0	1	0	2	0	0	0	0	3
9:00	0	0	0	4	6	1	1	0	0	12
10:00	0	0	0	1	3	4	2	0	0	10
11:00	0	0	0	1	1	4	0	0	0	6
Total	0	6	9	68	133	51	8	0	0	275
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			

Mean Speed (Average)	21.9
10 MPH Pace Speed	15-24
Number in Pace	199
Percent in Pace	72.4%
Number > 25 MPH	59
Percent > 25 MPH	21.5%

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: SB,

1/31/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	1	0	0	0	1
5:00	0	0	0	0	0	1	0	0	0	1
6:00	0	0	0	0	0	1	0	0	0	1
7:00	0	1	1	1	4	1	1	0	0	9
8:00	0	1	0	3	5	4	0	0	0	13
9:00	0	0	2	7	13	0	1	0	0	23
10:00	0	0	2	8	10	6	0	0	0	26
11:00	0	2	0	4	16	8	0	0	0	30
12:00 PM	0	0	0	4	9	8	2	0	0	23
1:00	0	1	1	7	11	13	2	2	0	37
2:00	0	0	1	7	7	4	2	0	0	21
3:00	0	1	2	1	14	9	2	0	0	29
4:00	0	0	0	6	19	7	0	0	0	32
5:00	0	0	1	2	11	3	2	0	0	19
6:00	0	0	0	1	4	5	1	0	0	11
7:00	0	0	0	2	5	7	1	0	0	15
8:00	0	0	0	3	3	1	1	0	0	8
9:00	0	0	0	1	6	1	0	0	0	8
10:00	0	0	0	0	6	4	2	0	0	12
11:00	0	0	0	0	0	2	2	0	0	4
Total	0	6	10	57	143	86	19	2	0	323
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			

Mean Speed (Average)	23.1
10 MPH Pace Speed	20-29
Number in Pace	228
Percent in Pace	70.6%
Number > 25 MPH	107
Percent > 25 MPH	33.1%

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: SB,

2/1/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	1	0	1	0	0	0	2
6:00	0	0	0	0	1	1	0	0	0	2
7:00	0	1	0	2	10	3	0	0	0	16
8:00	0	0	1	0	5	13	1	0	0	20
9:00	0	0	0	4	11	7	7	1	0	30
10:00	0	0	1	2	10	10	3	0	0	26
11:00	0	0	1	4	12	10	0	0	0	27
12:00 PM	0	0	1	3	6	12	6	0	0	28
1:00	0	0	0	9	17	10	3	1	0	40
2:00	0	0	0	2	11	12	3	0	0	28
3:00	0	2	1	7	5	9	2	1	0	27
4:00	0	4	0	3	6	8	1	0	0	22
5:00	0	2	0	2	7	6	4	0	0	21
6:00	0	0	0	2	7	2	1	0	0	12
7:00	0	2	1	0	7	9	2	0	0	21
8:00	0	0	0	2	3	7	1	0	0	13
9:00	0	0	0	0	3	6	0	0	0	9
10:00	0	0	0	0	2	4	2	0	0	8
11:00	0	0	0	1	1	3	1	0	0	6
Total	0	11	6	44	124	133	37	3	0	358
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			
			Mean Speed (Average)	24.3						
			10 MPH Pace Speed	20-29						
			Number in Pace	255						
			Percent in Pace	71.2%						
			Number > 25 MPH	173						
			Percent > 25 MPH	48.3%						

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: SB,

2/2/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	1	0	0	0	1
6:00	0	1	0	0	1	3	0	0	0	5
7:00	0	0	0	2	4	4	2	0	0	12
8:00	0	0	1	3	6	6	3	2	0	21
9:00	0	1	1	0	11	10	6	0	0	29
10:00	0	0	0	3	10	18	7	1	0	39
11:00	0	1	0	2	13	9	5	0	0	30
12:00 PM	0	2	0	5	8	7	2	0	0	24
1:00	0	0	0	6	9	17	6	0	0	38
2:00	0	0	0	2	12	18	5	2	0	39
3:00	0	1	1	5	10	7	5	0	0	29
4:00	0	0	1	2	6	9	4	0	0	22
5:00	0	0	0	2	7	3	5	1	0	18
6:00	0	0	0	1	11	8	2	0	1	23
7:00	0	0	0	1	3	8	0	0	0	12
8:00	0	0	0	1	8	4	2	1	0	16
9:00	0	0	0	1	11	12	5	1	0	30
10:00	0	0	0	2	0	2	0	0	0	4
11:00	0	0	0	1	3	0	0	0	0	4
Total	0	6	4	39	133	146	59	8	1	396
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			

Mean Speed (Average)	25.7
10 MPH Pace Speed	20-29
Number in Pace	277
Percent in Pace	69.9%
Number > 25 MPH	214
Percent > 25 MPH	54.0%

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA
Direction: SB,

2/3/2022 Time	0 - 5 MPH	> 5 - 10 MPH	> 10 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	1	0	1
6:00	0	0	0	0	1	1	0	0	0	2
7:00	0	0	0	1	7	5	0	0	0	13
8:00	0	0	0	1	7	6	2	1	0	17
9:00	0	0	0	2	13	9	4	0	0	28
10:00	0	0	0	1	13	14	4	0	0	32
11:00	0	1	0	4	6	17	2	0	0	30
12:00 PM	0	0	1	0	5	10	5	0	0	21
1:00	0	0	0	4	7	12	3	1	0	27
2:00	0	0	0	1	7	15	7	1	1	32
3:00	0	0	0	0	7	9	6	0	1	23
4:00	0	0	0	1	2	17	4	0	0	24
5:00	0	0	0	1	8	8	2	0	0	19
6:00	0	0	0	2	7	4	2	0	0	15
7:00	0	0	0	4	12	13	1	0	0	30
8:00	0	0	0	3	8	10	2	0	0	23
9:00	0	0	0	0	10	9	2	1	0	22
10:00	0	0	0	1	4	3	0	0	0	8
11:00	0	0	0	0	1	5	1	0	0	7
Total	0	1	1	26	125	167	47	5	2	374
Percent			Percentile	15th	50th	85th	95th			
			Speed	0	0	0	0			
			Mean Speed (Average)	26.5						
			10 MPH Pace Speed	20-29						
			Number in Pace	289						
			Percent in Pace	77.3%						
			Number > 25 MPH	221						
			Percent > 25 MPH	59.1%						
Overall Stats			Percentile	15th	50th	85th	95th			
			Speed	22	27	30	34			
			Mean Speed (Average)	24.9						
			10 MPH Pace Speed	20-29						
			Number in Pace	1606						
			Percent in Pace	70.4%						
			Number > 25 MPH	1103						
			Percent > 25 MPH	48.4%						

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

1/24/2022	1/24/22	1/25/22	1/26/2022	1/27/2022	1/28/2022	1/29/2022	1/30/2022	Average	
Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon - Fri	Mon - Sun
12:00 AM	*	*	*	*	2	17	0	2	6
1:00	*	*	*	*	0	1	0	0	0
2:00	*	*	*	*	0	0	0	0	0
3:00	*	*	*	*	0	4	0	0	1
4:00	*	*	*	*	0	2	1	0	1
5:00	*	*	*	*	2	1	0	2	1
6:00	*	*	*	*	1	5	4	1	3
7:00	*	*	*	*	11	1	3	11	5
8:00	*	*	*	*	28	3	5	28	12
9:00	*	*	*	*	38	5	11	38	18
10:00	*	*	*	*	38	4	8	38	17
11:00	*	*	*	*	33	3	18	33	18
12:00 PM	*	*	*	*	35	4	24	35	21
1:00	*	*	*	*	34	3	19	34	19
2:00	*	*	*	*	42	6	37	42	28
3:00	*	*	*	*	29	2	46	29	26
4:00	*	*	*	*	25	6	26	25	19
5:00	*	*	*	*	27	2	15	27	15
6:00	*	*	*	*	28	2	18	28	16
7:00	*	*	*	*	18	2	9	18	10
8:00	*	*	*	*	13	4	3	13	7
9:00	*	*	*	*	29	4	12	29	15
10:00	*	*	*	*	23	2	10	23	12
11:00	*	*	*	*	15	1	6	15	7
Total	0	0	0	0	471	84	275	471	277
Percent	0.0%	0.0%	0.0%	0.0%	56.7%	10.1%	33.1%		
AM Peak					9:00	12:00 AM	11:00	9:00	9:00
Volume					38	17	18	38	18
PM Peak					2:00	2:00	3:00	2:00	2:00
Volume					42	6	46	42	28

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

1/31/2022	1/31/22	2/1/22	2/2/2022	2/3/2022	2/4/2022	2/5/2022	2/6/2022	Average	
Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon - Fri	Mon - Sun
12:00 AM	0	0	0	0	*	*	*	0	0
1:00	0	0	0	0	*	*	*	0	0
2:00	0	0	0	0	*	*	*	0	0
3:00	0	0	0	0	*	*	*	0	0
4:00	1	0	0	0	*	*	*	0	0
5:00	1	2	1	1	*	*	*	1	1
6:00	1	2	5	2	*	*	*	2	2
7:00	9	16	12	13	*	*	*	12	12
8:00	13	20	21	17	*	*	*	18	18
9:00	23	30	29	28	*	*	*	28	28
10:00	26	26	39	32	*	*	*	31	31
11:00	30	27	30	30	*	*	*	29	29
12:00 PM	23	28	24	21	*	*	*	24	24
1:00	37	40	38	27	*	*	*	36	36
2:00	21	28	39	32	*	*	*	30	30
3:00	29	27	29	23	*	*	*	27	27
4:00	32	22	22	24	*	*	*	25	25
5:00	19	21	18	19	*	*	*	19	19
6:00	11	12	23	15	*	*	*	15	15
7:00	15	21	12	30	*	*	*	20	20
8:00	8	13	16	23	*	*	*	15	15
9:00	8	9	30	22	*	*	*	17	17
10:00	12	8	4	8	*	*	*	8	8
11:00	4	6	4	7	*	*	*	5	5
Total	323	358	396	374	0	0	0	362	362
Percent	22.3%	24.7%	27.3%	25.8%	0.0%	0.0%	0.0%		
AM Peak	11:00	9:00	10:00	10:00				10:00	10:00
Volume	30	30	39	32				31	31
PM Peak	1:00	1:00	2:00	2:00				1:00	1:00
Volume	37	40	39	32				36	36

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

2/7/2022	2/7/22	2/8/22	2/9/2022	2/10/2022	2/11/2022	2/12/2022	2/13/2022	Average	
Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon - Fri	Mon - Sun

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	1/28/2022	SB,		Hour Totals	
Time	Friday	Morning	Afternoon	Morning	Afternon
12:00		1	9		
12:15		1	7		
12:30		0	8		
12:45		0	11	2	35
1:00		0	6		
1:15		0	10		
1:30		0	12		
1:45		0	6	0	34
2:00		0	11		
2:15		0	5		
2:30		0	13		
2:45		0	13	0	42
3:00		0	10		
3:15		0	8		
3:30		0	6		
3:45		0	5	0	29
4:00		0	4		
4:15		0	12		
4:30		0	3		
4:45		0	6	0	25
5:00		0	6		
5:15		0	11		
5:30		2	5		
5:45		0	5	2	27
6:00		0	9		
6:15		1	8		
6:30		0	9		
6:45		0	2	1	28
7:00		2	6		
7:15		0	7		
7:30		3	2		
7:45		6	3	11	18
8:00		4	5		
8:15		10	2		
8:30		5	5		
8:45		9	1	28	13
9:00		9	7		
9:15		7	2		
9:30		12	12		
9:45		10	8	38	29
10:00		8	2		
10:15		12	13		
10:30		8	1		
10:45		10	7	38	23
11:00		7	5		
11:15		4	4		
11:30		7	4		
11:45		15	2	33	15
Total		153	318		
Percent		32.5%	67.5%		

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	1/29/2022	SB,		Hour Totals	
Time	Saturday	Morning	Afternoon	Morning	Afternon
12:00		4	0		
12:15		8	2		
12:30		3	1		
12:45		2	1	17	4
1:00		0	2		
1:15		0	0		
1:30		0	1		
1:45		1	0	1	3
2:00		0	3		
2:15		0	1		
2:30		0	0		
2:45		0	2	0	6
3:00		0	1		
3:15		1	0		
3:30		2	0		
3:45		1	1	4	2
4:00		1	1		
4:15		0	3		
4:30		1	2		
4:45		0	0	2	6
5:00		0	1		
5:15		1	1		
5:30		0	0		
5:45		0	0	1	2
6:00		3	2		
6:15		0	0		
6:30		2	0		
6:45		0	0	5	2
7:00		0	1		
7:15		1	0		
7:30		0	0		
7:45		0	1	1	2
8:00		0	1		
8:15		1	2		
8:30		2	1		
8:45		0	0	3	4
9:00		1	1		
9:15		1	1		
9:30		2	0		
9:45		1	2	5	4
10:00		2	1		
10:15		1	0		
10:30		1	0		
10:45		0	1	4	2
11:00		1	0		
11:15		0	0		
11:30		2	1		
11:45		0	0	3	1
Total		46	38		
Percent		54.8%	45.2%		

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	1/30/2022	SB,		Hour Totals	
Time	Sunday	Morning	Afternoon	Morning	Afternon
12:00		0	6		
12:15		0	4		
12:30		0	6		
12:45		0	8	0	24
1:00		0	5		
1:15		0	4		
1:30		0	7		
1:45		0	3	0	19
2:00		0	11		
2:15		0	6		
2:30		0	12		
2:45		0	8	0	37
3:00		0	7		
3:15		0	26		
3:30		0	5		
3:45		0	8	0	46
4:00		0	4		
4:15		0	12		
4:30		1	5		
4:45		0	5	1	26
5:00		0	7		
5:15		0	3		
5:30		0	2		
5:45		0	3	0	15
6:00		3	2		
6:15		1	6		
6:30		0	5		
6:45		0	5	4	18
7:00		0	1		
7:15		1	1		
7:30		1	3		
7:45		1	4	3	9
8:00		3	1		
8:15		1	0		
8:30		1	2		
8:45		0	0	5	3
9:00		4	4		
9:15		4	3		
9:30		0	0		
9:45		3	5	11	12
10:00		0	6		
10:15		0	3		
10:30		5	1		
10:45		3	0	8	10
11:00		4	0		
11:15		3	4		
11:30		5	2		
11:45		6	0	18	6
Total		50	225		
Percent		18.2%	81.8%		

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	1/31/2022	SB,		Hour Totals	
Time	Monday	Morning	Afternoon	Morning	Afternon
12:00		0	8		
12:15		0	1		
12:30		0	11		
12:45		0	3	0	23
1:00		0	8		
1:15		0	8		
1:30		0	12		
1:45		0	9	0	37
2:00		0	7		
2:15		0	4		
2:30		0	4		
2:45		0	6	0	21
3:00		0	5		
3:15		0	7		
3:30		0	10		
3:45		0	7	0	29
4:00		0	9		
4:15		0	8		
4:30		1	7		
4:45		0	8	1	32
5:00		0	2		
5:15		0	2		
5:30		1	10		
5:45		0	5	1	19
6:00		0	1		
6:15		1	6		
6:30		0	3		
6:45		0	1	1	11
7:00		2	6		
7:15		0	3		
7:30		5	2		
7:45		2	4	9	15
8:00		2	2		
8:15		3	2		
8:30		3	1		
8:45		5	3	13	8
9:00		6	0		
9:15		5	4		
9:30		5	0		
9:45		7	4	23	8
10:00		7	2		
10:15		5	3		
10:30		6	3		
10:45		8	4	26	12
11:00		7	0		
11:15		8	2		
11:30		8	2		
11:45		7	0	30	4
Total		104	219		
Percent		32.2%	67.8%		

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	2/1/2022	SB,		Hour Totals	
Time	Tuesday	Morning	Afternoon	Morning	Afternon
12:00		0	6		
12:15		0	11		
12:30		0	4		
12:45		0	7	0	28
1:00		0	14		
1:15		0	8		
1:30		0	7		
1:45		0	11	0	40
2:00		0	12		
2:15		0	7		
2:30		0	4		
2:45		0	5	0	28
3:00		0	7		
3:15		0	2		
3:30		0	7		
3:45		0	11	0	27
4:00		0	10		
4:15		0	3		
4:30		0	4		
4:45		0	5	0	22
5:00		0	7		
5:15		0	5		
5:30		1	3		
5:45		1	6	2	21
6:00		0	5		
6:15		1	3		
6:30		1	2		
6:45		0	2	2	12
7:00		4	5		
7:15		1	4		
7:30		6	6		
7:45		5	6	16	21
8:00		2	2		
8:15		8	1		
8:30		4	4		
8:45		6	6	20	13
9:00		8	1		
9:15		5	2		
9:30		10	6		
9:45		7	0	30	9
10:00		4	3		
10:15		7	0		
10:30		7	3		
10:45		8	2	26	8
11:00		4	3		
11:15		8	2		
11:30		5	0		
11:45		10	1	27	6
Total		123	235		
Percent		34.4%	65.6%		

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

	2/2/2022	SB,		Hour Totals	
Time	Wednesday	Morning	Afternoon	Morning	Afternon
12:00		0	5		
12:15		0	8		
12:30		0	5		
12:45		0	6	0	24
1:00		0	8		
1:15		0	9		
1:30		0	11		
1:45		0	10	0	38
2:00		0	8		
2:15		0	10		
2:30		0	11		
2:45		0	10	0	39
3:00		0	4		
3:15		0	8		
3:30		0	11		
3:45		0	6	0	29
4:00		0	8		
4:15		0	6		
4:30		0	5		
4:45		0	3	0	22
5:00		0	3		
5:15		0	4		
5:30		1	4		
5:45		0	7	1	18
6:00		1	10		
6:15		1	5		
6:30		2	4		
6:45		1	4	5	23
7:00		0	3		
7:15		2	6		
7:30		6	3		
7:45		4	0	12	12
8:00		2	5		
8:15		5	6		
8:30		7	3		
8:45		7	2	21	16
9:00		7	9		
9:15		8	11		
9:30		6	3		
9:45		8	7	29	30
10:00		14	1		
10:15		9	1		
10:30		7	1		
10:45		9	1	39	4
11:00		8	2		
11:15		8	0		
11:30		4	0		
11:45		10	2	30	4
Total		137	259		
Percent		34.6%	65.4%		

Location : Weathervane Drive SB 91240001
Location : North of Liberty Street
City/State: Weymouth, MA

Time	2/3/2022 Thursday	SB, Morning	Afternoon	Hour Totals Morning	Afternon
12:00		0	6		
12:15		0	3		
12:30		0	5		
12:45		0	7	0	21
1:00		0	7		
1:15		0	7		
1:30		0	5		
1:45		0	8	0	27
2:00		0	12		
2:15		0	7		
2:30		0	5		
2:45		0	8	0	32
3:00		0	9		
3:15		0	2		
3:30		0	3		
3:45		0	9	0	23
4:00		0	5		
4:15		0	5		
4:30		0	9		
4:45		0	5	0	24
5:00		0	3		
5:15		0	7		
5:30		1	4		
5:45		0	5	1	19
6:00		0	7		
6:15		1	4		
6:30		1	2		
6:45		0	2	2	15
7:00		0	8		
7:15		4	8		
7:30		3	8		
7:45		6	6	13	30
8:00		6	6		
8:15		6	3		
8:30		0	9		
8:45		5	5	17	23
9:00		8	7		
9:15		8	5		
9:30		5	2		
9:45		7	8	28	22
10:00		5	2		
10:15		6	2		
10:30		14	2		
10:45		7	2	32	8
11:00		12	5		
11:15		8	2		
11:30		2	0		
11:45		8	0	30	7
Total		123	251		
Percent		32.9%	67.1%		
Grand Total		736	1545		
Percent		32.3%	67.7%		
ADT		ADT: 326		AADT: 326	

Empirical Data Calculation from Weathervane ATR

During the Peak Hour AM (between 7-9 AM)

	Enter	Exit	Total
Tuesday 2/1	16	20	36
Wednesday 2/2	7	21	28
Thursday 2/3	11	17	28
Average	**11**	**19**	**30**

During the Peak Hour PM (between 4-6 PM)

	Enter	Exit	Total
Tuesday 2/1	32	22	54
Wednesday 2/2	43	22	65
Thursday 2/3	42	24	68
Average	**39**	**23**	**62**

Daily Trips: 376 trips

All for 150 homes

Average Rates

Average Weekday: 376 trips/150 homes = 2.51 trips per home
Weekday Morning Peak-Hour: 30 trips/150 homes = 0.20 trips per home (37% enter/63% exit)
Weekday Evening Peak-Hour: 62 trips/150 homes = 0.41 trips per home (63% enter/37% exit)

SEASONAL ADJUSTMENT DATA

Massachusetts Highway Department
Statewide Traffic Data Collection
2019 Weekday Seasonal Factors

Factor Group	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Axle Factor
R1	1.22	1.14	1.12	1.06	1.00	0.96	0.87	0.85	0.96	0.99	1.04	1.12	0.85
R2	0.95	0.96	0.98	0.97	0.97	0.93	0.97	0.94	0.96	0.90	0.92	0.93	0.96
R3	1.15	1.06	1.07	1.00	0.89	0.88	0.89	0.89	0.95	0.92	1.02	1.01	0.97
R4-R7	1.09	1.09	1.11	1.02	0.96	0.92	0.89	0.89	0.99	0.98	1.09	1.13	0.98
U1-Boston	1.03	1.01	0.98	0.94	0.94	0.92	0.95	0.93	0.94	0.94	0.97	1.04	0.96
U1-Essex	1.09	1.06	1.03	0.99	0.94	0.90	0.88	0.86	0.93	0.94	0.99	1.06	0.93
U1-Southeast	1.06	1.05	1.01	0.97	0.95	0.93	0.93	0.90	0.94	0.94	0.98	1.04	0.98
U1-West	1.19	1.14	1.09	0.95	0.92	0.89	0.89	0.86	0.91	0.95	0.97	1.07	0.84
U1-Worcester	1.02	1.04	0.97	0.94	0.93	0.91	0.95	0.91	0.93	0.92	0.95	1.10	0.88
U2	1.01	1.00	0.94	0.93	0.91	0.89	0.93	0.90	0.90	0.91	0.94	1.02	0.99
U3	1.06	1.03	0.98	0.94	0.93	0.91	0.95	0.91	0.92	0.93	0.97	1.00	0.98
U4-U7	1.01	1.00	0.95	0.92	0.88	0.86	0.92	0.91	0.92	0.94	0.99	1.04	0.99
Rec - East	1.04	1.16	1.12	0.98	0.92	0.88	0.77	0.81	0.94	1.02	1.08	1.12	0.99
Rec - West	1.30	1.23	1.32	1.18	0.95	0.82	0.70	0.69	0.97	0.96	1.16	1.15	0.98

Round off:
0-999 = 10
>1000 = 100

U = Urban
R = Rural

1 - Interstate
2 - Freeway and Expressway
3 - Other Principal Arterial
4 - Minor Arterial
5 - Major Collector
6 - Minor Collector
7 - Local Road and Street

Recreational - East Group - Cape Cod (all towns) including the town of Plymouth south of Route 3A (stations 7014,7079,7080,7090,7091,7092,7093,7094,7095,7096,7097,7108 and 7178), Martha's Vineyard and Nantucket.

Recreational - West Group - Continuous Stations 2 and 189 including stations 1066,1067,1083,1084,1085,1086,1087,1088,1089,1090,1091,1092,1093,1094,1095,1096,1097,1098,1099,1100,1101,1102,1103,1104,1105,1106,1107,1108,1113,1114,1116,2196,2197 and 2198.

9/14/2021

COVID ADJUSTMENT

2018 Average Count Data – Sta. 6255

January ADT: 122,041
February ADT: 126,174

Growth Rate (2018-2019): -0.4% [MassDOT Yearly Growth Rates (U4-7)]

Adjusted 2019 Calculations
$122{,}041 \times (1 - 0.004) = 121{,}553$
$126{,}174 \times (1 - 0.004) = 125{,}669$

Adjusted January ADT: 121,553
Adjusted February ADT: 125,669

2022 Average Count Data – Sta. 6255

January ADT: 110,689
February ADT: 118,564

COVID Adjustment

$$1 - \frac{110{,}689}{121{,}553} = 0.08937$$

$$1 - \frac{118{,}564}{125{,}669} = 0.05653$$

January COVID Adjustment: 8.9%
February COVID Adjustment: 5.7%

MassDOT Yearly Growth Rates

for data from 2014 to 2018

Growth Group	Grow 2014 to 2015	Grow 2015 to 2016	Grow 2016 to 2017	Grow 2017 to 2018	Grow 2018 to 2019
R1	0	0.023	0.004	0.018	0.016
R2	0.05	0.068	0.004	0.014	0.014
R3	-0.038	0.002	0.008	0.011	0.06
R4-7	-0.01	0.003	0.001	0.011	0.012
Rec - East		0.032	0.02	0.041	0.025
Rec - West		0.051	-0.008	0.029	0
U1-Boston	0.061	0.07	-0.003	0.012	0.006
U1-Essex	0.024	0.025	0.007	0.014	0.011
U1-Southeast	0.05	0.062	0.021	0.014	0
U1-West	0.03	-0.027	0.02	0.028	0.013
U1-Worcester	0.042	0.005	0.018	0.01	0.01
U2	0.04	0.048	0.008	0.01	0.02
U3	0.011	0.013	0.011	0.014	0.004
U4-7	0.023	0.062	0.017	0.003	-0.004

updated 5/1/2020

Massachusetts Highway Department

6255: Monthly Hourly Volume for January 2018

Location ID:	**6255**	**Seasonal Factor Group:**	**UR2**
County:	**Norfolk**	**Daily Factor Group:**	
Functional Class	**2**	**Axle Factor Group:**	**UR2**
Location:	**PILGRIM HIGHWAY**	**Growth Factor Group:**	

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	TOTAL	QC Status
1	1987	2286	1327	1082	789	952	1603	1778	2253	3324	4945	6473	7415	7349	7301	7083	6410	5613	4727	3935	3212	2399	1986	1491	87720	Accepted
2	890	498	398	591	1935	6166	7733	8488	8180	7473	7117	7147	7354	6610	8173	8287	8269	8458	7318	5557	4250	3377	2516	1796	128581	Accepted
3	1021	674	557	635	2040	6504	8194	8244	8277	8640	8042	8091	8082	8147	8585	8244	8503	8827	6536	7115	5776	4364	3436	2628	141162	Accepted
4																										
5	562	367	368	493	1209	3634	5190	5978	6321	5980	5731	5921	6051	6443	7126	6989	7133	7536	6417	4402	3963	3244	3057	2226	106341	Accepted
6	1357	945	685	587	955	2061	2901	4018	5059	5990	6766	7543	7489	7750	7919	7691	7461	6738	5942	4752	3819	3581	3539	2616	108164	Accepted
7	1723	1119	774	631	677	1077	2139	2567	3464	4727	5835	6695	7646	7531	7258	7289	6964	6369	5508	4579	3686	2722	2063	1705	94748	Accepted
8	1032	686	484	641	2027	6415	7803	7993	8171	7789	6888	6804	7081	7343	7956	8146	8134	8007	6880	5876	4457	3221	2395	1733	127962	Accepted
9	1037	585	479	586	1962	6245	7652	8034	7543	7964	7202	7179	7505	7453	8133	8526	8382	8485	7531	6130	5073	3699	2633	1833	131851	Accepted
10	1091	600	458	590	2187	6342	8060	8443	8287	7907	7291	7398	7220	7643	8215	8333	8249	8484	7596	6536	5268	3963	2796	2071	135028	Accepted
11																										
12	1274	770	565	642	1830	5817	7557	8643	8404	7479	7485	7760	7596	7862	7965	8176	8118	8137	7550	6153	5001	3895	3569	2668	134916	Accepted
13	1673	1105	787	605	882	1859	3028	4066	5485	6663	7574	7938	8292	8142	8328	8205	7842	7298	6331	4993	3839	2944	2921	3120	113920	Accepted
14	3069	1722	995	545	732	1102	2051	2751	3875	5527	6656	7882	8312	8149	7804	7600	7416	7131	6008	4741	4321	3500	2783	2040	106712	Accepted
15	1196	610	496	681	1891	4418	5673	6344	6378	6595	7376	7862	7979	7627	8056	8460	8027	7930	6148	4773	3860	2997	2339	1345	119061	Accepted
16	1128	745	412	562	1953	6202	6860	7135	7234	8080	7437	7550	7537	7720	8408	8580	8449	8638	7435	6082	4676	3600	2775	2132	131330	Accepted
17	1084	580	478	699	1896	5336	6860	7641	6695	5693	5340	5413	5652	5992	7114	7491	7693	7887	6242	5087	4176	3215	2782	2070	113116	Accepted
18	1141	688	430	617	1947	6564	7938	8061	8463	8222	7640	7707	7582	7808	8491	8492	8636	8507	7482	6159	4973	4142	3272	2181	137143	Accepted
19	1435	973	699	716	2044	6165	8202	8851	8760	7795	7580	7841	7761	7777	8733	8690	8526	8640	7966	5968	4824	4154	3505	2718	140323	Accepted
20	1632	1144	705	637	975	2269	3465	4658	5905	6965	7948	8629	8939	8453	8759	8812	8357	7982	7066	5443	4580	3955	3691	2793	123762	Accepted
21	1776	1448	952	556	577	932	2052	2904	3999	5754	7030	7964	8355	8657	8688	6491	5175	4486	5161	5783	4570	3163	2209	1449	100131	Accepted
22	818	593	422	524	2067	6370	7601	7980	7864	7518	6804	7116	7307	7205	7940	8102	7951	8078	7122	5328	4206	3217	2370	1612	126115	Accepted
23	884	541	412	584	1875	6143	7824	8215	7897	7397	7107	6826	6937	6943	7572	7661	7935	8114	7351	5749	4469	3451	2869	1974	126730	Accepted
24	906	512	430	556	1909	6441	7281	8251	8371	7792	7371	7475	7433	7818	8349	8555	8278	8494	7714	6225	5036	3869	2710	1881	133657	Accepted
25	1059	613	627	769	1971	6445	8159	8873	8446	7942	7447	7584	7441	7914	8418	8055	8306	8630	7633	6003	4919	4429	3122	2109	136914	Accepted
26	1287	915	559	804	1983	6094	7908	8713	8397	7842	7564	7727	7871	8100	8644	8045	8219	8578	7705	5929	4935	4070	3565	2707	138161	Accepted
27	1722	1095	807	614	882	2159	3396	4557	5929	7060	8044	8690	8708	8843	8742	8732	8411	7800	7035	5416	4136	3701	3706	2859	123044	Accepted
28	1951	1244	835	520	565	905	1832	2525	3531	5015	6441	7707	8345	8208	8164	8022	7640	7070	5775	4863	4025	2884	2101	1540	101708	Accepted
29	852	516	391	581	2053	6128	8068	8622	8477	7457	7022	6883	6887	7188	8086	8324	8232	8222	6948	5209	4203	3172	2211	1606	127338	Accepted
30	912	560	451	650	1571	5396	5903	5793	5932	5954	5094	5465	5631	6015	7290	7678	7633	7714	6479	4856	3998	3181	2674	1716	108546	Accepted
31	993	681	614	761	2151	6367	8061	8338	8040	7868	7517	7368	6882	7764	8283	8343	8169	8434	7654	6485	5106	3885	3040	2205	135009	Accepted
																									122041.1	**Jan 2018 ADT**

Massachusetts Highway Department

6255: Monthly Hourly Volume for January 2022

Location ID:	**6255**	**Seasonal Factor Group:**	**UR2**
County:	**Norfolk**	**Daily Factor Group:**	
Functional Class	**2**	**Axle Factor Group:**	**UR2**
Location:	**PILGRIM HIGHWAY**	**Growth Factor Group:**	

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	TOTAL	QC Status
1	1308	1252	835	598	549	807	1276	1663	2087	3132	4633	6049	6553	6672	6576	6350	5876	5159	4168	3281	2652	2057	1667	1144	76344	Accepted
2	696	450	339	332	447	885	1592	2072	2998	4550	6224	7567	8060	7678	7181	6969	6786	6110	4639	3537	2534	2042	1318	931	85937	Accepted
3	517	380	316	458	2023	4847	6373	7155	6579	6124	6442	6695	6886	7362	8376	8648	7894	7144	5184	3893	2719	1965	1351	1052	110383	Accepted
4	536	366	315	541	1986	5187	6858	8071	7190	6574	6507	6680	6914	7392	8679	9036	8819	8171	6075	4199	3279	2281	1923	1219	118798	Accepted
5	558	364	316	508	1961	4858	6651	8196	7233	6486	6637	6683	6903	7510	8214	8746	8190	7569	6019	4207	3138	2344	1642	1146	116079	Accepted
6	585	363	345	561	1935	5038	6794	8202	7376	6689	7095	6980	7226	7889	8842	9138	9559	9021	6947	5393	3927	3011	2295	1521	126732	Accepted
7	794	558	446	673	1776	2548	2684	2425	2340	2053	2061	2452	2989	3730	4363	4919	4600	4657	3726	2848	2143	1793	1604	1167	59349	Accepted
8	684	389	340	373	793	1709	2524	3642	4628	5712	6929	8225	8355	8436	7917	7843	7318	6414	4978	4259	3172	2608	2437	1676	101361	Accepted
9	995	690	462	405	445	943	1767	2276	3030	4234	6071	6904	7496	7650	7217	7440	6187	5156	4085	3426	3022	1969	1276	913	84059	Accepted
10	546	338	316	476	1972	5153	6841	8292	7416	6308	6271	6485	6788	7221	8552	8942	8713	8124	6082	4314	3126	2174	1537	1206	117193	Accepted
11	612	364	273	436	1896	4898	6399	7971	7065	6402	6311	6297	6547	7192	8268	8613	8604	8159	5756	4154	3383	2229	1556	1223	114608	Accepted
12	632	364	329	460	1903	5107	7005	8428	7783	6893	6633	6907	7148	7544	8480	9351	9231	8166	6794	4740	3599	2578	2131	1361	123567	Accepted
13	600	331	309	512	1994	5176	6992	8494	7784	7034	7051	7196	7479	7919	9187	9415	9456	8992	6676	5074	3681	2705	2346	1411	127814	Accepted
14	715	397	309	523	1947	4804	6555	8026	7440	6792	7363	7374	7941	8160	9367	9677	9116	8460	6730	4969	3887	2977	2373	1761	127663	Accepted
15	1045	622	414	419	732	1496	2429	3579	4743	6438	7826	8742	8708	8627	8487	8084	7571	6922	5378	4272	3169	2427	2217	2066	106413	Accepted
16	1234	696	512	390	441	877	1857	2473	3503	4861	6506	7906	8361	8128	7685	7976	7208	6391	5244	4338	3407	2519	1691	1217	95421	Accepted
17	616	389	311	427	1368	3093	3851	4705	4809	4970	5923	6583	7317	7768	8606	8149	8259	7122	5212	4147	3132	2138	1445	1106	101446	Accepted
18	542	311	297	499	2063	5457	7364	8692	8025	7002	6670	6829	7139	7714	8487	8781	9210	8830	7027	4870	3672	2469	2012	1304	125266	Accepted
19	575	350	286	499	2037	5317	7381	8817	8021	7311	6791	7164	7369	7393	8594	9319	9271	9158	7001	4961	3877	2700	1973	1414	127579	Accepted
20	586	404	339	610	2116	5027	6462	8338	7518	6614	6575	6574	6830	7617	8937	9499	9048	8792	6566	5059	3605	2849	2302	1418	123685	Accepted
21	732	400	335	526	1999	4951	6734	8252	7692	6816	7043	7248	7681	8193	9121	9590	9214	9012	7192	5161	4160	2945	2556	2001	129554	Accepted
22	995	653	437	436	817	1734	2705	3709	5037	6337	7654	8257	9072	8748	8847	8328	7566	7045	5754	4709	3685	2940	2415	1869	109749	Accepted
23	1053	794	546	389	442	871	1612	2312	3308	5065	6710	8049	8580	9059	8381	7988	7490	6641	5494	4624	3301	2288	1604	1016	97617	Accepted
24	518	373	307	501	2029	5385	7294	8671	7678	6513	6553	6529	7033	7379	8740	9051	8795	8559	6379	4396	3305	2330	1907	1117	121342	Accepted
25	583	360	315	514	2090	5341	7243	8628	7826	7162	6725	6694	7275	7561	8840	9349	9384	8573	6911	4692	3704	2563	1895	1263	125491	Accepted
26	607	331	278	510	2118	5379	7623	8785	8071	7315	6848	7038	7442	8071	9017	9370	9217	9154	7281	5330	3983	2763	1908	1342	129781	Accepted
27	609	358	317	547	2153	5484	7437	8256	8227	6219	5719	6640	7232	7989	9156	9439	9128	9167	7721	5478	4372	3146	2142	1633	128569	Accepted
28	788	455	378	579	2052	5104	6992	8351	8140	7563	7615	8015	8160	8923	9535	9602	9470	8862	7214	5420	4036	3271	2561	1842	134928	Accepted
29																										
30	235	201	187	174	302	658	1116	1327	1749	2430	3217	4100	4741	5457	5420	5228	4939	4381	3857	3293	2642	1940	1412	1195	60201	Accepted
31	721	480	429	627	2095	5153	6124	6576	7159	5764	6261	6254	6411	6842	8184	8057	8254	8193	6454	4653	3537	2419	1819	1262	113728	Accepted
																									110688.6	**Jan 2022 ADT**

Massachusetts Highway Department
6255: Monthly Hourly Volume for February 2018

Location ID:	**6255**	**Seasonal Factor Group:**	**UR2**
County:	**Norfolk**	**Daily Factor Group:**	
Functional Class	**2**	**Axle Factor Group:**	**UR2**
Location:	**PILGRIM HIGHWAY**	**Growth Factor Group:**	

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	TOTAL	QC Status
1	1096	626	478	626	1993	6538	8093	8786	8536	7925	7483	7357	7558	7715	8663	8703	8700	8756	7370	5988	5003	3996	3386	2277	137652	Accepted
2																										
3	1647	1151	747	643	1010	2108	3433	4539	6092	6926	7894	8386	8504	8490	8537	8465	8190	7734	6712	5121	4225	3840	3693	2750	120837	Accepted
4	1709	1179	772	574	498	999	1890	2592	3648	5095	6106	7052	7208	7237	7257	7207	6940	6047	3513	1910	1951	1691	4378	4154	91607	Accepted
5	1256	604	385	536	1739	5810	7793	8301	8427	7467	7265	6869	7147	7214	7952	8450	8147	8100	7278	5261	4184	3214	2425	1746	127570	Accepted
6	1100	572	368	631	2060	6540	8476	8730	8391	7961	7193	7177	7273	7449	8382	8858	8457	8529	7536	5987	4678	3862	2719	1923	134852	Accepted
7	1093	594	551	761	1979	6343	8095	9028	8000	7269	6777	6346	6411	6147	6633	6923	7126	7312	6008	4530	3886	2987	2332	1812	118943	Accepted
8	951	555	436	647	1927	6193	6163	8491	8415	7704	7377	7406	7498	7673	8378	8575	8277	8806	7703	6296	5196	4224	3056	2203	134150	Accepted
9	1257	742	590	813	2001	6056	7859	9162	8516	7588	7569	7633	8201	8326	8641	8419	8780	8765	7646	5923	4826	3947	3721	2866	139847	Accepted
10	1662	1046	735	610	886	2110	3631	4678	5898	7038	7796	8515	8911	8720	8713	8584	8358	8018	7006	5450	4609	4054	3693	2880	123601	Accepted
11	1852	1222	810	488	484	1010	2077	2155	3437	5009	6489	7635	8080	8145	7953	7473	7151	6631	5742	4687	4021	2856	2104	1420	98931	Accepted
12	806	531	360	569	2041	6466	7936	8338	8625	7503	7133	6956	6850	7242	8216	8502	8192	8404	7374	5852	4487	3612	2778	1999	130772	Accepted
13	1010	639	437	615	2051	6296	8179	8520	8633	7682	7204	7191	7321	7743	8466	8779	8875	8772	7463	5913	4941	3936	3100	2006	135772	Accepted
14	1112	574	432	598	1931	6419	8406	8891	8463	7775	7426	7273	7381	7741	8071	8327	8242	8930	7747	5962	4731	3791	2854	2233	135310	Accepted
15	1257	648	532	662	2048	6405	8280	8462	6843	8517	7353	7610	7270	7634	8662	8835	8497	8553	7462	6163	5194	4204	2706	2040	135837	Accepted
16	1216	770	483	673	1823	5842	7605	8715	8368	7543	7228	7620	7779	8432	8706	9188	8616	8544	7688	6183	4741	4114	3448	2559	137884	Accepted
17	1581	1086	736	644	997	2066	3286	4567	5901	7218	8156	8625	8803	8737	8954	8676	8292	7853	6926	5310	4098	3667	2947	2358	121484	Accepted
18	1555	955	705	591	536	841	1775	2229	3133	4376	5831	6969	7416	7755	7370	7392	7070	6687	5882	4771	3906	3168	2420	1825	95158	Accepted
19	1114	768	487	580	1164	2746	4813	5771	5867	6502	7433	7982	8244	8122	8346	8353	8074	7420	6256	5081	3717	2898	2487	1657	115882	Accepted
20	876	594	436	605	1919	6321	7983	8718	8226	7886	7754	7921	7689	7970	8441	8599	8656	8795	7746	5908	4568	3593	2577	1817	135598	Accepted
21	1042	611	350	623	1935	6111	7788	8884	8261	8080	8032	8079	7785	8181	8629	8872	8820	8828	7655	6058	5098	3975	2909	1993	138599	Accepted
22	1077	631	401	611	1882	6093	7718	8843	8402	7987	7974	7906	7851	7952	8284	8033	8324	8178	7110	5942	4876	3911	2954	2090	135030	Accepted
23	1258	728	530	666	1810	5566	7201	8485	8246	7710	7496	8059	8440	8310	8298	8193	8517	8235	7369	5922	4712	3937	3508	2515	135711	Accepted
24	1665	1179	773	642	876	1933	3276	4407	5901	7123	7799	8779	9052	8940	8460	8735	8390	7885	6970	5504	4781	3937	3639	2749	123395	Accepted
25	1841	1222	817	566	556	926	1956	2523	3415	5028	6243	7204	7781	7599	7727	7832	7131	6533	5575	4602	3720	2751	2097	1378	97023	Accepted
26	775	538	403	585	2125	6574	7859	8934	8378	7474	7228	7084	7206	7273	8301	8716	8146	8418	7314	5459	4564	3413	2812	1696	131275	Accepted
27	1052	590	440	590	2074	6586	8260	8413	8136	7855	7283	7337	7404	7626	8840	8756	8668	8741	7427	6239	4822	3767	3190	2063	136159	Accepted
28	1053	660	368	653	2048	6543	8451	8951	8260	7803	7350	7163	6889	7715	8563	8612	8650	9134	7828	6441	5415	4024	3246	2001	137821	Accepted
																									126174.1	**Feb 2018 ADT**

Massachusetts Highway Department
6255: Monthly Hourly Volume for February 2022

Location ID:	**6255**	**Seasonal Factor Group:**	**UR2**
County:	**Norfolk**	**Daily Factor Group:**	
Functional Class	**2**	**Axle Factor Group:**	**UR2**
Location:	**PILGRIM HIGHWAY**	**Growth Factor Group:**	

	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	TOTAL	QC Status
1	670	483	365	619	2186	5729	7115	8099	8086	7265	6588	6575	6881	7278	8515	9148	8614	8566	7023	5006	3921	2622	2206	1366	124926	Accepted
2	644	375	323	531	2171	5451	7638	8719	8134	6903	6795	6817	7142	7672	8835	8431	8496	8929	7377	5459	4079	2977	2260	1441	127599	Accepted
3	684	428	371	546	2187	5506	7566	8626	8239	7200	6860	7087	7454	8028	8883	9029	8825	8666	7309	5950	4511	3249	2146	1485	130835	Accepted
4	738	468	397	599	1923	4288	5188	5855	5610	4824	4940	4948	5360	5338	5392	5273	4570	4052	3338	2308	1809	1556	1449	1111	81334	Accepted
5	706	494	352	374	844	1838	2631	3739	4983	6381	7550	8555	8292	9173	8528	8367	8126	7639	6203	4688	3918	3155	2891	2159	111586	Accepted
6	1293	780	558	455	437	1004	1862	2477	3538	5092	6913	7962	8715	8734	8485	8544	8036	7367	6035	4808	3727	2439	1559	1158	101978	Accepted
7	575	349	303	534	2128	5152	7307	8544	7632	6844	6491	6495	6711	7337	8053	8628	8626	7930	6906	4643	3452	2434	1679	1270	120023	Accepted
8	633	361	298	511	2162	5442	6873	7538	7712	6335	6539	6934	7070	7610	8888	9446	9432	8614	7451	5058	3905	2746	2330	1355	125243	Accepted
9	610	378	282	532	2239	5578	7744	6170	8032	7522	6704	6967	7625	8325	8899	9446	9137	9154	7646	5470	4143	3117	2024	1353	129097	Accepted
10	648	371	347	572	2218	5567	7831	8826	8299	7549	6968	7467	7613	8266	9243	9593	9602	9422	7809	5807	4335	3307	2604	1567	135831	Accepted
11	788	440	380	597	2167	5196	7249	8666	8147	7271	7355	8090	8505	9003	9557	9230	9362	9508	7793	5914	4341	3460	2932	2083	138034	Accepted
12	1203	677	520	444	967	1907	3234	4384	6050	7595	9129	9551	9478	9312	9560	9287	8927	8599	7074	5666	4267	3760	2994	2032	126617	Accepted
13	1273	783	547	410	515	965	1897	2579	3515	4963	6243	7161	7463	7375	6935	6646	6247	5484	3995	2681	2334	1916	2572	1421	85920	Accepted
14	682	371	399	518	1711	4570	6065	7016	7028	6813	6313	6566	6589	7332	8136	7789	8639	8266	6462	4412	3484	2504	1930	1487	115082	Accepted
15	651	454	406	589	2358	5924	7743	8361	7876	7014	6880	6889	7274	7719	8800	9057	8780	8921	7186	5280	4031	2771	1842	1371	128177	Accepted
16	615	331	347	587	2282	5734	5651	8484	8086	7194	6618	6870	7133	7674	9251	9463	9416	9262	7527	5453	4244	3096	2357	1386	129061	Accepted
17	642	422	342	566	2312	5765	7827	8436	8368	7416	7000	7363	7457	8217	9179	9485	9587	9310	7752	5643	4703	3387	2151	1570	134900	Accepted
18	749	409	409	564	2120	4847	6796	8141	7662	7319	7320	7819	8363	9164	9542	9552	9275	9396	7530	5721	4391	3376	2683	1950	135098	Accepted
19	1231	669	508	518	909	1747	2813	4250	5703	7376	8767	9202	9595	9463	8944	8665	8274	6397	6039	4888	3799	3271	2672	2213	117913	Accepted
20	1337	802	576	463	500	1057	1772	2430	3576	5513	7298	8679	9065	8991	8646	8525	7829	7379	6058	4642	3556	2623	1884	1486	104687	Accepted
21	798	368	379	483	1106	2482	4414	5379	5682	6693	7733	8656	8203	8113	8813	8810	8828	8037	6499	4932	3750	2683	1762	1239	115842	Accepted
22	572	339	311	568	2333	5512	7157	8344	7735	7487	7156	8050	7897	8223	8843	8516	8567	8551	6608	5145	3852	2652	1845	1421	127684	Accepted
23	612	381	323	586	2289	5447	7242	8415	8057	7840	7713	8283	8421	8876	9082	9291	9463	9031	7490	5925	4396	3350	2149	1470	136132	Accepted
24	689	438	371	633	2271	5361	7195	8549	8162	7841	7721	8650	9018	9127	9627	9395	9501	9511	8372	7055	5229	3904	2731	1894	143245	Accepted
25	984	583	506	634	1398	2573	2602	2409	2072	1919	1970	2182	2905	3395	4064	3817	3898	3685	3088	2445	1990	1712	1532	1243	53606	Accepted
26	860	516	419	384	866	1677	2596	3705	4930	6370	7657	8236	8568	8765	8813	8473	7944	7380	6491	4818	4093	3334	3068	2087	112050	Accepted
27	1280	842	592	463	582	975	1768	2564	3516	5204	6986	8081	8536	8680	8300	8582	7997	6890	5998	4729	3494	2381	1764	1177	101381	Accepted
28	649	434	330	546	2290	5641	7688	8422	8005	6896	6724	6709	7171	7620	8859	8544	8884	8731	7208	4959	3769	2558	1753	1528	125918	Accepted
																									118564.3	**Feb 2022 ADT**

PUBLIC TRANSPORTATION SCHEDULES

System Alert: MASKS ARE RECOMMENDED ON ALL GATRA VEHICLES

GATRA GO Explore

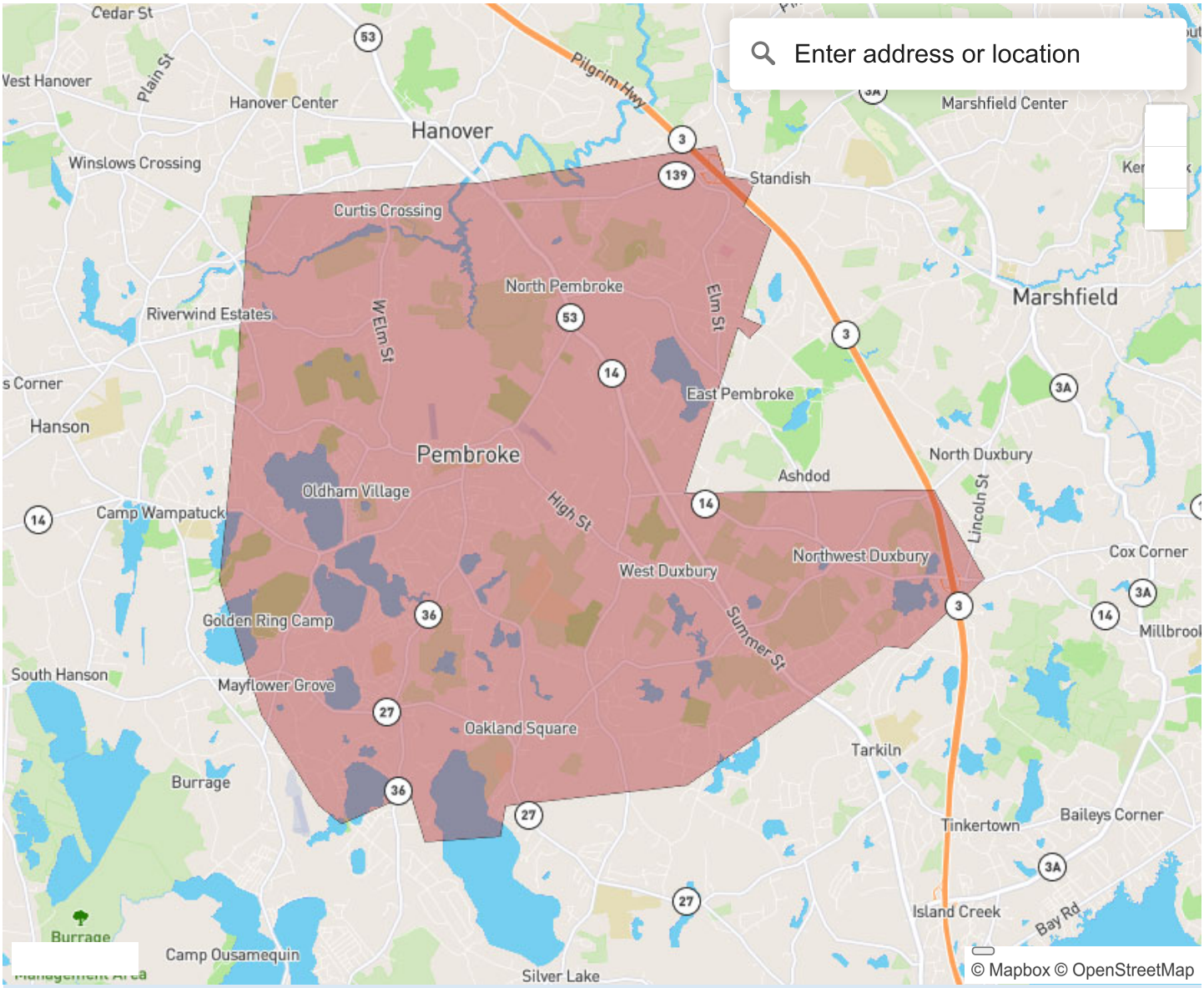
GATRA GO EXPLORE is an on-demand, same day, affordable, and accessible public transit service in the town of Pembroke.

Fares

No Fares

Connections

No connections



Stop Zone Legend

- Flag stop zone: Flag down the bus anywhere along this segment to ride.
- No stop zone: Bus will only stop at marked, designated stops in this area.

About GATRA

GATRA oversees operations of fixed-route bus services in the cities of Attleboro and Taunton, and the towns of Bellingham, Berkley, Carver, Dighton, Duxbury, Foxborough, Franklin, Hanover, Kingston, Lakeville, Mansfield, Marshfield, Medway, Middleborough, Norfolk, North Attleboro, Norton, Pembroke, Plainville, Plymouth, Raynham, Rehoboth, Scituate, Seekonk, Wareham, and Wrentham. All 28 member communities have demand response (Dial-A-Ride) services for people with disabilities and seniors.

Contact Us
800-483-2500
TTD: 508-824-7439
10 Oak Street Taunton, MA 02780

How to Ride
About Us
Employment
GATRA Advisory Board
GATRA Consumer Advisory Committee (GCAC)
Open Government
Procurement
Reports and Policies
Safety Reporting & Protocols
Title VI
Attleboro Commuter Parking Lot

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VEHICLE TRAVEL SPEED DATA

Location : West Elm Street 91240001
Location : South of Pembroke CC
City/State: Pembroke, MA
Direction: SB,

1/25/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1:00	0	0	0	3	0	0	0	0	0	0	0	0	0	3
2:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
4:00	0	0	0	1	2	1	3	0	0	0	0	0	0	7
5:00	0	0	1	2	7	0	0	0	0	0	0	0	0	10
6:00	1	0	1	4	9	12	1	0	0	0	0	0	0	28
7:00	0	0	1	6	22	40	12	0	0	0	0	0	0	81
8:00	0	0	2	5	24	37	10	0	0	0	0	0	0	78
9:00	1	0	0	1	27	20	7	1	2	0	0	0	0	59
10:00	1	1	1	4	24	24	11	0	0	0	0	0	0	66
11:00	0	0	0	5	31	28	9	3	0	0	0	0	0	76
12:00 PM	0	0	0	3	26	50	11	0	1	0	0	0	0	91
1:00	0	0	0	5	51	38	16	4	0	0	0	0	0	114
2:00	1	0	0	12	49	70	15	2	0	0	0	0	0	149
3:00	1	1	0	11	62	95	20	3	1	0	0	0	0	194
4:00	3	1	0	13	92	110	11	0	0	0	0	0	0	230
5:00	0	0	0	32	127	71	4	0	0	0	0	0	0	234
6:00	0	0	0	20	61	39	8	0	0	0	0	0	0	128
7:00	0	0	0	9	41	36	4	0	0	0	0	0	0	90
8:00	0	0	0	6	19	20	4	0	0	0	0	0	0	49
9:00	0	1	0	6	17	12	1	0	0	0	0	0	0	37
10:00	1	0	0	2	4	17	6	0	0	0	0	0	0	30
11:00	0	0	0	1	3	5	1	0	0	0	0	0	0	10
Total	9	4	6	152	700	725	154	13	4	0	0	0	0	1767

Percentile	15th	50th	85th	95th
Speed	31	35	39	42

Mean Speed (Average)	35.0
10 MPH Pace Speed	30-39
Number in Pace	1414
Percent in Pace	80.0%
Number > 35 MPH	896
Percent > 35 MPH	50.7%

Location : West Elm Street 91240001
Location : South of Pembroke CC
City/State: Pembroke, MA
Direction: SB,

1/26/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	3	1	0	0	0	0	0	0	0	4
1:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	1	0	1	0	0	0	0	0	0	2
4:00	0	0	0	1	0	1	0	1	0	0	0	0	0	3
5:00	0	0	0	0	3	1	1	0	0	0	0	0	0	5
6:00	0	0	2	1	8	17	1	2	0	0	0	0	0	31
7:00	0	0	0	5	32	34	8	3	0	0	0	0	0	82
8:00	0	0	0	5	11	26	11	2	0	0	0	0	0	55
9:00	1	2	2	4	31	35	8	0	0	0	0	0	0	83
10:00	0	0	1	4	32	35	3	0	1	0	0	0	0	76
11:00	0	0	1	12	35	36	8	2	1	0	0	0	0	95
12:00 PM	0	1	3	12	36	57	8	2	1	0	0	0	0	120
1:00	1	1	3	5	37	50	16	1	0	0	0	0	0	114
2:00	0	0	1	9	65	65	16	0	0	0	0	0	0	156
3:00	0	2	6	20	71	94	26	2	0	0	0	0	0	221
4:00	1	5	7	12	61	107	19	1	0	0	0	0	0	213
5:00	1	0	2	17	100	74	15	1	0	0	0	0	0	210
6:00	0	0	0	7	51	62	8	0	0	0	0	0	0	128
7:00	0	0	0	12	28	33	7	0	0	0	0	0	0	80
8:00	0	1	0	6	27	27	6	1	0	0	0	0	0	68
9:00	0	1	1	3	14	22	4	0	0	0	0	0	0	45
10:00	0	0	0	0	3	9	0	0	0	0	0	0	0	12
11:00	0	0	0	0	1	5	0	0	0	0	0	0	0	6
Total	4	13	29	135	651	791	166	18	3	0	0	0	0	1810
			Percentile	15th	50th	85th	95th							
			Speed	31	35	39	42							
		Mean Speed (Average)		35.1										
		10 MPH Pace Speed		30-39										
		Number in Pace		1429										
		Percent in Pace		79.0%										
		Number > 35 MPH		978										
		Percent > 35 MPH		54.0%										
Grand Total	13	17	35	287	1351	1516	320	31	7	0	0	0	0	3577
Stats			Percentile	15th	50th	85th	95th							
			Speed	31	35	39	42							
		Mean Speed (Average)		35.1										
		10 MPH Pace Speed		30-39										
		Number in Pace		2842										
		Percent in Pace		79.5%										
		Number > 35 MPH		1874										
		Percent > 35 MPH		52.4%										

Location : West Elm Street 91240001
Location : South of Pembroke CC
City/State: Pembroke, MA
Direction: NB,

1/25/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	1	2	0	0	0	0	0	0	0	0	3
1:00	1	1	0	0	0	0	0	0	0	0	0	0	0	2
2:00	2	0	0	0	1	0	1	0	0	0	0	0	0	4
3:00	0	0	0	0	4	5	2	0	0	0	0	0	0	11
4:00	0	0	0	3	18	23	15	2	2	0	0	0	0	63
5:00	0	1	1	3	31	59	26	8	3	0	0	0	0	132
6:00	1	0	2	9	41	101	23	1	0	0	0	0	0	178
7:00	0	2	3	7	84	121	39	2	0	0	0	0	0	258
8:00	0	0	2	5	71	138	39	9	0	0	0	0	0	264
9:00	0	1	0	1	34	80	34	0	0	0	0	0	0	150
10:00	0	1	0	1	29	79	16	3	0	1	0	0	0	130
11:00	1	1	1	9	31	84	23	4	1	0	0	0	0	155
12:00 PM	0	0	0	2	34	75	19	3	1	0	0	0	0	134
1:00	1	0	0	11	34	59	18	1	0	0	0	0	0	124
2:00	0	2	1	4	33	73	24	1	1	0	0	0	0	139
3:00	0	1	3	13	40	87	28	0	0	0	0	0	0	172
4:00	0	0	0	5	57	73	18	1	0	0	0	0	0	154
5:00	0	0	0	7	46	71	20	1	0	0	0	0	0	145
6:00	0	0	0	6	45	48	7	1	0	0	0	0	0	107
7:00	0	0	0	0	17	32	7	1	0	0	0	0	0	57
8:00	0	0	0	2	21	26	7	3	0	0	0	0	0	59
9:00	0	0	0	1	14	13	3	2	0	0	0	0	0	33
10:00	0	0	0	1	6	9	1	0	0	0	0	0	0	17
11:00	0	0	0	1	2	3	5	3	0	0	0	0	0	14
Total	6	10	13	92	695	1259	375	46	8	1	0	0	0	2505
			Percentile	15th	50th	85th	95th							
			Speed	33	37	40	43							
		Mean Speed (Average)		36.6										
		10 MPH Pace Speed		30-39										
		Number in Pace		1931										
		Percent in Pace		77.1%										
		Number > 35 MPH		1689										
		Percent > 35 MPH		67.4%										

Location : West Elm Street 91240001
Location : South of Pembroke CC
City/State: Pembroke, MA
Direction: NB,

1/26/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	1	0	0	0	1	1	0	0	0	0	0	0	0	3
1:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
2:00	0	0	0	0	0	1	0	1	0	0	0	0	0	2
3:00	0	0	0	1	2	5	2	1	0	0	0	0	0	11
4:00	0	0	0	0	8	22	15	6	1	0	0	0	0	52
5:00	0	1	0	1	21	63	41	9	1	0	0	0	0	137
6:00	1	2	2	5	56	73	25	2	0	0	0	0	0	166
7:00	1	0	1	4	81	157	38	4	0	0	0	0	0	286
8:00	0	1	2	16	70	97	39	2	0	0	0	0	0	227
9:00	1	0	0	9	55	90	34	6	0	0	0	0	0	195
10:00	0	0	2	2	40	74	21	3	1	0	0	0	0	143
11:00	0	0	1	5	42	71	20	1	0	0	0	0	0	140
12:00 PM	1	1	6	6	48	74	19	1	0	0	0	0	0	156
1:00	1	0	0	9	46	76	14	0	1	0	0	0	0	147
2:00	4	2	1	11	52	61	7	2	0	0	0	0	0	140
3:00	0	0	0	8	46	71	32	1	0	0	0	0	0	158
4:00	0	0	0	4	42	70	21	3	0	0	0	0	0	140
5:00	0	0	1	5	49	77	12	2	0	0	0	0	0	146
6:00	0	0	0	6	34	52	9	1	0	0	0	0	0	102
7:00	1	0	0	4	26	38	6	2	0	0	0	0	0	77
8:00	1	0	0	3	20	20	11	2	0	0	0	0	0	57
9:00	1	1	0	1	9	15	5	0	0	0	0	0	0	32
10:00	0	0	0	3	2	9	1	0	0	0	0	0	0	15
11:00	0	1	0	0	2	5	2	0	0	0	0	0	0	10
Total	13	9	16	103	752	1223	374	49	4	0	0	0	0	2543
			Percentile	15th	50th	85th	95th							
			Speed	32	36	40	43							
		Mean Speed (Average)		36.3										
		10 MPH Pace Speed		30-39										
		Number in Pace		1953										
		Percent in Pace		76.8%										
		Number > 35 MPH		1650										
		Percent > 35 MPH		64.9%										
Grand Total	19	19	29	195	1447	2482	749	95	12	1	0	0	0	5048
Stats			Percentile	15th	50th	85th	95th							
			Speed	32	37	40	43							
		Mean Speed (Average)		36.4										
		10 MPH Pace Speed		30-39										
		Number in Pace		3883										
		Percent in Pace		76.9%										
		Number > 35 MPH		3339										
		Percent > 35 MPH		66.1%										

Location : West Elm Street 91240001
Location : South of Pembroke CC
City/State: Pembroke, MA
Direction: Combined

1/25/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	1	3	0	0	0	0	0	0	0	0	4
1:00	1	1	0	3	0	0	0	0	0	0	0	0	0	5
2:00	2	0	0	0	2	0	1	0	0	0	0	0	0	5
3:00	0	0	0	1	4	5	2	0	0	0	0	0	0	12
4:00	0	0	0	4	20	24	18	2	2	0	0	0	0	70
5:00	0	1	2	5	38	59	26	8	3	0	0	0	0	142
6:00	2	0	3	13	50	113	24	1	0	0	0	0	0	206
7:00	0	2	4	13	106	161	51	2	0	0	0	0	0	339
8:00	0	0	4	10	95	175	49	9	0	0	0	0	0	342
9:00	1	1	0	2	61	100	41	1	2	0	0	0	0	209
10:00	1	2	1	5	53	103	27	3	0	1	0	0	0	196
11:00	1	1	1	14	62	112	32	7	1	0	0	0	0	231
12:00 PM	0	0	0	5	60	125	30	3	2	0	0	0	0	225
1:00	1	0	0	16	85	97	34	5	0	0	0	0	0	238
2:00	1	2	1	16	82	143	39	3	1	0	0	0	0	288
3:00	1	2	3	24	102	182	48	3	1	0	0	0	0	366
4:00	3	1	0	18	149	183	29	1	0	0	0	0	0	384
5:00	0	0	0	39	173	142	24	1	0	0	0	0	0	379
6:00	0	0	0	26	106	87	15	1	0	0	0	0	0	235
7:00	0	0	0	9	58	68	11	1	0	0	0	0	0	147
8:00	0	0	0	8	40	46	11	3	0	0	0	0	0	108
9:00	0	1	0	7	31	25	4	2	0	0	0	0	0	70
10:00	1	0	0	3	10	26	7	0	0	0	0	0	0	47
11:00	0	0	0	2	5	8	6	3	0	0	0	0	0	24
Total	15	14	19	244	1395	1984	529	59	12	1	0	0	0	4272
			Percentile	15th	50th	85th	95th							
			Speed	32	36	40	42							

Mean Speed (Average)	35.9
10 MPH Pace Speed	30-39
Number in Pace	3344
Percent in Pace	78.3%
Number > 35 MPH	2585
Percent > 35 MPH	60.5%

Location : West Elm Street 91240001
Location : South of Pembroke CC
City/State: Pembroke, MA
Direction: Combined

1/26/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	1	0	0	0	4	2	0	0	0	0	0	0	0	7
1:00	0	0	0	0	1	1	0	0	0	0	0	0	0	2
2:00	0	0	0	0	0	1	0	1	0	0	0	0	0	2
3:00	0	0	0	1	3	5	3	1	0	0	0	0	0	13
4:00	0	0	0	1	8	23	15	7	1	0	0	0	0	55
5:00	0	1	0	1	24	64	42	9	1	0	0	0	0	142
6:00	1	2	4	6	64	90	26	4	0	0	0	0	0	197
7:00	1	0	1	9	113	191	46	7	0	0	0	0	0	368
8:00	0	1	2	21	81	123	50	4	0	0	0	0	0	282
9:00	2	2	2	13	86	125	42	6	0	0	0	0	0	278
10:00	0	0	3	6	72	109	24	3	2	0	0	0	0	219
11:00	0	0	2	17	77	107	28	3	1	0	0	0	0	235
12:00 PM	1	2	9	18	84	131	27	3	1	0	0	0	0	276
1:00	2	1	3	14	83	126	30	1	1	0	0	0	0	261
2:00	4	2	2	20	117	126	23	2	0	0	0	0	0	296
3:00	0	2	6	28	117	165	58	3	0	0	0	0	0	379
4:00	1	5	7	16	103	177	40	4	0	0	0	0	0	353
5:00	1	0	3	22	149	151	27	3	0	0	0	0	0	356
6:00	0	0	0	13	85	114	17	1	0	0	0	0	0	230
7:00	1	0	0	16	54	71	13	2	0	0	0	0	0	157
8:00	1	1	0	9	47	47	17	3	0	0	0	0	0	125
9:00	1	2	1	4	23	37	9	0	0	0	0	0	0	77
10:00	0	0	0	3	5	18	1	0	0	0	0	0	0	27
11:00	0	1	0	0	3	10	2	0	0	0	0	0	0	16
Total	17	22	45	238	1403	2014	540	67	7	0	0	0	0	4353
			Percentile	15th	50th	85th	95th							
			Speed	32	36	40	42							
		Mean Speed (Average)		35.8										
		10 MPH Pace Speed		30-39										
		Number in Pace		3381										
		Percent in Pace		77.7%										
		Number > 35 MPH		2628										
		Percent > 35 MPH		60.4%										
Grand Total	32	36	64	482	2798	3998	1069	126	19	1	0	0	0	8625
Stats			Percentile	15th	50th	85th	95th							
			Speed	32	36	40	42							
		Mean Speed (Average)		35.9										
		10 MPH Pace Speed		30-39										
		Number in Pace		6726										
		Percent in Pace		78.0%										
		Number > 35 MPH		5213										
		Percent > 35 MPH		60.4%										

Location : Dwelley Street 91240002
Location : West of West Elm Street
City/State: Pembroke, MA
Direction: WB,

1/25/2022 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
1:00	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
2:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
4:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2
6:00	0	0	0	0	0	1	1	6	0	1	0	0	0	0	9
7:00	0	0	0	0	1	3	5	8	14	5	0	0	0	0	36
8:00	0	0	0	1	0	4	2	8	14	4	1	0	0	0	34
9:00	0	0	0	0	0	2	3	6	7	2	2	0	0	0	22
10:00	0	0	0	0	0	1	1	9	10	3	2	0	0	0	26
11:00	0	0	0	0	0	0	5	6	10	4	3	0	0	0	28
12:00 PM	0	0	0	1	3	2	4	8	9	8	5	0	0	0	40
1:00	0	0	0	2	1	0	5	8	7	4	3	0	0	0	30
2:00	0	0	0	1	0	1	6	10	12	8	1	0	0	0	39
3:00	0	0	0	0	1	1	5	13	14	14	4	1	0	0	53
4:00	0	0	1	1	0	1	7	20	13	9	4	2	0	0	58
5:00	0	0	0	0	1	0	4	18	10	6	0	1	0	0	40
6:00	0	0	0	1	1	2	5	7	9	1	0	0	0	0	26
7:00	0	0	0	0	0	3	12	2	3	1	0	0	0	0	21
8:00	0	0	0	0	0	1	4	6	7	2	2	0	0	0	22
9:00	0	0	0	0	1	0	1	4	8	2	0	0	0	0	16
10:00	0	0	0	0	0	0	1	0	2	1	0	0	0	0	4
11:00	0	0	0	0	0	2	0	1	2	1	0	0	0	0	6
Total	0	0	2	8	9	25	73	144	152	77	27	4	0	0	521

Percentile	15th	50th	85th	95th
Speed	19	24	28	30

Mean Speed (Average)	23.8
10 MPH Pace Speed	20-29
Number in Pace	397
Percent in Pace	76.2%
Number > 24 MPH	260
Percent > 24 MPH	49.9%

Location : Dwelley Street 91240002
Location : West of West Elm Street
City/State: Pembroke, MA
Direction: WB,

1/26/2022 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
1:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
6:00	0	0	0	0	0	0	1	2	5	0	0	0	0	0	8
7:00	0	0	0	0	0	1	3	12	12	5	0	1	0	0	34
8:00	0	0	0	0	1	0	1	16	4	7	2	1	0	0	32
9:00	0	0	0	1	1	0	3	9	7	3	1	0	0	0	25
10:00	0	0	0	0	0	1	1	8	12	2	1	0	0	0	25
11:00	0	0	0	1	0	0	3	7	11	4	6	0	0	0	32
12:00 PM	0	0	0	0	0	0	2	7	7	5	0	0	0	0	21
1:00	0	0	0	0	0	1	0	15	10	3	1	0	0	0	30
2:00	0	0	0	0	0	0	0	10	15	7	1	1	0	0	34
3:00	0	0	2	1	0	2	6	15	16	5	3	0	0	0	50
4:00	0	0	0	1	0	2	4	10	13	7	2	0	0	0	39
5:00	0	0	0	1	1	0	4	16	17	5	1	0	0	0	45
6:00	0	0	0	0	0	0	3	5	8	4	1	0	0	0	21
7:00	0	0	0	0	1	1	2	12	9	7	0	1	0	0	33
8:00	0	0	0	0	0	0	3	8	11	1	0	0	0	0	23
9:00	0	0	0	0	0	0	3	3	4	1	0	0	0	0	11
10:00	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5
11:00	0	0	0	0	1	0	1	0	5	1	0	0	0	0	8
Total	0	0	2	5	5	8	40	157	172	68	21	4	0	0	482
			Percentile	15th	50th	85th	95th								
			Speed	21	24	28	30								
			Mean Speed (Average)	24.3											
			10 MPH Pace Speed	20-29											
			Number in Pace	409											
			Percent in Pace	84.9%											
			Number > 24 MPH	265											
			Percent > 24 MPH	55.0%											
Grand Total	0	0	4	13	14	33	113	301	324	145	48	8	0	0	1003
Stats			Percentile	15th	50th	85th	95th								
			Speed	20	24	28	30								
			Mean Speed (Average)	24.0											
			10 MPH Pace Speed	20-29											
			Number in Pace	807											
			Percent in Pace	80.5%											
			Number > 24 MPH	525											
			Percent > 24 MPH	52.3%											

Location : Dwelley Street 91240002
Location : West of West Elm Street
City/State: Pembroke, MA
Direction: EB,

1/25/2022 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	1	0	0	1	1	0	0	0	0	3
1:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
2:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3:00	0	0	0	0	0	0	1	0	1	1	0	0	0	0	3
4:00	0	0	0	0	1	1	1	2	1	1	4	0	0	0	11
5:00	0	0	0	0	0	0	3	3	5	2	0	0	0	0	13
6:00	0	0	0	0	0	1	2	3	8	8	0	0	0	0	22
7:00	0	0	0	0	0	0	0	7	24	13	3	0	0	0	47
8:00	0	0	0	1	1	0	0	5	23	15	5	0	1	0	51
9:00	0	0	0	1	0	0	1	9	12	5	5	0	0	0	33
10:00	0	0	0	0	0	0	3	3	7	13	3	0	0	0	29
11:00	0	0	0	0	0	0	1	13	9	12	4	0	0	0	39
12:00 PM	0	0	0	0	0	0	2	10	10	9	4	0	0	0	35
1:00	0	0	0	0	1	2	5	4	13	5	3	0	0	0	33
2:00	0	0	0	0	0	0	2	4	14	8	4	0	0	0	32
3:00	0	0	0	0	0	0	1	6	14	13	5	3	0	0	42
4:00	0	0	0	0	0	0	2	10	15	9	4	1	0	0	41
5:00	0	0	0	0	1	1	4	13	26	10	4	0	0	0	59
6:00	0	0	0	0	0	0	1	15	15	3	4	1	0	0	39
7:00	0	0	0	0	0	0	1	7	3	5	2	0	0	0	18
8:00	0	0	0	0	0	0	0	3	2	3	1	0	0	0	9
9:00	0	0	0	0	0	0	1	0	8	3	0	1	0	0	13
10:00	0	0	0	0	1	0	0	1	0	1	0	0	0	0	3
11:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Total	0	0	0	2	5	6	32	120	212	141	55	6	1	0	580

Percentile	15th	50th	85th	95th
Speed	22	25	30	31

Mean Speed (Average)	25.8
10 MPH Pace Speed	21-30
Number in Pace	491
Percent in Pace	84.7%
Number > 24 MPH	415
Percent > 24 MPH	71.6%

Location : Dwelley Street 91240002
Location : West of West Elm Street
City/State: Pembroke, MA
Direction: EB,

1/26/2022 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	1	0	1	0	1	0	0	0	3
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
3:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
4:00	0	0	0	0	0	0	0	2	1	2	1	1	0	0	7
5:00	0	0	0	0	0	0	0	3	9	1	1	0	0	0	14
6:00	0	0	0	0	1	1	0	2	10	8	3	0	0	0	25
7:00	0	0	0	0	1	0	4	5	19	23	2	0	1	0	55
8:00	0	0	0	0	1	0	5	11	16	12	5	0	0	0	50
9:00	0	0	0	1	1	2	2	5	15	8	3	0	0	0	37
10:00	0	0	0	0	0	0	2	6	6	17	3	1	0	0	35
11:00	0	0	0	0	0	0	1	5	13	11	2	0	0	0	32
12:00 PM	0	0	0	0	1	0	3	6	14	8	3	0	1	0	36
1:00	0	0	0	0	0	1	1	9	12	10	2	0	0	0	35
2:00	0	0	0	0	0	0	5	4	10	12	1	0	0	0	32
3:00	0	0	0	0	0	1	0	8	15	16	4	0	0	0	44
4:00	0	0	0	1	1	5	6	5	22	9	2	1	0	0	52
5:00	0	0	0	0	0	1	0	6	14	9	4	0	0	0	34
6:00	0	0	0	1	0	1	1	4	8	10	1	0	0	0	26
7:00	0	0	0	0	0	0	0	5	6	10	2	1	0	0	24
8:00	0	0	0	0	0	0	0	1	4	3	0	0	0	0	8
9:00	0	0	0	0	0	0	0	1	2	1	1	0	0	0	5
10:00	0	0	0	0	0	0	1	1	3	1	0	0	0	0	6
11:00	0	0	0	0	0	0	1	0	2	1	0	0	0	0	4
Total	0	0	0	3	6	12	33	90	204	172	42	4	2	0	568
			Percentile	15th	50th	85th	95th								
			Speed	22	26	29	31								
		Mean Speed (Average)		25.8											
		10 MPH Pace Speed		21-30											
		Number in Pace		480											
		Percent in Pace		84.5%											
		Number > 24 MPH		424											
		Percent > 24 MPH		74.6%											
Grand Total	0	0	0	5	11	18	65	210	416	313	97	10	3	0	1148
Stats			Percentile	15th	50th	85th	95th								
			Speed	22	26	29	31								
		Mean Speed (Average)		25.8											
		10 MPH Pace Speed		21-30											
		Number in Pace		970											
		Percent in Pace		84.5%											
		Number > 24 MPH		839											
		Percent > 24 MPH		73.1%											

Location : Dwelley Street 91240002
Location : West of West Elm Street
City/State: Pembroke, MA
Direction: Combined

1/25/2022 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	1	0	3	1	1	0	0	0	0	6
1:00	0	0	0	1	0	0	2	0	0	1	0	0	0	0	4
2:00	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
3:00	0	0	0	0	0	0	2	0	1	2	0	0	0	0	5
4:00	0	0	0	0	1	1	1	2	2	1	4	0	0	0	12
5:00	0	0	0	0	0	1	3	4	5	2	0	0	0	0	15
6:00	0	0	0	0	0	2	3	9	8	9	0	0	0	0	31
7:00	0	0	0	0	1	3	5	15	38	18	3	0	0	0	83
8:00	0	0	0	2	1	4	2	13	37	19	6	0	1	0	85
9:00	0	0	0	1	0	2	4	15	19	7	7	0	0	0	55
10:00	0	0	0	0	0	1	4	12	17	16	5	0	0	0	55
11:00	0	0	0	0	0	0	6	19	19	16	7	0	0	0	67
12:00 PM	0	0	0	1	3	2	6	18	19	17	9	0	0	0	75
1:00	0	0	0	2	2	2	10	12	20	9	6	0	0	0	63
2:00	0	0	0	1	0	1	8	14	26	16	5	0	0	0	71
3:00	0	0	0	0	1	1	6	19	28	27	9	4	0	0	95
4:00	0	0	1	1	0	1	9	30	28	18	8	3	0	0	99
5:00	0	0	0	0	2	1	8	31	36	16	4	1	0	0	99
6:00	0	0	0	1	1	2	6	22	24	4	4	1	0	0	65
7:00	0	0	0	0	0	3	13	9	6	6	2	0	0	0	39
8:00	0	0	0	0	0	1	4	9	9	5	3	0	0	0	31
9:00	0	0	0	0	1	0	2	4	16	5	0	1	0	0	29
10:00	0	0	0	0	1	0	1	1	2	2	0	0	0	0	7
11:00	0	0	0	0	0	2	0	2	3	1	0	0	0	0	8
Total	0	0	2	10	14	31	105	264	364	218	82	10	1	0	1101
			Percentile	15th	50th	85th	95th								
			Speed	21	25	29	30								

Mean Speed (Average)	24.8
10 MPH Pace Speed	20-29
Number in Pace	877
Percent in Pace	79.7%
Number > 24 MPH	675
Percent > 24 MPH	61.3%

Location : Dwelley Street 91240002
Location : West of West Elm Street
City/State: Pembroke, MA
Direction: Combined

1/26/2022 Time	0 - 3 MPH	> 3 - 6 MPH	> 6 - 9 MPH	> 9 - 12 MPH	> 12 - 15 MPH	> 15 - 18 MPH	> 18 - 21 MPH	> 21 - 24 MPH	> 24 - 27 MPH	> 27 - 30 MPH	> 30 - 33 MPH	> 33 - 36 MPH	> 36 - 39 MPH	> 39 MPH	Total
12:00 AM	0	0	0	0	0	0	1	0	1	1	2	0	0	0	5
1:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
2:00	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
3:00	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
4:00	0	0	0	0	0	0	0	2	1	2	1	1	0	0	7
5:00	0	0	0	0	0	0	0	4	9	1	2	0	0	0	16
6:00	0	0	0	0	1	1	1	4	15	8	3	0	0	0	33
7:00	0	0	0	0	1	1	7	17	31	28	2	1	1	0	89
8:00	0	0	0	0	2	0	6	27	20	19	7	1	0	0	82
9:00	0	0	0	2	2	2	5	14	22	11	4	0	0	0	62
10:00	0	0	0	0	0	1	3	14	18	19	4	1	0	0	60
11:00	0	0	0	1	0	0	4	12	24	15	8	0	0	0	64
12:00 PM	0	0	0	0	1	0	5	13	21	13	3	0	1	0	57
1:00	0	0	0	0	0	2	1	24	22	13	3	0	0	0	65
2:00	0	0	0	0	0	0	5	14	25	19	2	1	0	0	66
3:00	0	0	2	1	0	3	6	23	31	21	7	0	0	0	94
4:00	0	0	0	2	1	7	10	15	35	16	4	1	0	0	91
5:00	0	0	0	1	1	1	4	22	31	14	5	0	0	0	79
6:00	0	0	0	1	0	1	4	9	16	14	2	0	0	0	47
7:00	0	0	0	0	1	1	2	17	15	17	2	2	0	0	57
8:00	0	0	0	0	0	0	3	9	15	4	0	0	0	0	31
9:00	0	0	0	0	0	0	3	4	6	2	1	0	0	0	16
10:00	0	0	0	0	0	0	1	2	7	1	0	0	0	0	11
11:00	0	0	0	0	1	0	2	0	7	2	0	0	0	0	12
Total	0	0	2	8	11	20	73	247	376	240	63	8	2	0	1050
			Percentile	15th	50th	85th	95th								
			Speed	22	25	29	31								
		Mean Speed (Average)		25.1											
		10 MPH Pace Speed		21-30											
		Number in Pace		884											
		Percent in Pace		84.2%											
		Number > 24 MPH		689											
		Percent > 24 MPH		65.6%											
Grand Total	0	0	4	18	25	51	178	511	740	458	145	18	3	0	2151
Stats			Percentile	15th	50th	85th	95th								
			Speed	21	25	29	30								
		Mean Speed (Average)		25.0											
		10 MPH Pace Speed		20-29											
		Number in Pace		1759											
		Percent in Pace		81.8%											
		Number > 24 MPH		1364											
		Percent > 24 MPH		63.4%											

Location : Oldham Street 91240003
Location : East of West Elm Street
City/State: Pembroke, MA
Direction: EB,

1/25/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	1	0	0	0	1	1	0	0	0	0	0	0	3
1:00	0	0	1	1	1	1	0	0	0	0	0	0	0	4
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	2	1	1	1	0	0	0	0	0	0	5
4:00	0	0	0	4	3	6	1	1	0	0	0	0	0	15
5:00	0	0	1	8	13	6	1	0	0	0	0	0	0	29
6:00	4	3	1	7	45	34	11	0	0	0	0	0	0	105
7:00	0	0	3	13	74	82	15	1	0	0	0	0	0	188
8:00	0	1	2	17	69	86	20	1	0	0	0	0	0	196
9:00	0	1	1	7	37	51	15	0	0	0	0	0	0	112
10:00	0	1	2	11	45	55	12	2	0	0	0	0	0	128
11:00	1	0	2	5	56	63	11	0	0	0	0	0	0	138
12:00 PM	0	2	3	8	45	67	8	1	0	0	0	0	0	134
1:00	0	0	0	7	60	60	10	0	0	0	0	0	0	137
2:00	0	2	1	18	71	83	25	6	0	0	0	0	0	206
3:00	2	0	3	19	91	112	19	1	0	0	0	0	0	247
4:00	2	3	4	23	120	119	17	1	1	0	0	0	0	290
5:00	0	0	8	33	130	93	11	1	0	0	0	0	0	276
6:00	0	0	1	15	77	56	7	2	0	0	0	0	0	158
7:00	0	0	0	8	41	31	5	1	0	0	0	0	0	86
8:00	0	0	0	7	22	26	8	0	0	0	0	0	0	63
9:00	0	0	1	2	13	13	3	1	0	0	0	0	0	33
10:00	0	0	0	2	11	13	1	0	0	0	0	0	0	27
11:00	0	0	0	1	1	4	1	0	0	0	0	0	0	7
Total	9	14	34	218	1026	1063	203	19	1	0	0	0	0	2587
			Percentile	15th	50th	85th	95th							
			Speed	31	35	38	41							
		Mean Speed (Average)		34.8										
		10 MPH Pace Speed		30-39										
		Number in Pace		2072										
		Percent in Pace		80.1%										
		Number > 35 MPH		1286										
		Percent > 35 MPH		49.7%										

Location : Oldham Street 91240003
Location : East of West Elm Street
City/State: Pembroke, MA
Direction: EB,

1/26/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	2	0	1	0	0	0	0	0	0	3
1:00	0	0	0	0	1	1	1	0	0	0	0	0	0	3
2:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
3:00	0	0	0	1	0	2	1	0	0	0	0	0	0	4
4:00	0	0	0	0	4	3	1	0	0	0	0	0	0	8
5:00	0	0	0	5	12	9	1	0	1	0	0	0	0	28
6:00	1	1	6	13	40	42	6	1	1	0	0	0	0	111
7:00	1	0	6	12	67	98	13	1	1	0	0	0	0	199
8:00	0	1	0	19	57	74	15	0	0	0	0	0	0	166
9:00	0	1	4	12	73	58	16	1	0	0	0	0	0	165
10:00	0	0	3	12	46	51	7	2	0	0	0	0	0	121
11:00	0	1	0	11	60	58	13	0	0	0	0	0	0	143
12:00 PM	0	0	1	10	50	61	16	1	0	0	0	0	0	139
1:00	0	3	6	21	61	63	15	2	0	0	0	0	0	171
2:00	0	4	4	20	90	63	13	3	0	0	0	0	0	197
3:00	4	2	5	18	107	94	22	5	0	0	0	0	0	257
4:00	1	1	3	27	100	110	17	1	0	0	0	0	0	260
5:00	0	0	1	18	130	97	14	3	0	0	0	0	0	263
6:00	0	0	4	13	62	49	9	1	0	0	0	0	0	138
7:00	0	0	3	15	36	52	14	1	2	0	0	0	0	123
8:00	0	0	0	5	30	20	6	0	0	0	0	0	0	61
9:00	0	1	1	7	13	14	5	1	1	0	0	0	0	43
10:00	0	0	0	1	7	4	1	0	0	0	0	0	0	13
11:00	0	0	0	0	6	3	0	0	0	0	0	0	0	9
Total	7	15	47	240	1055	1026	207	23	6	0	0	0	0	2626
			Percentile	15th	50th	85th	95th							
			Speed	30	35	39	41							
		Mean Speed (Average)		34.7										
		10 MPH Pace Speed		30-39										
		Number in Pace		2065										
		Percent in Pace		78.6%										
		Number > 35 MPH		1262										
		Percent > 35 MPH		48.1%										
Grand Total	16	29	81	458	2081	2089	410	42	7	0	0	0	0	5213
Stats			Percentile	15th	50th	85th	95th							
			Speed	31	35	38	41							
		Mean Speed (Average)		34.7										
		10 MPH Pace Speed		30-39										
		Number in Pace		4137										
		Percent in Pace		79.4%										
		Number > 35 MPH		2548										
		Percent > 35 MPH		48.9%										

Location : Oldham Street 91240003
Location : East of West Elm Street
City/State: Pembroke, MA
Direction: WB,

1/25/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	1	1	0	0	0	0	0	0	0	2
1:00	0	0	1	2	1	1	0	0	0	0	0	0	0	5
2:00	0	1	0	1	3	0	0	0	0	0	0	0	0	5
3:00	0	0	0	1	2	3	0	0	0	0	0	1	0	7
4:00	0	0	0	0	1	11	8	2	0	0	0	0	0	22
5:00	0	0	0	1	5	24	18	9	1	0	0	0	0	58
6:00	0	0	0	4	36	64	22	3	0	0	0	0	0	129
7:00	0	1	0	5	42	96	48	3	0	0	0	0	1	196
8:00	0	3	3	8	36	104	51	10	0	0	0	0	0	215
9:00	0	0	0	1	22	71	38	4	0	0	0	0	0	136
10:00	1	0	0	6	33	62	35	2	1	0	0	0	0	140
11:00	2	0	4	7	25	82	45	7	0	0	0	0	1	173
12:00 PM	0	0	0	4	22	80	32	10	1	0	0	0	0	149
1:00	0	0	3	6	21	75	31	1	0	0	0	0	0	137
2:00	0	0	1	0	35	90	48	4	0	0	0	0	0	178
3:00	0	0	5	6	49	114	56	7	0	0	0	0	0	237
4:00	0	0	0	3	39	122	53	3	0	0	0	0	0	220
5:00	0	0	0	6	60	113	38	4	0	0	0	0	0	221
6:00	0	0	3	5	36	72	13	6	0	0	0	0	0	135
7:00	0	0	0	2	39	44	12	0	0	0	0	0	0	97
8:00	0	0	1	2	17	41	16	0	1	0	1	0	0	79
9:00	0	0	0	0	12	24	13	3	0	0	1	0	0	53
10:00	0	0	0	2	4	7	5	0	0	0	0	0	0	18
11:00	0	0	0	0	4	6	4	3	1	0	0	0	0	18
Total	3	5	21	72	545	1307	586	81	5	0	2	1	2	2630

Percentile	15th	50th	85th	95th
Speed	34	37	42	44

Mean Speed (Average)	37.6
10 MPH Pace Speed	35-44
Number in Pace	1892
Percent in Pace	71.9%
Number > 35 MPH	1984
Percent > 35 MPH	75.4%

Location : Oldham Street 91240003
Location : East of West Elm Street
City/State: Pembroke, MA
Direction: WB,

1/26/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	0	5	1	0	0	0	0	0	0	6
1:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
2:00	0	0	0	0	3	1	0	0	0	0	0	0	0	4
3:00	0	0	0	1	1	0	3	1	0	0	0	0	0	6
4:00	0	0	1	0	3	5	4	2	1	0	0	0	0	16
5:00	0	0	0	1	7	31	18	10	1	0	0	0	0	68
6:00	0	0	3	6	19	60	25	3	0	0	0	0	0	116
7:00	0	0	1	9	34	99	34	8	0	0	0	0	0	185
8:00	0	0	1	16	46	102	31	2	0	0	0	0	1	199
9:00	1	0	0	4	37	89	41	3	0	0	0	1	0	176
10:00	1	0	1	4	31	70	26	1	0	0	0	1	0	135
11:00	0	0	0	4	26	73	22	2	0	0	0	0	0	127
12:00 PM	1	4	1	12	42	69	26	4	1	0	0	0	0	160
1:00	0	0	2	3	21	72	39	3	0	0	0	0	0	140
2:00	0	0	1	15	43	95	29	2	0	1	0	0	0	186
3:00	0	0	3	9	44	112	54	3	0	0	0	0	0	225
4:00	0	0	1	7	44	120	46	7	1	0	0	0	0	226
5:00	2	1	4	4	47	90	35	2	3	0	0	0	0	188
6:00	0	0	2	6	31	72	16	3	0	0	0	0	0	130
7:00	0	0	1	2	25	44	15	4	0	0	0	0	0	91
8:00	0	0	2	2	19	33	20	4	0	0	0	0	0	80
9:00	0	0	1	0	5	38	17	2	0	0	0	0	0	63
10:00	0	0	1	0	6	15	8	3	0	0	0	0	0	33
11:00	0	0	0	1	1	7	3	2	1	0	0	0	0	15
Total	5	5	26	106	536	1302	513	71	8	1	0	2	1	2576
			Percentile	15th	50th	85th	95th							
			Speed	33	37	41	43							
		Mean Speed (Average)		37.2										
		10 MPH Pace Speed		31-40										
		Number in Pace		1834										
		Percent in Pace		71.2%										
		Number > 35 MPH		1898										
		Percent > 35 MPH		73.7%										
Grand Total	8	10	47	178	1081	2609	1099	152	13	1	2	3	3	5206
Stats			Percentile	15th	50th	85th	95th							
			Speed	34	37	42	44							
		Mean Speed (Average)		37.4										
		10 MPH Pace Speed		35-44										
		Number in Pace		3708										
		Percent in Pace		71.2%										
		Number > 35 MPH		3882										
		Percent > 35 MPH		74.6%										

Location : Oldham Street 91240003
Location : East of West Elm Street
City/State: Pembroke, MA
Direction: Combined

1/25/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	1	0	0	1	2	1	0	0	0	0	0	0	5
1:00	0	0	2	3	2	2	0	0	0	0	0	0	0	9
2:00	0	1	0	1	3	0	0	0	0	0	0	0	0	5
3:00	0	0	0	3	3	4	1	0	0	0	0	1	0	12
4:00	0	0	0	4	4	17	9	3	0	0	0	0	0	37
5:00	0	0	1	9	18	30	19	9	1	0	0	0	0	87
6:00	4	3	1	11	81	98	33	3	0	0	0	0	0	234
7:00	0	1	3	18	116	178	63	4	0	0	0	0	1	384
8:00	0	4	5	25	105	190	71	11	0	0	0	0	0	411
9:00	0	1	1	8	59	122	53	4	0	0	0	0	0	248
10:00	1	1	2	17	78	117	47	4	1	0	0	0	0	268
11:00	3	0	6	12	81	145	56	7	0	0	0	0	1	311
12:00 PM	0	2	3	12	67	147	40	11	1	0	0	0	0	283
1:00	0	0	3	13	81	135	41	1	0	0	0	0	0	274
2:00	0	2	2	18	106	173	73	10	0	0	0	0	0	384
3:00	2	0	8	25	140	226	75	8	0	0	0	0	0	484
4:00	2	3	4	26	159	241	70	4	1	0	0	0	0	510
5:00	0	0	8	39	190	206	49	5	0	0	0	0	0	497
6:00	0	0	4	20	113	128	20	8	0	0	0	0	0	293
7:00	0	0	0	10	80	75	17	1	0	0	0	0	0	183
8:00	0	0	1	9	39	67	24	0	1	0	1	0	0	142
9:00	0	0	1	2	25	37	16	4	0	0	1	0	0	86
10:00	0	0	0	4	15	20	6	0	0	0	0	0	0	45
11:00	0	0	0	1	5	10	5	3	1	0	0	0	0	25
Total	12	19	55	290	1571	2370	789	100	6	0	2	1	2	5217

Percentile	15th	50th	85th	95th
Speed	32	36	40	43

Mean Speed (Average)	36.2
10 MPH Pace Speed	30-39
Number in Pace	3899
Percent in Pace	74.7%
Number > 35 MPH	3270
Percent > 35 MPH	62.7%

Location : Oldham Street 91240003
Location : East of West Elm Street
City/State: Pembroke, MA
Direction: Combined

1/26/2022 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	0	0	0	2	5	2	0	0	0	0	0	0	9
1:00	0	0	0	0	2	1	1	0	0	0	0	0	0	4
2:00	0	0	0	0	4	1	0	0	0	0	0	0	0	5
3:00	0	0	0	2	1	2	4	1	0	0	0	0	0	10
4:00	0	0	1	0	7	8	5	2	1	0	0	0	0	24
5:00	0	0	0	6	19	40	19	10	2	0	0	0	0	96
6:00	1	1	9	19	59	102	31	4	1	0	0	0	0	227
7:00	1	0	7	21	101	197	47	9	1	0	0	0	0	384
8:00	0	1	1	35	103	176	46	2	0	0	0	0	1	365
9:00	1	1	4	16	110	147	57	4	0	0	0	1	0	341
10:00	1	0	4	16	77	121	33	3	0	0	0	1	0	256
11:00	0	1	0	15	86	131	35	2	0	0	0	0	0	270
12:00 PM	1	4	2	22	92	130	42	5	1	0	0	0	0	299
1:00	0	3	8	24	82	135	54	5	0	0	0	0	0	311
2:00	0	4	5	35	133	158	42	5	0	1	0	0	0	383
3:00	4	2	8	27	151	206	76	8	0	0	0	0	0	482
4:00	1	1	4	34	144	230	63	8	1	0	0	0	0	486
5:00	2	1	5	22	177	187	49	5	3	0	0	0	0	451
6:00	0	0	6	19	93	121	25	4	0	0	0	0	0	268
7:00	0	0	4	17	61	96	29	5	2	0	0	0	0	214
8:00	0	0	2	7	49	53	26	4	0	0	0	0	0	141
9:00	0	1	2	7	18	52	22	3	1	0	0	0	0	106
10:00	0	0	1	1	13	19	9	3	0	0	0	0	0	46
11:00	0	0	0	1	7	10	3	2	1	0	0	0	0	24
Total	12	20	73	346	1591	2328	720	94	14	1	0	2	1	5202
			Percentile	15th	50th	85th	95th							
			Speed	32	36	40	43							
		Mean Speed (Average)		36.0										
		10 MPH Pace Speed		30-39										
		Number in Pace		3879										
		Percent in Pace		74.6%										
		Number > 35 MPH		3160										
		Percent > 35 MPH		60.7%										
Grand Total	24	39	128	636	3162	4698	1509	194	20	1	2	3	3	10419
Stats			Percentile	15th	50th	85th	95th							
			Speed	32	36	40	43							
		Mean Speed (Average)		36.1										
		10 MPH Pace Speed		30-39										
		Number in Pace		7779										
		Percent in Pace		74.7%										
		Number > 35 MPH		6430										
		Percent > 35 MPH		61.7%										

MASSDOT CRASH RATE WORKSHEETS AND HIGH CRASH LOCATION MAPPING

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Pembroke COUNT DATE : 1/25/2022

DISTRICT : 5 UNSIGNALIZED : X SIGNALIZED :

~ INTERSECTION DATA ~

MAJOR STREET : Oldham Street

MINOR STREET(S) : West Elm Street

INTERSECTION DIAGRAM (Label Approaches)

↑ *North*

PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/PM) :		338	222	247		**807**

" K " FACTOR : **0.090** INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **8,967**

TOTAL # OF CRASHES : 6 # OF YEARS : 5 AVERAGE # OF CRASHES PER YEAR (**A**) : **1.20**

CRASH RATE CALCULATION : **0.37** RATE = $\frac{(A * 1{,}000{,}000)}{(V * 365)}$

Comments : Below MassDOT District/Statewide Crash Rates

Project Title & Date: 9214 - Pembroke: Proposed Age Qualified Residential Development

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Pembroke COUNT DATE : 1/25/2022

DISTRICT : 5 UNSIGNALIZED : X SIGNALIZED :

~ INTERSECTION DATA ~

MAJOR STREET : West Elm Street

MINOR STREET(S) : Dwelley Street

Milbery Lane

INTERSECTION DIAGRAM (Label Approaches)

↑ *North*

PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/PM) :	176	365	61	2		**604**

" K " FACTOR : **0.090** INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **6,711**

TOTAL # OF CRASHES : 2 # OF YEARS : 5 AVERAGE # OF CRASHES PER YEAR (**A**) : **0.40**

CRASH RATE CALCULATION : **0.16** RATE = $\frac{(A * 1{,}000{,}000)}{(V * 365)}$

Comments : Below MassDOT District/Statewide Crash Rates

Project Title & Date: Proposed Age Qualified Residential Development

INTERSECTION CRASH RATE WORKSHEET

CITY/TOWN : Pembroke COUNT DATE : 1/25/2022

DISTRICT : 5 UNSIGNALIZED : X SIGNALIZED :

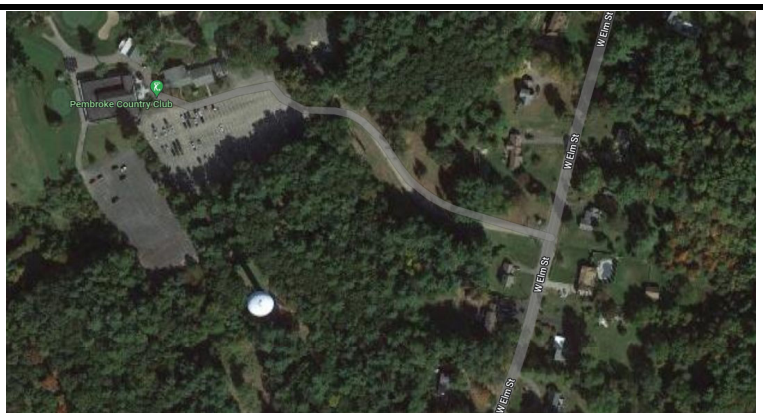
~ INTERSECTION DATA ~

MAJOR STREET : West Elm Street

MINOR STREET(S) : Pembroke CC Main Driveway

INTERSECTION DIAGRAM
(Label Approaches)

↑ *North*



PEAK HOUR VOLUMES

APPROACH :	1	2	3	4	5	Total Peak Hourly Approach Volume
DIRECTION :	NB	SB	EB	WB		
PEAK HOURLY VOLUMES (AM/PM) :	158	356				**514**

" K " FACTOR : **0.090**

INTERSECTION ADT (**V**) = TOTAL DAILY APPROACH VOLUME : **5,711**

TOTAL # OF CRASHES : 2

OF YEARS : 5

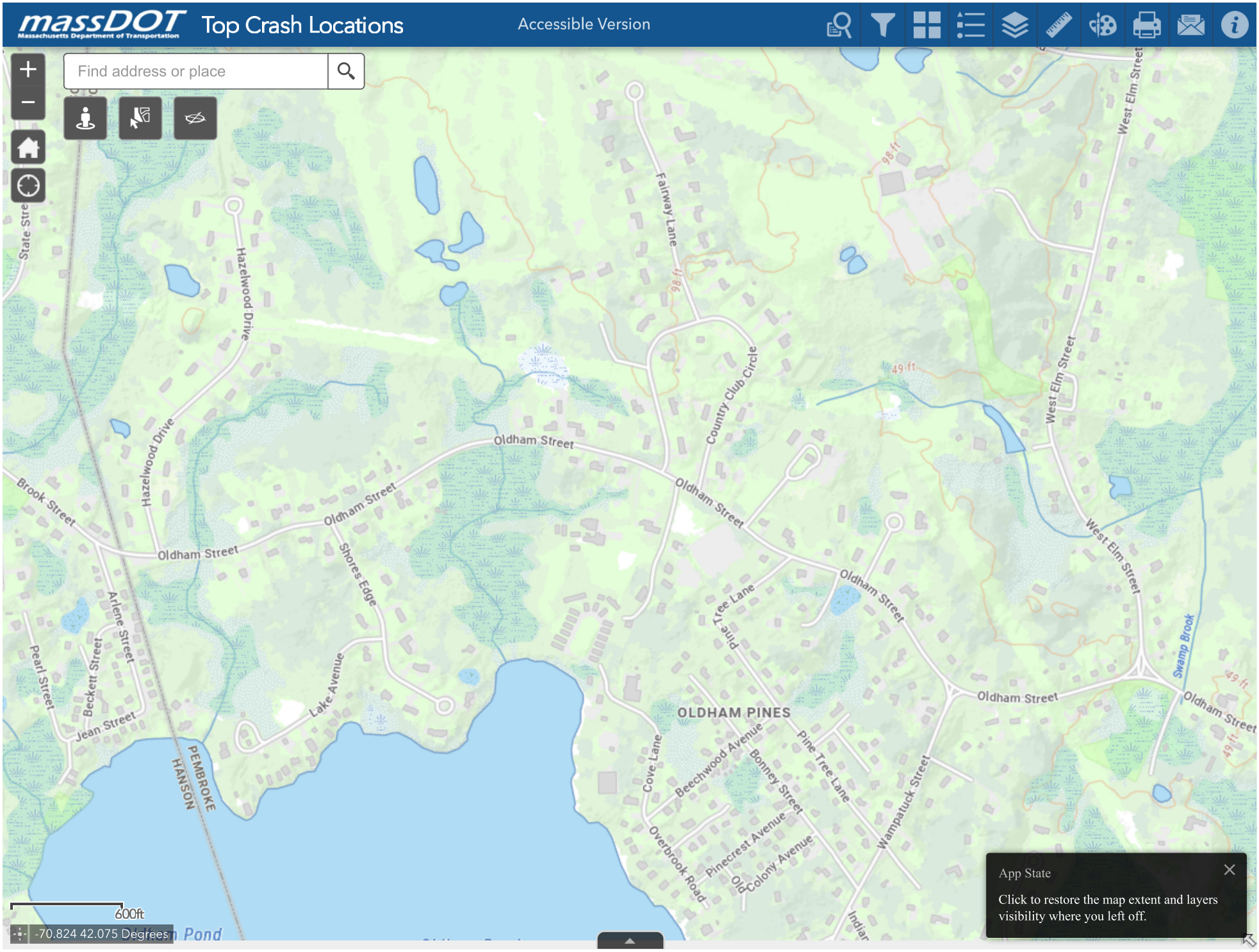
AVERAGE # OF CRASHES PER YEAR (**A**) : **0.40**

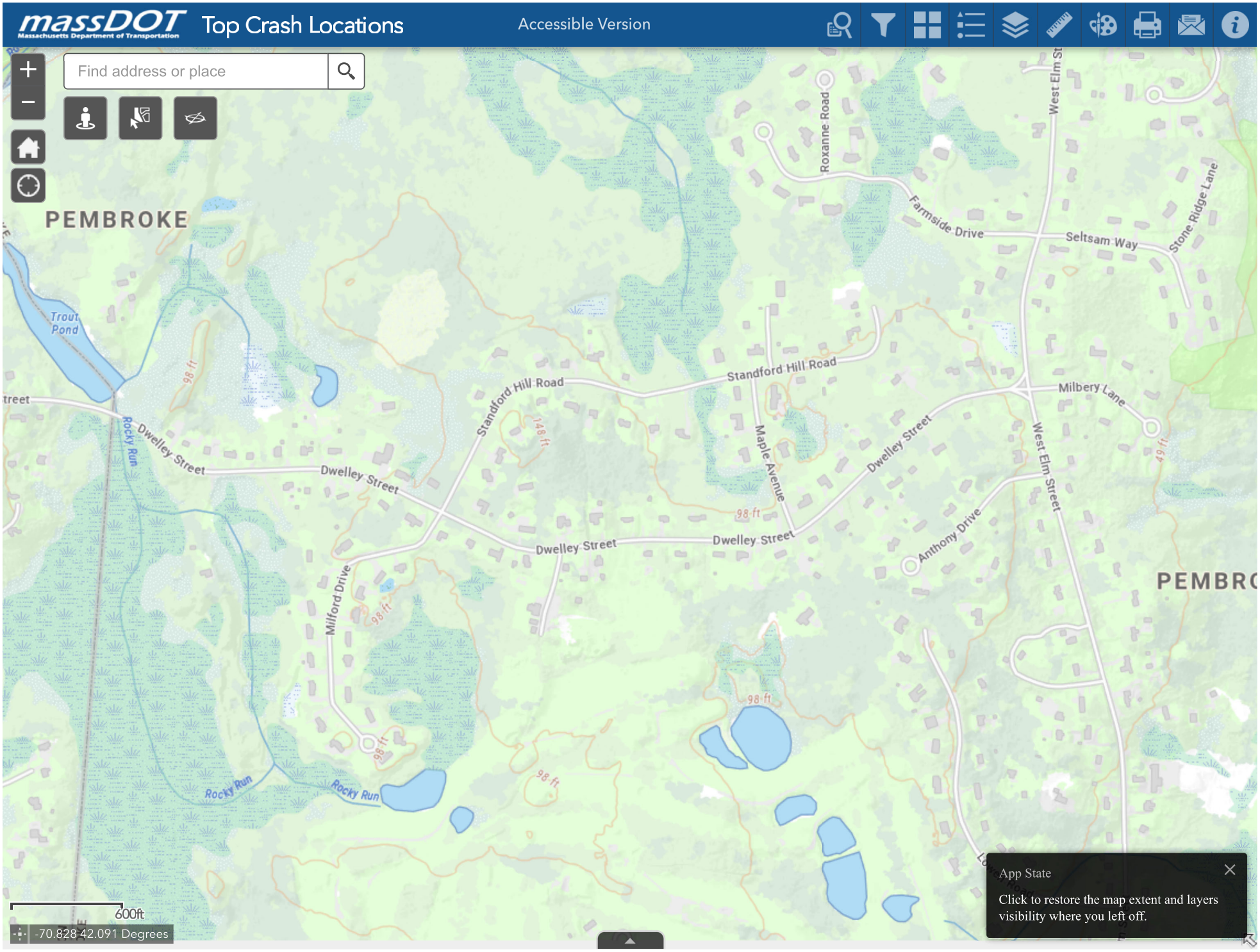
CRASH RATE CALCULATION : **0.19**

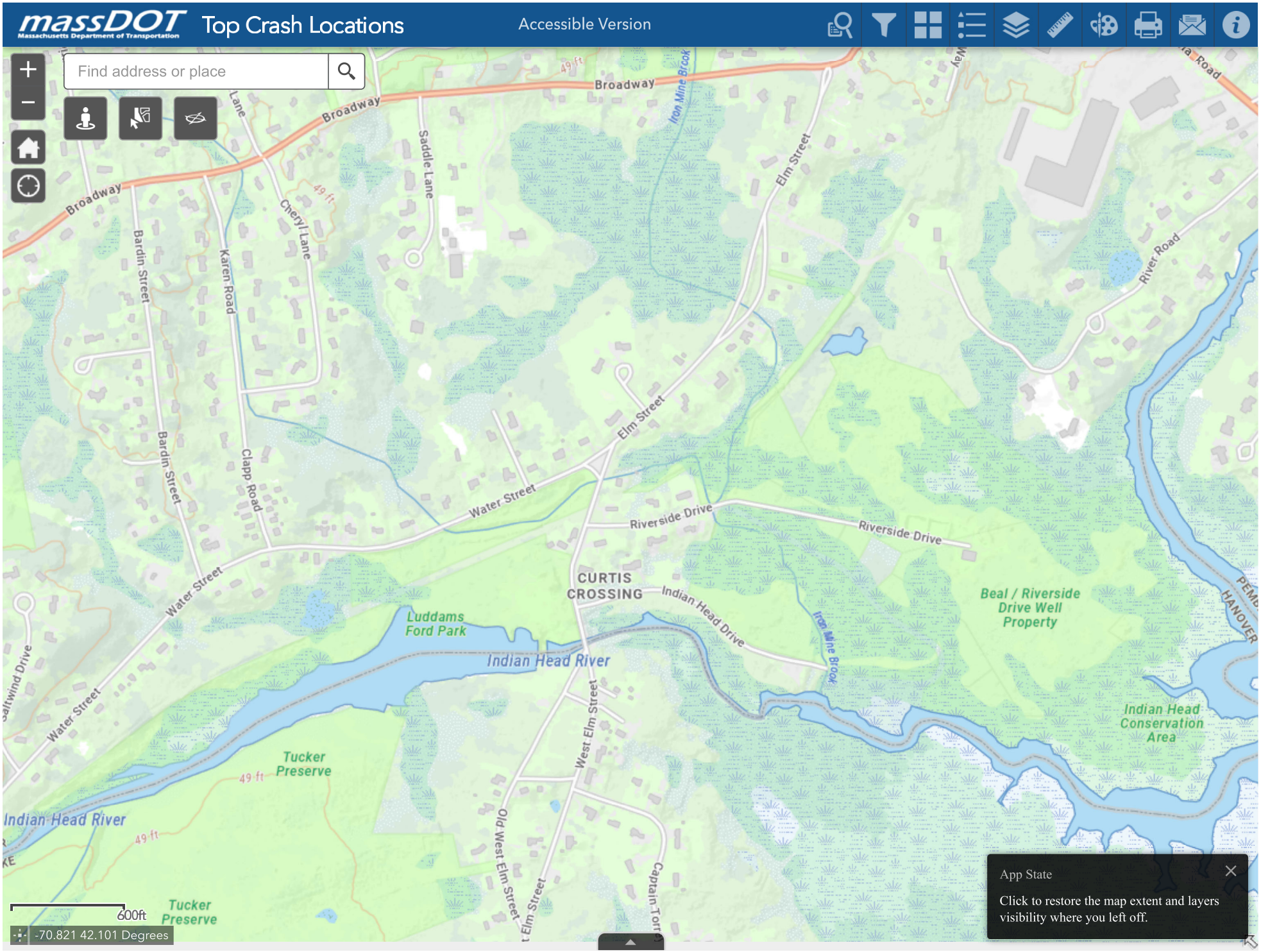
$$\text{RATE} = \frac{(A * 1{,}000{,}000)}{(V * 365)}$$

Comments : Below MassDOT District/Statewide Crash Rates

Project Title & Date: 9214 - Pembroke: Proposed Age Qualified Residential Development


massDOT
Massachusetts Department of Transportation
Top Crash Locations
Accessible Version
Find address or place
Oldham Street
Hazelwood Drive
Brook Street
Shores Edge
Lake Avenue
Arlene Street
Beckett Street
Pearl Street
Jean Street
PEMBROKE
HANSON
Fairway Lane
Country Club Circle
West Elm Street
Tree Lane
Pine Tree Lane
OLDHAM PINES
Beechwood Avenue
Bonney Street
Cove Lane
Overbrook Road
Pinecrest Avenue
Old Colony Avenue
Wampatuck Street
Swamp Brook
98 ft
49 ft
600ft
-70.824 42.075 Degrees
App State
Click to restore the map extent and layers visibility where you left off.


massDOT
Massachusetts Department of Transportation
Top Crash Locations
Accessible Version
Find address or place
PEMBROKE
Trout Pond
Roxanne Road
West Elm St
Farmside Drive
Seltsam Way
Stone Ridge Lane
Standford Hill Road
Milbery Lane
Rocky Run
Dwelley Street
Maple Avenue
West Elm Street
Anthony Drive
Milford Drive
98 ft
148 ft
49 ft
600ft
-70.828 42.091 Degrees
App State
Click to restore the map extent and layers visibility where you left off.

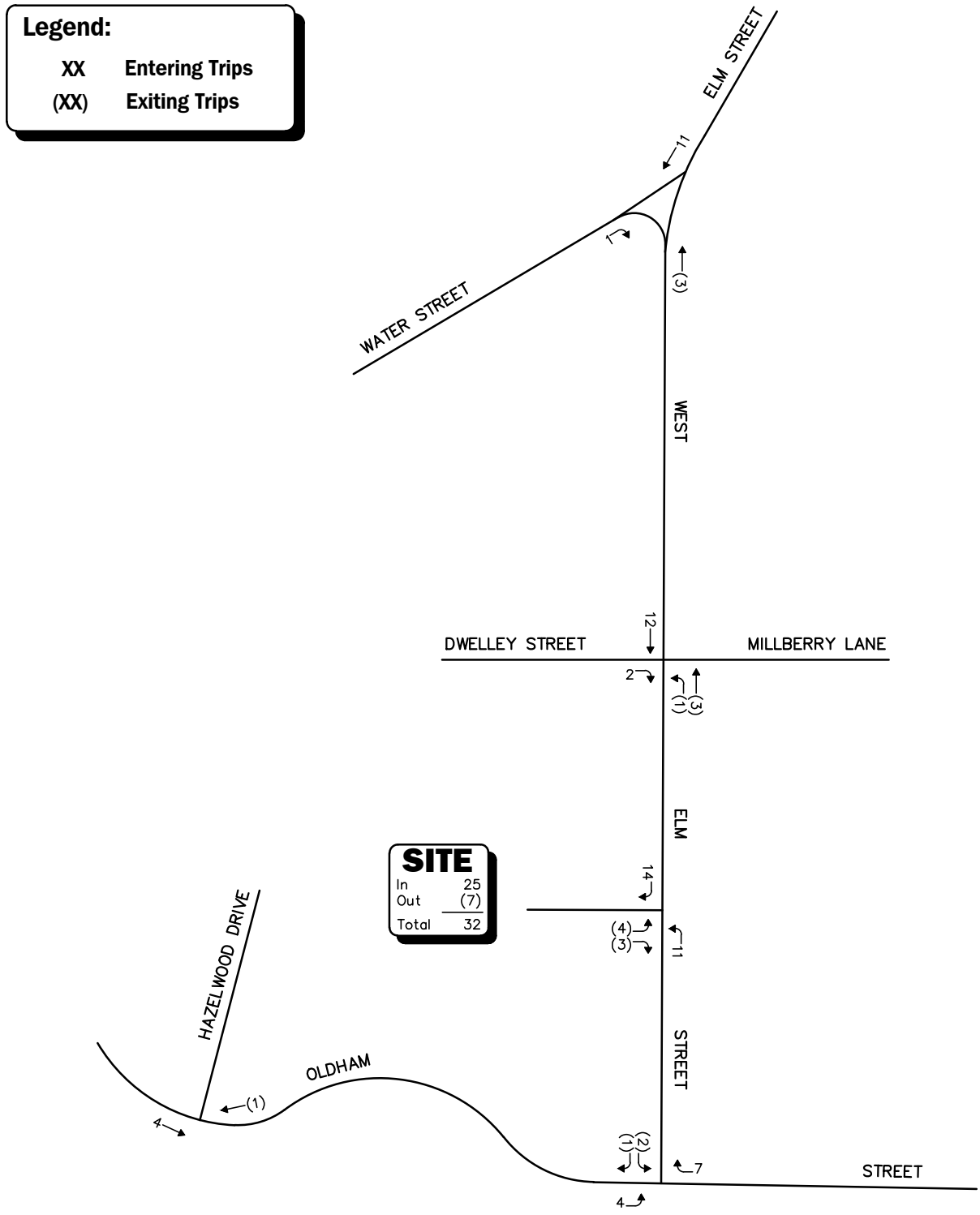

massDOT
Massachusetts Department of Transportation
Top Crash Locations
Accessible Version
Find address or place
Broadway
Broadway
Broadway
Lane
Cheryl Lane
Saddle Lane
Iron Mine Brook
Elm Street
River Road
Bardin Street
Karen Road
Bardin Street
Clapp Road
Elm Street
Water Street
Riverside Drive
Riverside Drive
CURTIS
CROSSING
Indian Head Drive
Water Street
Water Street
Luddams
Ford Park
Indian Head River
Iron Mine Brook
Beal / Riverside
Drive Well
Property
Indian Head
Conservation
Area
Tucker
Preserve
West Elm Street
Old West Elm Street
Elm Street
Captain Torr
Indian Head River
Tucker
Preserve
49 ft
600ft
-70.821 42.101 Degrees
App State
Click to restore the map extent and layers visibility where you left off.

GENERAL BACKGROUND TRAFFIC GROWTH

General Background Traffic Growth - Daily Traffic Volumes

CITY/TOWN	ROUTE/STREET	LOCATION	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Annual Growth Rate
Hanson	State Street	at Hanover town line									3,808	3,819	3,804	**-0.05%**
Pembroke	Pleasant Street	east of Washington Street							5,463	5,802	5,901	5,919	5,895	**1.95%**
Pembroke	High Street	south of Barker Street						1,911	1,955	2,076	2,111	2,117	2,109	**2.02%**
Pembroke	Mountain Avenue	east of Center Street						2,473	2,530	2,687	2,733	2,741	2,730	**2.02%**
Hanover	Broadway	east of Cross Street									6,002	6,020	5,996	**-0.05%**
Hanover	Broadway	east of Water Street									5,954	5,972	5,948	**-0.05%**
Hanover	Cross Street	north of Broadway									3,775	3,786	3,771	**-0.05%**
Hanover	Broadway	west of Cross Street									3,647	3,658	3,643	**-0.05%**
Pembroke	Columbia Road	at Hanover town line	21,400	21,475	21,653	22,872	22,977	24,241	22,647	22,941	23,193	23,518	23,612	**1.04%**
														0.75%

ADDITIONAL NO-BUILD TRIPS



Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure A-1

Vanasse & Associates inc

Pembroke Country Club Trips
Weekday Morning
Peak-Hour Traffic Volumes

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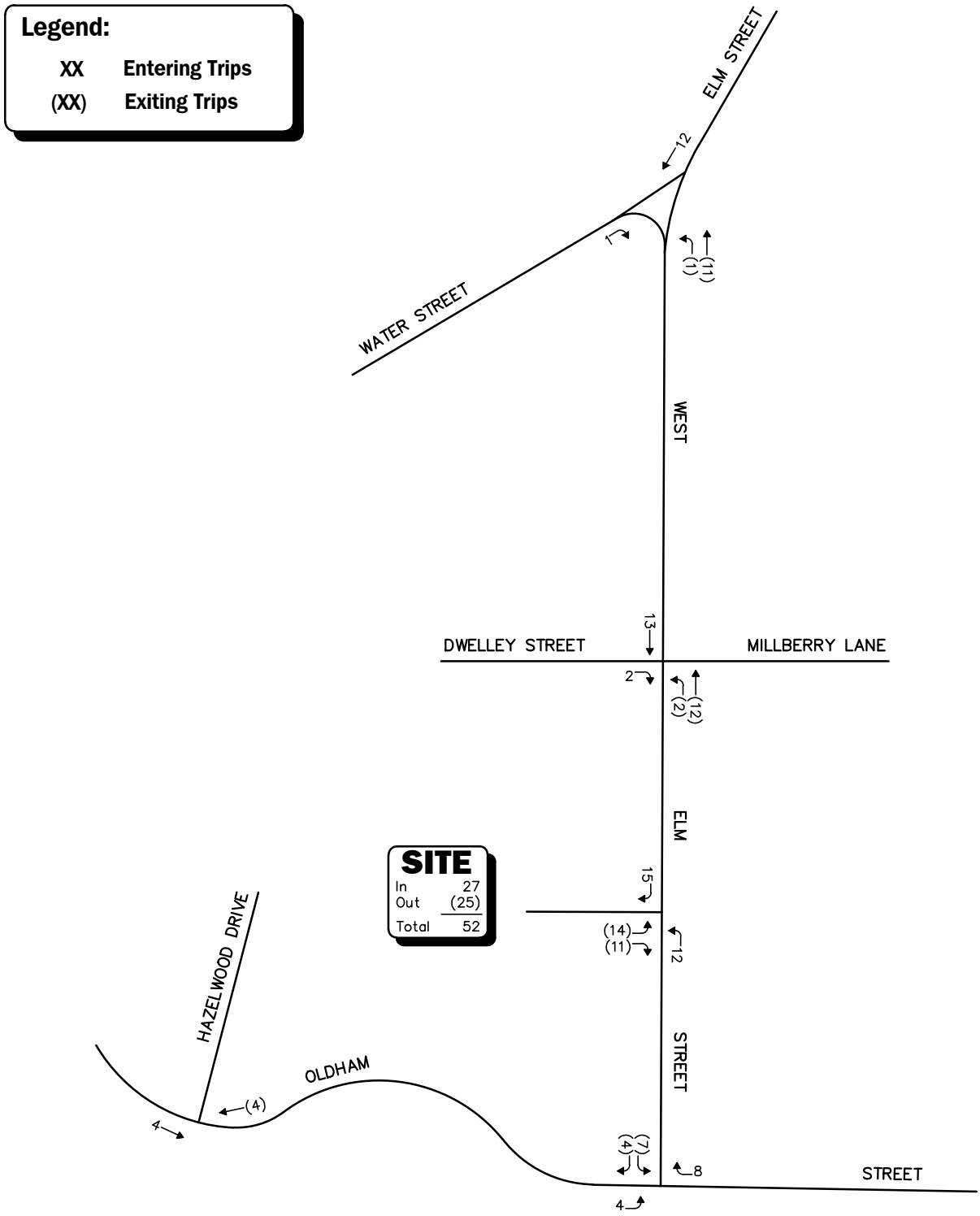

Note: Imbalances exist due to numerous curb cuts and side streets that are not shown.

Not To Scale

Figure A-2

Pembroke Country Club Trips
Weekday Evening
Peak-Hour Traffic Volumes

Vanasse & Associates inc

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TRIP-GENERATION CALCULATIONS

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- Add Users
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Add-ons to do more

Try OTISS Pro

Query | Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 430

LAND USE GROUP: (400-499) Recreational

LAND USE : 430 - Golf Course

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

INDEPENDENT VARIABLE (IV): Holes

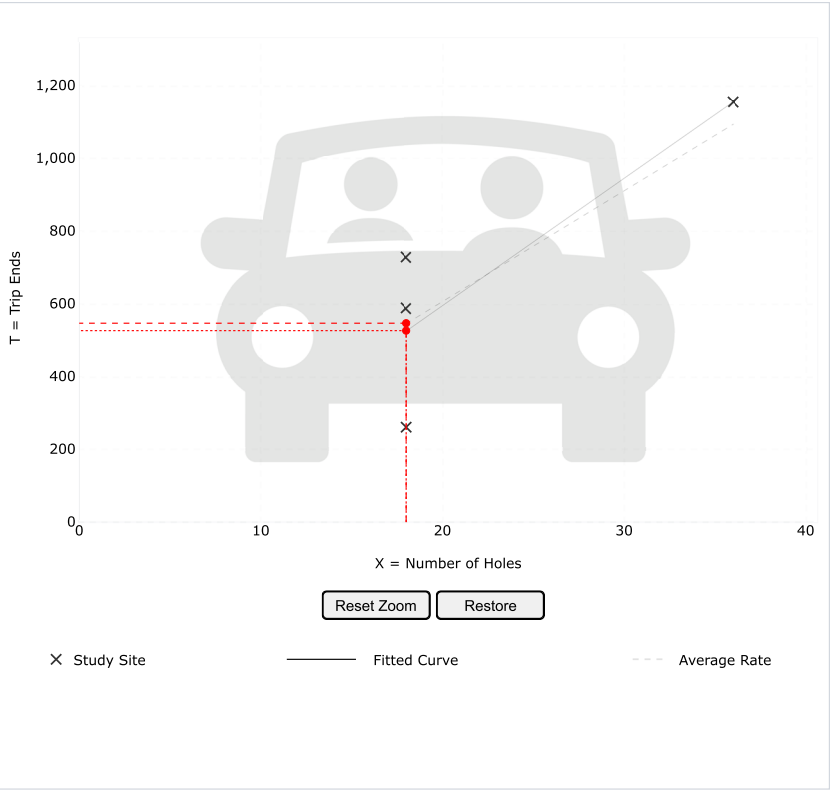
TIME PERIOD: Weekday

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 18 Calculate

Data Plot and Equation

Caution – Small Sample Size



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Golf Course (430) Click for Description and Data Plots

Independent Variable:
Holes

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
4

Avg. Num. of Holes:
23

Average Rate:
30.38

Range of Rates:
14.50 - 40.50

Standard Deviation:
9.88

Fitted Curve Equation:
T = 34.93(X) - 102.33

R^2:
0.72

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 547 (Total), 273 (Entry), 274 (Exit)
Fitted Curve: 526 (Total), 263 (Entry), 263 (Exit)

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DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 430

LAND USE GROUP: (400-499) Recreational

LAND USE : 430 - Golf Course

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

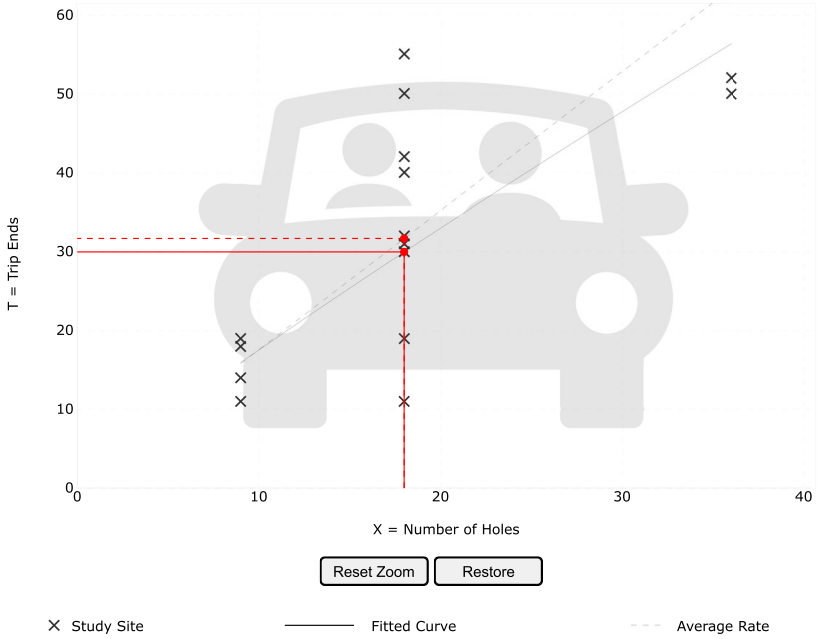
INDEPENDENT VARIABLE (IV): Holes

TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 18 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Golf Course (430) Click for Description and Data Plots

Independent Variable:
Holes

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
15

Avg. Num. of Holes:
18

Average Rate:
1.76

Range of Rates:
0.61 - 3.06

Standard Deviation:
0.64

Fitted Curve Equation:
Ln(T) = 0.91 Ln(X) + 0.77

R^2:
0.50

Directional Distribution:
79% entering, 21% exiting

Calculated Trip Ends:
Average Rate: 32 (Total), 25 (Entry), 7 (Exit)
Fitted Curve: 30 (Total), 24 (Entry), 6 (Exit)

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DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 430

LAND USE GROUP: (400-499) Recreational

LAND USE : 430 - Golf Course

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

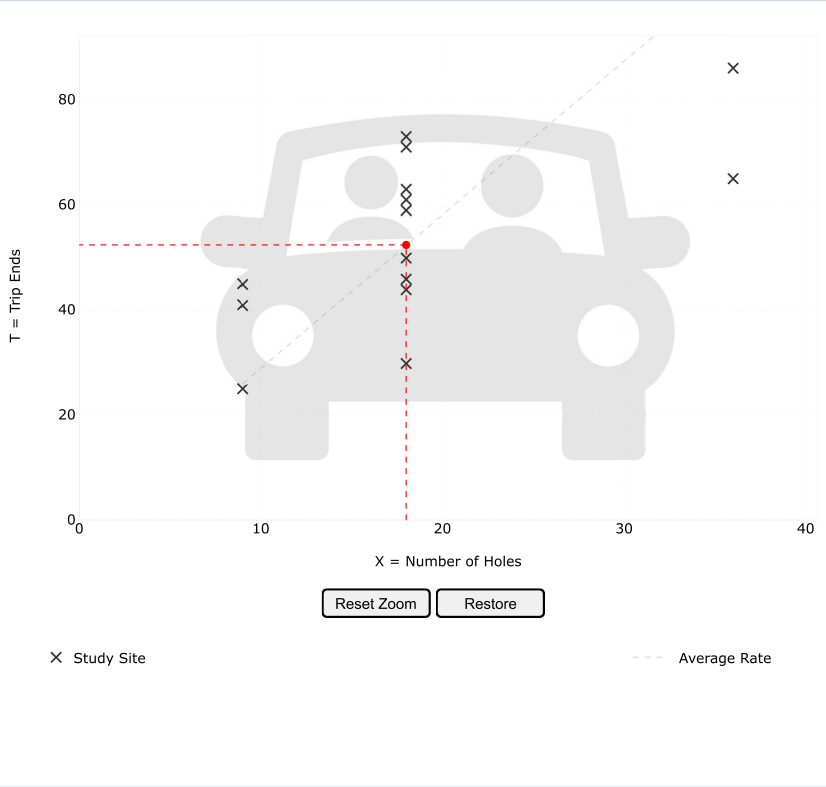
INDEPENDENT VARIABLE (IV): Holes

TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 18 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Golf Course (430) Click for Description and Data Plots

Independent Variable:
Holes

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
14

Avg. Num. of Holes:
19

Average Rate:
2.91

Range of Rates:
1.67 - 5.00

Standard Deviation:
0.93

Fitted Curve Equation:
Not Given

R^2:
****

Directional Distribution:
53% entering, 47% exiting

Calculated Trip Ends:
Average Rate: 52 (Total), 27 (Entry), 25 (Exit)

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Query | Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 251

LAND USE GROUP: (200-299) Residential

LAND USE : 251 - Senior Adult Housing - Single-Family

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

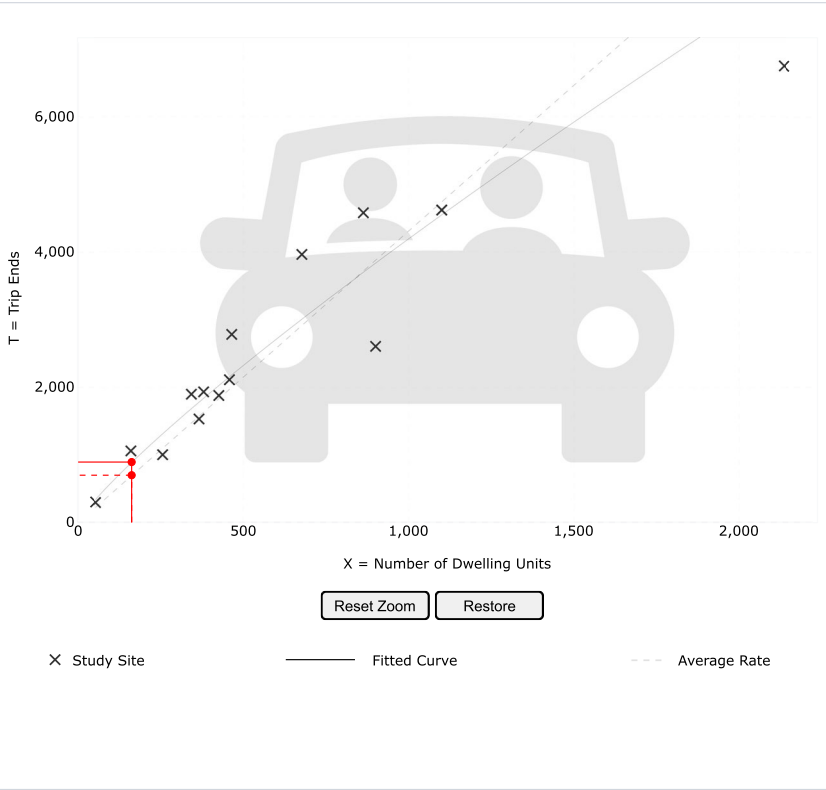
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 162 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Senior Adult Housing - Single-Family (251) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
15

Avg. Num. of Dwelling Units:
646

Average Rate:
4.31

Range of Rates:
2.90 - 6.66

Standard Deviation:
1.07

Fitted Curve Equation:
Ln(T) = 0.85 Ln(X) + 2.47

R^2:
0.94

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 698 (Total), 349 (Entry), 349 (Exit)
Fitted Curve: 893 (Total), 446 (Entry), 447 (Exit)

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DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 251

LAND USE GROUP: (200-299) Residential

LAND USE : 251 - Senior Adult Housing - Single-Family

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

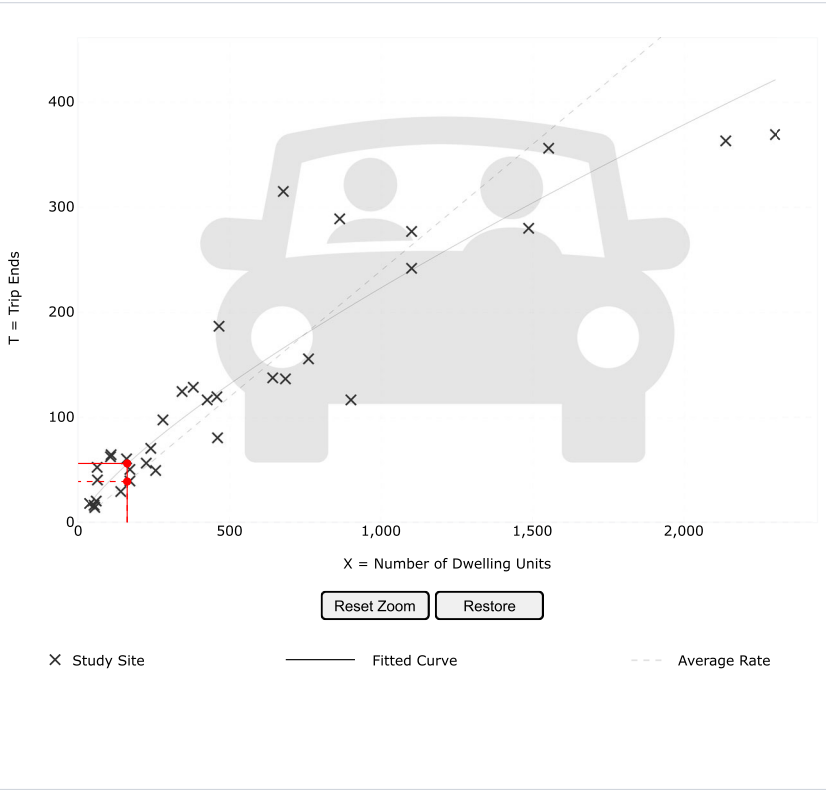
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 162 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Senior Adult Housing - Single-Family (251) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
34

Avg. Num. of Dwelling Units:
557

Average Rate:
0.24

Range of Rates:
0.13 - 0.84

Standard Deviation:
0.10

Fitted Curve Equation:
Ln(T) = 0.76 Ln(X) + 0.16

R^2:
0.88

Directional Distribution:
33% entering, 67% exiting

Calculated Trip Ends:
Average Rate: 39 (Total), 13 (Entry), 26 (Exit)
Fitted Curve: 56 (Total), 18 (Entry), 38 (Exit)

Add-ons to do more
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Graph Look Up

Query | Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 251

LAND USE GROUP: (200-299) Residential

LAND USE : 251 - Senior Adult Housing - Single-Family

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

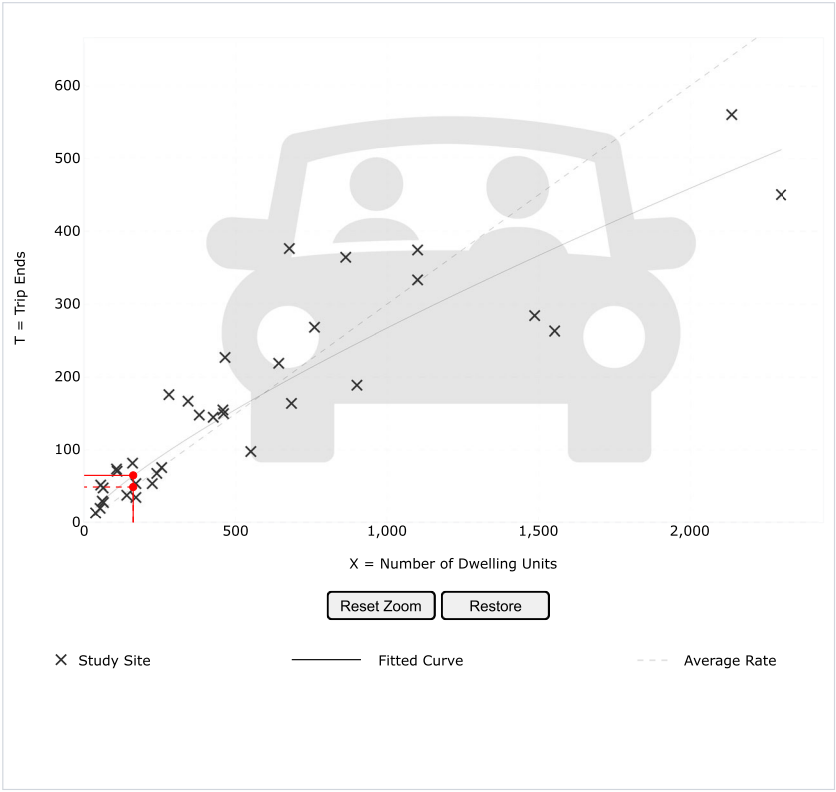
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 162 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Senior Adult Housing - Single-Family (251) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
35

Avg. Num. of Dwelling Units:
556

Average Rate:
0.30

Range of Rates:
0.17 - 0.95

Standard Deviation:
0.12

Fitted Curve Equation:
Ln(T) = 0.78 Ln(X) + 0.20

R^2:
0.86

Directional Distribution:
61% entering, 39% exiting

Calculated Trip Ends:
Average Rate: 49 (Total), 30 (Entry), 19 (Exit)
Fitted Curve: 65 (Total), 39 (Entry), 26 (Exit)

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Query | Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 252

LAND USE GROUP: (200-299) Residential

LAND USE : 252 - Senior Adult Housing - Multifamily

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

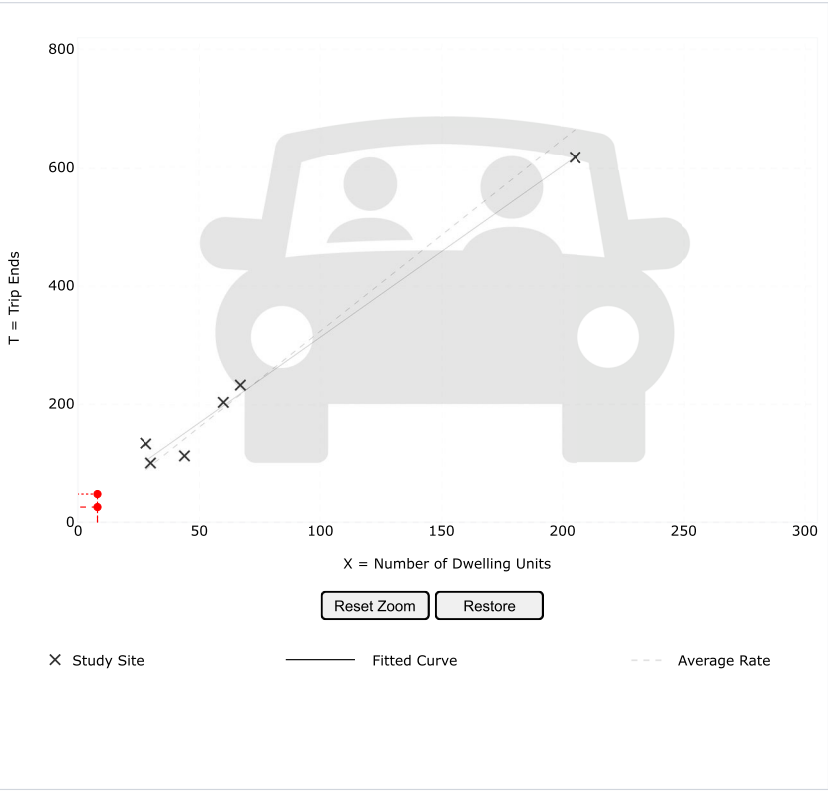
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 8 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Senior Adult Housing - Multifamily (252) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
6

Avg. Num. of Dwelling Units:
72

Average Rate:
3.24

Range of Rates:
2.59 - 4.79

Standard Deviation:
0.53

Fitted Curve Equation:
T = 2.89(X) + 24.82

R^2:
0.99

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 26 (Total), 13 (Entry), 13 (Exit)
Fitted Curve: 48 (Total), 24 (Entry), 24 (Exit)

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Graph Look Up

Query | Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 252

LAND USE GROUP: (200-299) Residential

LAND USE : 252 - Senior Adult Housing - Multifamily

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

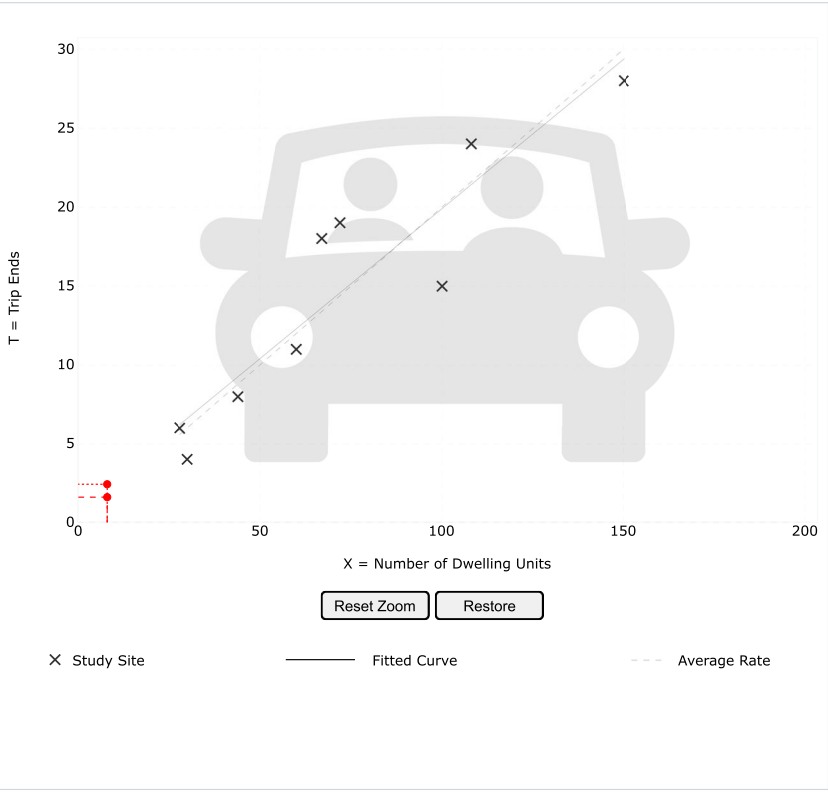
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 8 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Senior Adult Housing - Multifamily (252) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
9

Avg. Num. of Dwelling Units:
73

Average Rate:
0.20

Range of Rates:
0.13 - 0.27

Standard Deviation:
0.04

Fitted Curve Equation:
T = 0.19(X) + 0.90

R^2:
0.85

Directional Distribution:
34% entering, 66% exiting

Calculated Trip Ends:
Average Rate: 2 (Total), 1 (Entry), 1 (Exit)
Fitted Curve: 2 (Total), 0 (Entry), 2 (Exit)

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Graph Look Up

Query | Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 252

LAND USE GROUP: (200-299) Residential

LAND USE : 252 - Senior Adult Housing - Multifamily

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

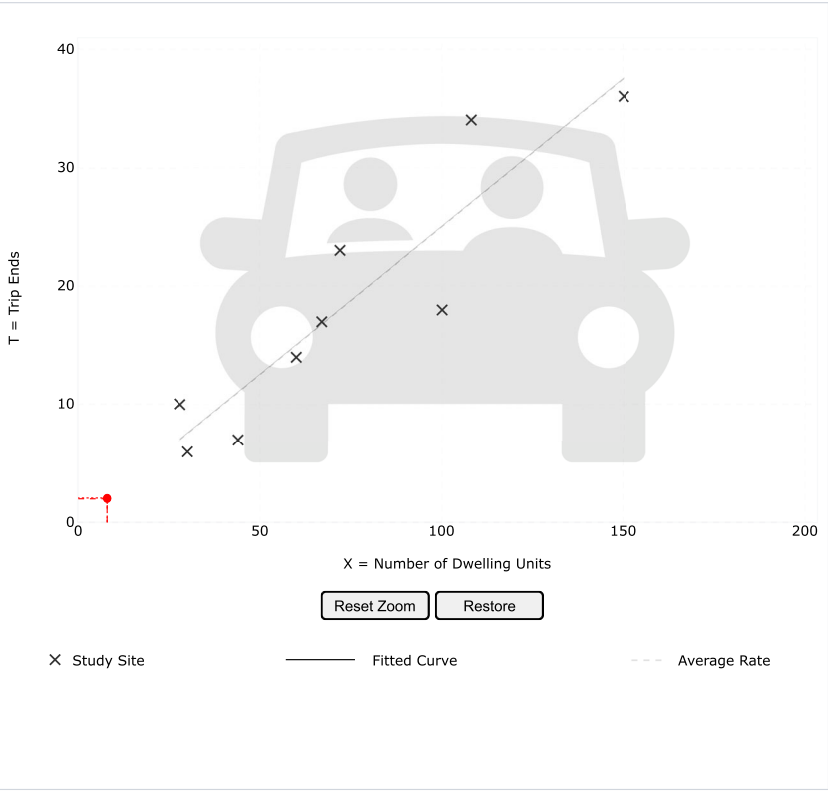
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 8 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Senior Adult Housing - Multifamily (252) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
9

Avg. Num. of Dwelling Units:
73

Average Rate:
0.25

Range of Rates:
0.16 - 0.36

Standard Deviation:
0.06

Fitted Curve Equation:
T = 0.25(X) + 0.07

R^2:
0.84

Directional Distribution:
56% entering, 44% exiting

Calculated Trip Ends:
Average Rate: 2 (Total), 1 (Entry), 1 (Exit)
Fitted Curve: 2 (Total), 1 (Entry), 1 (Exit)

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DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 210

LAND USE GROUP: (200-299) Residential

LAND USE : 210 - Single-Family Detached Housing

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

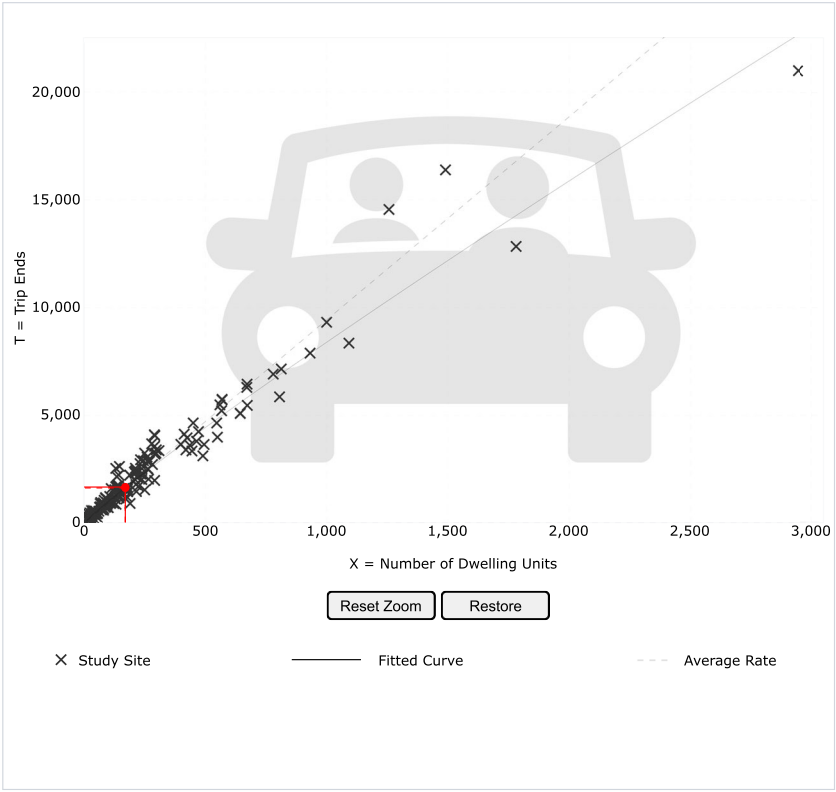
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 170 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
174

Avg. Num. of Dwelling Units:
246

Average Rate:
9.43

Range of Rates:
4.45 - 22.61

Standard Deviation:
2.13

Fitted Curve Equation:
Ln(T) = 0.92 Ln(X) + 2.68

R^2:
0.95

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 1603 (Total), 801 (Entry), 802 (Exit)
Fitted Curve: 1644 (Total), 822 (Entry), 822 (Exit)

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Graph Look Up

Query | Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 210

LAND USE GROUP: (200-299) Residential

LAND USE : 210 - Single-Family Detached Housing

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

INDEPENDENT VARIABLE (IV): Dwelling Units

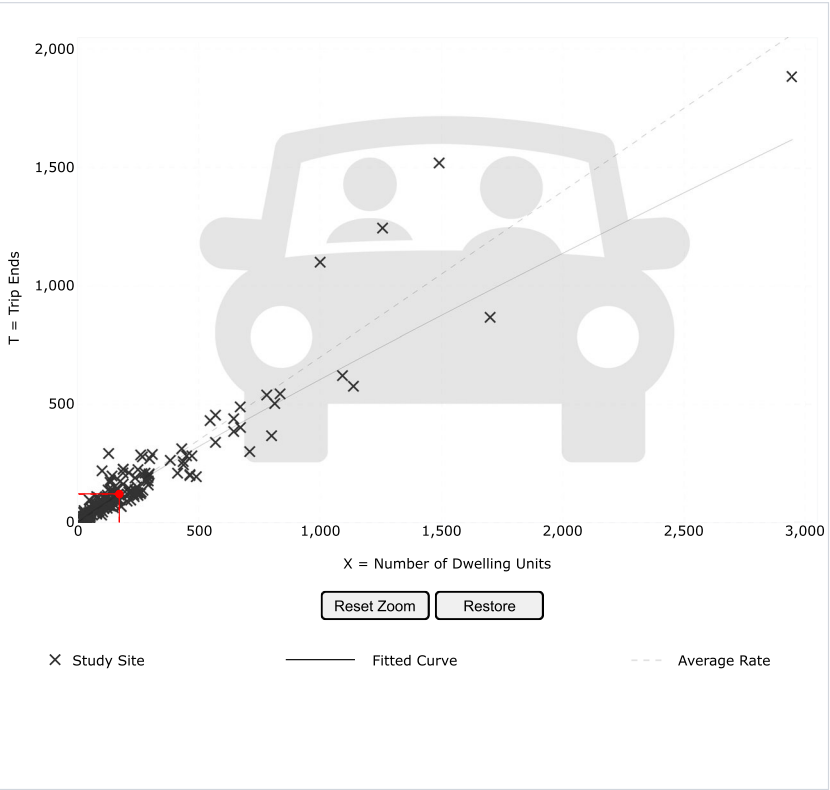
TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 170 Calculate

Vehicle

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
192

Avg. Num. of Dwelling Units:
226

Average Rate:
0.70

Range of Rates:
0.27 - 2.27

Standard Deviation:
0.24

Fitted Curve Equation:
Ln(T) = 0.91 Ln(X) + 0.12

R^2:
0.90

Directional Distribution:
26% entering, 74% exiting

Calculated Trip Ends:
Average Rate: 119 (Total), 31 (Entry), 88 (Exit)
Fitted Curve: 121 (Total), 31 (Entry), 90 (Exit)

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Graph Look Up

Graph Look Up
How to Use ITETripGen
TGM Desk Reference
TGM Appendices
Support Documents
Add Users
Comments

Query | Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 210

LAND USE GROUP: (200-299) Residential

LAND USE : 210 - Single-Family Detached Housing

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

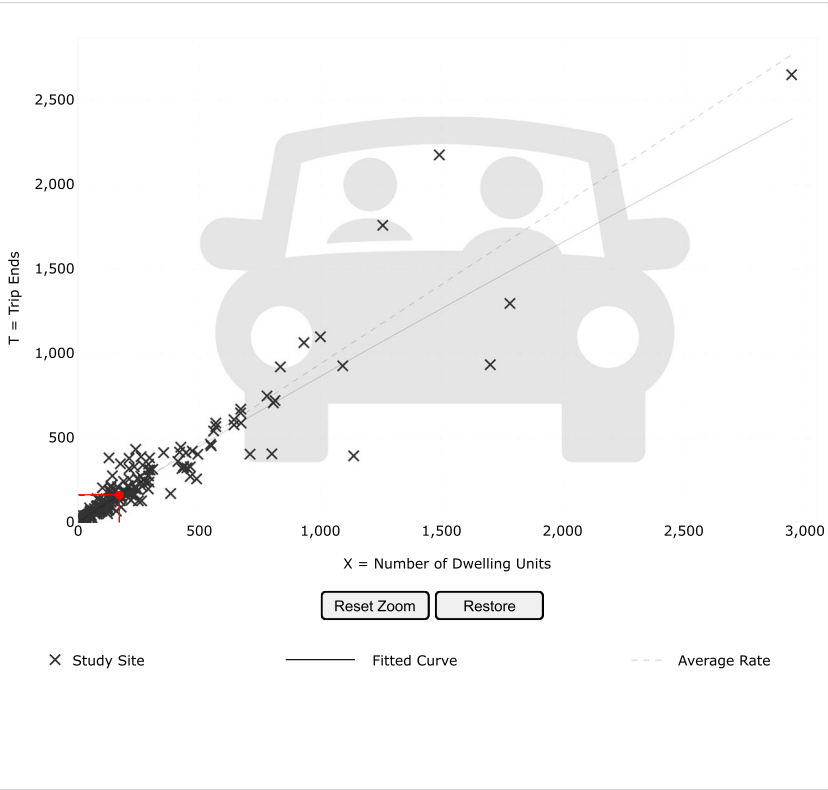
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 170 Calculate

Data Plot and Equation



Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

DATA STATISTICS

Land Use:
Single-Family Detached Housing (210) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
208

Avg. Num. of Dwelling Units:
248

Average Rate:
0.94

Range of Rates:
0.35 - 2.98

Standard Deviation:
0.31

Fitted Curve Equation:
Ln(T) = 0.94 Ln(X) + 0.27

R^2:
0.92

Directional Distribution:
63% entering, 37% exiting

Calculated Trip Ends:
Average Rate: 160 (Total), 101 (Entry), 59 (Exit)
Fitted Curve: 164 (Total), 103 (Entry), 61 (Exit)

Add-ons to do more
Try OTISS Pro

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JOURNEY-TO-WORK TRIP DISTRIBUTIONS

Proposed Age-Qualified Residential Development
Pembroke, Massachusetts

Residence	Workplace	Number	Elm Street (North)		Water Street (West)		Dwelley Street (West)		Oldham Street (West)		Oldham Street (East)					
Pembroke town	Pembroke town	1,828		0		0		0	25%	457	75%	1371		0		0
Pembroke town	Boston city	1,200	100%	1200		0		0		0		0		0		0
Pembroke town	Plymouth town	598		0		0		0		0	100%	598		0		0
Pembroke town	Hanover town	524	50%	262		0	50%	262		0		0		0		0
Pembroke town	Brockton city	505		0		0	50%	253	50%	253		0		0		0
Pembroke town	Quincy city	446	100%	446		0		0		0		0		0		0
Pembroke town	Hingham town	388	100%	388		0		0		0		0		0		0
Pembroke town	Marshfield town	334	50%	167		0		0		0	50%	167		0		0
Pembroke town	Kingston town	301		0		0		0		0	100%	301		0		0
Pembroke town	Norwell town	297	100%	297		0		0		0		0		0		0
Pembroke town	Weymouth Town city	289	100%	289		0		0		0		0		0		0
Pembroke town	Braintree Town city	272	100%	272		0		0		0		0		0		0
Pembroke town	Duxbury town	265		0		0		0		0	100%	265		0		0
Pembroke town	Canton town	221	50%	111		0	25%	55	25%	55		0		0		0
Pembroke town	Rockland town	167		0		0	100%	167		0		0		0		0
Pembroke town	Abington town	159		0		0	50%	80	50%	80		0		0		0
Pembroke town	Hanson town	139		0		0	50%	70	50%	70		0		0		0
Pembroke town	Whitman town	102		0		0	50%	51	50%	51		0		0		0
Pembroke town	Bridgewater town	84		0		0		0	100%	84		0		0		0
Pembroke town	Norwood town	83	100%	83		0		0		0		0		0		0
Pembroke town	Sandwich town	75		0		0		0		0	100%	75		0		0
Pembroke town	Dedham town	71	100%	71		0		0		0		0		0		0
Pembroke town	East Bridgewater town	70		0		0		0	100%	70		0		0		0
Pembroke town	Westwood town	65	100%	65		0		0		0		0		0		0
Pembroke town	Barnstable Town city	64		0		0		0		0	100%	64		0		0
Pembroke town	Randolph town	59		0		0	50%	30	50%	30		0		0		0
Pembroke town	Westford town	57	100%	57		0		0		0		0		0		0
Pembroke town	Waltham city	48	100%	48		0		0		0		0		0		0
Pembroke town	Middleborough town	47		0		0		0	100%	47		0		0		0
Pembroke town	Wellesley town	45	100%	45		0		0		0		0		0		0
Pembroke town	Foxborough town	43	100%	43		0		0		0		0		0		0
Pembroke town	Newton city	41	100%	41		0		0		0		0		0		0
		8,887		3,885		0		966		1,195		2,841		0		0
				43.7%		0.0%		10.9%		13.4%		32.0%		0.0%		0.0%
		SAY		**44.0%**		**0.0%**		**11.0%**		**13.0%**		**32.0%**				

CAPACITY ANALYSIS WORKSHEETS

Elm Street at Water Street
West Elm Street at Dwelley Street and Milbery Lane
West Elm Street at the Pembroke CC Main Driveway
Oldham Street at West Elm Street
Oldham Street at Hazelwood Drive
Dwelley Street at the East Project Site Driveway
Dwelley Street at the West Project Site Driveway

Elm Street at Water Street

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	13	14	319	90	13
Future Vol, veh/h	19	13	14	319	90	13
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	83	83	93	93	71	71
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	23	16	15	343	127	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	509	136	145	0	-	0
Stage 1	136	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	528	918	1450	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	521	918	1450	-	-	-
Mov Cap-2 Maneuver	521	-	-	-	-	-
Stage 1	883	-	-	-	-	-
Stage 2	701	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1450	-	632	-	-
HCM Lane V/C Ratio	0.01	-	0.061	-	-
HCM Control Delay (s)	7.5	0	11.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	19	20	25	172	338	25
Future Vol, veh/h	19	20	25	172	338	25
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	66	66	79	79	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	29	30	32	218	367	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	663	381	394	0	-	0
Stage 1	381	-	-	-	-	-
Stage 2	282	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	429	671	1176	-	-	-
Stage 1	695	-	-	-	-	-
Stage 2	770	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	416	671	1176	-	-	-
Mov Cap-2 Maneuver	416	-	-	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	770	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.9	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1176	-	517	-	-
HCM Lane V/C Ratio	0.027	-	0.114	-	-
HCM Control Delay (s)	8.1	0	12.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	15	15	345	107	14
Future Vol, veh/h	20	15	15	345	107	14
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	83	83	93	93	71	71
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	24	18	16	371	151	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	564	161	171	0	-	0
Stage 1	161	-	-	-	-	-
Stage 2	403	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	490	889	1418	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	483	889	1418	-	-	-
Mov Cap-2 Maneuver	483	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	679	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.4	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1418	-	601	-	-
HCM Lane V/C Ratio	0.011	-	0.07	-	-
HCM Control Delay (s)	7.6	0	11.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	23	28	196	375	27
Future Vol, veh/h	20	23	28	196	375	27
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	66	66	79	79	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	35	35	248	408	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	741	423	437	0	-	0
Stage 1	423	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	387	635	1134	-	-	-
Stage 1	665	-	-	-	-	-
Stage 2	742	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	373	635	1134	-	-	-
Mov Cap-2 Maneuver	373	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	742	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.7	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1134	-	479	-	-
HCM Lane V/C Ratio	0.031	-	0.136	-	-
HCM Control Delay (s)	8.3	0	13.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	15	15	362	115	14
Future Vol, veh/h	20	15	15	362	115	14
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	83	83	93	93	71	71
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	24	18	16	389	162	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	593	172	182	0	-	0
Stage 1	172	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	472	877	1405	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	465	877	1405	-	-	-
Mov Cap-2 Maneuver	465	-	-	-	-	-
Stage 1	850	-	-	-	-	-
Stage 2	667	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1405	-	582	-	-
HCM Lane V/C Ratio	0.011	-	0.072	-	-
HCM Control Delay (s)	7.6	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	23	28	208	393	27
Future Vol, veh/h	20	23	28	208	393	27
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	66	66	79	79	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	30	35	35	263	427	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	775	442	456	0	-	0
Stage 1	442	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	369	620	1115	-	-	-
Stage 1	652	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	355	620	1115	-	-	-
Mov Cap-2 Maneuver	355	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	731	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.1	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1115	-	460	-	-
HCM Lane V/C Ratio	0.032	-	0.142	-	-
HCM Control Delay (s)	8.3	0	14.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

West Elm Street at Dwelley Street and Milbery Lane

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	38	0	23	0	2	1	22	305	0	1	90	24
Future Vol, veh/h	38	0	23	0	2	1	22	305	0	1	90	24
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	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	38	38	38	86	86	86	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	5	1	0	0	2	5
Mvmt Flow	46	0	28	0	5	3	26	355	0	1	106	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	533	529	120	529	515	355	106	0	0	355	0	0
Stage 1	122	122	-	407	407	-	-	-	-	-	-	-
Stage 2	411	407	-	122	108	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.15	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.245	-	-	2.2	-	-
Pot Cap-1 Maneuver	461	458	937	463	466	693	1467	-	-	1215	-	-
Stage 1	887	799	-	625	601	-	-	-	-	-	-	-
Stage 2	622	601	-	887	810	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	447	447	937	441	455	693	1467	-	-	1215	-	-
Mov Cap-2 Maneuver	447	447	-	441	455	-	-	-	-	-	-	-
Stage 1	867	798	-	611	588	-	-	-	-	-	-	-
Stage 2	601	588	-	860	809	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.5	12.1	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1467	-	-	557	514	1215	-	-
HCM Lane V/C Ratio	0.017	-	-	0.134	0.015	0.001	-	-
HCM Control Delay (s)	7.5	0	-	12.5	12.1	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0	0	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	33	2	26	0	0	2	18	158	0	3	322	40
Future Vol, veh/h	33	2	26	0	0	2	18	158	0	3	322	40
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	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	50	50	50	91	91	91	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	45	3	35	0	0	4	20	174	0	3	366	45

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	611	609	389	605	586	174	366	0	0	174	0	0
Stage 1	395	395	-	214	214	-	-	-	-	-	-	-
Stage 2	216	214	-	391	372	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	409	412	664	413	425	875	1204	-	-	1415	-	-
Stage 1	634	608	-	793	729	-	-	-	-	-	-	-
Stage 2	791	729	-	637	622	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	401	403	664	383	416	875	1204	-	-	1415	-	-
Mov Cap-2 Maneuver	401	403	-	383	416	-	-	-	-	-	-	-
Stage 1	623	606	-	779	716	-	-	-	-	-	-	-
Stage 2	773	716	-	599	620	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14	9.1	0.8	0.1
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1204	-	-	483	875	1415	-	-
HCM Lane V/C Ratio	0.016	-	-	0.171	0.005	0.002	-	-
HCM Control Delay (s)	8	0	-	14	9.1	7.5	0	-
HCM Lane LOS	A	A	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	41	0	27	0	2	1	25	330	0	1	109	26
Future Vol, veh/h	41	0	27	0	2	1	25	330	0	1	109	26
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	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	38	38	38	86	86	86	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	5	1	0	0	2	5
Mvmt Flow	50	0	33	0	5	3	29	384	0	1	128	31

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	592	588	144	589	572	384	128	0	0	384	0	0
Stage 1	146	146	-	442	442	-	-	-	-	-	-	-
Stage 2	446	442	-	147	130	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.15	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.245	-	-	2.2	-	-
Pot Cap-1 Maneuver	421	424	909	423	433	668	1440	-	-	1186	-	-
Stage 1	861	780	-	598	580	-	-	-	-	-	-	-
Stage 2	595	580	-	860	792	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	407	413	909	399	421	668	1440	-	-	1186	-	-
Mov Cap-2 Maneuver	407	413	-	399	421	-	-	-	-	-	-	-
Stage 1	839	779	-	582	565	-	-	-	-	-	-	-
Stage 2	572	565	-	828	791	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	12.6	0.5	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1440	-	-	521	480	1186	-	-
HCM Lane V/C Ratio	0.02	-	-	0.159	0.016	0.001	-	-
HCM Control Delay (s)	7.6	0	-	13.2	12.6	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	2	30	0	0	2	21	182	0	3	359	42
Future Vol, veh/h	35	2	30	0	0	2	21	182	0	3	359	42
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	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	50	50	50	91	91	91	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	47	3	41	0	0	4	23	200	0	3	408	48

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	686	684	432	682	660	200	408	0	0	200	0	0
Stage 1	438	438	-	246	246	-	-	-	-	-	-	-
Stage 2	248	246	-	436	414	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	364	374	628	367	386	846	1162	-	-	1384	-	-
Stage 1	601	582	-	762	706	-	-	-	-	-	-	-
Stage 2	760	706	-	603	597	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	355	365	628	335	376	846	1162	-	-	1384	-	-
Mov Cap-2 Maneuver	355	365	-	335	376	-	-	-	-	-	-	-
Stage 1	588	580	-	745	690	-	-	-	-	-	-	-
Stage 2	740	690	-	560	595	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.3	9.3	0.8	0.1
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1162	-	-	441	846	1384	-	-
HCM Lane V/C Ratio	0.02	-	-	0.205	0.005	0.002	-	-
HCM Control Delay (s)	8.2	0	-	15.3	9.3	7.6	0	-
HCM Lane LOS	A	A	-	C	A	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	49	0	37	0	2	1	31	339	0	1	113	30
Future Vol, veh/h	49	0	37	0	2	1	31	339	0	1	113	30
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	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	38	38	38	86	86	86	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0	5	1	0	0	2	5
Mvmt Flow	60	0	45	0	5	3	36	394	0	1	133	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	623	619	151	624	601	394	133	0	0	394	0	0
Stage 1	153	153	-	466	466	-	-	-	-	-	-	-
Stage 2	470	466	-	158	135	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.15	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.245	-	-	2.2	-	-
Pot Cap-1 Maneuver	401	407	901	401	417	659	1433	-	-	1176	-	-
Stage 1	854	775	-	581	566	-	-	-	-	-	-	-
Stage 2	578	566	-	849	789	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	385	394	901	371	403	659	1433	-	-	1176	-	-
Mov Cap-2 Maneuver	385	394	-	371	403	-	-	-	-	-	-	-
Stage 1	827	774	-	562	548	-	-	-	-	-	-	-
Stage 2	552	548	-	806	788	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.9	12.9	0.6	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1433	-	-	511	463	1176	-	-
HCM Lane V/C Ratio	0.025	-	-	0.205	0.017	0.001	-	-
HCM Control Delay (s)	7.6	0	-	13.9	12.9	8.1	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	41	2	38	0	0	2	32	188	0	3	368	51
Future Vol, veh/h	41	2	38	0	0	2	32	188	0	3	368	51
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	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	74	74	74	50	50	50	91	91	91	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	55	3	51	0	0	4	35	207	0	3	418	58

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	732	730	447	728	701	207	418	0	0	207	0	0
Stage 1	453	453	-	277	277	-	-	-	-	-	-	-
Stage 2	279	277	-	451	424	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	339	352	616	341	365	839	1152	-	-	1376	-	-
Stage 1	590	573	-	734	685	-	-	-	-	-	-	-
Stage 2	732	685	-	592	590	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	328	339	616	302	351	839	1152	-	-	1376	-	-
Mov Cap-2 Maneuver	328	339	-	302	351	-	-	-	-	-	-	-
Stage 1	570	571	-	709	662	-	-	-	-	-	-	-
Stage 2	704	662	-	538	588	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.5	9.3	1.2	0.1
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1152	-	-	421	839	1376	-	-
HCM Lane V/C Ratio	0.031	-	-	0.26	0.005	0.002	-	-
HCM Control Delay (s)	8.2	0	-	16.5	9.3	7.6	0	-
HCM Lane LOS	A	A	-	C	A	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	1	0	0	-	-

West Elm Street at the Pembroke CC Main Driveway

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	3	11	334	143	14
Future Vol, veh/h	4	3	11	334	143	14
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	90	86	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	3	12	371	166	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	569	174	181	0	-	0
Stage 1	174	-	-	-	-	-
Stage 2	395	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	484	869	1394	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	681	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	479	869	1394	-	-	-
Mov Cap-2 Maneuver	479	-	-	-	-	-
Stage 1	847	-	-	-	-	-
Stage 2	681	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1394	-	593	-	-
HCM Lane V/C Ratio	0.009	-	0.013	-	-
HCM Control Delay (s)	7.6	0	11.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	11	12	170	382	15
Future Vol, veh/h	14	11	12	170	382	15
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	86	88	92
Heavy Vehicles, %	2	2	2	1	1	2
Mvmt Flow	15	12	13	198	434	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	666	442	450	0	-	0
Stage 1	442	-	-	-	-	-
Stage 2	224	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	425	615	1110	-	-	-
Stage 1	648	-	-	-	-	-
Stage 2	813	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	419	615	1110	-	-	-
Mov Cap-2 Maneuver	419	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	813	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1110	-	487	-	-
HCM Lane V/C Ratio	0.012	-	0.056	-	-
HCM Control Delay (s)	8.3	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	10	14	341	153	18
Future Vol, veh/h	12	10	14	341	153	18
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	90	86	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	11	15	379	178	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	597	188	198	0	-	0
Stage 1	188	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	466	854	1375	-	-	-
Stage 1	844	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	459	854	1375	-	-	-
Mov Cap-2 Maneuver	459	-	-	-	-	-
Stage 1	832	-	-	-	-	-
Stage 2	671	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.5	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1375	-	581	-	-
HCM Lane V/C Ratio	0.011	-	0.041	-	-
HCM Control Delay (s)	7.6	0	11.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	16	19	181	391	23
Future Vol, veh/h	20	16	19	181	391	23
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	86	88	92
Heavy Vehicles, %	2	2	2	1	1	2
Mvmt Flow	22	17	21	210	444	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	709	457	469	0	-	0
Stage 1	457	-	-	-	-	-
Stage 2	252	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	401	604	1093	-	-	-
Stage 1	638	-	-	-	-	-
Stage 2	790	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	392	604	1093	-	-	-
Mov Cap-2 Maneuver	392	-	-	-	-	-
Stage 1	624	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.5	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1093	-	464	-	-
HCM Lane V/C Ratio	0.019	-	0.084	-	-
HCM Control Delay (s)	8.4	0	13.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Oldham Street at West Elm Street

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	161	147	93	142	87	47
Future Vol, veh/h	161	147	93	142	87	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	91	91	90	90
Heavy Vehicles, %	1	2	5	2	1	0
Mvmt Flow	189	173	102	156	97	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	102	0	-	0	731	180
Stage 1	-	-	-	-	180	-
Stage 2	-	-	-	-	551	-
Critical Hdwy	4.11	-	-	-	6.41	6.2
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.3
Pot Cap-1 Maneuver	1496	-	-	-	390	868
Stage 1	-	-	-	-	853	-
Stage 2	-	-	-	-	579	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1496	-	-	-	335	868
Mov Cap-2 Maneuver	-	-	-	-	335	-
Stage 1	-	-	-	-	734	-
Stage 2	-	-	-	-	579	-

Approach	EB	WB	SB
HCM Control Delay, s	4.1	0	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1496	-	-	-	472
HCM Lane V/C Ratio	0.127	-	-	-	0.315
HCM Control Delay (s)	7.8	0	-	-	16.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	1.3

Intersection	
Int Delay, s/veh	8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	76	146	150	97	191	147
Future Vol, veh/h	76	146	150	97	191	147
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	86	86	85	85
Heavy Vehicles, %	0	1	1	0	1	0
Mvmt Flow	85	164	174	113	225	173

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	174	0	-	0	565	231
Stage 1	-	-	-	-	231	-
Stage 2	-	-	-	-	334	-
Critical Hdwy	4.1	-	-	-	6.41	6.2
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.2	-	-	-	3.509	3.3
Pot Cap-1 Maneuver	1415	-	-	-	488	813
Stage 1	-	-	-	-	810	-
Stage 2	-	-	-	-	728	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1415	-	-	-	456	813
Mov Cap-2 Maneuver	-	-	-	-	456	-
Stage 1	-	-	-	-	757	-
Stage 2	-	-	-	-	728	-

Approach	EB	WB	SB
HCM Control Delay, s	2.6	0	17.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1415	-	-	-	686
HCM Lane V/C Ratio	0.06	-	-	-	0.58
HCM Control Delay (s)	7.7	0	-	-	17.2
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	3.7

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	176	158	100	159	95	52
Future Vol, veh/h	176	158	100	159	95	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	91	91	90	90
Heavy Vehicles, %	1	2	5	2	1	0
Mvmt Flow	207	186	110	175	106	58

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	110	0	-	0	798	198
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	600	-
Critical Hdwy	4.11	-	-	-	6.41	6.2
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.3
Pot Cap-1 Maneuver	1486	-	-	-	356	848
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	550	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1486	-	-	-	301	848
Mov Cap-2 Maneuver	-	-	-	-	301	-
Stage 1	-	-	-	-	708	-
Stage 2	-	-	-	-	550	-

Approach	EB	WB	SB
HCM Control Delay, s	4.1	0	18.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1486	-	-	-	428
HCM Lane V/C Ratio	0.139	-	-	-	0.382
HCM Control Delay (s)	7.8	0	-	-	18.5
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	1.8

Intersection	
Int Delay, s/veh	11.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	85	157	160	112	212	162
Future Vol, veh/h	85	157	160	112	212	162
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	86	86	85	85
Heavy Vehicles, %	0	1	1	0	1	0
Mvmt Flow	96	176	186	130	249	191

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	186	0	-	0	619	251
Stage 1	-	-	-	-	251	-
Stage 2	-	-	-	-	368	-
Critical Hdwy	4.1	-	-	-	6.41	6.2
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.2	-	-	-	3.509	3.3
Pot Cap-1 Maneuver	1401	-	-	-	454	793
Stage 1	-	-	-	-	793	-
Stage 2	-	-	-	-	702	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1401	-	-	-	419	793
Mov Cap-2 Maneuver	-	-	-	-	419	-
Stage 1	-	-	-	-	733	-
Stage 2	-	-	-	-	702	-

Approach	EB	WB	SB
HCM Control Delay, s	2.7	0	25.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1401	-	-	-	598
HCM Lane V/C Ratio	0.068	-	-	-	0.736
HCM Control Delay (s)	7.8	0	-	-	25.9
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	6.3

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	181	159	101	164	107	57
Future Vol, veh/h	181	159	101	164	107	57
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	91	91	90	90
Heavy Vehicles, %	1	2	5	2	1	0
Mvmt Flow	213	187	111	180	119	63

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	111	0	-	0	814	201
Stage 1	-	-	-	-	201	-
Stage 2	-	-	-	-	613	-
Critical Hdwy	4.11	-	-	-	6.41	6.2
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.3
Pot Cap-1 Maneuver	1485	-	-	-	349	845
Stage 1	-	-	-	-	835	-
Stage 2	-	-	-	-	542	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1485	-	-	-	293	845
Mov Cap-2 Maneuver	-	-	-	-	293	-
Stage 1	-	-	-	-	701	-
Stage 2	-	-	-	-	542	-

Approach	EB	WB	SB
HCM Control Delay, s	4.2	0	20.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1485	-	-	-	414
HCM Lane V/C Ratio	0.143	-	-	-	0.44
HCM Control Delay (s)	7.8	0	-	-	20.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.5	-	-	-	2.2

Intersection	
Int Delay, s/veh	13.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	91	158	161	124	220	168
Future Vol, veh/h	91	158	161	124	220	168
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Yield	-	Yield
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	86	86	85	85
Heavy Vehicles, %	0	1	1	0	1	0
Mvmt Flow	102	178	187	144	259	198

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	187	0	-	0	641	259
Stage 1	-	-	-	-	259	-
Stage 2	-	-	-	-	382	-
Critical Hdwy	4.1	-	-	-	6.41	6.2
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.2	-	-	-	3.509	3.3
Pot Cap-1 Maneuver	1399	-	-	-	441	785
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	692	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1399	-	-	-	405	785
Mov Cap-2 Maneuver	-	-	-	-	405	-
Stage 1	-	-	-	-	723	-
Stage 2	-	-	-	-	692	-

Approach	EB	WB	SB
HCM Control Delay, s	2.8	0	30.5
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1399	-	-	-	579
HCM Lane V/C Ratio	0.073	-	-	-	0.788
HCM Control Delay (s)	7.8	0	-	-	30.5
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.2	-	-	-	7.5

Oldham Street at Hazelwood Drive

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	101	118	4	9	5
Future Vol, veh/h	4	101	118	4	9	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	77	77	65	65
Heavy Vehicles, %	0	0	1	50	13	0
Mvmt Flow	4	113	153	5	14	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	158	0	-	0	277	156
Stage 1	-	-	-	-	156	-
Stage 2	-	-	-	-	121	-
Critical Hdwy	4.1	-	-	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	2.2	-	-	-	3.617	3.3
Pot Cap-1 Maneuver	1434	-	-	-	690	895
Stage 1	-	-	-	-	846	-
Stage 2	-	-	-	-	878	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1434	-	-	-	688	895
Mov Cap-2 Maneuver	-	-	-	-	688	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	878	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1434	-	-	-	750
HCM Lane V/C Ratio	0.003	-	-	-	0.029
HCM Control Delay (s)	7.5	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	154	131	4	4	0
Future Vol, veh/h	5	154	131	4	4	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	81	81	33	33
Heavy Vehicles, %	0	1	0	0	0	0
Mvmt Flow	6	175	162	5	12	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	167	0	-	0	352	165
Stage 1	-	-	-	-	165	-
Stage 2	-	-	-	-	187	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1423	-	-	-	650	885
Stage 1	-	-	-	-	869	-
Stage 2	-	-	-	-	850	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1423	-	-	-	647	885
Mov Cap-2 Maneuver	-	-	-	-	647	-
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	850	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1423	-	-	-	647
HCM Lane V/C Ratio	0.004	-	-	-	0.019
HCM Control Delay (s)	7.5	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	4	112	127	4	9	5
Future Vol, veh/h	4	112	127	4	9	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	77	77	65	65
Heavy Vehicles, %	0	0	1	50	13	0
Mvmt Flow	4	126	165	5	14	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	170	0	-	0	302	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	134	-
Critical Hdwy	4.1	-	-	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	2.2	-	-	-	3.617	3.3
Pot Cap-1 Maneuver	1420	-	-	-	667	881
Stage 1	-	-	-	-	836	-
Stage 2	-	-	-	-	866	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1420	-	-	-	665	881
Mov Cap-2 Maneuver	-	-	-	-	665	-
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	866	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1420	-	-	-	729
HCM Lane V/C Ratio	0.003	-	-	-	0.03
HCM Control Delay (s)	7.5	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	169	144	5	5	0
Future Vol, veh/h	6	169	144	5	5	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	81	81	33	33
Heavy Vehicles, %	0	1	0	0	0	0
Mvmt Flow	7	192	178	6	15	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	184	0	-	0	387	181
Stage 1	-	-	-	-	181	-
Stage 2	-	-	-	-	206	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1403	-	-	-	620	867
Stage 1	-	-	-	-	855	-
Stage 2	-	-	-	-	833	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1403	-	-	-	616	867
Mov Cap-2 Maneuver	-	-	-	-	616	-
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	833	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1403	-	-	-	616
HCM Lane V/C Ratio	0.005	-	-	-	0.025
HCM Control Delay (s)	7.6	0	-	-	11
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	114	131	6	13	6
Future Vol, veh/h	5	114	131	6	13	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	77	77	65	65
Heavy Vehicles, %	0	0	1	50	13	0
Mvmt Flow	6	128	170	8	20	9

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	178	0	-	0	314	174
Stage 1	-	-	-	-	174	-
Stage 2	-	-	-	-	140	-
Critical Hdwy	4.1	-	-	-	6.53	6.2
Critical Hdwy Stg 1	-	-	-	-	5.53	-
Critical Hdwy Stg 2	-	-	-	-	5.53	-
Follow-up Hdwy	2.2	-	-	-	3.617	3.3
Pot Cap-1 Maneuver	1410	-	-	-	657	875
Stage 1	-	-	-	-	830	-
Stage 2	-	-	-	-	860	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1410	-	-	-	654	875
Mov Cap-2 Maneuver	-	-	-	-	654	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	860	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	10.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1410	-	-	-	711
HCM Lane V/C Ratio	0.004	-	-	-	0.041
HCM Control Delay (s)	7.6	0	-	-	10.3
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	173	147	9	8	0
Future Vol, veh/h	7	173	147	9	8	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	88	88	81	81	33	33
Heavy Vehicles, %	0	1	0	0	0	0
Mvmt Flow	8	197	181	11	24	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	192	0	-	0	400	187
Stage 1	-	-	-	-	187	-
Stage 2	-	-	-	-	213	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1394	-	-	-	610	860
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	827	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1394	-	-	-	606	860
Mov Cap-2 Maneuver	-	-	-	-	606	-
Stage 1	-	-	-	-	845	-
Stage 2	-	-	-	-	827	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1394	-	-	-	606
HCM Lane V/C Ratio	0.006	-	-	-	0.04
HCM Control Delay (s)	7.6	0	-	-	11.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Dwelley Street at the East Project Site Driveway

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	78	0	5	78	0	3
Future Vol, veh/h	78	0	5	78	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	92	92	90	92	92
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	105	0	5	87	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	105	0	202	105
Stage 1	-	-	-	-	105	-
Stage 2	-	-	-	-	97	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1486	-	787	949
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	927	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1486	-	784	949
Mov Cap-2 Maneuver	-	-	-	-	784	-
Stage 1	-	-	-	-	919	-
Stage 2	-	-	-	-	923	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	949	-	-	1486	-
HCM Lane V/C Ratio	0.003	-	-	0.004	-
HCM Control Delay (s)	8.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	81	0	2	61	0	5
Future Vol, veh/h	81	0	2	61	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	92	92	85	92	92
Heavy Vehicles, %	0	2	2	5	2	2
Mvmt Flow	99	0	2	72	0	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	99	0	175	99
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	76	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1494	-	815	957
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	947	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1494	-	814	957
Mov Cap-2 Maneuver	-	-	-	-	814	-
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	946	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	957	-	-	1494	-
HCM Lane V/C Ratio	0.006	-	-	0.001	-
HCM Control Delay (s)	8.8	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Dwelley Street at the West Project Site Driveway

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	69	1	6	55	2	12
Future Vol, veh/h	69	1	6	55	2	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	82	92	92	85	92	92
Heavy Vehicles, %	0	2	2	5	2	2
Mvmt Flow	84	1	7	65	2	13

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	85	0	164	85
Stage 1	-	-	-	-	85	-
Stage 2	-	-	-	-	79	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1512	-	827	974
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1512	-	823	974
Mov Cap-2 Maneuver	-	-	-	-	823	-
Stage 1	-	-	-	-	938	-
Stage 2	-	-	-	-	939	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	949	-	-	1512	-
HCM Lane V/C Ratio	0.016	-	-	0.004	-
HCM Control Delay (s)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	69	2	13	65	1	9
Future Vol, veh/h	69	2	13	65	1	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	74	92	92	90	92	92
Heavy Vehicles, %	0	2	2	0	2	2
Mvmt Flow	93	2	14	72	1	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	95	0	194	94
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	100	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1499	-	795	963
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	924	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1499	-	787	963
Mov Cap-2 Maneuver	-	-	-	-	787	-
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	915	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	942	-	-	1499	-
HCM Lane V/C Ratio	0.012	-	-	0.009	-
HCM Control Delay (s)	8.9	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-