

***TOWN OF TRUMBULL
CONNECTICUT***

*Town Hall
5866 Main Street
Trumbull, Connecticut 06611*

/

***Community Facilities Building Committee Meeting
February 12, 2025
7:00 PM
Trumbull Town Hall
Council Chambers***

AGENDA

I. Call to Order

II. Pledge of Allegiance

III. Roll Call

IV. Public Comment

V. Approval of 1/8/25 Minutes

VI. Project Discussion - Tom Arcari & Rocco Petitto, QA&M Architects

- Conceptual Plan Approval
- Traffic Study Report

VII. Next Steps

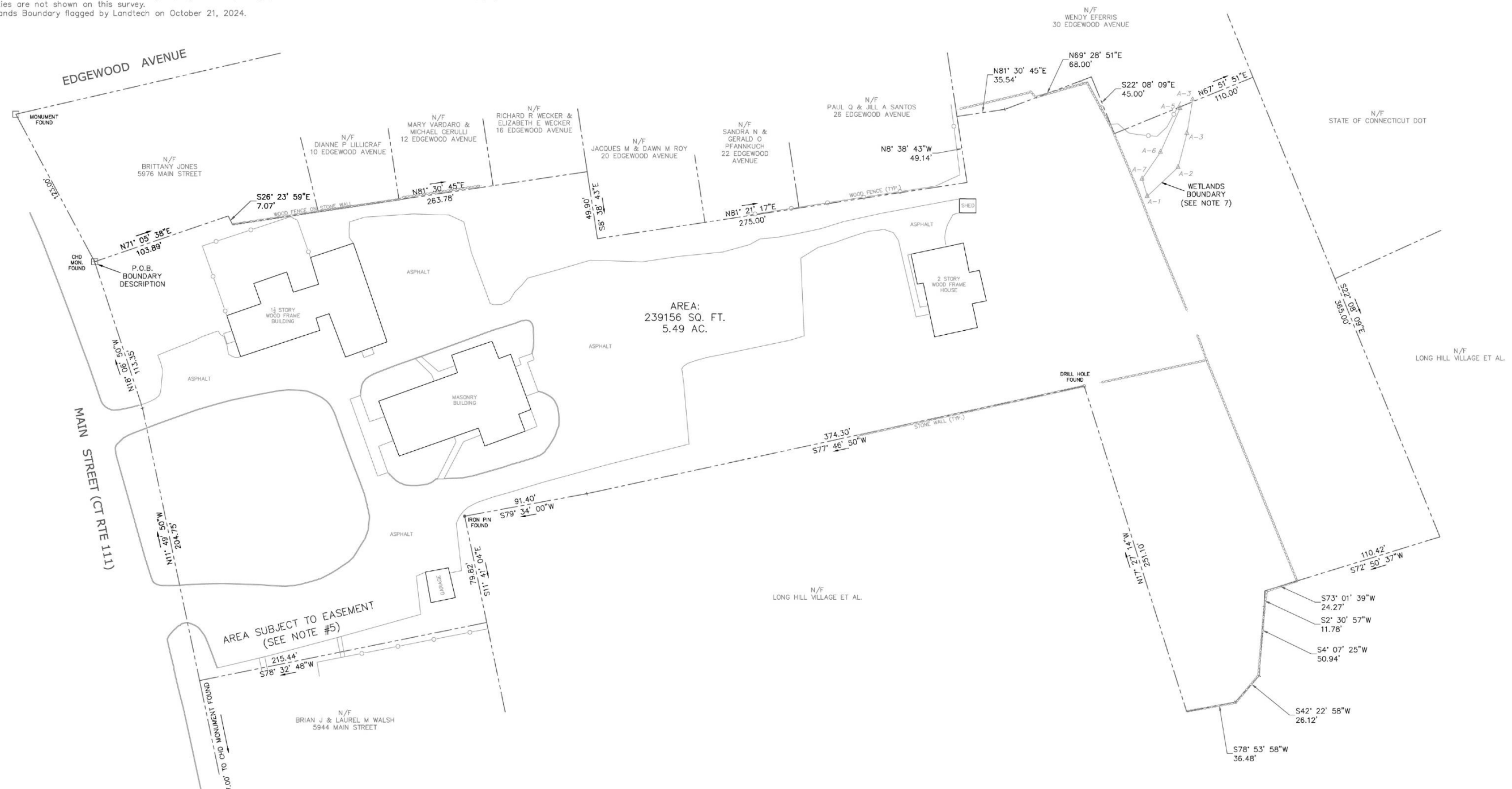
IX. New Business

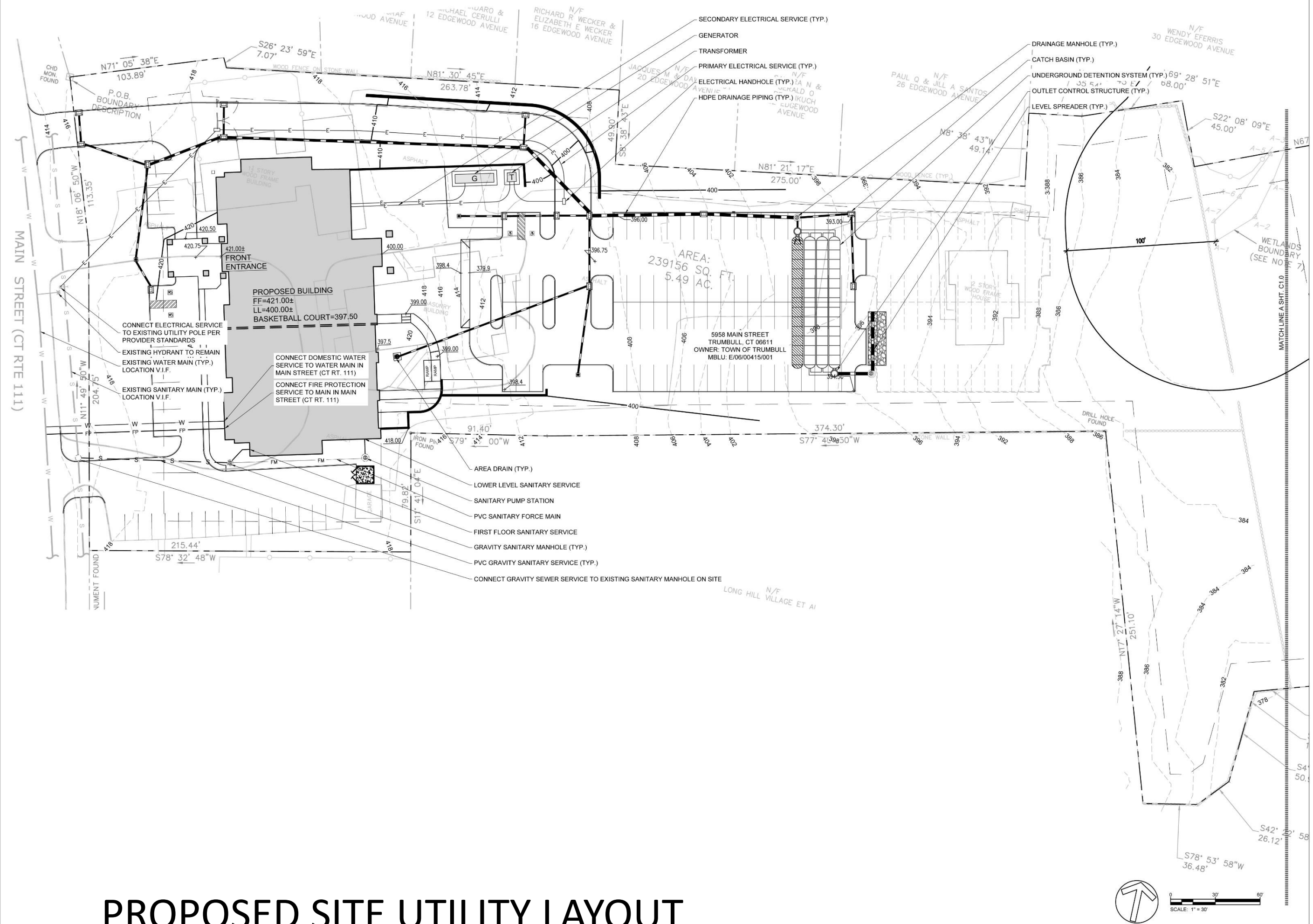
X. Adjournment



SITE AERIAL/GIS MAP

- Notes:
- a. Mapping Standards.
 - a. This map has been prepared pursuant to the regulations of Connecticut State Agencies Sections 20-300b-1 thru 20-300b-20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.
 - b. The Type of Survey is a Property/Boundary Survey.
 - c. The Boundary Determination Category is "Dependent Resurvey".
 - d. The horizontal accuracy conforms to Class A-2.
 - e. The intent of this survey is to retrace the boundaries of the subject parcel.
2. Reference Maps.
- a. "Revised Map of 'Lakewood' Property of J. M. Snyder Long Hill--Town of Trumbull, Conn.", by C. A. Anderson, August 7, 1936. RM#130
 - b. "Plan of Land in Trumbull, Conn.", by John H. Burroughs, July 12, 1945. RM#324
 - c. "Property of Grace Episcopal Church Trumbull, Conn.", by Daniel B. Guion, Revised to July 2, 1964. RM#1236"
 - d. "Map of Property To Be Exchanged Between Arthur L. & Joseph Sciortino & Bpt. Hyd. Co.South Edgewood Avenue Trumbull Conn.", by J & D Kasper & Assoc., April 15, 1975. RM#1842
 - e. "Property of Joseph & Arthur L. Sciortino South Edgewood Avenue & Main Street Trumbull Connecticut.", by J & D Kasper & Assoc., May, 1975. RW#1861
 - f. "Map of Trumbull Basin Property Prepared for Bridgeport Hydraulic Company Trumbull, Conn.", by Ochman Associates, Inc., Revised to July 24, 1989. RW#2577
 - g. "Boundary Map of Property Located on Main Street & South Edgewood Avenue Prepared for Joseph & Arthur L. Sciortino Trumbull Connecticut.", by J & D Kasper & Assoc., revised to June 28, 1988. RM#2581
 - h. "Data Accumulation Plan Long Hill Village Phase Three in Trumbull, Connecticut Prepared for Long Hill Village Associates, LLC", by Spath-Bjorklund Associates, Inc., September 29, 1997. RM#2873
 - i. "Improvement Location Survey Prepared for Parish of Grace Church 5944 Main Street Trumbull, Connecticut", by Stuart Somers Co. LLC, December 8, 2009. RM#3315
 - j. "Map Showing Easement for Sanitary Sewers Granted to Town of Trumbull By Bridgeport Hydraulic Co., Sciortino & Seaberg", by J & D Kasper & Assoc., January 6, 1975. RM#S60
 - k. "Right of Way Map Town of Trumbull Bridgeport--Newtown Road From Church Hill Road Northerly to Lake Avenue Sheet 1 of 2" by Connecticut State Highway Department, Revised to June 19, 1963.
3. Coordinates refer to the project datum.
4. Parcel is located in Residential Zone A.
5. Parcel is subject to an easement for ingress, egress and parking per deed in Trumbull Land Records volume 1520, page 292.
6. Utilities are not shown on this survey.
7. Wetlands Boundary flagged by Landtech on October 21, 2024.





PROPOSED SITE UTILITY LAYOUT

QA+M
architecture

QuisenberryArcariMallik
195 Scott Swamp Road
Farmington, CT 06032
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120 Hebron Avenue, 2nd Floor
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PROJECT DESCRIPTION:
**TRUMBULL
COMMUNITY
CENTER**
TRUMBULL, CT

Project #: 1656

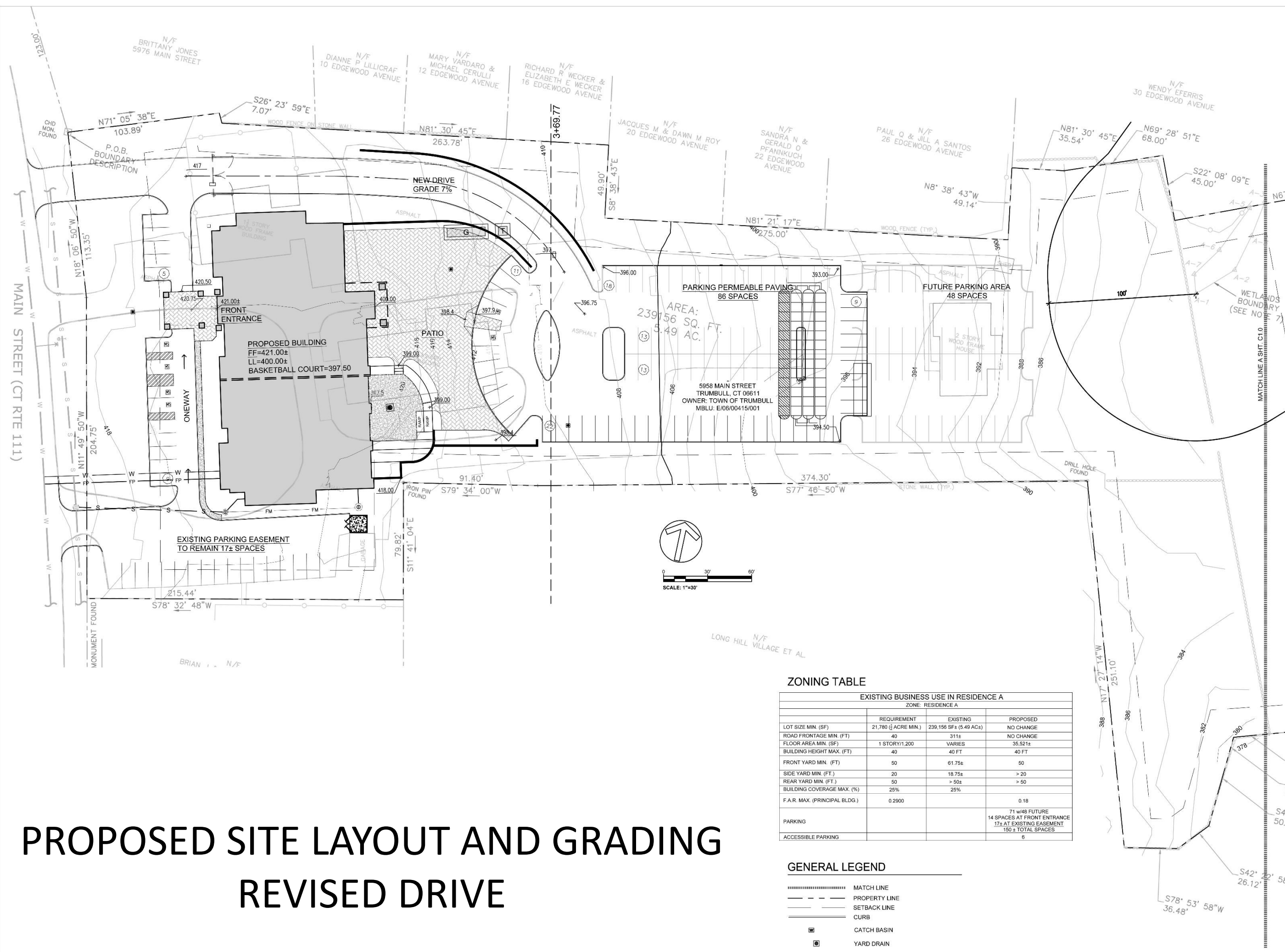
Revisions

Issue Dates:

SCHEMATIC DESIGN
01.06.2024

SCHEMATIC DRAINAGE &
UTILITY PLAN

C-2.0



PROPOSED SITE LAYOUT AND GRADING REVISED DRIVE

ZONING TABLE

EXISTING BUSINESS USE IN RESIDENCE A			
ZONE: RESIDENCE A			
	REQUIREMENT	EXISTING	PROPOSED
LOT SIZE MIN. (SF)	21,780 (1/4 ACRE MIN.)	239,156 SF± (5.49 AC±)	NO CHANGE
ROAD FRONTAGE MIN. (FT)	40	311±	NO CHANGE
FLOOR AREA MIN. (SF)	1 STORY/1,200	VARIES	35,521±
BUILDING HEIGHT MAX. (FT)	40	40 FT	40 FT
FRONT YARD MIN. (FT)	50	61.75±	50
SIDE YARD MIN. (FT.)	20	18.75±	> 20
REAR YARD MIN. (FT.)	50	> 50±	> 50
BUILDING COVERAGE MAX. (%)	25%	25%	
F.A.R. MAX. (PRINCIPAL BLDG.)	0.2900		0.18
PARKING			71 w/48 FUTURE 14 SPACES AT FRONT ENTRANCE 17± AT EXISTING EASEMENT 150 ± TOTAL SPACES
ACCESSIBLE PARKING			6

GENERAL LEGEND

- MATCH LINE
- PROPERTY LINE
- SETBACK LINE
- CURB
- CATCH BASIN
- YARD DRAIN
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- PROPOSED SPOT ELEVATION

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TRUMBULL, CT
Project #: 1656

Revisions
Issue Dates:
SCHEMATIC DESIGN 01.06.2024

SCHEMATIC SITE PLAN

C-1.0

PROJECT DESCRIPTION:

TRUMBULL
COMMUNITY
CENTER
TRUMBULL, CT

Project #: 1656

ZONING TABLE

EXISTING BUSINESS USE IN RESIDENCE A			
ZONE: RESIDENCE A			
	REQUIREMENT	EXISTING	PROPOSED
LOT SIZE MIN. (SF)	21,780 (1/4 ACRE MIN.)	239,156 SF± (5.49 AC±)	NO CHANGE
ROAD FRONTAGE MIN. (FT)	40	311±	NO CHANGE
FLOOR AREA MIN. (SF)	1 STORY/1,200	VARIES	35,521±
BUILDING HEIGHT MAX. (FT)	40	40 FT	40 FT
FRONT YARD MIN. (FT)	50	61.75±	50
SIDE YARD MIN. (FT.)	20	18.75±	> 20
REAR YARD MIN. (FT.)	50	> 50±	> 50
BUILDING COVERAGE MAX. (%)	25%	25%	
F.A.R. MAX. (PRINCIPAL BLDG.)	0.2900		0.18
PARKING			77 w/48 FUTURE 14 SPACES AT FRONT ENTRANCE 13± AT EXISTING EASEMENT 152 ± TOTAL SPACES
ACCESSIBLE PARKING			6

GENERAL LEGEND

=====	MATCH LINE
-----	PROPERTY LINE
-----	SETBACK LINE
=====	CURB
■	CATCH BASIN
■	YARD DRAIN
—412—	PROPOSED INTERMEDIATE CONTOUR
—410—	PROPOSED INDEX CONTOUR
123.45	PROPOSED SPOT ELEVATION

PROJECT DESCRIPTION:
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TRUMBULL, CT

Project #: 1656

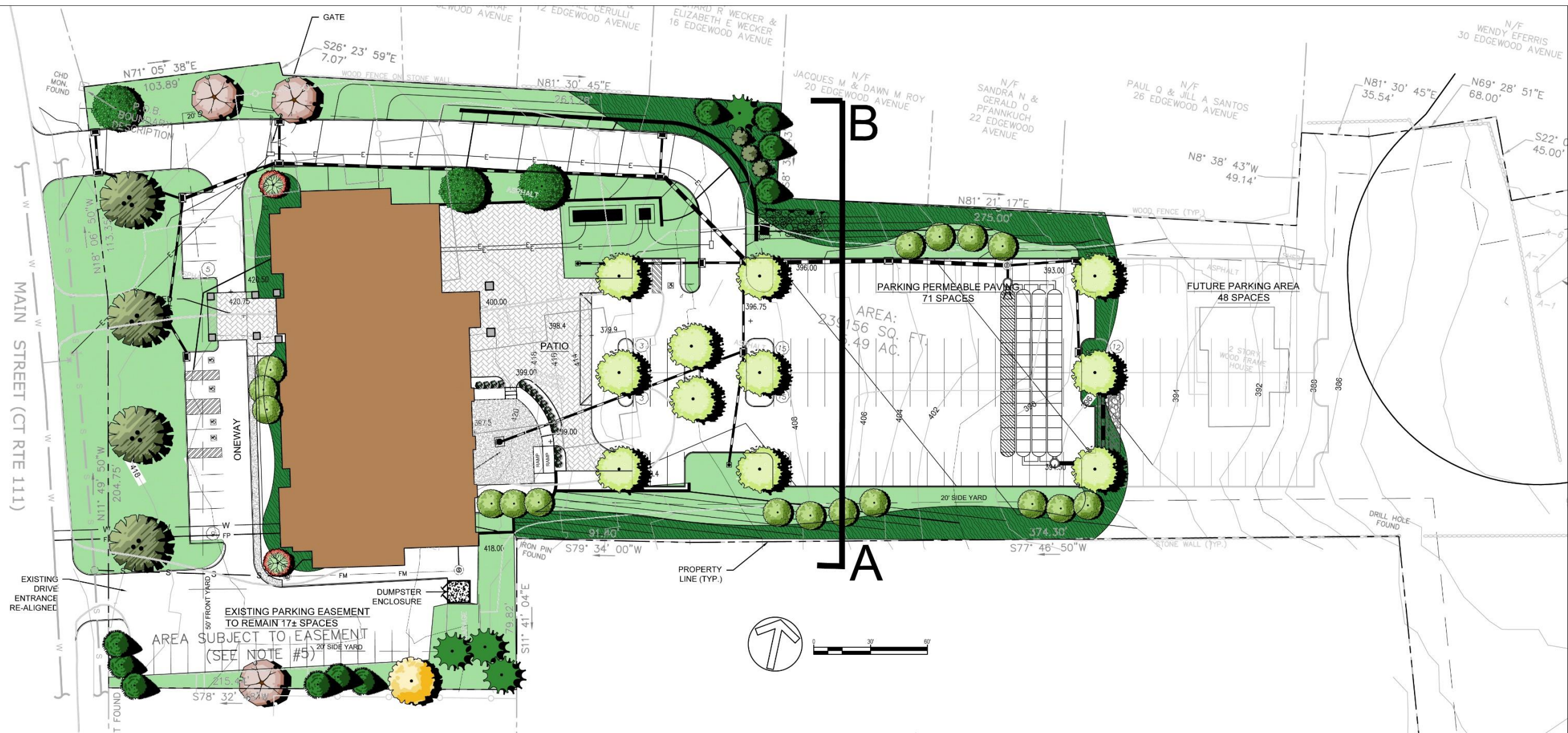
Revisions

Issue Dates:

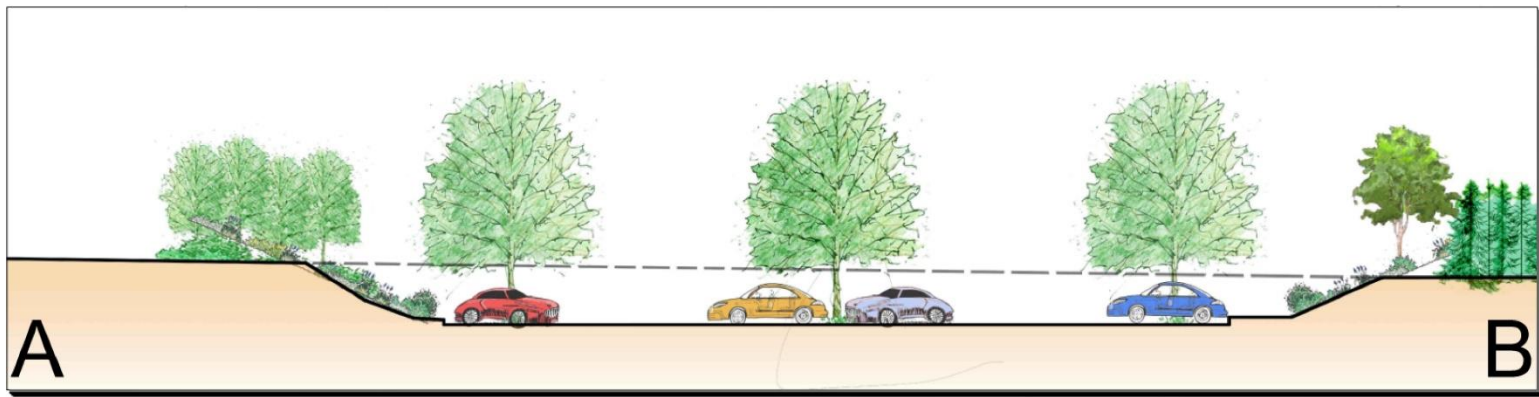
SCHEMATIC DESIGN
01.06.2024

SCHEMATIC PLANTING PLAN

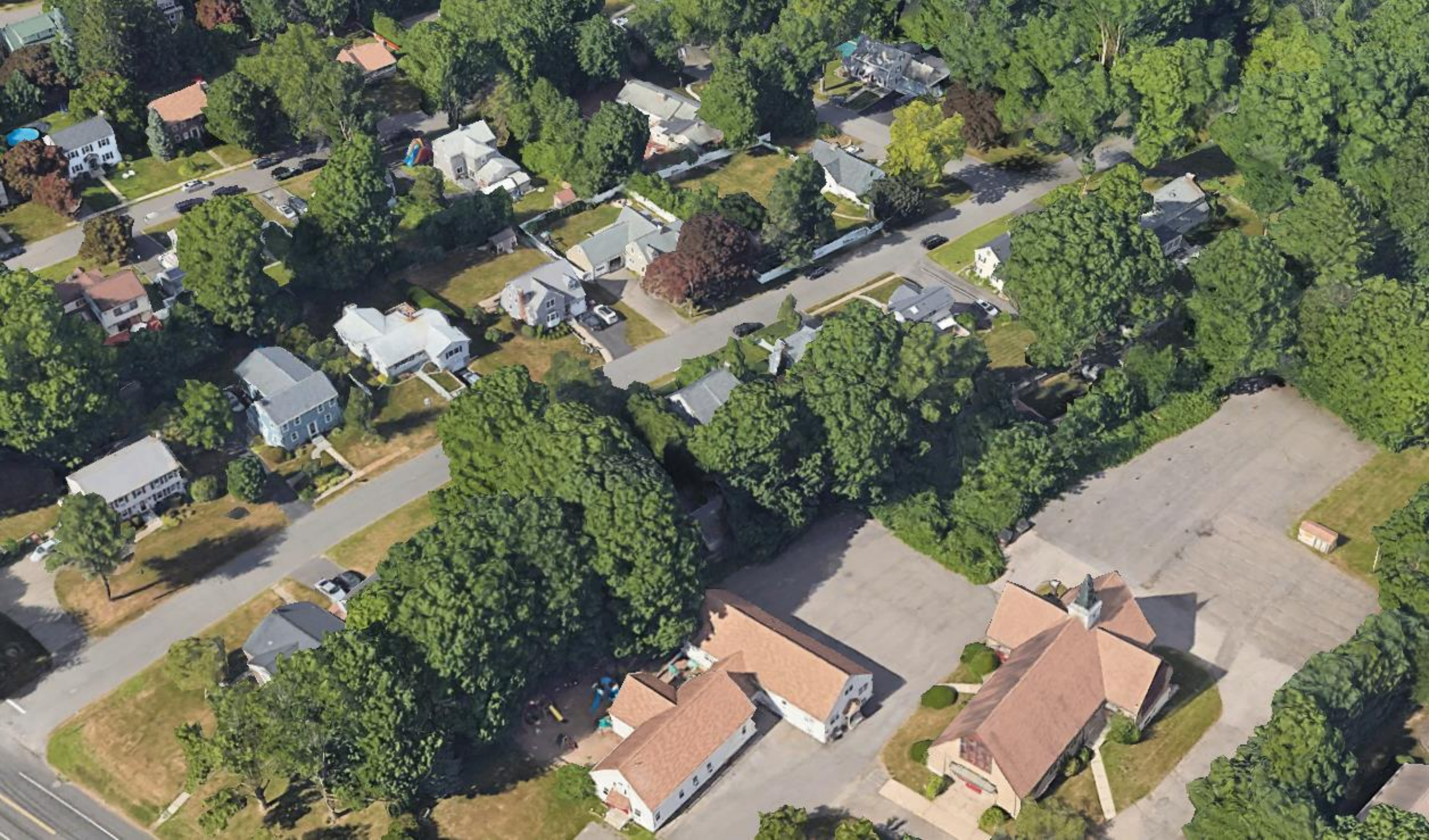
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PLANT SCHEDULE					
SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT.	CAL.	SIZE
DECIDUOUS TREES					
ASL		ACER SACCHARUM 'LEGACY' / LEGACY SUGAR MAPLE	B & B	6-7" CAL.	20' MIN.
GH		GLEDTISIA TRIACANTHOS INERMIS 'HALKA' / HALKA THORNLESS HONEY LOCUST	B & B	2.5-3" CAL.	
GK		GYMNOCLADUS DOICA / KENTUCKY COFFEETREE	B & B	2.5-3" CAL.	
LT		LIRIODENDRON TULIPIFERA / TULIP TREE	B & B	6-7" CAL.	20' MIN.
PO		PLATANUS OCCIDENTALIS / AMERICAN SYCAMORE	B & B	7-8" CAL.	20' MIN.
EVERGREEN TREES					
CNP		CHAMPAECYPARIS NOOTKATENSIS 'PENDULA' / WEEPING NOOTKA CYPRESS	B & B	CONIFER	6-7' HT.
P2		PINUS STROBUS / EASTERN WHITE PINE	B & B	CONIFER	14-16' HT.
PS		PINUS SYLVESTRIS / SCOTCH PINE	B & B	CONIFER	12-14' HT.
ORNAMENTAL TREES					
AGA		AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' / AUTUMN BRILLIANCE SERVICEBERRY	B & B	MULTI-TRUNK	12-14' HT.
CRRG		CORNUS X RUTGERSENSIS 'RUTGIAN' / STELLAR PINK DOGWOOD	B & B	4.4-5" CAL.	10-12' HT.
SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	HEIGHT	SPREAD
ANNUAL PERENNIALS					
NN		NISSIPONANTHEMUM NIPPONICUM / MONTAUK DAISY	#1 CONT.	12-15" HT.	12-15" SP.
DECIDUOUS SHRUBS					
CAH		CLETHRA ALNIFOLIA 'HUMMINGBIRD' / HUMMINGBIRD SUMMERSWEET	#5 CONT.	30-36" HT.	30-36" SP.
CAC		CORNUS SANGUINEA 'CATO' / ARCTIC SUNB BLOODTWIG DOGWOOD	#3 CONT.	2-3' HT.	2-3' SPR.
WV		ILEX VERTICILLATA / WINTERBERRY	#5 CONT.	30-36" HT.	30-36" SP.
RAG		RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC	#3 CONT.	8-12' HT.	12-15" SP.
EVERGREEN SHRUBS					
IGS		ILEX GLABRA 'SHAMROCK' / SHAMROCK INK BERRY	#5 CONT.	24-30" HT.	24-30" SPR.
SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT.	HEIGHT	SPREAD
GROUND COVERS					
NW		NEPETA X FAASSENII 'WALKERS LOW' / WALKERS LOW CATMINT	#1 CONT.	9-12" HT.	12" OC
PERENNIAL		HELLEBORUS X 'BRANDYWINE' TM / BRANDYWINE HELLEBORE	#1 CONT.	10-12" HT.	9-12" SPR.



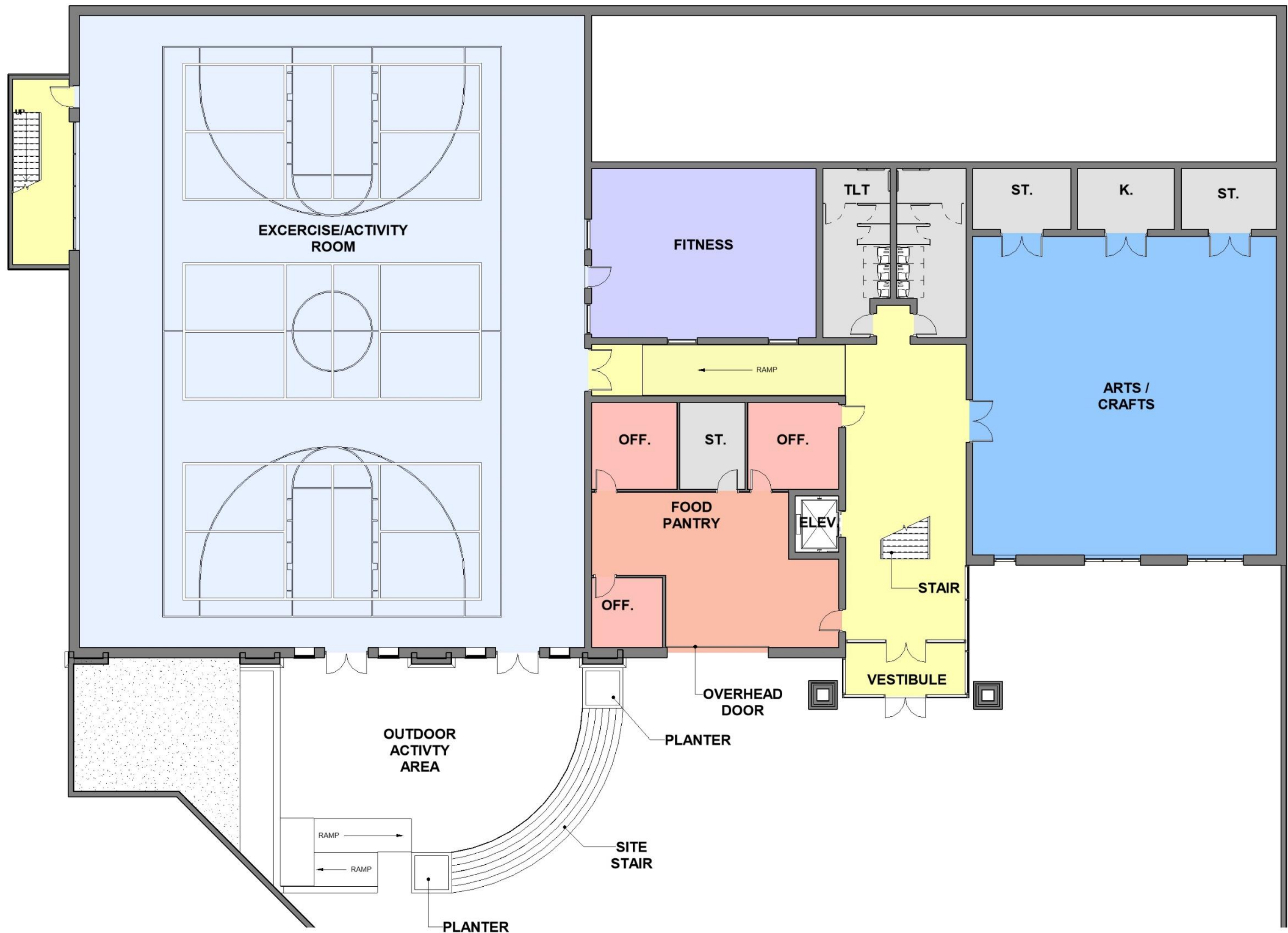
PROPOSED SITE LANDSCAPE



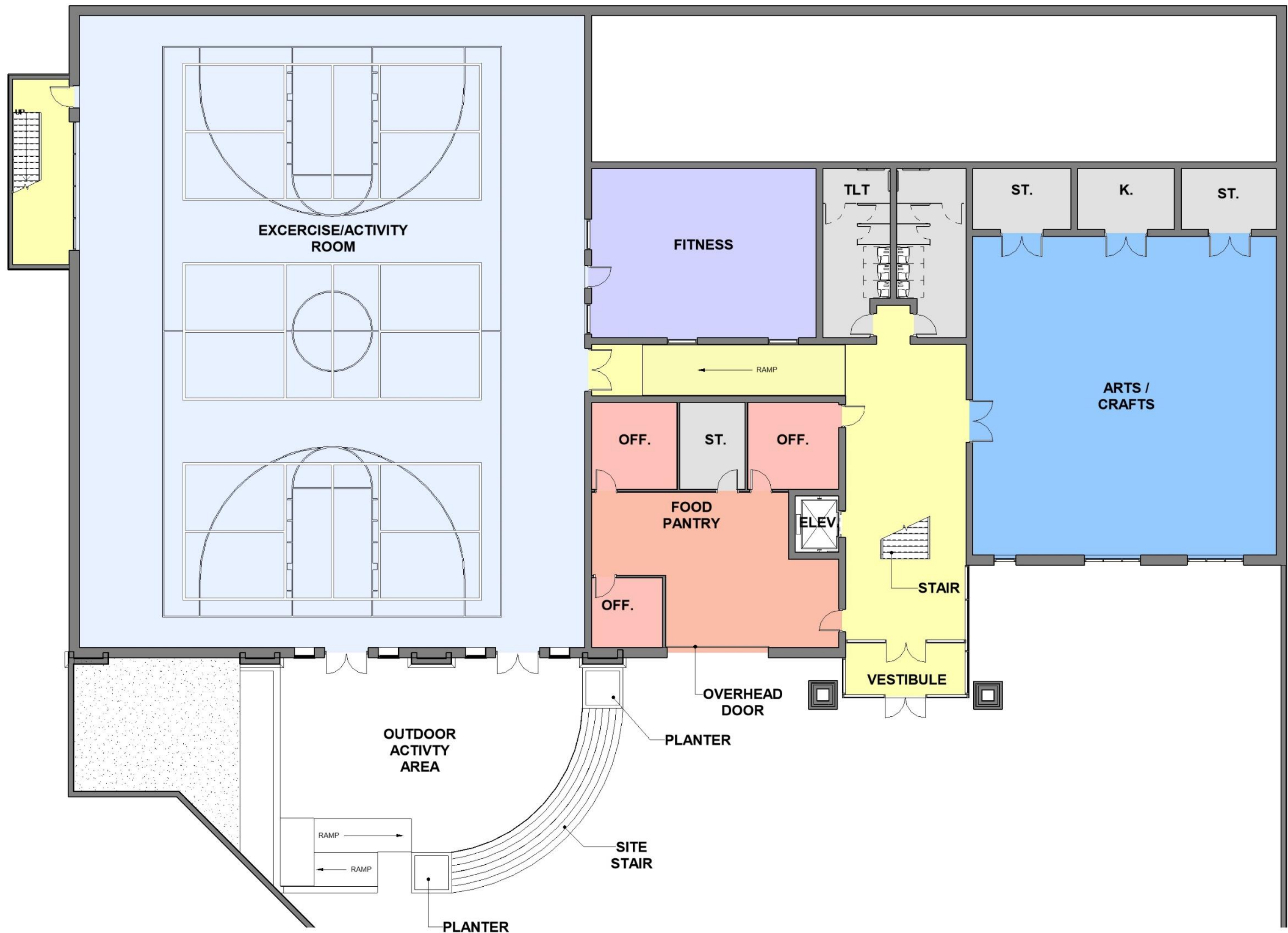








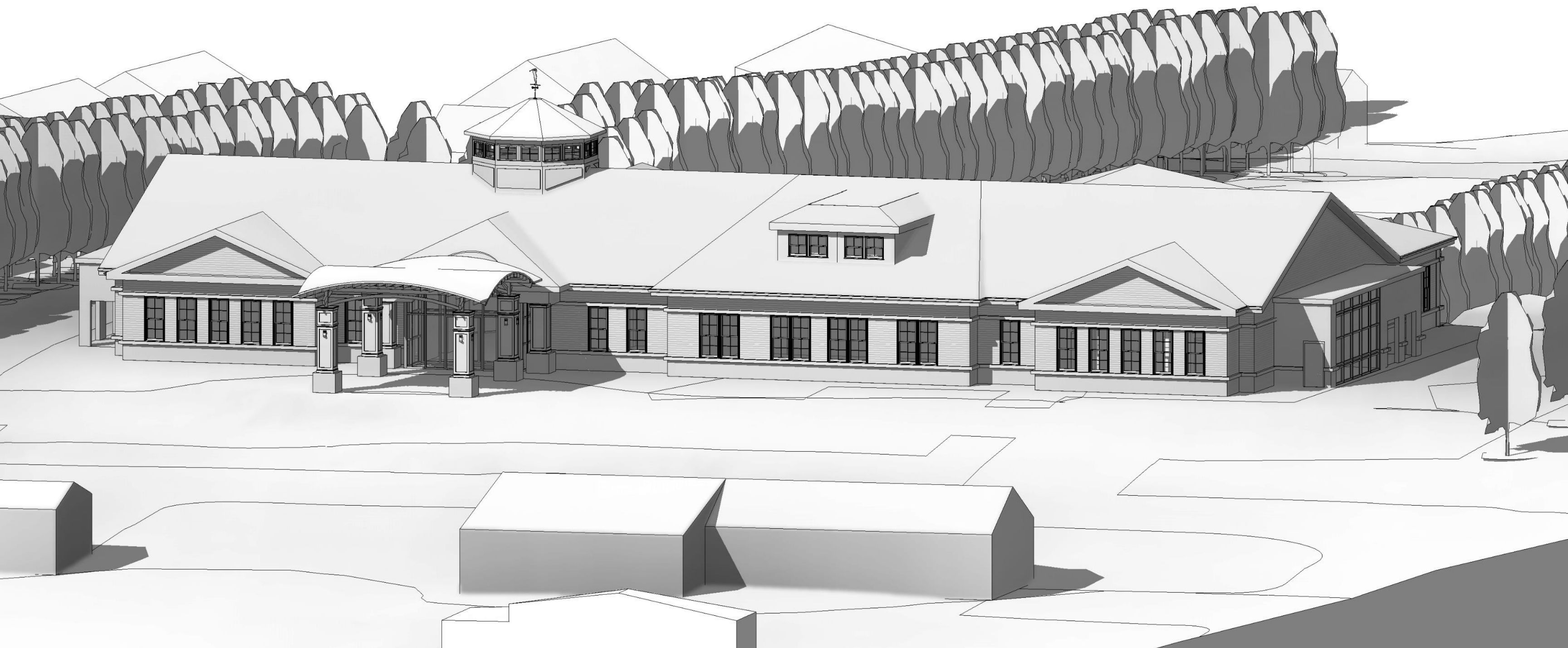
Lower-Level Floor Plan



Lower-Level Floor Plan



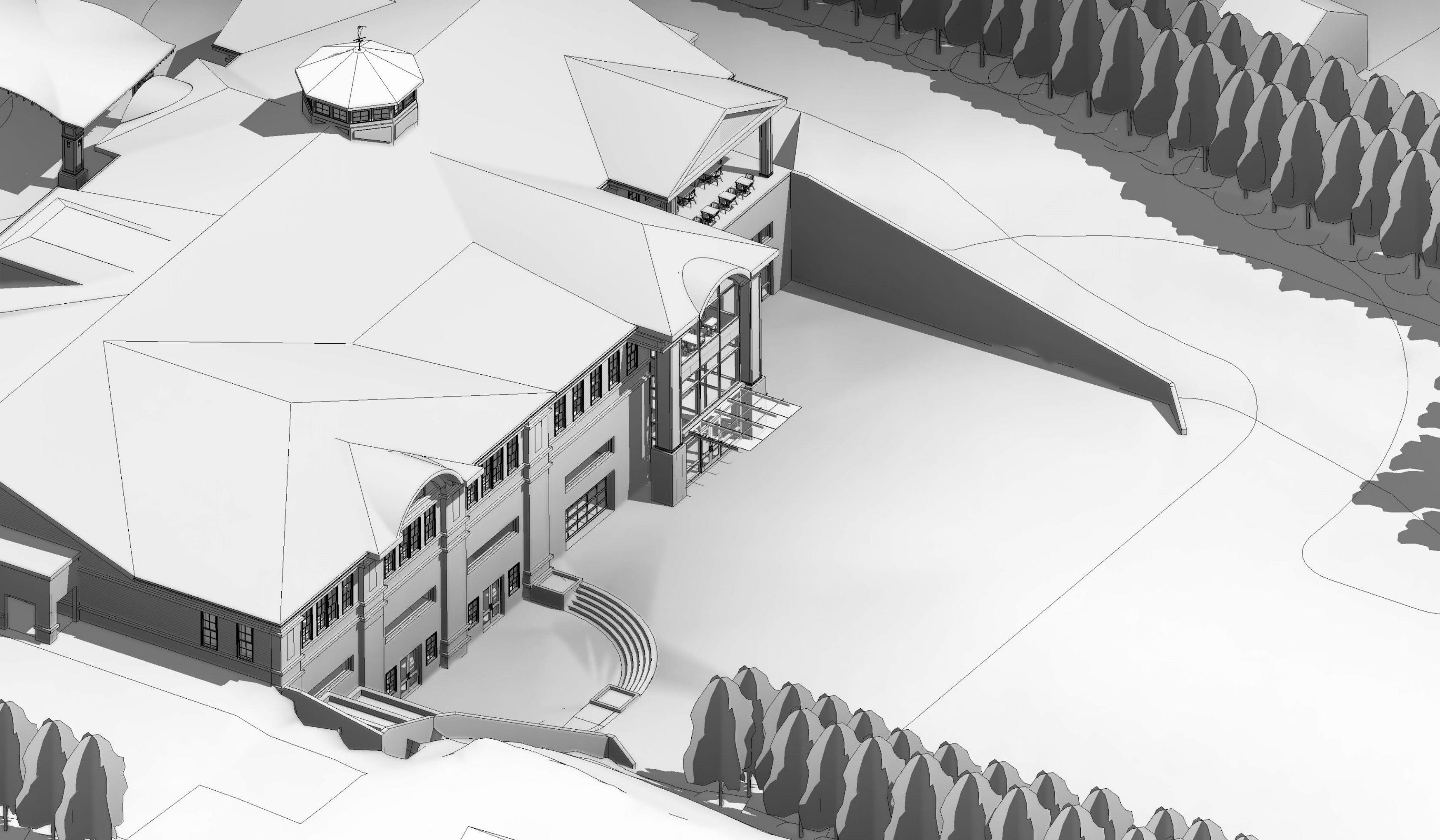
West



West Elevation

Trumbull - Senior/Community Center







East



Trumbull Community Center Traffic Impact Study

5958 Main Street (State Route 111)
Trumbull, Connecticut

February 4, 2025

Tighe&Bond

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- A. Traffic Volume Data
- B. Capacity Analysis Methodology
- C. Capacity Analysis Worksheets
- D. Collision History Summary

Section 1

Introduction

This Traffic Study evaluates the potential traffic impact of the potential Trumbull Community Center (development) to be located on Main Street (State Route 111) in Trumbull. The development site (the Site) consists of one parcel, 5958 Main Street, which is a 5.1 acre parcel that was the former home of Grace Episcopal Church. The Site is bordered by Main Street to the west, residential properties located to the north and south, and by the Pequonnock River and Pequonnock River Trail to the east. Figure 1 shows the Site location relative to the surrounding roadway network.

The development will include a 30,000± square foot community recreation and senior center. Major amenities will include an exercise/activity room, a fitness room, classrooms, a multi-purpose space, a kitchen, a café, a game room, a food pantry, an arts and crafts room, and a library lounge, among other amenities. The location of the southernmost driveway will remain the same as existing conditions, and the northern driveway will be about 80 feet north of its existing location. Approximately 113 parking spaces, including 6 handicap accessible spaces, will be provided on the Site with provisions to add an additional 48 parking spaces in the future. The development is expected to be completed by 2027.

This study concludes that based on the results of the analysis, it is the professional opinion of Tighe & Bond that the additional traffic expected to be generated by the community center is not expected to have a significant impact on traffic operations within the study area. Sections 5 and 6 provide a summary of the analyses performed and the results that are the basis of this conclusion.

Section 2

Existing Conditions

The approximately 5.1 acre Site is located along Main Street between Church Hill Road (State Route 127) and Lake Avenue. The Site consists of one parcel, 5958 Main Street, which was previously home to Grace Episcopal Church. The Site is bordered by Main Street to the west, residential properties to the north and south, and a wooded area containing the Pequonnock River and Pequonnock River Trail to the east.

2.1 Study Area Intersections

The study area intersections were selected based upon the land use and size of the development and potential access points to the development. The following intersections make up the study-area intersections:

- Main Street (State Route 111) at Church Hill Road (State Route 127) / Gas Station Driveway [Signalized]
- Main Street (State Route 111) at Lake Avenue / Turney Place /Gas Station Driveway [Signalized]
- Main Street (State Route 111) at the North & South Site Driveways (2) [Side Street Stop Controlled]

2.2 Roadways

The following sections detail the roadways in the study area.

2.2.1 Main Street (Route 111)

Main Street (Route 111) runs north to south from Roosevelt Drive (State Route 34) in Monroe south to the Merritt Parkway (Route 15) on and off-ramps where it becomes Main Street (State Route 731). The roadway is classified as a minor arterial by the Connecticut Department of Transportation (CTDOT). Within the study area, the road is approximately 35 feet wide, providing one 11 to 12 foot travel lane in each direction with wide shoulders ranging from 4 to 7 feet in width. The roadway widens on the northbound approach to the Lake Avenue and Turney Place intersection and the southbound approach to the Church Hill Road intersection for the addition of an exclusive left turn lane. It also widens on the northbound approach to the Church Hill Road intersection for the addition of an exclusive right turn lane. A sidewalk is provided on the western side of the roadway throughout the study area as well as on the eastern side of the roadway from Church Hill Road to Long Hill Place (Private). The posted speed limit on Main Street (State Route 111) within the study area is 40 miles per hour.

2.2.2 Church Hill Road (State Route 127)

Church Hill Road (State Route 127) runs north to south from Main Street (State Route 111) in Trumbull south to the intersection with Daniels Farm Road in Trumbull Center, where it becomes White Plains Road. White Plains Road continues south to the State Route 8 Expressway interchange and East Main Street in Bridgeport. The roadway is classified by CTDOT as a minor arterial roadway. Within the study area, the road is approximately

36 feet wide, providing one 11 to 12 foot travel lane in each direction with wide shoulders ranging from 3 to 8 feet in width. At the intersection with Main Street, the roadway widens to provide a shared through-left lane and an exclusive right turn lane. A sidewalk is provided on the northern side of the roadway near the intersection with Main Street in addition to a sidewalk extending to the southwest corner of the Main Street intersection into the Trumbull Town Hall campus. The posted speed limit on Church Hill Road within the study area is 40 miles per hour.

2.2.3 Lake Avenue

Lake Avenue is a 1.3 mile roadway running east to west, connecting Madison Avenue to Main Street (State Route 111). The roadway is surrounded by residential properties and provides access to neighborhoods between Main Street (State Route 111) and Madison Avenue. Lake Avenue is approximately 31 feet wide with a single lane in each direction and 1-3 foot shoulders. At the intersection with Main Street (State Route 111), the roadway widens to provide a left and right turn lane. The Trumbull Plan of Conservation and Development (POCD) and CTDOT classify Lake Avenue as a collector roadway.

2.2.4 Turney Place

Turney Place is a 0.15 mile roadway running east to west, connecting Main Street (State Route 111) to Calhoun Avenue. The roadway provides access to residential properties located between the Main Street and Calhoun Avenue corridors. Turney Place is approximately 25 feet wide with a single lane in each direction. The roadway is classified as a local roadway by the Trumbull POCD and CTDOT.

2.3 Traffic Volumes

The study analysis focuses on the weekday morning, weekday afternoon, and Saturday midday peak periods when commuter and/or site related traffic volumes are at their highest levels. In order to determine the traffic impact of the potential development on adjacent study area roadways, weekday morning (7:00 AM to 9:00 AM), weekday afternoon (4:00 PM to 6:00 PM), and Saturday midday (11:00 AM to 1:00 PM) manual intersection turning movement counts (TMC) were collected at the study area intersections. The traffic count data indicates that the weekday morning peak hour occurred from approximately 8:15 AM to 9:15 AM, the weekday afternoon peak hour occurred from 4:15 PM to 5:15 PM, and the Saturday midday peak hour occurred from 11:30 AM to 12:30 PM. These 2025 Existing Condition traffic volumes for the weekday morning, weekday afternoon, and Saturday midday peak hours are shown in Figures 2, 3, and 4, respectively. The raw TMC data is provided in Appendix A.

Automatic Traffic Recorder (ATR) counts were conducted on Main Street (State Route 111) along the site frontage between Clark Road and Walker Road to record hourly directional traffic volumes and vehicular speeds. The ATR data showed that the weekday average daily traffic (ADT) volume on Main Street was approximately 15,785 vehicles with a nearly equal directional distribution of 7,875 northbound and 7,910 southbound vehicles. The ATR data also showed that the 85th percentile speed, also known as the operating speed of the roadway, was 40 mph in both the northbound and southbound directions. The raw ATR data is provided in Appendix A.

2.4 Capacity and Queue Analyses - Existing Condition

Capacity and queue analyses were performed for the study intersections for the 2025 Existing Condition traffic volumes during the weekday morning, weekday afternoon, and Saturday midday peak hours using Trafficware Synchro Studio 11 – Traffic Analysis Software. The software conducts analyses based upon the methodology provided in the *Highway Capacity Manual (HCM)*, 6th Edition. The analysis results are categorized in terms of Level of Service (LOS) and queue. LOS describes the qualitative intersection operational conditions based on the calculated average delay per vehicle. The queue analysis results are summarized based upon the length of vehicle queues on an intersection approach. For unsignalized intersections, queues are quantified for 95th percentile (design queues). For signalized intersections, queues are quantified by 95th percentile (design) and 50th percentile (average) queues. For summary purposes, queues will be detailed in terms of car lengths, which are approximately 25 feet per vehicle. A summary of the HCM capacity analysis methodology and a detailed definition of LOS is provided in Appendix B.

Tables 1 and 2 summarize the capacity and queue analyses results for the 2025 Existing Conditions. Capacity analysis worksheets with full inputs, settings, and results are provided in Appendix C.

As shown in Table 1, overall operations are acceptable with overall intersection LOS B and LOS D or better for all movements at the two signalized study area intersections, Main Street at Lake Avenue / Turney Place / Gas Station Driveway and at Church Hill Road / Gas Station Driveway. As shown in Table 2, queues are within available storage with two exceptions during the weekday afternoon peak hour. The Main Street northbound left turn at the Lake Avenue intersection has queues slightly exceeding the short storage space of 50 feet. The Main Street northbound shared left-through queues at the Church Hill Road intersection extend just past available storage due to the closely spaced intersection to the south at the Town Hall Shopping Plaza. Main Street has additional storage space south of the Town Hall Shopping Plaza driveway to accommodate the additional queue length.

2.5 Collision History

Vehicle collision history was collected from the Connecticut Crash Data Repository at the two study area intersections within the study area between January 1, 2020 and December 31, 2024. Table 3 provides a summary of the collisions within the study area including type, severity, and location. Appendix D includes detailed collision summaries for each of the study intersections.

As shown in Table 3, there were 64 reported motor vehicle collisions reported in the study area within the 5 year period analyzed. There were 5 collisions along the site frontage, 19 collisions at the Lake Avenue / Turney Place at Main Street (State Route 111) intersection, and 40 collisions at the Church Hill Road (State Route 127) at Main Street (State Route 111) intersection.

Along the 5958 Main Street site frontage, which included the existing site driveway intersections with Main Street, all 5 crashes were rear-end collisions. At the two signalized study area intersections, the most frequent type of collision were angled collisions and rear-end collisions which totaled 23 collisions each. This accounted for 78% (39% each) of collisions at the study area intersections. The second most frequent collision type was sideswipe, same direction which accounted for 10% of the collisions. The remaining 12% of collisions consisted of animal, backing, bicycle, fixed object, and pedestrian collisions.

Throughout the period analyzed, there was 1 fatality and 13 collisions reporting minor injuries. The fatality was the result of a collision between a vehicle traveling westbound on Church Hill Road (State Route 127) and a pedestrian crossing Church Hill Road (State Route 127) east of the intersection of Main Street (State Route 111) and not within the crosswalk. The rainy weather conditions and poor visibility during the time of the accident are considered as contributing factors during the preliminary investigation.

The collision analysis results do not identify a significant or notable pattern of collisions in the study area. The addition of the potential development's site-generated traffic is not anticipated to negatively impact existing collision patterns or overall roadway safety.

Section 3

Background Conditions

The Background Condition represents the analysis of traffic volumes and operating conditions for the potential completion year of the development, assuming that the development is not constructed. The Background Condition considers the general background growth of traffic and site-generated traffic associated with other planned and/or recently approved developments in proximity to the Site, which are expected to open prior to the opening of the Site. This development is expected to be completed by 2027, and therefore, 2027 was selected as the Background Condition year.

3.1 Planned/Recently Approved Developments and Planned Roadway Improvements

The Town of Trumbull and the CTDOT Office of the State Traffic Administration (OSTA) were contacted to determine if there were any pending or recently approved developments that would generate traffic in the study area or any planned roadway improvements in the area.

Two pending developments were identified proximate to the study area. One project is a redevelopment of 6600 Main Street (State Route 111), located 1.5 miles north of the Site, which includes the demolition of an existing residential building and the construction of a 12,210 square foot medical office facility. The small amount of traffic expected to be generated by this development is accounted for in the background traffic growth detailed in Section 3.2. The second development is the renovation of the existing Sunoco gas and service station at 6159 Main Street opposite Turney Place, which is currently under construction. Though not yet approved by the Town, Trumbull Planning and Zoning staff noted that the renovation intends convert the existing building to a convenience store and maintain the 4 fueling positions. The site-generated traffic for this development was calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition, 2021. The volumes were added to the 2027 Background Conditions volumes detailed in Section 3.2.

No pending or planned roadway improvements were identified within the study area.

3.2 Background Traffic Volumes

To develop the 2027 Background Condition traffic volumes, the 2025 Existing Condition traffic volumes were grown by 1.0% per year for three years to represent the general growth of traffic volume on the public roadways and small developments such as the one pending for 6600 Main Street. The site-generated traffic for the Sunoco Gas Station was also added to the 2025 Existing Condition volumes. The resulting 2027 Background Condition traffic volumes for the weekday morning, weekday afternoon, and Saturday midday peak hours are illustrated in Figures 5, 6 and 7, respectively.

3.3 Capacity and Queue Analyses

Capacity and queue analyses were conducted for the 2027 Background Condition traffic volumes for the weekday morning, afternoon, and Saturday peak hours using the methodology described in Section 2.4. Tables 1 and 2 summarize the capacity and queue results. Capacity analysis worksheets with full inputs, settings, and results are provided in Appendix C.

The background traffic growth results in marginal increases in delays and queues when compared to the Existing Conditions. Select movements during select peaks experience decreases in LOS at the Main Street at Lake Avenue / Turney Place / Gas Station Driveway intersection due to the addition of the renovated gas station traffic, but all remain operating at LOS D or better in all peaks. Queues lengths remain stable with minimal increases on all approaches.

Section 4

Proposed Development Conditions

The Town of Trumbull is proposing to construct a 30,000± square foot shared community recreation and senior center on the 5958 Main Street site. Major amenities will include an exercise/activity room, a fitness room, classrooms, a multi-purpose space, a kitchen, a café, a game room, a food pantry, an arts and crafts room, and a library lounge, among other minor amenities. There are 113 surface parking spaces to be located on the Site, including 6 handicap accessible spaces, with provisions for an additional 48 surface parking spaces to be added in the future. The development is expected to be completed by 2027.

4.1 Site Access

Similar to existing conditions, the Site will be accessed by two driveways. The northern site driveway (North Site Driveway) will be located approximately 80 feet north of the existing site driveway and the southern site driveway (South Site Driveway) will remain in the existing location. The North Site Driveway provides access to a larger surface parking area in the rear of the building to the east with 71 parking spaces. A loop driveway facilitating drop-offs/pick-ups is located at the rear entrance to the building. The South Site Driveway will lead to a smaller parking area with 17 spaces to the southwest of the building and connect to a one-way northbound loop driveway in front of the building that leads to the North Site Driveway. The one-way loop driveway accesses 14 surface parking spaces on its west side and facilitates drops-offs/pick-ups at the building front entrance.

The North and South Site driveway intersections with Main Street will be unsignalized with stop control on the driveway approach only. The North Site Driveway will contain a single entering lane and two lanes exiting; one exclusive left turn and one exclusive right turn lane. The South Site Driveway will have a single entering and single exiting lane. Main Street, with a shoulder of 5-7 feet adjacent to the travel lane, provides the ability for through vehicles to bypass any vehicles waiting to turn left into the Site.

Intersection sight distances were reviewed at the North and South Site driveways in accordance with criteria set forth in the CTDOT Highway Design Manual, Revised October 2024. Based on the Main Street operating speed of 40 mph, the CTDOT minimum required sight distance for passenger cars on a stop controlled approach for a two lane roadway is 445 feet. Based on this criterion, both the North and South Site driveway provide sight lines well in excess of the required distances with over 1000 feet looking in each direction.

The Site contains provisions for pedestrian, bicycle, and public transportation access. Pedestrian access will be accommodated through a sidewalk along the site frontage which will be connected to the existing sidewalk network to the south of the Site through a future town project. The roadway shoulders along Main Street within the study area support bicycle access to and from the Site. Public transportation access to the Site is provided via the Route 19X bus of the Greater Bridgeport Transit system. The route has a stop located just south of the existing southern driveway on the 5958 Main Street Site. Route 19x operates approximately hourly between 6 AM and 6 PM Monday through Friday.

4.2 Trip Generation

Site-generated traffic volumes for the potential development were estimated using both data collected as similar community centers as well as industry-standard data. Traffic counts were collected at the following community centers to assess the site-generating characteristics of similar centers:

Name	Address	Size (Square Feet)	Parking Spaces
Comstock Community Center	180 School Road, Wilton, CT	38,587	92
Joseph Trapasso House	46 Church Street, Branford, CT	42,822	136
Jewish Community Center of Greater New Haven	360 Amity Rd, Woodbridge, CT	118,484	406

The observed site-generated traffic for these uses is presented in Table 4. These site-generated traffic values were then compared to industry-standard data presented in the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition, 2021. Land Use 495 – Recreational Community Center as it most closely represented the proposed community and senior center use. The site-generated traffic based on the ITE data is also summarized in Table 4.

Based on a review of the site-generated traffic data presented in Table 4, the following two site-generated traffic scenarios were selected for analyses:

Scenario 1 - Based on Joseph Trapasso Community in Branford

- Weekday Morning: 98 trips (81 entering, 17 exiting)
- Weekday Afternoon: 125 trips (51 entering, 74 exiting)
- Saturday Midday: 122 trips (40 entering, 82 exiting)

Scenario 2 - Based on Jewish Community Center Data in Woodbridge

- Weekday Morning: 124 trips (39 entering, 85 exiting)
- Weekday Afternoon: 316 trips (155 entering, 161 exiting)
- Saturday Midday: 88 trips (53 entering, 35 exiting)

These site-generated traffic scenarios conservatively represent the potential site-generated traffic for the proposed center in Trumbull. Both the Branford and Woodbridge centers are significantly larger than the proposed community center. Along with the smaller size, the ITE Trip Generation Manual data also suggests that the proposed Trumbull center will have less traffic than either Scenario 1 or Scenario 2. As such, the analyses presented in this study are conservative.

4.3 Arrival and Departure Distribution

The distribution of traffic entering and exiting the Site was applied to the road network based on existing traffic patterns, the roadway/driveway layout, and the location of the community center in relation to expected users. Due to the fact that the community center is centrally located within the Town the following distribution is estimated:

- 55% to/from Main Street (State Route 111) south of the Site
- 45% to/from Main Street (State Route 111) north of the Site

Figure 8 shows the site trip distribution on a percentage basis distributed to the study area intersections. Figures 9, 10 and 11 show the Scenario 1 site-generated traffic volumes distributed to the study area intersections for the weekday morning, weekday afternoon, and Saturday midday peak hours, respectively. Figures 12, 13 and 14 show the Scenario 2 site-generated traffic volumes distributed to the study area intersections for the weekday morning, weekday afternoon, and Saturday midday peak hours, respectively.

Section 5

Combined Conditions

The anticipated site-generated traffic volumes from Scenarios 1 and 2 were added to the 2027 Background Condition traffic volumes to develop the 2027 Combined Condition traffic volumes. Figures 15, 16 and 17 present the 2027 Combined Condition traffic volumes based on Scenario 1 for the weekday morning, weekday afternoon, and Saturday peak hours, respectively. Figures 18, 19 and 20 present the 2027 Combined Condition traffic volumes based on Scenario 2 for the weekday morning, weekday afternoon, and Saturday peak hours, respectively.

5.1 Capacity and Queue Analyses - Combined Condition

Capacity and queue analyses were conducted for the 2027 Combined Condition under both Scenarios 1 and 2 for the weekday morning, weekday afternoon, and Saturday midday peak hours using the methodology described in Section 2.4. These Combined Condition analyses include the improvements outlined in Section 4.4. Tables 1 and 2 summarize the capacity and queue results. Capacity analysis worksheets with full inputs, settings, and results are provided in Appendix C.

As shown in Tables 1 and 2, the signalized intersections of Main Street with Lake Avenue / Turney Place / Gas Station Driveway and Church Hill Road / Gas Station Driveway operate well with the addition of the site-generated traffic with overall LOS B operations and LOS D or better for all movements under both Scenario 1 and Scenario 2. Queue lengths remain stable with minor increases. All queues remain within available storage with the exception of the two approaches, the Main Street northbound left at Lake Avenue / Turney Place / Gas Station Driveway and Main Street northbound left-through lane at the Church Hill Road / Gas Station Driveway, which extend past available storage in the Existing and Background Conditions.

Vehicles entering the Site from Main Street operate efficiently at LOS A and queues of less than one vehicle. Main Street, with the shoulder of 5-7 feet adjacent to the travel lane, provides the ability for through vehicles to bypass the limited amount of expected vehicles waiting to turn left into the Site.

Vehicles exiting the North and South Site Driveway operate at LOS D or better with queues of one vehicle or less under both Scenario 1 and 2 with a few exceptions. Left turning traffic exiting the North Site Driveway under Scenario 1 during the weekday afternoon and Saturday midday peak hours operates just above the LOS D threshold with queues of approximately one vehicle. Under Scenario 2, left turning traffic from the North Site Driveway and all exiting traffic from the South Site driveway during the weekday afternoon peak hour experience some congestion with LOS F and E operations and queues of approximately four and one vehicle, respectively. Delays are expected at stop controlled approaches to minor arterials, such as Main Street, due to the arterial's propensity for high levels of peak traffic. The additional exiting lane for separate left turn and right turn lanes at the North Site Driveway is provided to allow lower delay right turn movements space to bypass the left turning traffic at this higher volume driveway. Additional improvements are not warranted based on the analysis results and traffic signalization of the intersection is unlikely to be approved by CTDOT, the owner of Main Street (State Route 111), based on the community center site-generated traffic.

It is also important to note that both Scenarios 1 and 2 are based upon community centers that are larger than the proposed facility and the Trumbull Community Center is expected to have less site-generated traffic than either scenario. Both driveways contain sufficient space to store vehicles waiting to exit the Site under both Scenarios 1 and 2 and no significant impact on the operations of Main Street is expected.

Section 6

Conclusions & Recommendations

1. The project proposes to construct a 30,000± square foot community recreation and senior center. Approximately 113 parking spaces, including 6 handicap accessible spaces, will be provided on the Site. The development is expected to be completed by 2027.
2. The Site will be accessed by vehicles via the North Site Driveway, which is located approximately 80 feet north of the existing northern site driveway, and the South Site Driveway, which is in a similar location to the existing southern site driveway. The driveways lead to the surface parking in front and back of the Site and also facilitate pick-up and drop-off operations at the front and rear entrances. The Site driveways will be stop sign controlled for exiting traffic. The North Site Driveway will contain a single entering and two lanes exiting lanes; one exclusive left turn and one exclusive right turn lane. The South Site Driveway will have a single entering and single exiting lane. Main Street, with a shoulder of 5-7 feet adjacent to the southbound travel lane, provides the ability for through vehicles to bypass any vehicles waiting to turn left into the Site. Ample intersection sight distances, far exceeding CTDOT standards are expected for both driveways looking in both directions.
3. The Site will be accessible for pedestrians, bicyclists, and public transportation riders. Sidewalks will be provided along the site frontage that will connect to the existing sidewalk network to the south through a future town project. Bicycle access is accommodated through the existing shoulders along Main Street within the study area. Public transportation access to the Site is provided via the Route 19X bus of the Greater Bridgeport Transit system.
4. Site-generated traffic was estimated using data collected at similar community centers in Connecticut and in consultant with industry-standard rates. Based on the review, the following site-generated traffic scenarios were analyzed:

Scenario 1 - Based on Joseph Trapasso Community in Branford

- Weekday Morning: 98 trips (81 entering, 17 exiting)
- Weekday Afternoon: 125 trips (51 entering, 74 exiting)
- Saturday Midday: 122 trips (40 entering, 82 exiting)

Scenario 2 - Based on Jewish Community Center in Woodbridge

- Weekday Morning: 124 trips (39 entering, 85 exiting)
- Weekday Afternoon: 316 trips (155 entering, 161 exiting)
- Saturday Midday: 88 trips (53 entering, 35 exiting)

These site-generated traffic scenarios conservatively represent the potential site-generated traffic for the proposed center in Trumbull. Both the Branford and Woodbridge centers are significantly larger than the proposed community center. Along with the smaller size, the ITE Trip Generation Manual data also suggests that the proposed Trumbull center will have less traffic than either Scenario 1 or Scenario 2. As such, the analyses presented in this study are conservative.

5. Vehicle collision history does not indicate a significant or notable pattern of collisions in the study area. The addition of the potential development site-generated traffic is not anticipated to impact existing collision patterns within the study area with the off-site improvements.
6. The capacity analysis shows that the signalized intersections operate with overall intersection LOS B during all peak periods and minor queue length increases for intersection movements with the addition of the site-generated traffic under Scenarios 1 and 2.

Vehicles entering the Site from Main Street operate efficiently at LOS A and queues of less than one vehicle. Vehicles exiting the Site driveways operate with LOS D or better operations with queues of less than one vehicle during most peaks under Scenarios 1 and 2. The exceptions being the weekday afternoon and Saturday midday peaks for left turning traffic under Scenario 1 operating at just above the LOS D threshold and exiting traffic at both the North and South Site driveways under Scenario 2 during the weekday afternoon peak hour operating with some congestion at LOS E/F. Delays are expected at stop controlled approaches to minor arterials, such as Main Street, due to the arterial's propensity for high levels of peak traffic. The additional exiting lane for separate left turn and right turn lanes at the North Site Driveway is provided to allow lower delay right turn movements space to bypass the left turning traffic at this higher volume driveway. Additional improvements are not warranted based on the analysis results and traffic signalization of the intersection is unlikely to be approved by CTDOT, the owner of Main Street (State Route 111), based on the proposed community center site-generated traffic. It is also important to note that both Scenarios 1 and 2 are based upon centers that are larger than the proposed center and the Trumbull Community Center is expected to have less site-generated traffic than either scenario. Ultimately, both the North and South Site Driveways contain sufficient space to store vehicles waiting to exit the Site under both Scenarios 1 and 2 and no significant impact on the operations of Main Street is expected.

7. Based on the results of the analysis, it is the professional opinion of Tighe & Bond that the additional traffic expected to be generated by the potential Trumbull Community Center at 5958 Main Street is not expected to have a significant impact on traffic operations within the study area.

Section 7

Tables

TABLE 1
Intersection Operation Summary - Capacity

		Weekday Morning Peak Hour												Weekday Afternoon Peak Hour												Saturday Midday Peak Hour															
Lane Use		2025			2027			2027			2027			2025			2027			2027			2027			2025			2027			2027			2027						
		Existing			Background			Combined Scenario 1			Combined Scenario 2			Existing			Background			Combined Scenario 1			Combined Scenario 2			Existing			Background			Combined Scenario 1			Combined Scenario 2						
		LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C	LOS	Delay	V/C							
Traffic Signal - Main Street (Route 111) at Lake Avenue / Turney Place / Gas Station Driveway																																									
Overall		B	13.3	0.64	B	15.8	0.69	B	16.5	0.72	B	16.1	0.71	B	12.3	0.61	B	16.7	0.67	B	17.1	0.70	B	18.1	0.75	B	12.3	0.64	B	15.9	0.70	B	16.2	0.72	B	16.4	0.72				
Gas Station Driveway	EB	A	0.0	0.00	D	41.8	0.19	D	41.8	0.19	D	41.8	0.19	A	0.0	0.00	D	43.8	0.22	D	43.9	0.22	D	44.1	0.22	A	0.0	0.00	D	41.7	0.19	D	41.7	0.19	D	41.7	0.19				
Turney Place	WB	A	0.5	0.08	A	0.6	0.08	A	0.6	0.08	A	0.6	0.08	D	37.0	0.05	D	39.8	0.05	D	40.0	0.05	D	40.2	0.05	D	36.5	0.12	D	39.6	0.12	D	39.6	0.12	D	39.6	0.12				
Route 111 (Main Street)	NBL	A	5.6	0.17	A	6.7	0.18	A	6.8	0.19	A	6.8	0.19	A	5.3	0.25	A	7.7	0.29	A	7.8	0.30	A	8.0	0.32	A	4.9	0.22	A	6.8	0.24	A	6.9	0.25	A	6.9	0.25				
	NBTR	A	6.6	0.40	A	8.5	0.45	A	8.5	0.46	A	8.9	0.49	A	6.1	0.44	A	9.5	0.50	A	9.9	0.53	B	10.3	0.56	A	5.4	0.38	A	7.8	0.43	A	8.1	0.46	A	8.0	0.44				
	SB	B	18.0	0.64	C	21.1	0.69	C	22.6	0.72	C	21.9	0.71	B	16.3	0.61	C	22.1	0.67	C	23.1	0.70	C	25.3	0.75	B	16.6	0.64	C	21.3	0.70	C	22.1	0.72	C	22.3	0.72				
Lake Avenue	EBL	D	38.8	0.40	D	41.2	0.42	D	41.2	0.42	D	41.3	0.42	D	38.2	0.45	D	42.7	0.47	D	42.9	0.47	D	43.1	0.47	D	36.4	0.34	D	40.5	0.37	D	40.5	0.37	D	40.5	0.37				
	EBR	A	6.3	0.30	A	6.4	0.31	A	6.4	0.31	A	6.4	0.31	A	5.7	0.26	A	6.1	0.27	A	6.0	0.27	A	5.9	0.28	A	6.3	0.23	A	6.6	0.24	A	6.6	0.25	A	6.6	0.25				
Traffic Signal - Main Street (Route 111) at Church Hill Road (Route 127) / Gas Station Driveway																																									
Overall		B	12.3	0.57	B	12.5	0.58	B	13.8	0.63	B	13.3	0.61	B	14.0	0.69	B	14.4	0.70	B	15.5	0.74	B	18.2	0.81	B	10.4	0.57	B	10.6	0.58	B	11.0	0.60	B	11.1	0.61				
Gas Station Driveway	EB	B	18.9	0.04	B	19.2	0.05	C	20.1	0.05	C	20.1	0.05	B	14.1	0.09	B	14.2	0.09	B	14.6	0.09	B	15.0	0.09	B	14.5	0.07	B	14.5	0.07	B	14.9	0.08	B	14.8	0.07				
State Route 127 (Church Hill Road)	WBTL	C	27.9	0.16	C	28.6	0.17	C	30.0	0.17	C	30.3	0.17	C	24.5	0.10	C	24.8	0.10	C	25.4	0.10	C	26.3	0.10	C	21.4	0.07	C	21.6	0.07	C	22.1	0.07	C	21.8	0.07				
State Route 111 (Main Street)	WBR	B	16.0	0.46	B	15.7	0.46	B	15.4	0.47	B	14.9	0.45	B	16.7	0.47	B	16.7	0.47	B	16.6	0.48	B	16.6	0.50	B	15.4	0.45	B	15.4	0.46	B	15.4	0.47	B	15.7	0.48				
	NBTL	B	20.0	0.52	C	21.2	0.55	C	25.1	0.63	C	24.6	0.61	C	21.8	0.69	C	22.7	0.70	C	25.1	0.74	C	30.2	0.81	B	15.6	0.57	B	16.0	0.58	B	17.0	0.60	B	16.8	0.61				
	NBR	A	0.1	0.03	A	0.1	0.04	A	0.1	0.04	A	0.1	0.04	A	0.1	0.02	A	0.1	0.02	A	0.1	0.02	A	0.1	0.02	A	0.0	0.02	A	0.0	0.02	A	0.0	0.02	A	0.0	0.02				
	SBL	A	8.2	0.57	A	8.2	0.58	A	8.5	0.58	A	8.5	0.59	A	9.1	0.56	A	9.7	0.58	B	11.9	0.62	B	17.0	0.69	A	6.0	0.43	A	6.2	0.45	A	6.7	0.49	A	6.6	0.47				
	SBTR	A	5.1	0.33	A	5.1	0.34	A	5.0	0.34	A	5.0	0.35	A	5.5	0.37	A	5.6	0.38	A	5.7	0.40	A	6.0	0.42	A	5.1	0.42	A	5.2	0.43	A	5.3	0.45	A	5.3	0.44				
Unsignalized TWSC - Main Street (Route 111) at North Site Driveway																																									
North Site Driveway	WBL	--	--	--	--	--	--	D	28.8	0.06	D	32.7	0.25	--	--	--	--	--	--	E	43.6	0.29	F	108.8	0.77	--	--	--	--	--	--	E	36.7	0.27	D	32.1	0.12				
	WBR	--	--	--	--	--	--	B	11.9	0.02	B	12.3	0.08	--	--	--	--	--	--	C	15.4	0.10	C	17.4	0.22	--	--	--	--	--	--	B	13.3	0.09	B	12.9	0.04				
State Route 111 (Main Street)	SBL	--	--	--	--	--	--	A	8.7	0.03	A	8.6	0.01	--	--	--	--	--	--	A	9.5	0.02	A	9.9	0.06	--	--	--	--	--	--	A	8.9	0.01	A	8.9	0.02				
Unsignalized TWSC - Main Street (Route 111) at South Site Driveway																																									
South Site Driveway	WB	--	--	--	--	--	--	C	22.3	0.02	D	25.1	0.11	--	--	--	--	--	--	D	31.4	0.12	E	46.3	0.32	--	--	--	--	--	--	D	27.5	0.11	D	25.1	0.05				
State Route 111 (Main Street)	SBL	--	--	--	--	--	--	A	8.7	0.01	A	8.6	0.01	--	--	--	--	--	--	A	9.5	0.01	A	9.8	0.03	--	--	--	--	--	--	A	8.9	0.01	A	8.9	0.01				

Legend
LOS - Level of Service
Delay - average delay per vehicle in seconds
V/C - volume to capacity ratio

TABLE 2
Intersection Operation Summary - Queues (In Feet)

			Weekday Morning Peak Hour								Weekday Afternoon Peak Hour								Saturday Midday Peak Hour							
	Lane Use	Available Storage	2025		2027		2027		2027		2025		2027		2027		2027		2025		2027		2027		2027	
			Existing		Background		Combined Scenario 1		Combined Scenario 2		Existing		Background		Combined Scenario 1		Combined Scenario 2		Existing		Background		Combined Scenario 1		Combined Scenario 2	
			50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th	50 th	95 th
Traffic Signal - Main Street (Route 111) at Lake Avenue / Turney Place / Gas Station Driveway																										
Gas Station Driveway	EB	50	0	0	11	36	11	36	11	36	0	0	13	40	13	40	13	41	0	0	11	36	11	36	11	36
Turney Place	WB	730	0	0	0	0	0	0	0	0	3	13	4	13	4	13	4	13	7	21	9	21	9	21	9	21
Route 111 (Main Street)	NBL	50	6	27	13	30	13	30	14	31	11	51	24	56	25	58	26	59	9	41	19	43	20	44	19	43
	NBTR	1000+	51	155	117	185	120	190	131	206	64	242	151	288	163	312	178	341	53	191	119	212	130	232	124	221
Lake Avenue	SB	1000+	157	403	243	443	265	529	255	484	154	418	250	465	264	532	296	603	164	420	262	442	274	462	277	474
	EBL	1000+	36	89	44	93	44	93	44	93	45	103	56	108	56	108	56	109	32	77	40	80	40	80	40	80
	EBR	65	0	44	0	45	0	45	0	45	0	37	0	38	0	39	0	39	0	33	0	34	0	34	0	34
Traffic Signal - Main Street (Route 111) at Church Hill Road (Route 127) / Gas Station Driveway																										
Gas Station Driveway	EB	50	3	13	3	14	3	14	3	14	3	18	3	18	3	19	4	19	3	14	3	14	3	14	3	14
State Route 127 (Church Hill Road)	WBTL	100	15	33	15	33	16	34	16	34	9	30	9	31	9	31	10	32	5	19	5	19	5	19	5	19
	WBR	1000+	85	102	87	104	98	114	92	108	83	136	85	139	90	146	101	160	64	106	66	108	69	113	70	115
State Route 111 (Main Street)	NBTL	350	125	202	135	211	169	239	163	229	172	387	180	402	200	435	240	490	104	212	108	220	117	236	116	234
	NBR	350	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SBL	200	54	93	57	95	60	96	63	101	35	63	36	64	41	80	53	124	24	41	24	42	27	45	25	43
	SBTR	1000+	61	101	63	103	67	104	71	111	65	108	68	111	76	118	88	126	61	94	62	97	67	104	65	100
Unsignalized TWSC - Main Street (Route 111) at North Site Driveway																										
North Site Driveway	WBL	400	--	--	--	--	--	5	--	23	--	--	--	--	--	28	--	105	--	--	--	--	--	25	--	10
State Route 111 (Main Street)	WBR	50	--	--	--	--	--	3	--	8	--	--	--	--	--	8	--	20	--	--	--	--	--	8	--	3
	SBL	1000+	--	--	--	--	--	3	--	0	--	--	--	--	--	3	--	5	--	--	--	--	--	0	--	3
Unsignalized TWSC - Main Street (Route 111) at South Site Driveway																										
South Site Driveway	WB	75	--	--	--	--	--	3	--	10	--	--	--	--	--	10	--	30	--	--	--	--	--	10	--	3
State Route 111 (Main Street)	SBL	1000+	--	--	--	--	--	0	--	0	--	--	--	--	--	0	--	3	--	--	--	--	--	0	--	0

Legend
50th & 95th - 50th and 95th percentile queue lengths in feet; Available Storage = vehicle queue space in feet;

TABLE 3
Study Area Collision History Summary

COLLISION TYPE

	2020	2021	2022	2023	2024	Total	Percent
Rear-End	8	2	8	2	8	28	43.8%
Angle	5	3	4	8	3	23	35.9%
Sideswipe, Same Direction	0	1	2	2	1	6	9.4%
Bicycle	2	0	0	0	0	2	3.1%
Fixed Object	0	0	2	0	0	2	3.1%
Animal	0	0	0	1	0	1	1.6%
Backing	1	0	0	0	0	1	1.6%
Pedestrian	0	0	0	0	1	1	1.6%
TOTAL	16	6	16	13	13	64	100%

COLLISION EVENT

	2020	2021	2022	2023	2024	Total	Percent
Motor Vehicle	15	6	16	13	12	62	95.4%
Pedestrian / Cyclist	2	0	0	0	1	3	4.6%
TOTAL	17	6	16	13	13	65	100%

SEVERITY

	2020	2021	2022	2023	2024	Total	Percent
Fatal	0	0	0	0	1	1	1.6%
Serious Injury	0	0	0	0	0	0	0.0%
Minor Injury	3	2	3	3	3	14	21.9%
Property Damage Only (PDO)	13	4	13	10	9	49	76.6%
TOTAL	16	6	16	13	13	64	100%

DAY & TIME

	2020	2021	2022	2023	2024	Total	Percent
Weekday 6-9 A.M.	0	0	2	1	0	3	4.7%
Weekday 3-6 P.M.	2	2	3	2	4	13	20.3%
Weekday Off-Peak	11	4	8	5	5	33	51.6%
Saturday 11 A.M. - 2 P.M.	0	0	0	0	2	2	3.1%
Weekend Off-Peak	3	0	3	5	2	13	20.3%
TOTAL	16	6	16	13	13	64	100%

WEATHER

	2020	2021	2022	2023	2024	Total	Percent
Clear	12	5	15	11	8	51	79.7%
Rain	4	1	1	2	5	13	20.3%
Snow	0	0	0	0	0	0	0.0%
Ice	0	0	0	0	0	0	0.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	16	6	16	13	13	64	100%

ROAD SURFACE CONDITION

	2020	2021	2022	2023	2024	Total	Percent
Dry	11	5	12	10	7	45	70.3%
Wet	5	1	4	3	6	19	29.7%
Snow	0	0	0	0	0	0	0.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	16	6	16	13	13	64	100%

LIGHT CONDITIONS

	2020	2021	2022	2023	2024	Total	Percent
Light	14	3	11	9	9	46	71.9%
Dark	2	3	5	4	4	18	28.1%
TOTAL	16	6	16	13	13	64	100%

COLLISIONS BY STUDY AREA INTERSECTION

	2020	2021	2022	2023	2024	Total	Percent
Main Street (Route 111) at Lake Avenue / Turney Place	5	2	5	3	4	19	29.7%
Main Street (Route 111) at Church Hill Road (Route 127)	10	4	9	10	7	40	62.5%
Main Street (Route 111) along 5958 Main Street Site Frontage	1	0	2	0	2	5	7.8%
TOTAL	16	6	16	13	13	64	100%

TABLE 4

Site-Generated Traffic Summary

Comstock Community Center - Wilton (~38,600 SF)			
Peak Hour Period	Enter	Exit	Total
Weekday Morning	26	8	34
Weekday Afternoon	21	34	55
Saturday Midday	13	37	50
ITE Land Use Code 495 - Recreational Community Center (~30,000 SF)			
Peak Hour Period	Enter	Exit	Total
Weekday Morning	38	19	57
Weekday Afternoon	53	60	113
Saturday Midday	17	15	32
Joseph Trapasso Community House - Branford (~42,850 SF) [Scenario 1]			
Peak Hour Period	Enter	Exit	Total
Weekday Morning	81	17	98
Weekday Afternoon	51	74	125
Saturday Midday	40	82	122
Jewish Community Center of Greater New Haven - Woodbridge (~118,500 SF) [Scenario 2]			
Peak Hour Period	Enter	Exit	Total
Weekday Morning	39	85	124
Weekday Afternoon	155	161	316
Saturday Midday	53	35	88

Sources: Turning Movement Counts at the Comstock Community Center at
180 School Road, Wilton, CT

Institute of Transportation Engineers, Trip Generation, 11th Edition, 2021
Land Use - 495 [Recreational Community Center]

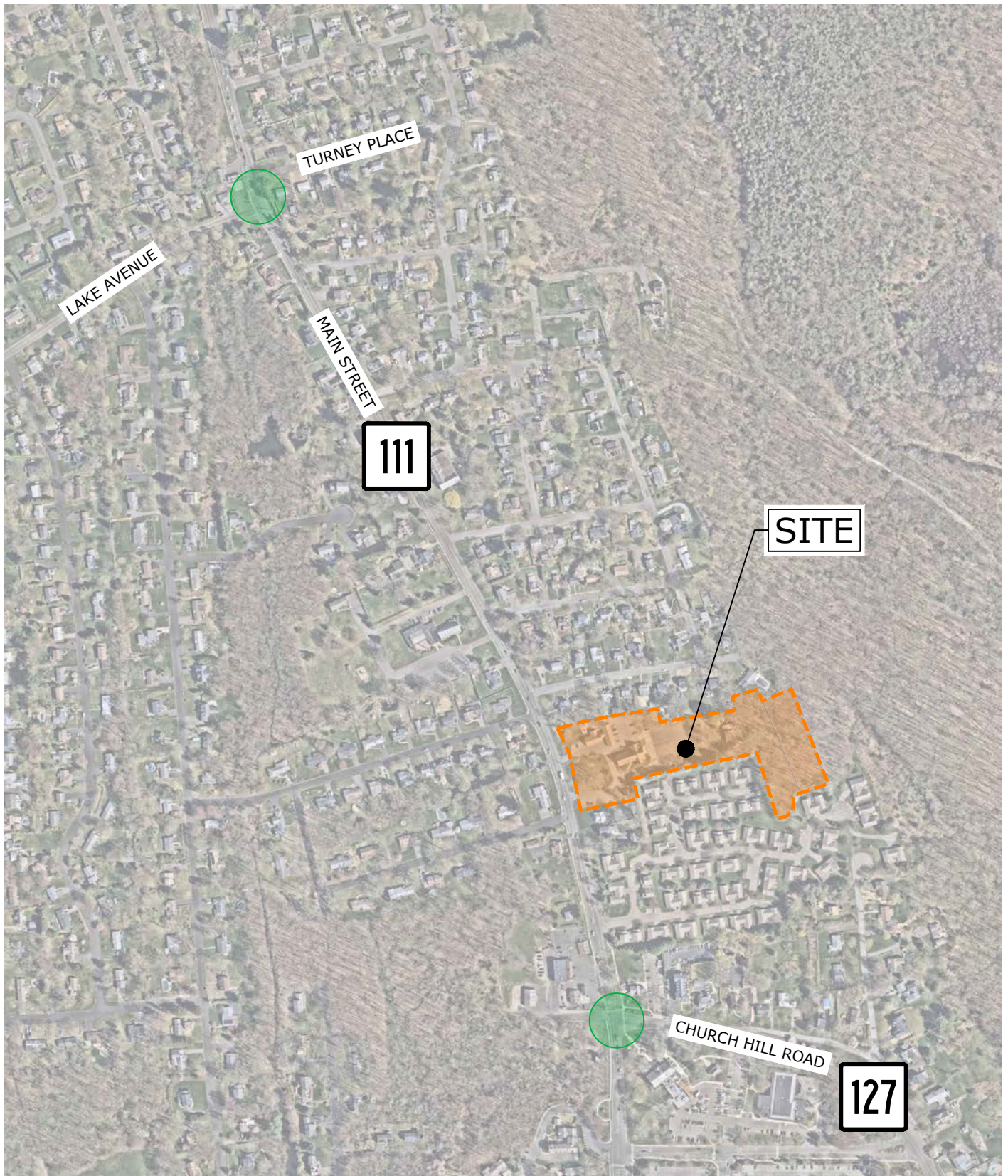
Turning Movement Counts at the Jewish Community Center of Greater
New Haven at 360 Amity Road (State Route 63) in Woodbridge, CT

Turning Movement Counts at the Joseph Trapasso Community House at
46 Church Street, Branford, CT

Section 8

Figures

Jan 31, 2025-9:19am Plotted By: DFitzgerald
Tighe & Bond, Inc. J:\T\T0196\212 Community Center\Drawings\Sheet\T0196-212 Site Location Map.dwg



- STUDY AREA
INTERSECTION
(IN ADDITION TO
SITE DRIVEWAYS)



SCALE: 1" = 500'

TRUMBULL COMMUNITY CENTER
TRUMBULL, CT

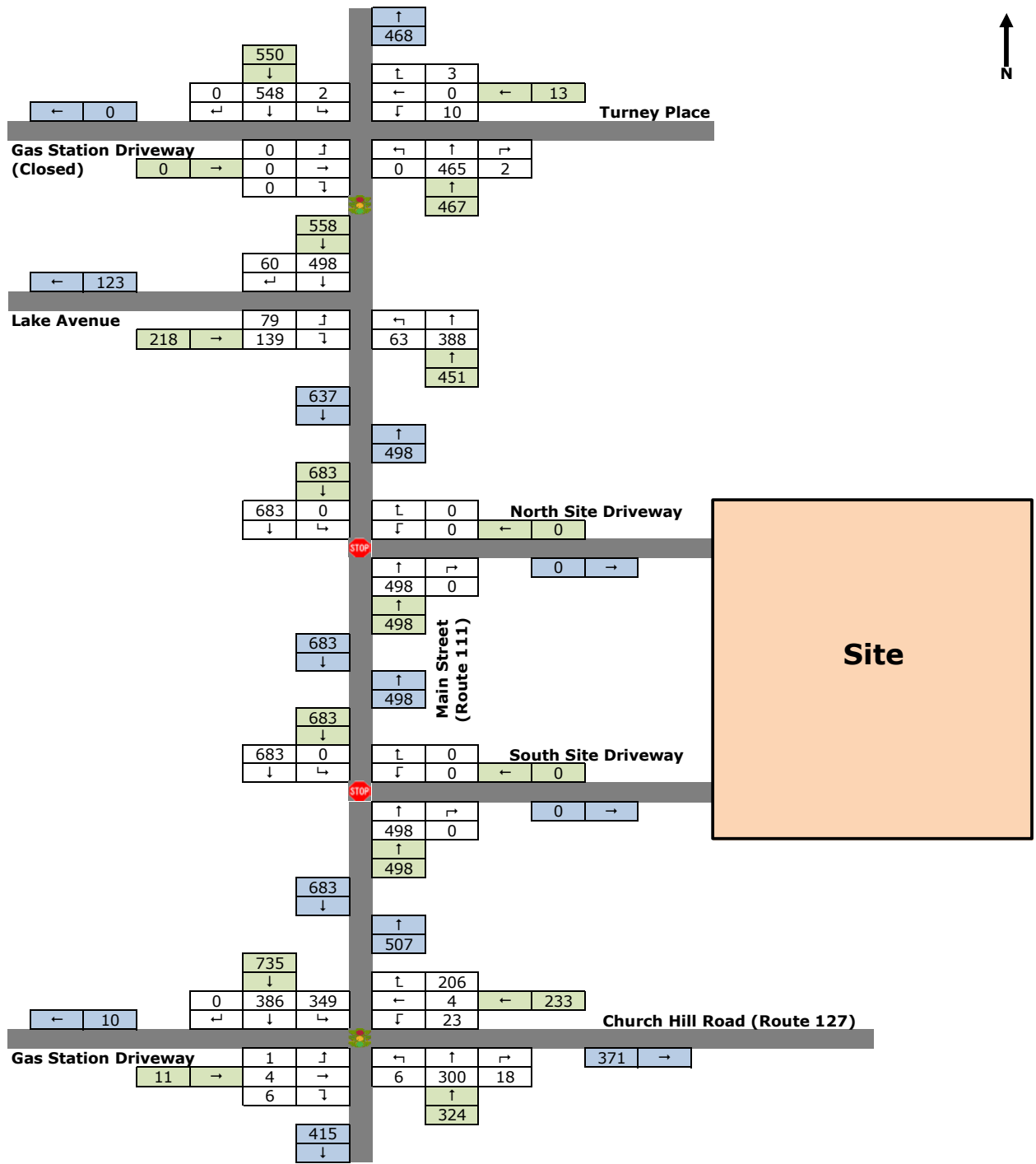
SITE LOCATION MAP

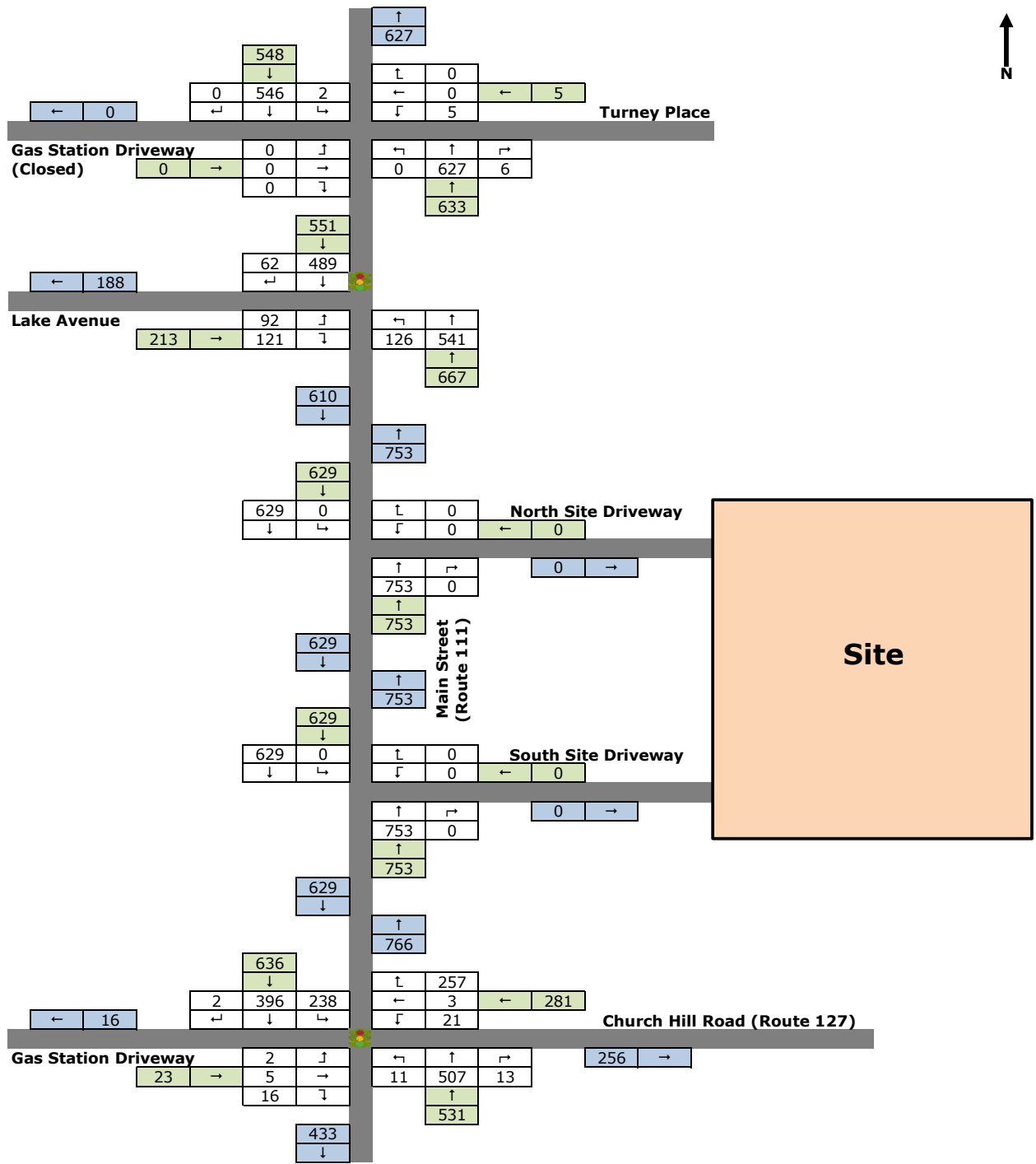


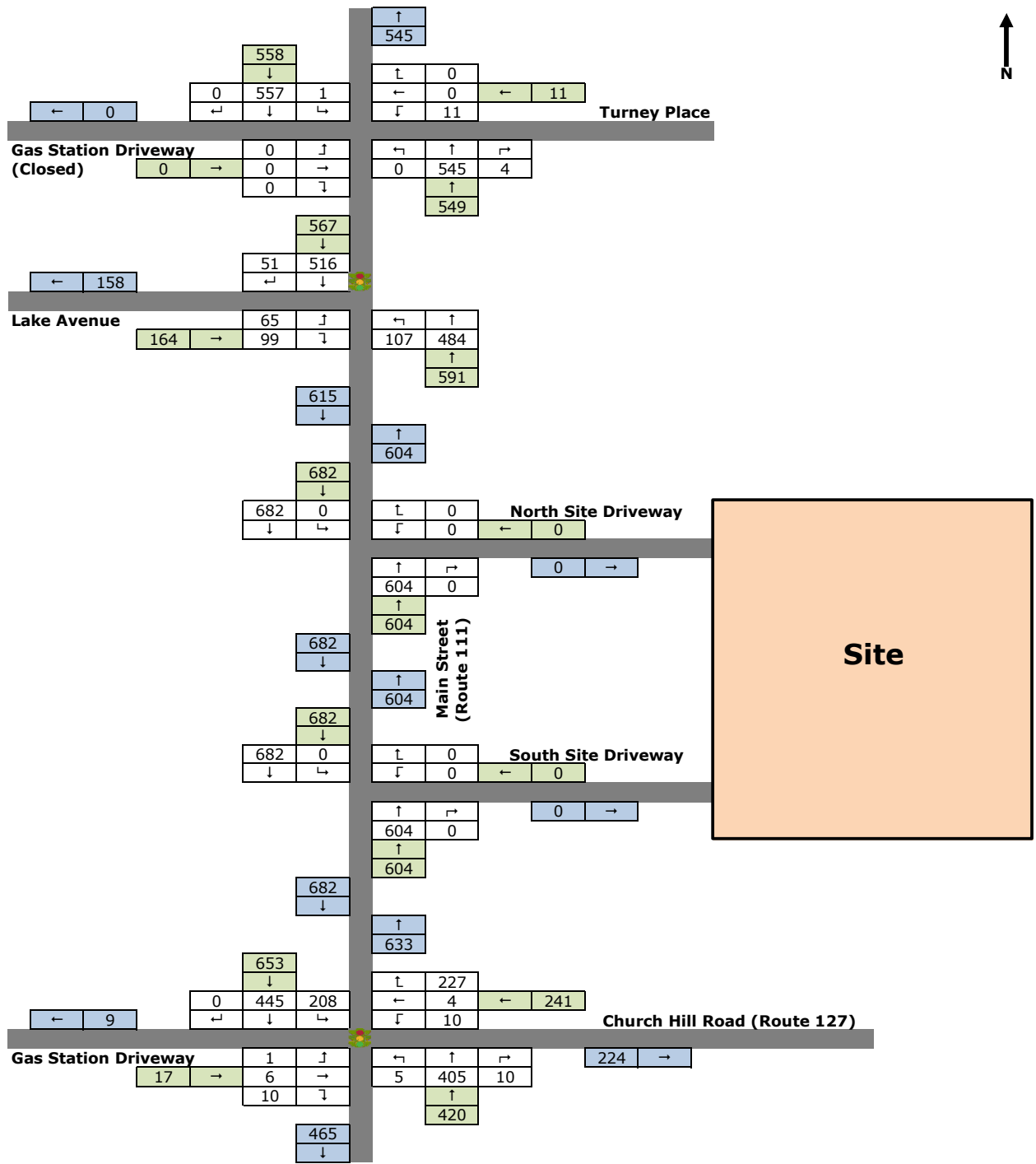
AS SHOWN

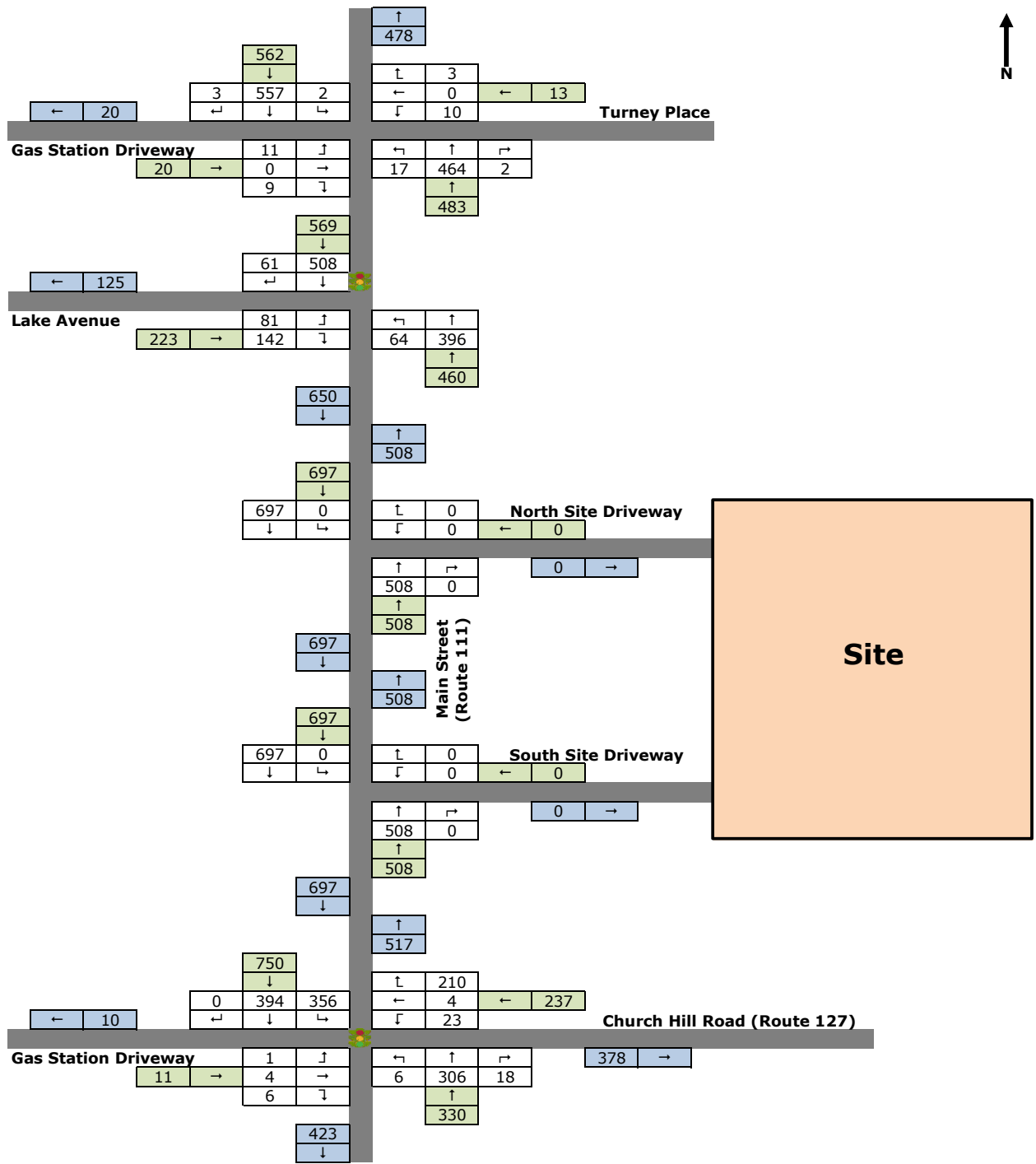
FIGURE 1

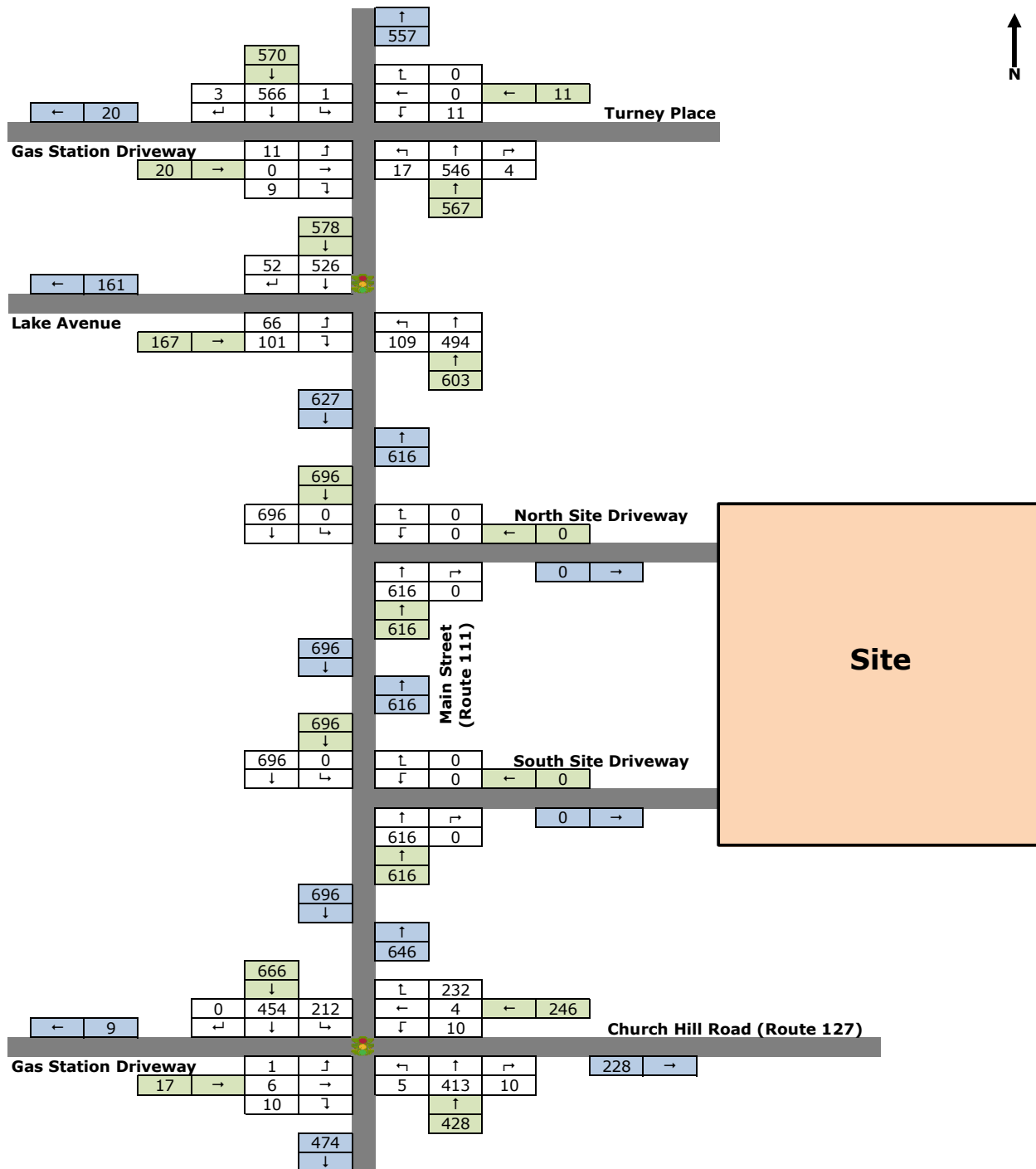
Tighe&Bond

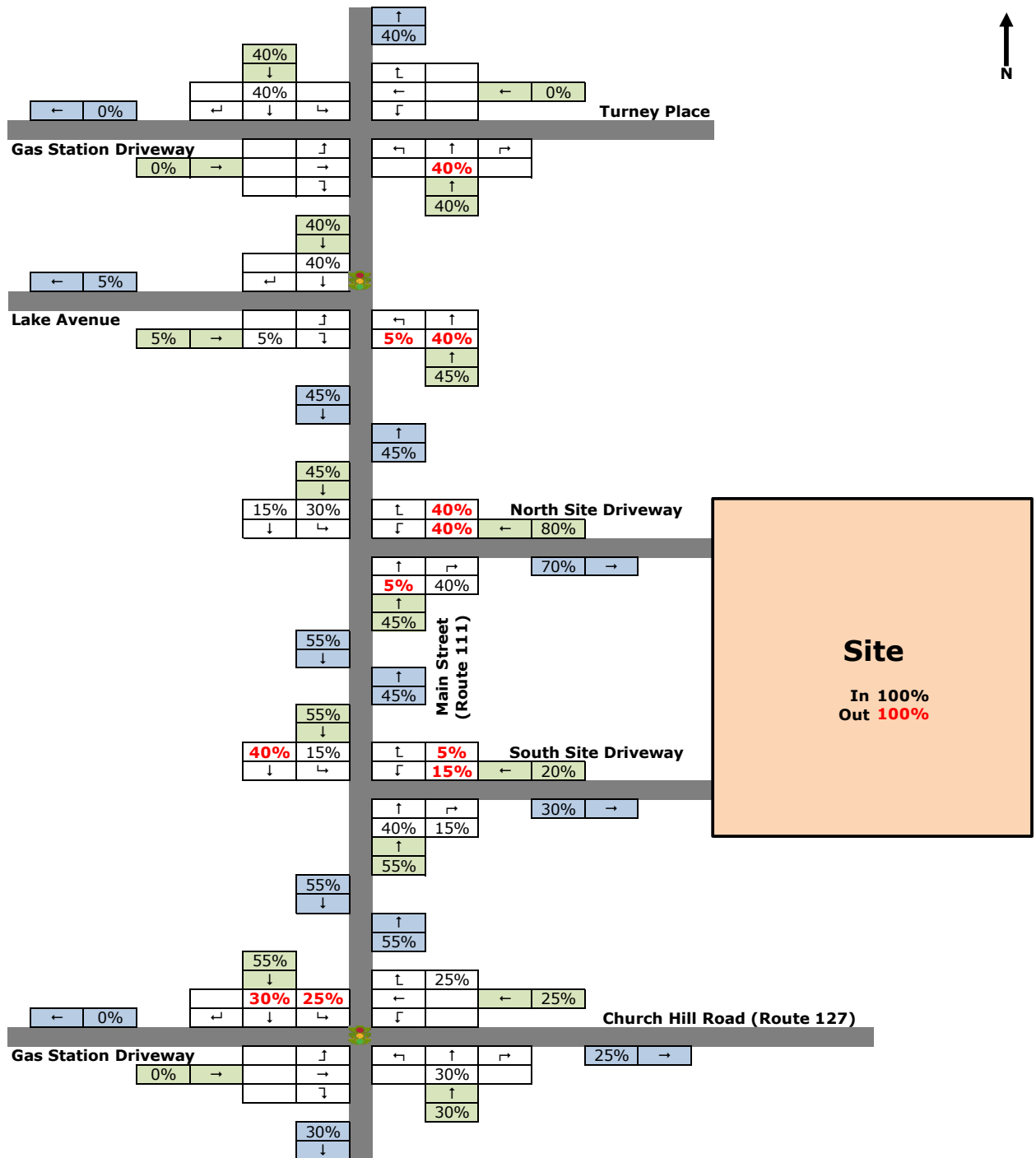












**2025 Site-Generated Traffic
Arrival/Departure Distribution
Trumbull Community Center**

Figure 8

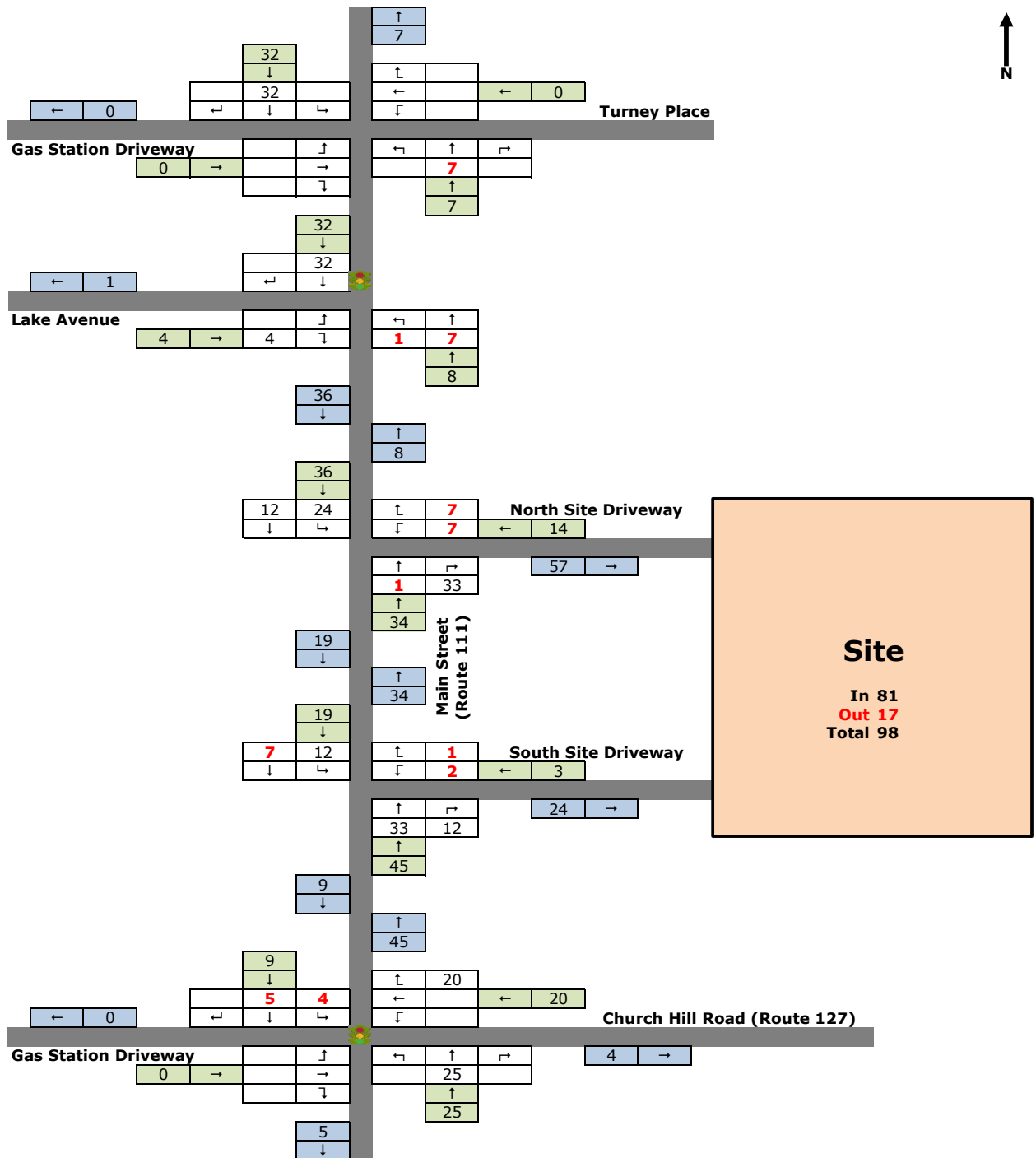
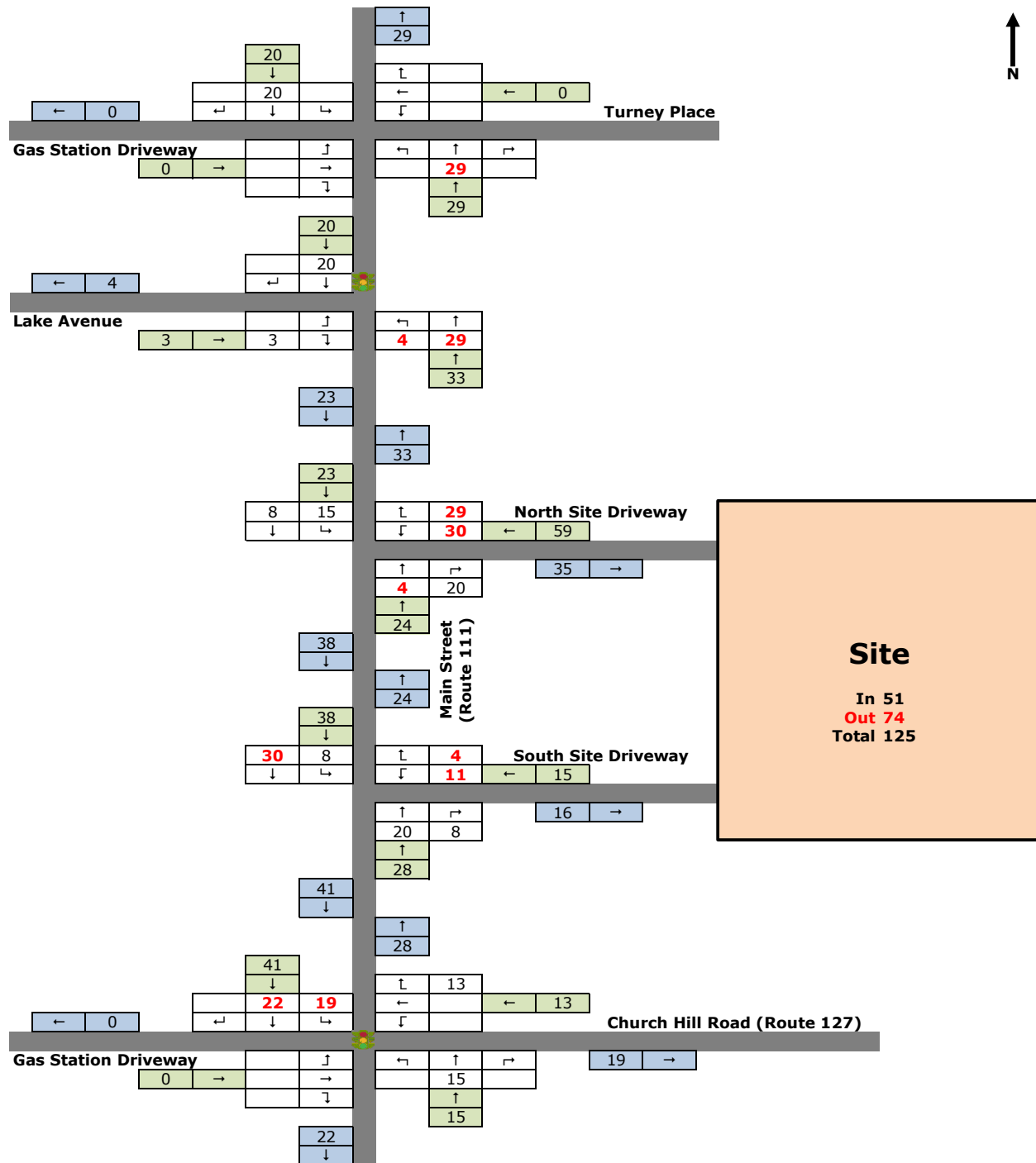


Figure 9



2025 Site-Generated Traffic Volumes [Scenario 1 - Based on Branford Data]
Weekday Afternoon Peak Hour
Trumbull Community Center

Figure 10

Legend

XX - Entering Traffic

XX - Exiting Traffic

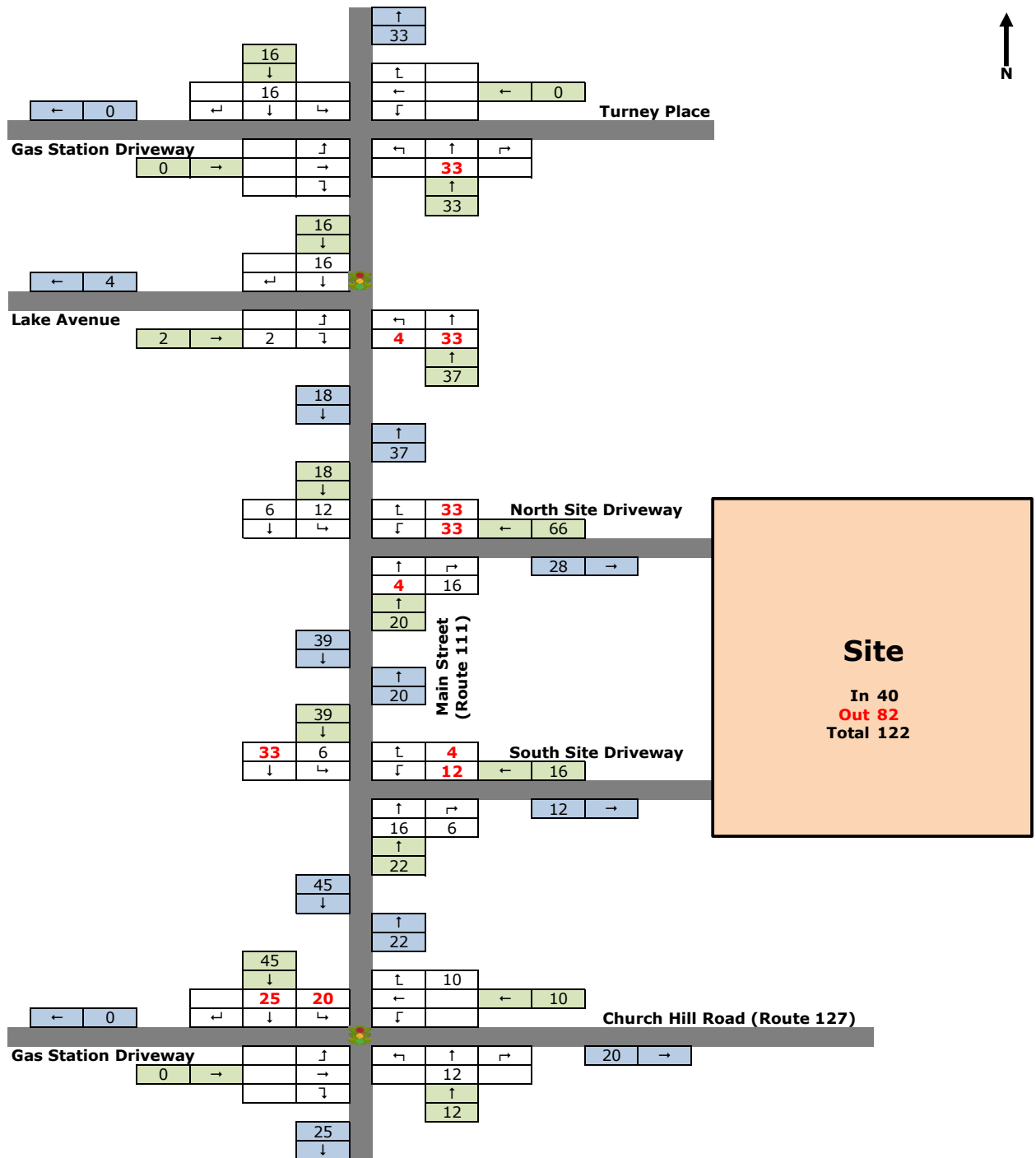
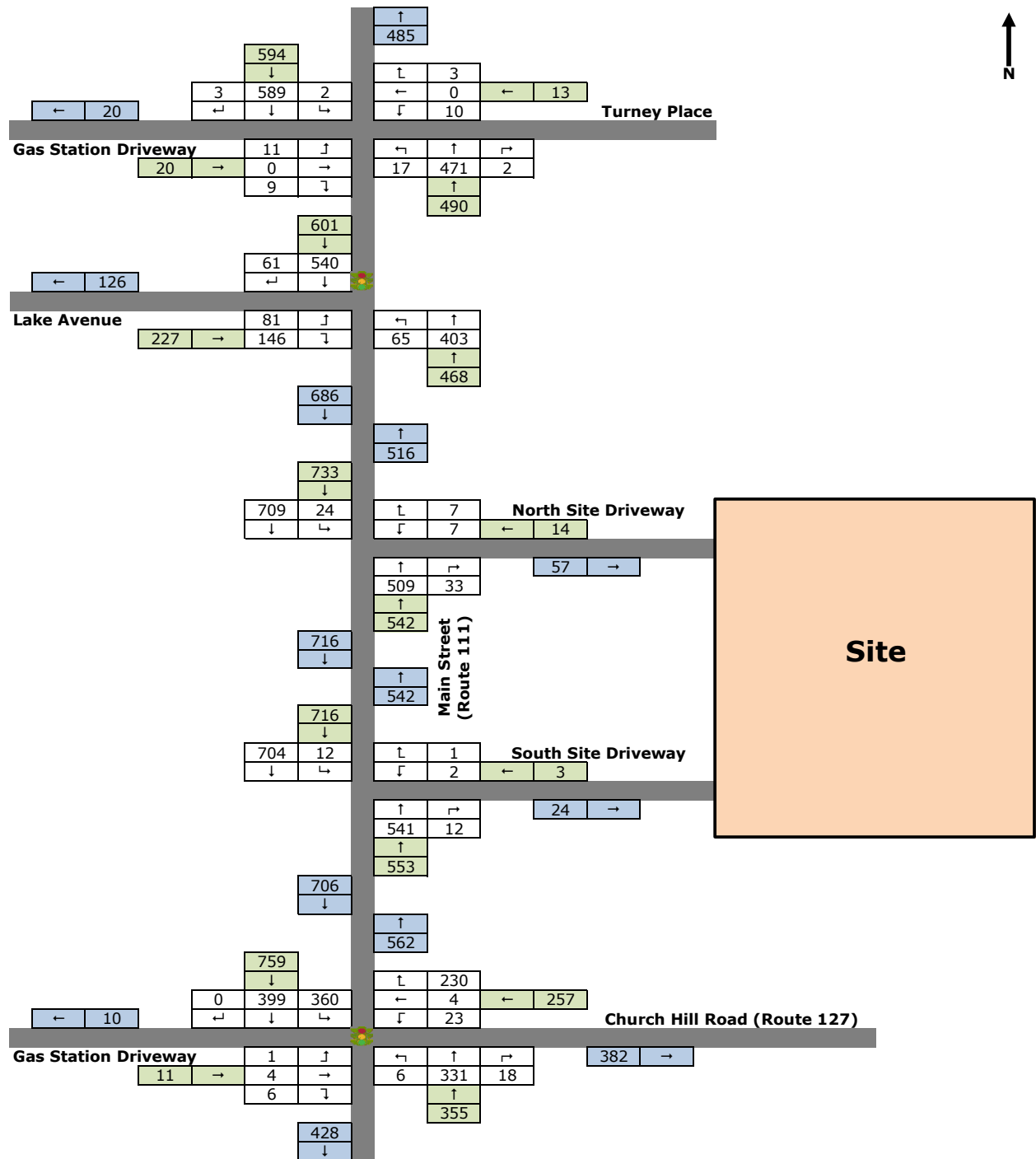
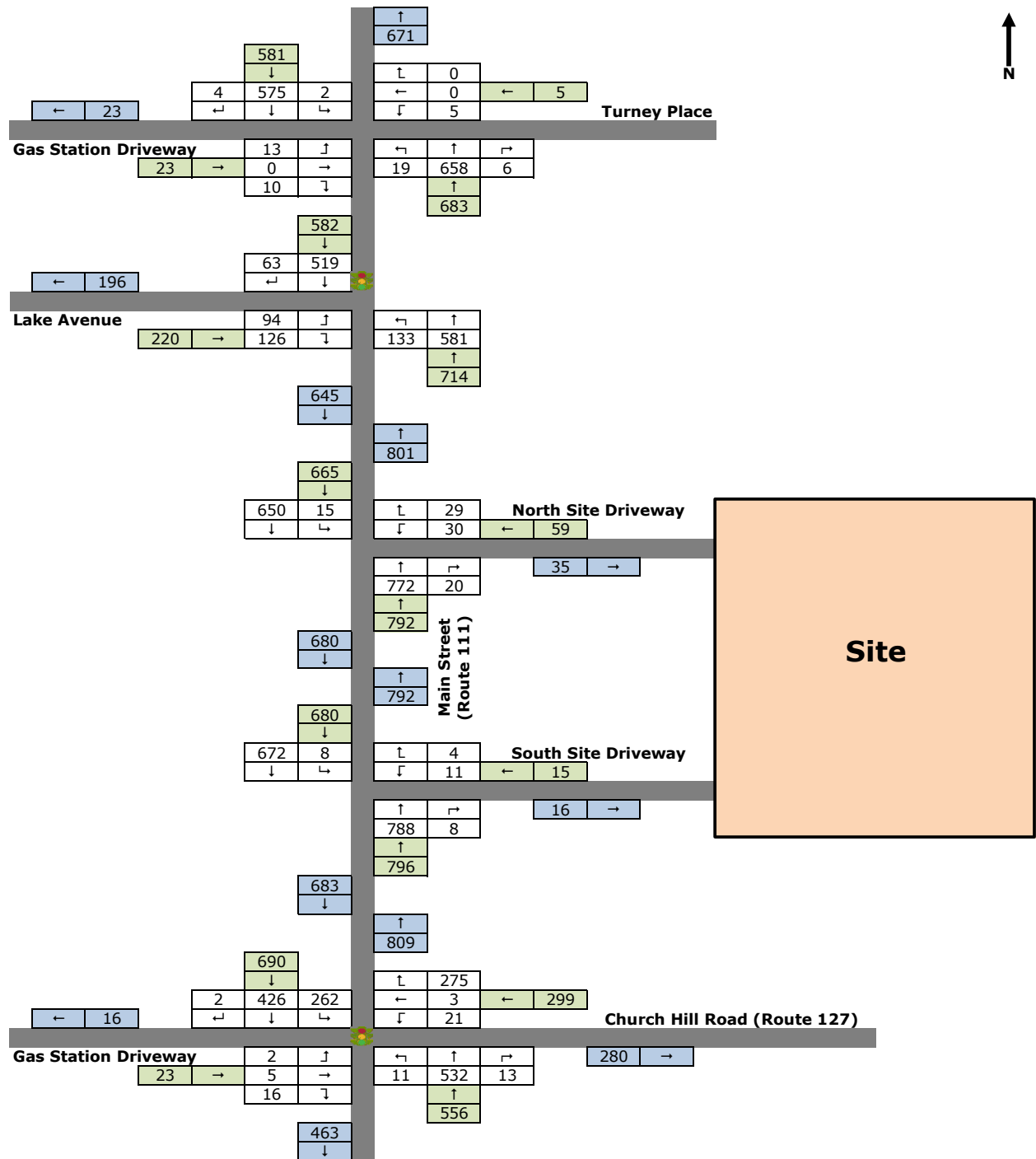
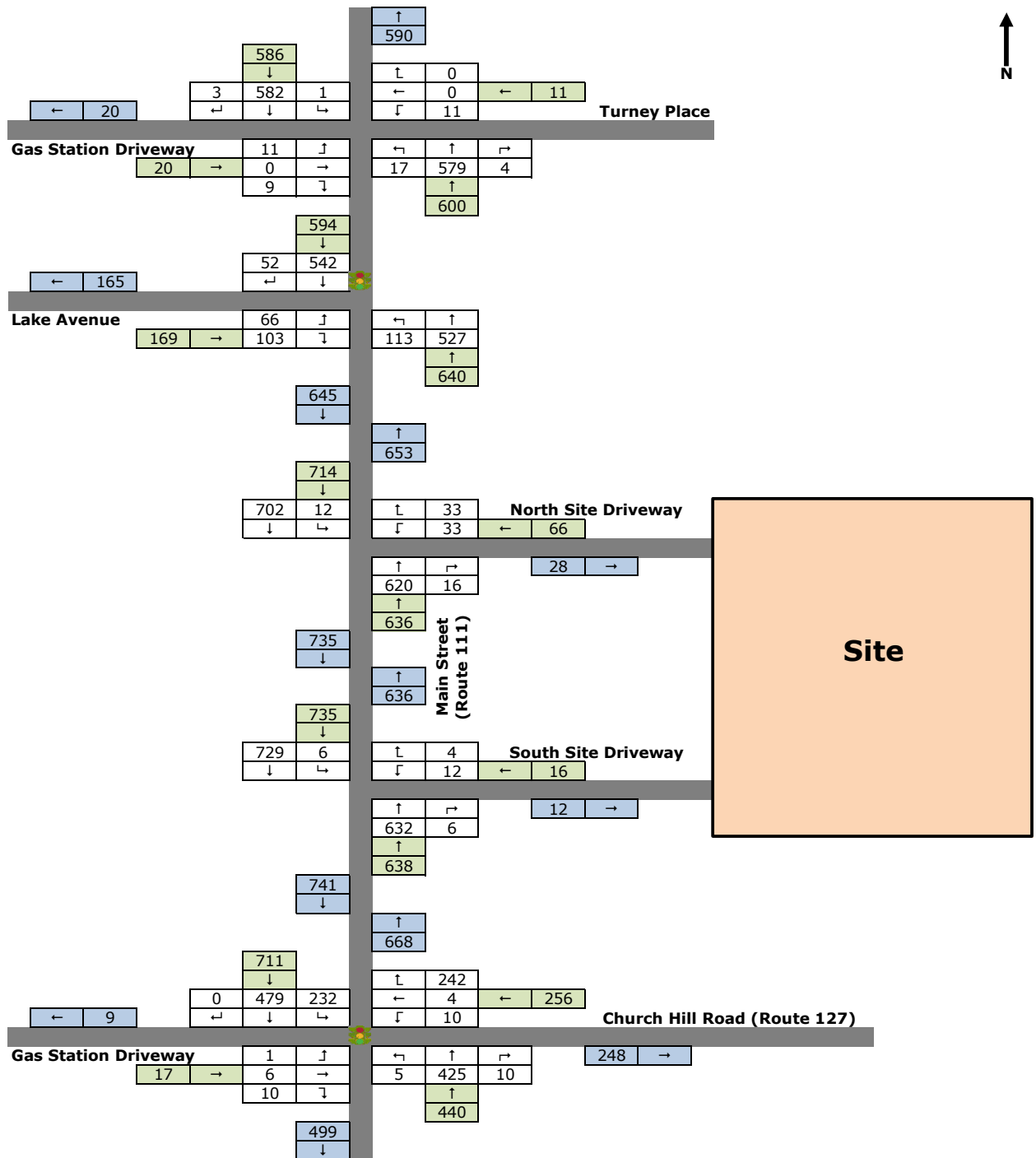


Figure 11







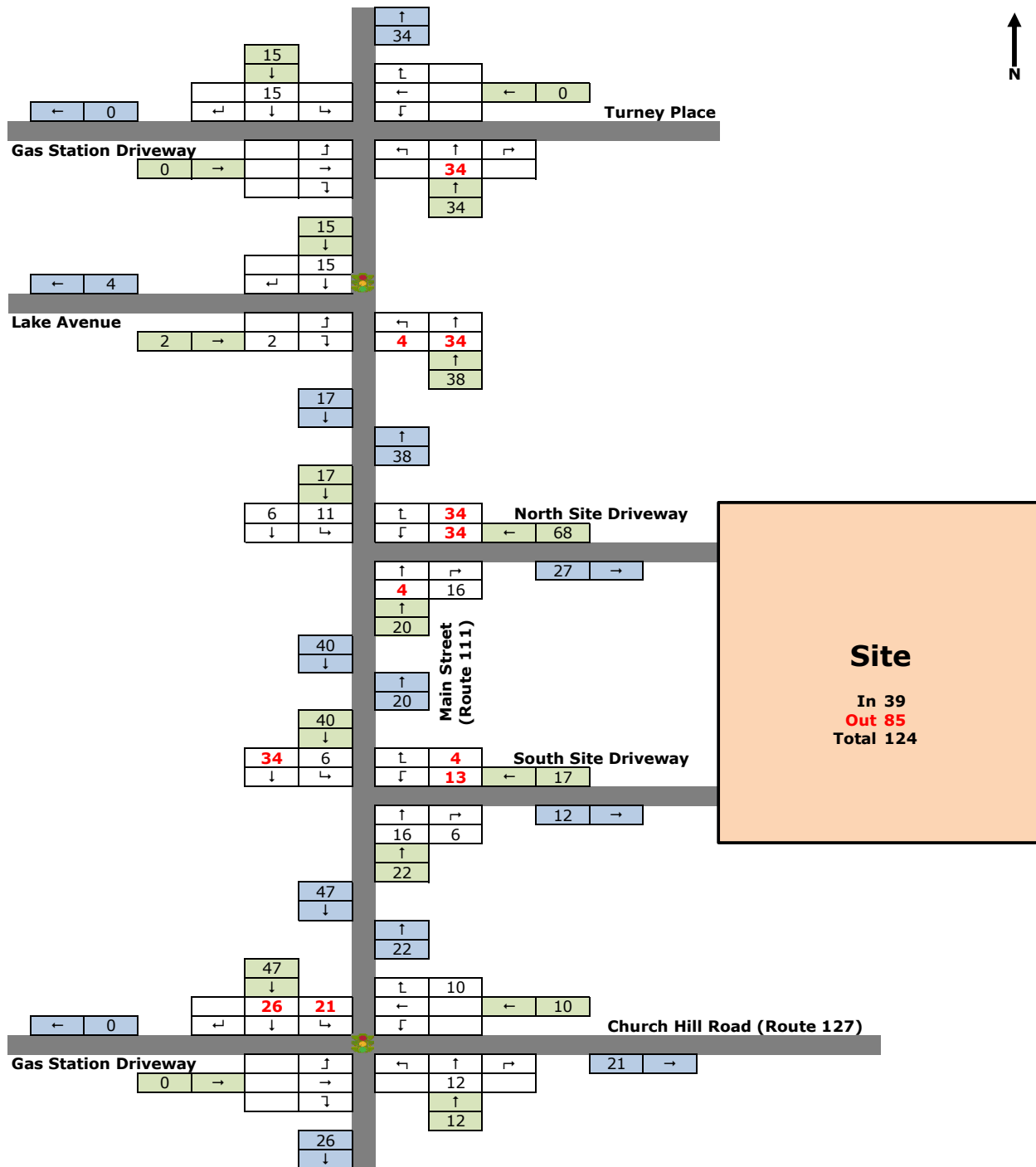
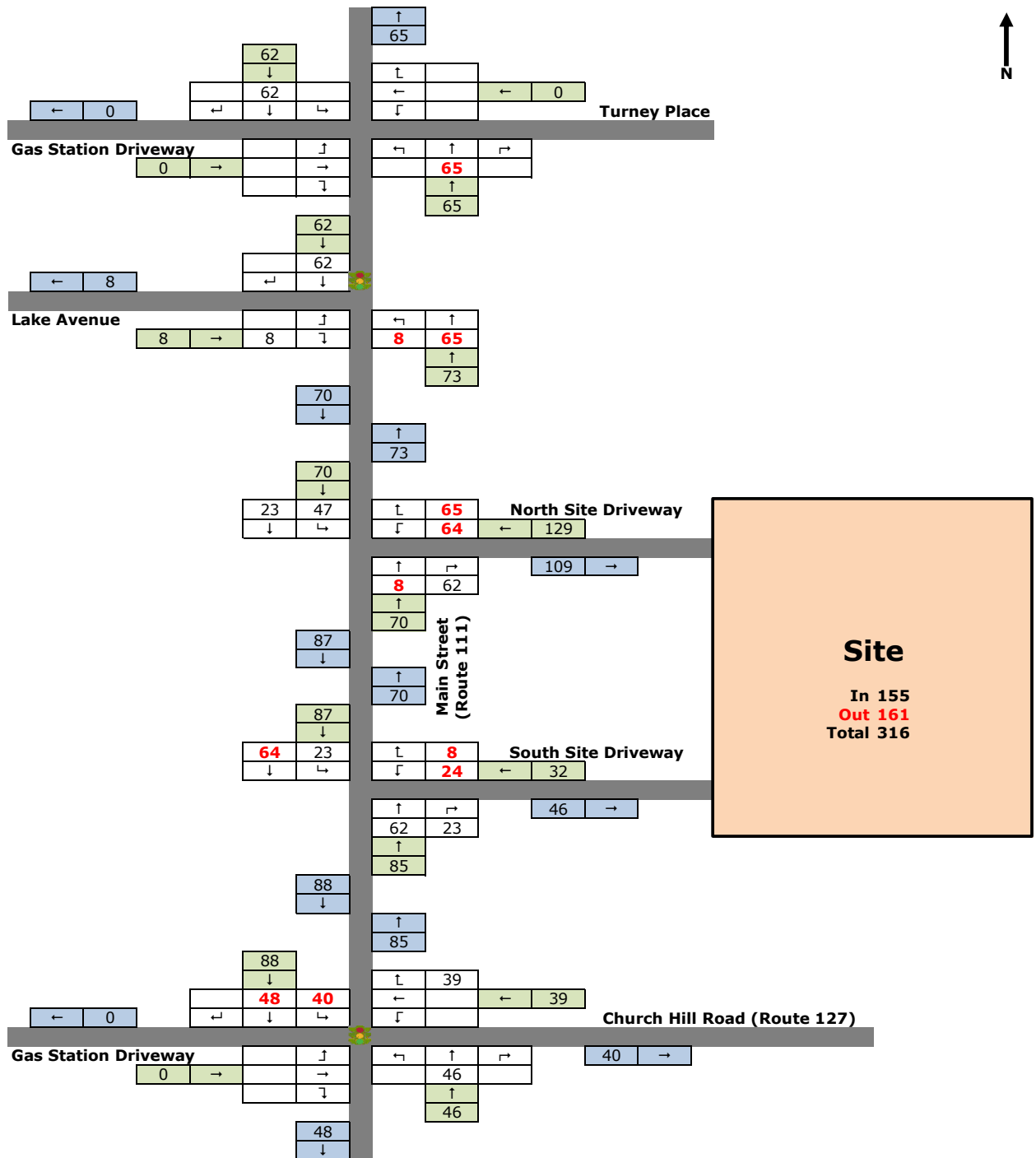


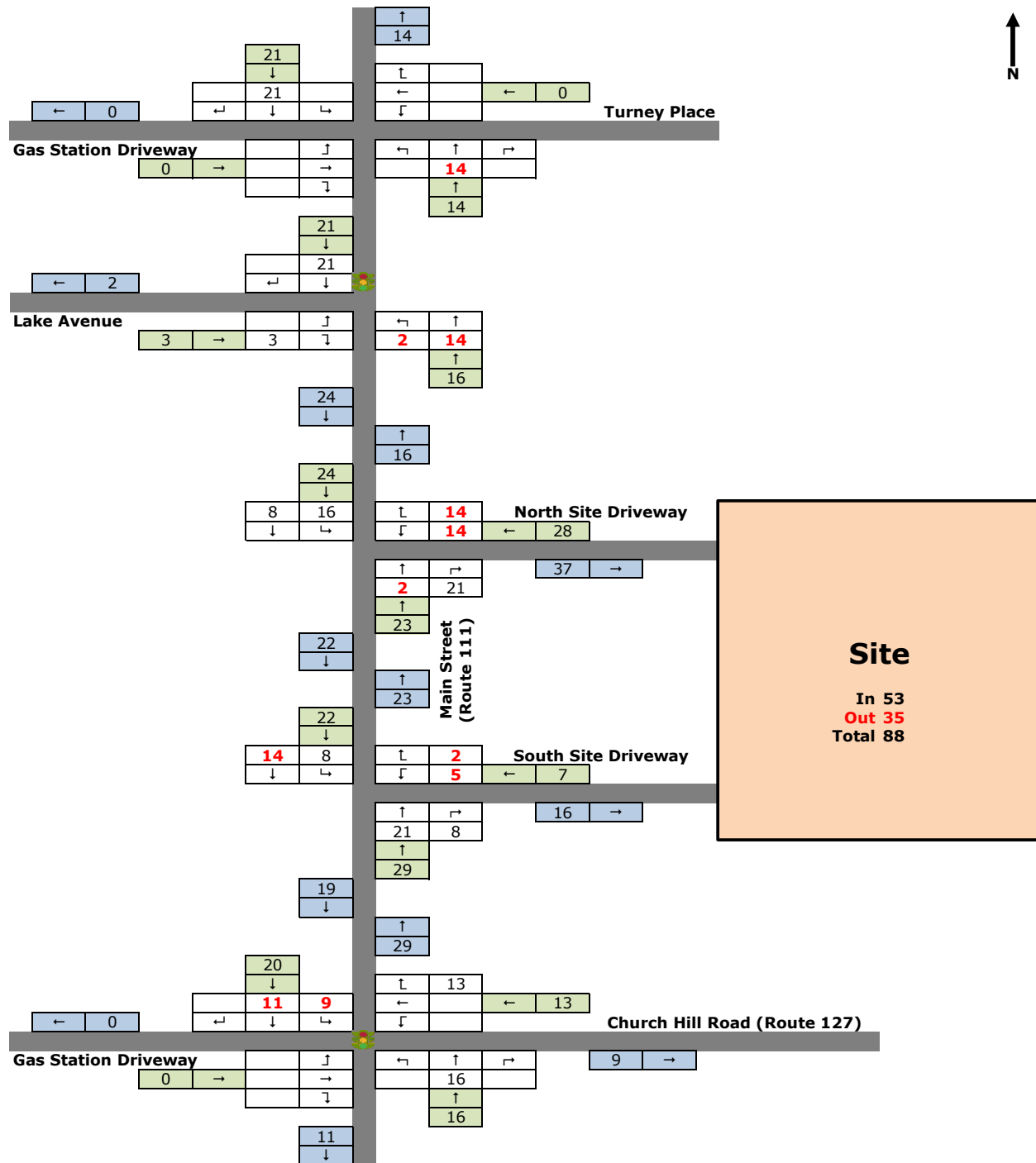
Figure 15



2025 Site-Generated Traffic Volumes [Scenario 2 - Based on Woodbridge Data]
Weekday Afternoon Peak Hour
Trumbull Community Center

Legend
 XX - Entering Traffic
 XX - Exiting Traffic

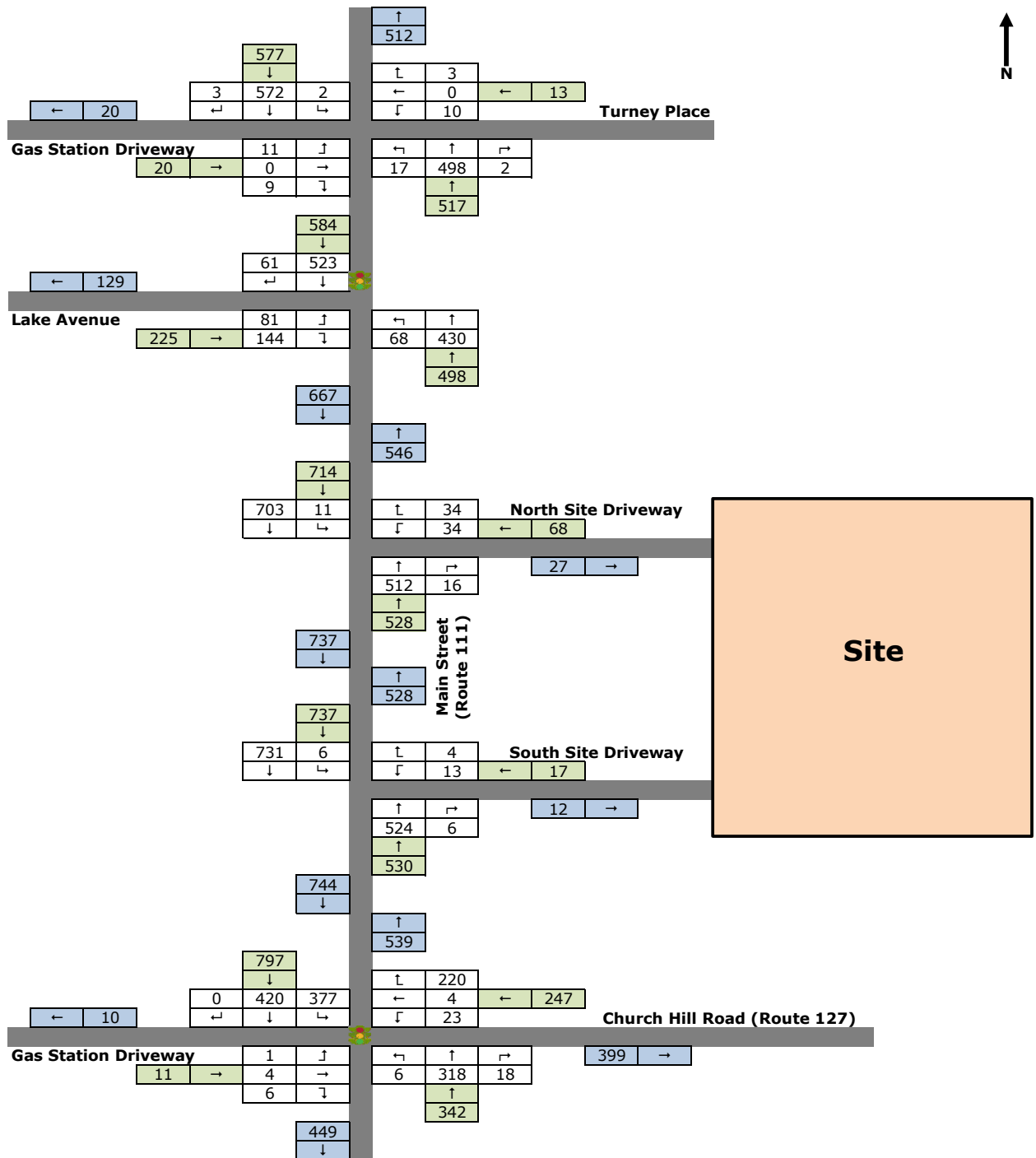
Figure 16



2025 Site-Generated Traffic Volumes [Scenario 2 - Based on Woodbridge Data]
Saturday Midday Peak Hour
Trumbull Community Center

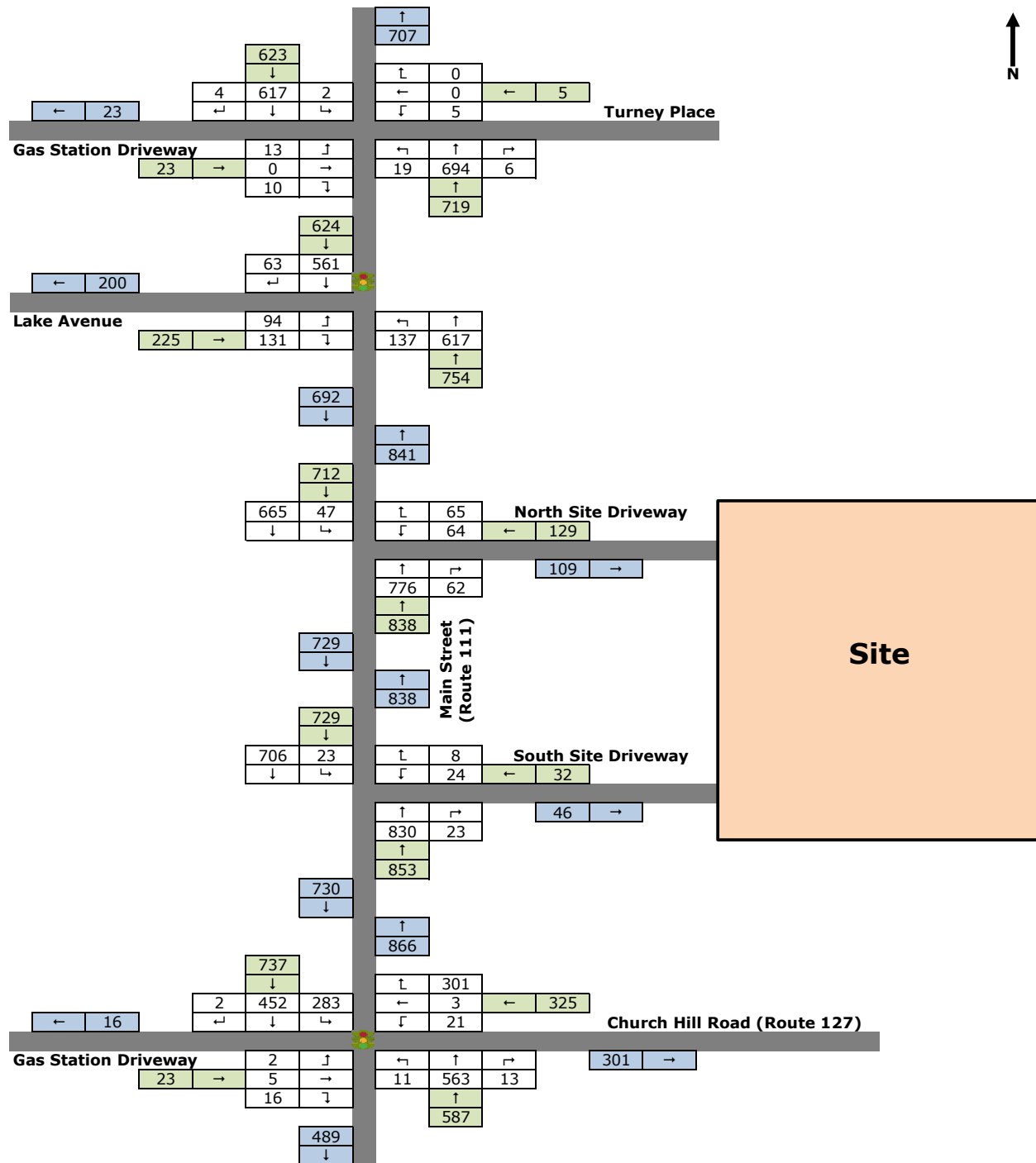
Legend
 XX - Entering Traffic
 XX - Exiting Traffic

Figure 17



2027 Combined Condition Traffic Volumes [Scenario 2 - Based on Woodbridge Data]
Weekday Morning Peak Hour
Trumbull Community Center

Figure 18



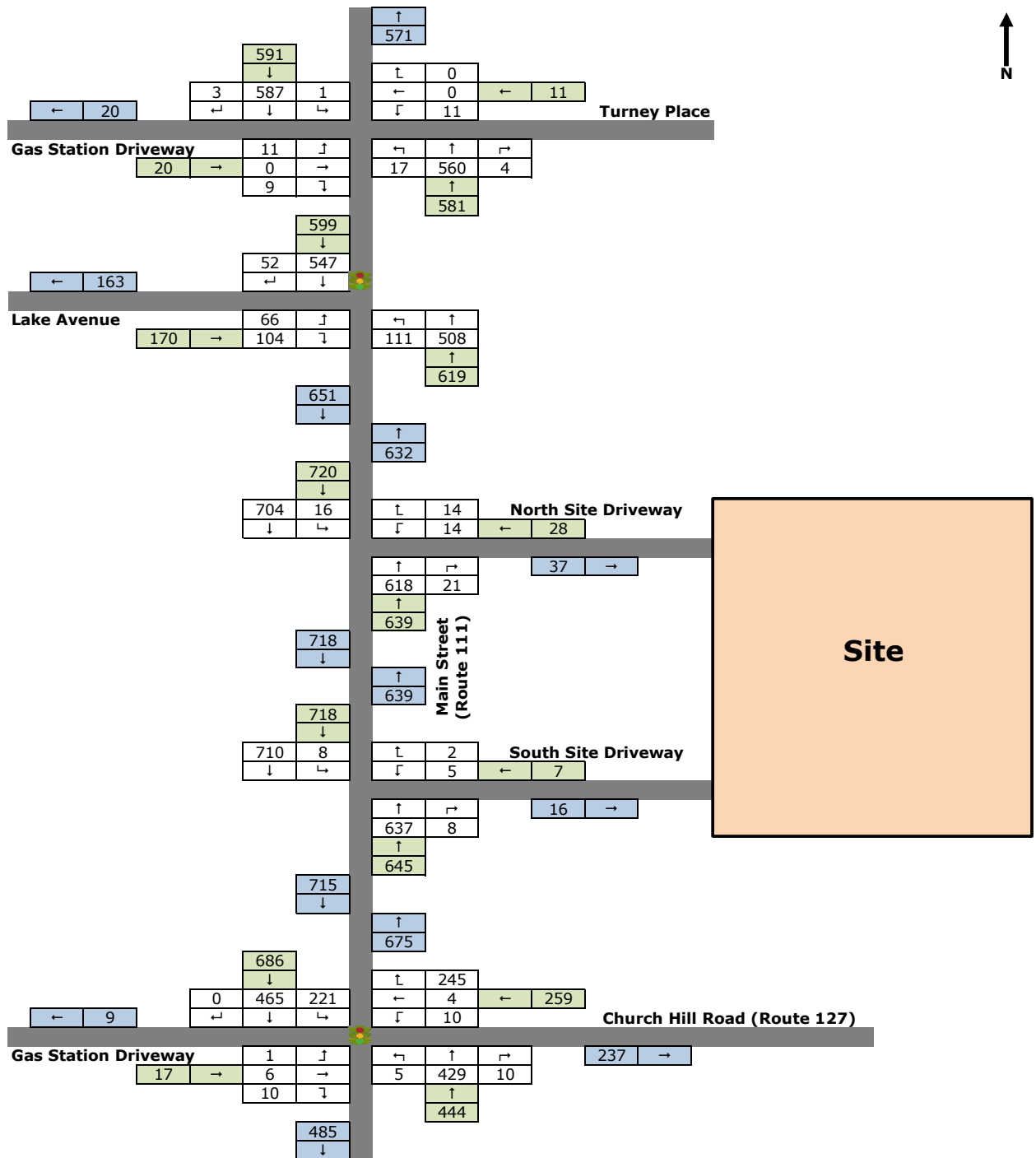


Figure 20

APPENDIX A

Traffic Volume Data

VOLUME

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Wednesday

City: Trumbull

Date: 1/8/2025

Project #: CT25_700002_001

DAILY TOTALS					NB	SB						EB	WB	Total	
					7,738	7,812						0	0	15,550	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
0:00	8	9	0	0	17		12:00	131	146	0	0	277			
0:15	9	4	0	0	13		12:15	123	117	0	0	240			
0:30	10	7	0	0	17		12:30	134	118	0	0	252			
0:45	5	32	3	23	0	0	12:45	146	534	138	519	0	0	284	1053
1:00	3	4	0	0	7		13:00	157	158	0	0	315			
1:15	1	0	0	0	1		13:15	126	144	0	0	270			
1:30	3	1	0	0	4		13:30	119	116	0	0	235			
1:45	1	8	4	9	0	0	13:45	154	556	126	544	0	0	280	1100
2:00	1	2	0	0	3		14:00	135	119	0	0	254			
2:15	1	1	0	0	2		14:15	145	138	0	0	283			
2:30	0	2	0	0	2		14:30	152	160	0	0	312			
2:45	4	6	2	7	0	0	14:45	157	589	145	562	0	0	302	1151
3:00	1	2	0	0	3		15:00	191	144	0	0	335			
3:15	2	5	0	0	7		15:15	200	155	0	0	355			
3:30	2	1	0	0	3		15:30	181	154	0	0	335			
3:45	2	7	2	10	0	0	15:45	163	735	131	584	0	0	294	1319
4:00	4	6	0	0	10		16:00	173	150	0	0	323			
4:15	5	4	0	0	9		16:15	156	167	0	0	323			
4:30	4	5	0	0	9		16:30	189	147	0	0	336			
4:45	9	22	9	24	0	0	16:45	195	713	137	601	0	0	332	1314
5:00	3	17	0	0	20		17:00	221	147	0	0	368			
5:15	11	29	0	0	40		17:15	162	159	0	0	321			
5:30	17	37	0	0	54		17:30	173	158	0	0	331			
5:45	16	47	51	134	0	0	17:45	194	750	139	603	0	0	333	1353
6:00	27	51	0	0	78		18:00	177	139	0	0	316			
6:15	32	60	0	0	92		18:15	149	131	0	0	280			
6:30	43	61	0	0	104		18:30	126	105	0	0	231			
6:45	63	165	94	266	0	0	18:45	115	567	108	483	0	0	223	1050
7:00	55	120	0	0	175		19:00	136	95	0	0	231			
7:15	83	149	0	0	232		19:15	101	90	0	0	191			
7:30	84	163	0	0	247		19:30	104	75	0	0	179			
7:45	103	325	150	582	0	0	19:45	80	421	64	324	0	0	144	745
8:00	69	188	0	0	257		20:00	85	62	0	0	147			
8:15	77	187	0	0	264		20:15	77	69	0	0	146			
8:30	142	175	0	0	317		20:30	65	50	0	0	115			
8:45	135	423	170	720	0	0	20:45	51	278	39	220	0	0	90	498
9:00	112	133	0	0	245		21:00	52	34	0	0	86			
9:15	90	117	0	0	207		21:15	53	35	0	0	88			
9:30	76	124	0	0	200		21:30	28	24	0	0	52			
9:45	98	376	98	472	0	0	21:45	33	166	19	112	0	0	52	278
10:00	75	82	0	0	157		22:00	28	27	0	0	55			
10:15	110	117	0	0	227		22:15	23	20	0	0	43			
10:30	104	117	0	0	221		22:30	19	9	0	0	28			
10:45	94	383	117	433	0	0	22:45	22	92	7	63	0	0	29	155
11:00	108	97	0	0	205		23:00	20	19	0	0	39			
11:15	104	130	0	0	234		23:15	10	14	0	0	24			
11:30	128	117	0	0	245		23:30	12	11	0	0	23			
11:45	142	482	119	463	0	0	23:45	19	61	10	54	0	0	29	115
TOTALS	2276	3143			5419		TOTALS	5462	4669			10131			
SPLIT %	42.0%	58.0%			34.8%		SPLIT %	53.9%	46.1%			65.2%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					7,738	7,812						0	0	15,550	
AM Peak Hour	11:45	8:00			8:00		PM Peak Hour	16:30	14:30			16:15			
AM Pk Volume	530	720			1143		PM Pk Volume	767	604			1359			
Pk Hr Factor	0.933	0.957			0.901		Pk Hr Factor	0.868	0.944			0.923			
7 - 9 Volume	748	1302			2050		4 - 6 Volume	1463	1204			2667			
7 - 9 Peak Hour	8:00	8:00			8:00		4 - 6 Peak Hour	16:30	17:00			16:15			
7 - 9 Pk Volume	423	720			1143		4 - 6 Pk Volume	767	603			1359			
Pk Hr Factor	0.745	0.957			0.901		Pk Hr Factor	0.868	0.948			0.923			

VOLUME

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Thursday

Date: 1/9/2025

City: Trumbull

Project #: CT25_700002_001

DAILY TOTALS					NB	SB						EB	WB	Total	
					8,010	8,006						0	0	16,016	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
0:00	13	10	0	0	23		12:00	110	124	0	0	234			
0:15	8	9	0	0	17		12:15	133	113	0	0	246			
0:30	6	5	0	0	11		12:30	140	123	0	0	263			
0:45	10	37	4	28	0	0	12:45	144	527	135	495	0	0	279	1022
1:00	12	4	0	0	16		13:00	132	147	0	0	279			
1:15	4	5	0	0	9		13:15	118	123	0	0	241			
1:30	3	3	0	0	6		13:30	140	116	0	0	256			
1:45	1	20	4	16	0	0	13:45	127	517	124	510	0	0	251	1027
2:00	1	2	0	0	3		14:00	138	129	0	0	267			
2:15	2	5	0	0	7		14:15	142	156	0	0	298			
2:30	1	1	0	0	2		14:30	151	157	0	0	308			
2:45	0	4	2	10	0	0	14:45	164	595	161	603	0	0	325	1198
3:00	0	2	0	0	2		15:00	177	171	0	0	348			
3:15	0	1	0	0	1		15:15	212	168	0	0	380			
3:30	2	4	0	0	6		15:30	168	107	0	0	275			
3:45	3	5	7	14	0	0	15:45	177	734	148	594	0	0	325	1328
4:00	7	6	0	0	13		16:00	171	166	0	0	337			
4:15	3	4	0	0	7		16:15	185	151	0	0	336			
4:30	7	9	0	0	16		16:30	181	145	0	0	326			
4:45	15	32	11	30	0	0	16:45	169	706	163	625	0	0	332	1331
5:00	7	13	0	0	20		17:00	182	156	0	0	338			
5:15	12	30	0	0	42		17:15	198	145	0	0	343			
5:30	14	32	0	0	46		17:30	188	146	0	0	334			
5:45	25	58	41	116	0	0	17:45	175	743	141	588	0	0	316	1331
6:00	22	64	0	0	86		18:00	164	138	0	0	302			
6:15	29	53	0	0	82		18:15	160	129	0	0	289			
6:30	41	60	0	0	101		18:30	154	103	0	0	257			
6:45	53	145	113	290	0	0	18:45	112	590	101	471	0	0	213	1061
7:00	88	93	0	0	181		19:00	121	85	0	0	206			
7:15	81	132	0	0	213		19:15	119	89	0	0	208			
7:30	76	158	0	0	234		19:30	116	94	0	0	210			
7:45	90	335	142	525	0	0	19:45	100	456	84	352	0	0	184	808
8:00	92	184	0	0	276		20:00	95	71	0	0	166			
8:15	84	191	0	0	275		20:15	86	63	0	0	149			
8:30	156	172	0	0	328		20:30	62	52	0	0	114			
8:45	132	464	153	700	0	0	20:45	56	299	64	250	0	0	120	549
9:00	126	167	0	0	293		21:00	55	51	0	0	106			
9:15	103	130	0	0	233		21:15	45	43	0	0	88			
9:30	72	146	0	0	218		21:30	42	28	0	0	70			
9:45	108	409	113	556	0	0	21:45	46	188	31	153	0	0	77	341
10:00	103	112	0	0	215		22:00	34	22	0	0	56			
10:15	117	110	0	0	227		22:15	25	18	0	0	43			
10:30	105	113	0	0	218		22:30	19	11	0	0	30			
10:45	112	437	100	435	0	0	22:45	26	104	21	72	0	0	47	176
11:00	117	117	0	0	234		23:00	17	16	0	0	33			
11:15	133	135	0	0	268		23:15	25	28	0	0	53			
11:30	154	117	0	0	271		23:30	16	18	0	0	34			
11:45	131	535	128	497	0	0	23:45	12	70	14	76	0	0	26	146
TOTALS	2481	3217			5698		TOTALS	5529	4789			10318			
SPLIT %	43.5%	56.5%			35.6%		SPLIT %	53.6%	46.4%			64.4%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					8,010	8,006						0	0	16,016	
AM Peak Hour	11:00	8:00			8:15		PM Peak Hour	17:00	14:30			14:30			
AM Pk Volume	535	700			1181		PM Pk Volume	743	657			1361			
Pk Hr Factor	0.869	0.916			0.900		Pk Hr Factor	0.938	0.961			0.895			
7 - 9 Volume	799	1225			2024		4 - 6 Volume	1449	1213			2662			
7 - 9 Peak Hour	8:00	8:00			8:00		4 - 6 Peak Hour	17:00	16:00			16:45			
7 - 9 Pk Volume	464	700			1164		4 - 6 Pk Volume	743	625			1347			
Pk Hr Factor	0.744	0.916			0.887		Pk Hr Factor	0.938	0.941			0.982			

VOLUME

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Friday

Date: 1/10/2025

City: Trumbull

Project #: CT25_700002_001

DAILY TOTALS					NB	SB						EB	WB	Total	
					8,283	8,410						0	0	16,693	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
0:00	15	15	0	0	30		12:00	146	140	0	0	286			
0:15	5	12	0	0	17		12:15	141	161	0	0	302			
0:30	13	8	0	0	21		12:30	154	139	0	0	293			
0:45	8	41	3	38	0	0	12:45	155	596	132	572	0	0	287	1168
1:00	5	1	0	0	6		13:00	137	170	0	0	307			
1:15	3	6	0	0	9		13:15	137	135	0	0	272			
1:30	1	2	0	0	3		13:30	157	135	0	0	292			
1:45	3	12	4	13	0	0	13:45	134	565	145	585	0	0	279	1150
2:00	3	3	0	0	6		14:00	146	130	0	0	276			
2:15	4	1	0	0	5		14:15	151	151	0	0	302			
2:30	3	1	0	0	4		14:30	172	158	0	0	330			
2:45	4	14	1	6	0	0	14:45	167	636	172	611	0	0	339	1247
3:00	2	4	0	0	6		15:00	189	166	0	0	355			
3:15	2	3	0	0	5		15:15	202	167	0	0	369			
3:30	2	1	0	0	3		15:30	180	159	0	0	339			
3:45	5	11	7	15	0	0	15:45	173	744	144	636	0	0	317	1380
4:00	4	2	0	0	6		16:00	160	170	0	0	330			
4:15	2	7	0	0	9		16:15	188	155	0	0	343			
4:30	9	6	0	0	15		16:30	184	158	0	0	342			
4:45	5	20	6	21	0	0	16:45	188	720	142	625	0	0	330	1345
5:00	6	16	0	0	22		17:00	193	174	0	0	367			
5:15	12	19	0	0	31		17:15	180	161	0	0	341			
5:30	14	35	0	0	49		17:30	168	133	0	0	301			
5:45	23	55	47	117	0	0	17:45	179	720	137	605	0	0	316	1325
6:00	20	48	0	0	68		18:00	174	146	0	0	320			
6:15	31	47	0	0	78		18:15	159	124	0	0	283			
6:30	47	71	0	0	118		18:30	127	141	0	0	268			
6:45	68	166	111	277	0	0	18:45	139	599	122	533	0	0	261	1132
7:00	74	89	0	0	163		19:00	115	105	0	0	220			
7:15	87	130	0	0	217		19:15	113	86	0	0	199			
7:30	74	177	0	0	251		19:30	118	77	0	0	195			
7:45	106	341	142	538	0	0	19:45	87	433	73	341	0	0	160	774
8:00	98	161	0	0	259		20:00	82	85	0	0	167			
8:15	110	166	0	0	276		20:15	61	71	0	0	132			
8:30	117	156	0	0	273		20:30	79	64	0	0	143			
8:45	127	452	147	630	0	0	20:45	74	296	61	281	0	0	135	577
9:00	133	141	0	0	274		21:00	64	46	0	0	110			
9:15	104	138	0	0	242		21:15	40	49	0	0	89			
9:30	89	145	0	0	234		21:30	48	36	0	0	84			
9:45	124	450	128	552	0	0	21:45	54	206	38	169	0	0	92	375
10:00	105	128	0	0	233		22:00	41	33	0	0	74			
10:15	93	137	0	0	230		22:15	31	22	0	0	53			
10:30	103	139	0	0	242		22:30	36	29	0	0	65			
10:45	124	425	123	527	0	0	22:45	31	139	21	105	0	0	52	244
11:00	112	114	0	0	226		23:00	29	29	0	0	58			
11:15	128	132	0	0	260		23:15	36	21	0	0	57			
11:30	133	146	0	0	279		23:30	19	27	0	0	46			
11:45	160	533	119	511	0	0	23:45	25	109	25	102	0	0	50	211
TOTALS	2520	3245			5765		TOTALS	5763	5165			10928			
SPLIT %	43.7%	56.3%			34.5%		SPLIT %	52.7%	47.3%			65.5%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					8,283	8,410						0	0	16,693	
AM Peak Hour	11:45	7:30			11:45		PM Peak Hour	16:15	14:45			14:45			
AM Pk Volume	601	646			1160		PM Pk Volume	753	664			1402			
Pk Hr Factor	0.939	0.912			0.960		Pk Hr Factor	0.975	0.965			0.950			
7 - 9 Volume	793	1168			1961		4 - 6 Volume	1440	1230			2670			
7 - 9 Peak Hour	8:00	7:30			8:00		4 - 6 Peak Hour	16:15	16:30			16:15			
7 - 9 Pk Volume	452	646			1082		4 - 6 Pk Volume	753	635			1382			
Pk Hr Factor	0.890	0.912			0.980		Pk Hr Factor	0.975	0.912			0.941			

VOLUME

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Saturday

Date: 1/11/2025

City: Trumbull

Project #: CT25_700002_001

DAILY TOTALS					NB	SB						EB	WB	Total	
					6,565	6,670						0	0	13,235	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
0:00	14	16	0	0	30		12:00	152	132	0	0	284			
0:15	19	10	0	0	29		12:15	134	143	0	0	277			
0:30	12	8	0	0	20		12:30	161	157	0	0	318			
0:45	19	64	7	41	0	0	12:45	150	597	155	587	0	0	305	1184
1:00	14	7	0	0	21		13:00	135	156	0	0	291			
1:15	8	13	0	0	21		13:15	125	134	0	0	259			
1:30	8	6	0	0	14		13:30	130	139	0	0	269			
1:45	5	35	2	28	0	0	13:45	109	499	152	581	0	0	261	1080
2:00	6	5	0	0	11		14:00	155	113	0	0	268			
2:15	7	9	0	0	16		14:15	133	122	0	0	255			
2:30	4	3	0	0	7		14:30	122	118	0	0	240			
2:45	3	20	3	20	0	0	14:45	111	521	131	484	0	0	242	1005
3:00	3	1	0	0	4		15:00	119	140	0	0	259			
3:15	6	5	0	0	11		15:15	117	132	0	0	249			
3:30	4	1	0	0	5		15:30	141	131	0	0	272			
3:45	1	14	3	10	0	0	15:45	137	514	114	517	0	0	251	1031
4:00	0	5	0	0	5		16:00	138	137	0	0	275			
4:15	2	6	0	0	8		16:15	119	140	0	0	259			
4:30	6	2	0	0	8		16:30	117	118	0	0	235			
4:45	4	12	8	21	0	0	16:45	135	509	109	504	0	0	244	1013
5:00	6	6	0	0	12		17:00	128	111	0	0	239			
5:15	4	7	0	0	11		17:15	124	107	0	0	231			
5:30	6	10	0	0	16		17:30	133	118	0	0	251			
5:45	12	28	19	42	0	0	17:45	123	508	117	453	0	0	240	961
6:00	15	26	0	0	41		18:00	110	111	0	0	221			
6:15	20	29	0	0	49		18:15	123	111	0	0	234			
6:30	20	35	0	0	55		18:30	113	71	0	0	184			
6:45	41	96	27	117	0	0	18:45	89	435	101	394	0	0	190	829
7:00	31	37	0	0	68		19:00	96	84	0	0	180			
7:15	35	39	0	0	74		19:15	76	75	0	0	151			
7:30	44	51	0	0	95		19:30	67	67	0	0	134			
7:45	45	155	66	193	0	0	19:45	77	316	61	287	0	0	138	603
8:00	52	53	0	0	105		20:00	81	75	0	0	156			
8:15	54	71	0	0	125		20:15	58	62	0	0	120			
8:30	66	85	0	0	151		20:30	55	62	0	0	117			
8:45	68	240	82	291	0	0	20:45	53	247	36	235	0	0	89	482
9:00	83	76	0	0	159		21:00	46	40	0	0	86			
9:15	81	105	0	0	186		21:15	45	29	0	0	74			
9:30	86	135	0	0	221		21:30	34	38	0	0	72			
9:45	93	343	98	414	0	0	21:45	46	171	31	138	0	0	77	309
10:00	101	114	0	0	215		22:00	38	40	0	0	78			
10:15	117	117	0	0	234		22:15	44	35	0	0	79			
10:30	111	119	0	0	230		22:30	28	20	0	0	48			
10:45	121	450	143	493	0	0	22:45	30	140	25	120	0	0	55	260
11:00	121	144	0	0	265		23:00	36	26	0	0	62			
11:15	110	130	0	0	240		23:15	27	22	0	0	49			
11:30	152	181	0	0	333		23:30	32	22	0	0	54			
11:45	152	535	162	617	0	0	23:45	21	116	13	83	0	0	34	199
TOTALS	1992	2287			4279		TOTALS	4573	4383			8956			
SPLIT %	46.6%	53.4%			32.3%		SPLIT %	51.1%	48.9%			67.7%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					6,565	6,670						0	0	13,235	
AM Peak Hour	11:45	11:30			11:30		PM Peak Hour	12:00	12:15			12:15			
AM Pk Volume	599	618			1208		PM Pk Volume	597	611			1191			
Pk Hr Factor	0.930	0.854			0.907		Pk Hr Factor	0.927	0.973			0.936			
7 - 9 Volume	395	484			879		4 - 6 Volume	1017	957			1974			
7 - 9 Peak Hour	8:00	8:00			8:00		4 - 6 Peak Hour	16:45	16:00			16:00			
7 - 9 Pk Volume	240	291			531		4 - 6 Pk Volume	520	504			1013			
Pk Hr Factor	0.882	0.856			0.879		Pk Hr Factor	0.963	0.900			0.921			

SPEED**Main St/SR 111 Bet Walker Rd & Clark Rd****Day:** Wednesday**Date:** 1/8/2025**City:** Trumbull**Project #:** CT25_700002_001**Summary**

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	1	2	1	15	20	13	2	1	0	0	0	0	55
1:00	0	0	0	3	8	4	1	0	1	0	0	0	0	17
2:00	0	0	0	0	4	3	4	2	0	0	0	0	0	13
3:00	0	1	1	1	6	4	3	0	1	0	0	0	0	17
4:00	0	2	2	3	10	10	12	6	1	0	0	0	0	46
5:00	2	1	4	7	37	86	36	5	3	0	0	0	0	181
6:00	5	20	29	54	139	133	43	8	0	0	0	0	0	431
7:00	6	31	38	83	374	285	78	11	1	0	0	0	0	907
8:00	8	45	59	185	433	326	81	6	0	0	0	0	0	1143
9:00	4	25	31	105	316	263	89	12	3	0	0	0	0	848
10:00	34	46	73	97	218	236	98	10	4	0	0	0	0	816
11:00	3	18	22	58	291	364	164	19	6	0	0	0	0	945
12:00 PM	16	40	36	88	394	351	116	9	3	0	0	0	0	1053
13:00	7	28	39	67	374	417	141	19	8	0	0	0	0	1100
14:00	17	17	57	144	433	350	118	14	1	0	0	0	0	1151
15:00	34	43	99	243	487	316	89	8	0	0	0	0	0	1319
16:00	6	40	47	190	521	404	100	6	0	0	0	0	0	1314
17:00	20	72	127	270	517	284	54	7	2	0	0	0	0	1353
18:00	10	38	33	117	432	340	75	4	1	0	0	0	0	1050
19:00	3	19	35	62	252	292	72	10	0	0	0	0	0	745
20:00	3	10	14	21	148	201	86	14	1	0	0	0	0	498
21:00	1	3	4	12	62	120	63	13	0	0	0	0	0	278
22:00	0	3	2	2	35	65	37	8	3	0	0	0	0	155
23:00	0	1	2	3	29	42	27	5	6	0	0	0	0	115
Totals	179	504	756	1816	5535	4916	1600	198	46					15550
% of Totals	1%	3%	5%	12%	36%	32%	10%	1%	0%					100%

AM Volumes	62	190	261	597	1851	1734	622	81	21	0	0	0	0	5419
% AM	0%	1%	2%	4%	12%	11%	4%	1%	0%					35%
AM Peak Hour	10:00	10:00	10:00	8:00	8:00	11:00	11:00	11:00	11:00					8:00
Volume	34	46	73	185	433	364	164	19	6					1143
PM Volumes	117	314	495	1219	3684	3182	978	117	25	0	0	0	0	10131
% PM	1%	2%	3%	8%	24%	20%	6%	1%	0%					65%
PM Peak Hour	15:00	17:00	17:00	17:00	16:00	13:00	13:00	13:00	13:00					17:00
Volume	34	72	127	270	521	417	141	19	8					1353
Directional Peak Periods			AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes					
All Speeds			Volume	%	Volume	%	Volume	%	Volume	%				
			2050	13%	2153	14%	2667	17%	8680	56%				

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Main St/SR 111	Summary	27	34	34	40	43	15550

SPEED**Main St/SR 111 Bet Walker Rd & Clark Rd****Day:** Thursday**Date:** 1/9/2025**City:** Trumbull**Project #:** CT25_700002_001**Summary**

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	1	3	1	13	15	24	8	0	0	0	0	0	65
1:00	0	0	0	2	3	19	7	3	1	1	0	0	0	36
2:00	0	0	0	1	3	6	3	0	1	0	0	0	0	14
3:00	0	0	0	1	4	10	4	0	0	0	0	0	0	19
4:00	0	0	1	3	9	23	21	4	1	0	0	0	0	62
5:00	0	0	4	4	29	54	52	23	5	3	0	0	0	174
6:00	4	3	8	45	123	141	89	19	3	0	0	0	0	435
7:00	6	22	28	116	297	317	64	10	0	0	0	0	0	860
8:00	2	20	35	205	453	345	92	11	1	0	0	0	0	1164
9:00	2	20	41	151	369	289	86	6	0	1	0	0	0	965
10:00	0	3	18	94	345	329	75	8	0	0	0	0	0	872
11:00	5	10	25	131	400	369	75	14	2	1	0	0	0	1032
12:00 PM	0	3	7	88	439	391	84	9	1	0	0	0	0	1022
13:00	0	6	11	106	415	386	83	18	2	0	0	0	0	1027
14:00	25	34	50	189	443	347	98	11	0	1	0	0	0	1198
15:00	19	36	87	254	500	356	65	11	0	0	0	0	0	1328
16:00	11	10	40	281	589	330	64	6	0	0	0	0	0	1331
17:00	2	21	65	355	549	296	37	5	1	0	0	0	0	1331
18:00	4	2	31	211	427	297	74	15	0	0	0	0	0	1061
19:00	0	5	15	100	297	294	80	14	3	0	0	0	0	808
20:00	0	0	11	46	151	224	95	19	3	0	0	0	0	549
21:00	0	0	4	23	106	146	46	15	1	0	0	0	0	341
22:00	0	0	1	4	45	77	36	10	3	0	0	0	0	176
23:00	0	0	0	9	26	52	43	9	5	2	0	0	0	146
Totals	80	196	485	2420	6035	5113	1397	248	33	9				16016
% of Totals	0%	1%	3%	15%	38%	32%	9%	2%	0%	0%				100%

AM Volumes	19	79	163	754	2048	1917	592	106	14	6	0	0	0	5698
% AM	0%	0%	1%	5%	13%	12%	4%	1%	0%	0%				36%
AM Peak Hour	7:00	7:00	9:00	8:00	8:00	11:00	8:00	5:00	5:00	5:00				8:00
Volume	6	22	41	205	453	369	92	23	5	3				1164
PM Volumes	61	117	322	1666	3987	3196	805	142	19	3	0	0	0	10318
% PM	0%	1%	2%	10%	25%	20%	5%	1%	0%	0%				64%
PM Peak Hour	14:00	15:00	15:00	17:00	16:00	12:00	14:00	20:00	23:00	23:00				16:00
Volume	25	36	87	355	589	391	98	19	5	2				1331
Directional Peak Periods			AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes					
All Speeds			Volume	%	Volume	%	Volume	%	Volume	%				
			2024	↔ 13%	2049	↔ 13%	2662	↔ 17%	9281	↔ 58%				

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Main St/SR 111	Summary	28	34	34	39	43	16016

SPEED**Main St/SR 111 Bet Walker Rd & Clark Rd****Day:** Friday**Date:** 1/10/2025**City:** Trumbull**Project #:** CT25_700002_001**Summary**

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	0	2	17	33	18	6	1	2	0	0	0	79
1:00	0	0	0	1	4	12	7	0	1	0	0	0	0	25
2:00	0	0	1	3	1	8	5	2	0	0	0	0	0	20
3:00	0	0	0	4	5	10	5	2	0	0	0	0	0	26
4:00	0	0	0	4	5	13	11	7	0	1	0	0	0	41
5:00	0	0	4	5	42	67	37	11	5	1	0	0	0	172
6:00	0	9	7	43	145	172	53	8	6	0	0	0	0	443
7:00	0	15	18	85	376	296	77	11	0	1	0	0	0	879
8:00	10	15	38	150	365	381	106	15	2	0	0	0	0	1082
9:00	5	12	22	137	380	340	93	12	1	0	0	0	0	1002
10:00	1	12	9	117	392	316	92	10	3	0	0	0	0	952
11:00	27	24	22	117	343	380	118	10	2	1	0	0	0	1044
12:00 PM	25	5	30	167	459	377	88	15	2	0	0	0	0	1168
13:00	2	10	21	160	459	397	80	18	2	1	0	0	0	1150
14:00	20	36	37	181	472	380	107	13	1	0	0	0	0	1247
15:00	6	26	63	233	524	421	97	8	1	1	0	0	0	1380
16:00	13	29	89	314	547	304	43	5	1	0	0	0	0	1345
17:00	16	44	69	350	601	219	25	1	0	0	0	0	0	1325
18:00	9	41	40	186	551	271	33	1	0	0	0	0	0	1132
19:00	9	33	26	105	312	236	47	4	2	0	0	0	0	774
20:00	7	10	13	59	268	165	43	10	0	2	0	0	0	577
21:00	2	11	13	24	126	160	38	1	0	0	0	0	0	375
22:00	1	5	5	16	76	98	39	4	0	0	0	0	0	244
23:00	2	7	3	14	63	79	27	12	3	1	0	0	0	211
Totals	155	344	530	2477	6533	5135	1289	186	33	11				16693
% of Totals	1%	2%	3%	15%	39%	31%	8%	1%	0%	0%				100%

AM Volumes	43	87	121	668	2075	2028	622	94	21	6	0	0	0	5765
% AM	0%	1%	1%	4%	12%	12%	4%	1%	0%	0%				35%
AM Peak Hour	11:00	11:00	8:00	8:00	10:00	8:00	11:00	8:00	6:00					8:00
Volume	27	24	38	150	392	381	118	15	6	2				1082
PM Volumes	112	257	409	1809	4458	3107	667	92	12	5	0	0	0	10928
% PM	1%	2%	2%	11%	27%	19%	4%	1%	0%	0%				65%
PM Peak Hour	12:00	17:00	16:00	17:00	17:00	15:00	14:00	13:00	23:00	20:00				15:00
Volume	25	44	89	350	601	421	107	18	3	2				1380
Directional Peak Periods			AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes					
All Speeds			Volume	%	Volume	%	Volume	%	Volume	%				
			1961	↔ 12%	2318	↔ 14%	2670	↔ 16%	9744	↔ 58%				

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Main St/SR 111	Summary	28	34	33	39	43	16693

SPEED**Main St/SR 111 Bet Walker Rd & Clark Rd**

Day: Saturday
Date: 1/11/2025

City: Trumbull
Project #: CT25_700002_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	3	3	2	5	35	29	20	5	2	1	0	0	0	105
1:00	0	4	3	3	10	19	12	7	3	2	0	0	0	63
2:00	0	2	2	5	9	16	4	0	2	0	0	0	0	40
3:00	0	0	2	0	7	8	4	3	0	0	0	0	0	24
4:00	0	0	2	10	13	5	2	1	0	0	0	0	0	33
5:00	1	8	15	25	15	4	2	0	0	0	0	0	0	70
6:00	9	9	55	74	57	7	0	2	0	0	0	0	0	213
7:00	2	8	7	28	115	147	33	6	2	0	0	0	0	348
8:00	3	14	8	38	164	211	76	15	1	1	0	0	0	531
9:00	4	21	8	37	268	308	93	15	3	0	0	0	0	757
10:00	6	28	25	48	285	411	120	18	2	0	0	0	0	943
11:00	2	30	21	109	379	451	132	25	3	0	0	0	0	1152
12:00 PM	14	28	27	63	388	506	140	14	3	1	0	0	0	1184
13:00	12	13	13	63	320	486	153	19	0	1	0	0	0	1080
14:00	8	25	20	57	291	447	139	14	4	0	0	0	0	1005
15:00	4	39	24	72	333	399	135	23	2	0	0	0	0	1031
16:00	9	25	26	66	281	416	168	19	2	1	0	0	0	1013
17:00	5	28	35	121	323	344	86	18	1	0	0	0	0	961
18:00	8	26	21	71	280	335	80	8	0	0	0	0	0	829
19:00	3	18	10	36	203	240	81	10	2	0	0	0	0	603
20:00	6	17	15	47	148	183	55	9	2	0	0	0	0	482
21:00	0	8	5	9	60	144	61	14	7	1	0	0	0	309
22:00	0	2	9	11	62	113	52	8	3	0	0	0	0	260
23:00	1	8	6	5	46	78	40	9	3	3	0	0	0	199
Totals	100	364	361	1003	4092	5307	1688	262	47	11				13235
% of Totals	1%	3%	3%	8%	31%	40%	13%	2%	0%	0%				100%

AM Volumes	30	127	150	382	1357	1616	498	97	18	4	0	0	0	4279
% AM	0%	1%	1%	3%	10%	12%	4%	1%	0%	0%				32%
AM Peak Hour	6:00	11:00	6:00	11:00	11:00	11:00	11:00	11:00	1:00	1:00				11:00
Volume	9	30	55	109	379	451	132	25	3	2				1152
PM Volumes	70	237	211	621	2735	3691	1190	165	29	7	0	0	0	8956
% PM	1%	2%	2%	5%	21%	28%	9%	1%	0%	0%				68%
PM Peak Hour	12:00	15:00	17:00	17:00	12:00	12:00	16:00	15:00	21:00	23:00				12:00
Volume	14	39	35	121	388	506	168	23	7	3				1184
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume		%	Volume		%	Volume		%	Volume		%
			879	↔	7%	2264	↔	17%	1974	↔	15%	8118	↔	61%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Main St/SR 111	Summary	30	36	35	40	44	13235

CLASSIFICATION

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Wednesday

City: Trumbull

Date: 1/8/2025

Project #: CT25_700002_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	52	2	0	1	0	0	0	0	0	0	0	0	55
1:00	0	14	2	0	1	0	0	0	0	0	0	0	0	17
2:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13
3:00	0	12	5	0	0	0	0	0	0	0	0	0	0	17
4:00	0	33	12	1	0	0	0	0	0	0	0	0	0	46
5:00	0	132	48	0	1	0	0	0	0	0	0	0	0	181
6:00	0	333	70	17	10	0	0	1	0	0	0	0	0	431
7:00	0	757	114	15	11	2	0	3	3	2	0	0	0	907
8:00	0	974	118	29	14	5	0	0	2	1	0	0	0	1143
9:00	0	702	107	4	33	0	0	0	2	0	0	0	0	848
10:00	0	663	101	3	37	5	0	5	2	0	0	0	0	816
11:00	0	796	108	9	22	7	0	2	1	0	0	0	0	945
12:00 PM	0	878	128	10	28	6	0	1	1	1	0	0	0	1053
13:00	1	923	135	10	26	4	0	0	1	0	0	0	0	1100
14:00	0	948	149	18	22	10	0	1	2	1	0	0	0	1151
15:00	0	1119	156	23	18	1	0	1	1	0	0	0	0	1319
16:00	0	1137	154	10	11	0	0	2	0	0	0	0	0	1314
17:00	0	1177	160	2	11	2	0	0	1	0	0	0	0	1353
18:00	0	945	104	0	1	0	0	0	0	0	0	0	0	1050
19:00	0	669	72	0	3	1	0	0	0	0	0	0	0	745
20:00	0	454	43	0	0	1	0	0	0	0	0	0	0	498
21:00	0	262	15	0	0	0	0	0	1	0	0	0	0	278
22:00	0	147	7	0	1	0	0	0	0	0	0	0	0	155
23:00	0	99	15	0	1	0	0	0	0	0	0	0	0	115
Totals	1	13237	1827	151	252	44		16	17	5				15550
% of Totals	0%	85%	12%	1%	2%	0%		0%	0%	0%				100%

AM Volumes	0	4479	689	78	130	19	0	11	10	3	0	0	0	5419
% AM		29%	4%	1%	1%	0%		0%	0%	0%				35%
AM Peak Hour		8:00	8:00	8:00	10:00	11:00		10:00	7:00	7:00				8:00
Volume		974	118	29	37	7		5	3	2				1143
PM Volumes	1	8758	1138	73	122	25	0	5	7	2	0	0	0	10131
% PM	0%	56%	7%	0%	1%	0%		0%	0%	0%				65%
PM Peak Hour	13:00	17:00	17:00	15:00	12:00	14:00		16:00	14:00	12:00				17:00
Volume	1	1177	160	23	28	10		2	2	1				1353

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	2050	↔ 13%	2153	↔ 14%	2667	↔ 17%	8680	↔ 56%

Classification Definitions

1 Motorcycles	4 Buses	7 > =4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

CLASSIFICATION

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Thursday

Date: 1/9/2025

City: Trumbull

Project #: CT25_700002_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	61	4	0	0	0	0	0	0	0	0	0	0	65
1:00	0	34	2	0	0	0	0	0	0	0	0	0	0	36
2:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14
3:00	0	17	1	0	1	0	0	0	0	0	0	0	0	19
4:00	0	49	11	0	2	0	0	0	0	0	0	0	0	62
5:00	0	129	41	0	1	2	0	0	1	0	0	0	0	174
6:00	0	330	79	16	9	1	0	0	0	0	0	0	0	435
7:00	0	717	113	18	6	2	0	1	3	0	0	0	0	860
8:00	0	971	135	27	23	5	0	1	2	0	0	0	0	1164
9:00	0	821	111	4	21	4	0	1	3	0	0	0	0	965
10:00	0	706	110	6	38	4	0	4	4	0	0	0	0	872
11:00	0	868	121	12	27	1	0	3	0	0	0	0	0	1032
12:00 PM	0	849	138	9	21	4	0	1	0	0	0	0	0	1022
13:00	1	883	111	6	22	2	0	1	1	0	0	0	0	1027
14:00	0	1024	126	16	19	9	0	4	0	0	0	0	0	1198
15:00	0	1153	135	23	16	0	0	1	0	0	0	0	0	1328
16:00	0	1182	134	10	5	0	0	0	0	0	0	0	0	1331
17:00	0	1180	138	2	10	1	0	0	0	0	0	0	0	1331
18:00	0	971	86	2	1	0	0	1	0	0	0	0	0	1061
19:00	0	734	73	0	1	0	0	0	0	0	0	0	0	808
20:00	0	490	56	0	3	0	0	0	0	0	0	0	0	549
21:00	1	307	33	0	0	0	0	0	0	0	0	0	0	341
22:00	0	164	12	0	0	0	0	0	0	0	0	0	0	176
23:00	0	134	11	0	1	0	0	0	0	0	0	0	0	146
Totals	2	13788	1781	151	227	35		18	14					16016
% of Totals	0%	86%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	0	4717	728	83	128	19	0	10	13	0	0	0	0	5698
% AM		29%	5%	1%	1%	0%		0%	0%					36%
AM Peak Hour		8:00	8:00	8:00	10:00	8:00		10:00	10:00					8:00
Volume		971	135	27	38	5		4	4					1164
PM Volumes	2	9071	1053	68	99	16	0	8	1	0	0	0	0	10318
% PM	0%	57%	7%	0%	1%	0%		0%	0%					64%
PM Peak Hour	13:00	16:00	12:00	15:00	13:00	14:00		14:00	13:00					16:00
Volume	1	1182	138	23	22	9		4	1					1331
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes
All Classes		Volume		%		Volume		%		Volume		%		Volume
		2024		↔		2049		↔		2662		↔		9281
				13%				13%		17%				58%

Classification Definitions

1 Motorcycles	4 Buses	7 > =4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

CLASSIFICATION

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Friday

City: Trumbull

Date: 1/10/2025

Project #: CT25_700002_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	75	4	0	0	0	0	0	0	0	0	0	0	79
1:00	0	22	1	0	2	0	0	0	0	0	0	0	0	25
2:00	0	17	2	0	0	0	0	0	1	0	0	0	0	20
3:00	0	22	3	0	1	0	0	0	0	0	0	0	0	26
4:00	0	31	7	1	1	1	0	0	0	0	0	0	0	41
5:00	0	130	39	0	2	1	0	0	0	0	0	0	0	172
6:00	0	333	82	16	10	2	0	0	0	0	0	0	0	443
7:00	0	732	108	17	16	4	0	2	0	0	0	0	0	879
8:00	0	896	132	27	18	6	0	1	0	2	0	0	0	1082
9:00	0	833	124	5	29	10	0	0	1	0	0	0	0	1002
10:00	0	779	128	12	23	8	0	1	1	0	0	0	0	952
11:00	0	874	125	4	26	12	0	1	2	0	0	0	0	1044
12:00 PM	0	1005	119	9	26	7	0	1	1	0	0	0	0	1168
13:00	1	973	144	7	21	3	0	0	1	0	0	0	0	1150
14:00	0	1092	115	15	14	9	0	1	1	0	0	0	0	1247
15:00	0	1199	149	21	10	1	0	0	0	0	0	0	0	1380
16:00	0	1168	161	8	7	0	0	0	1	0	0	0	0	1345
17:00	0	1189	131	1	2	0	0	1	1	0	0	0	0	1325
18:00	0	1024	101	2	3	1	0	1	0	0	0	0	0	1132
19:00	0	697	73	0	1	1	0	0	2	0	0	0	0	774
20:00	0	524	51	0	1	0	0	0	1	0	0	0	0	577
21:00	1	344	29	0	1	0	0	0	0	0	0	0	0	375
22:00	0	216	24	0	2	0	0	0	2	0	0	0	0	244
23:00	0	193	16	0	2	0	0	0	0	0	0	0	0	211
Totals	2	14368	1868	145	218	66		9	15	2				16693
% of Totals	0%	86%	11%	1%	1%	0%		0%	0%	0%				100%

AM Volumes	0	4744	755	82	128	44	0	5	5	2	0	0	0	5765
% AM		28%	5%	0%	1%	0%		0%	0%	0%				35%
AM Peak Hour		8:00	8:00	8:00	9:00	11:00		7:00	11:00	8:00				8:00
Volume		896	132	27	29	12		2	2	2				1082
PM Volumes	2	9624	1113	63	90	22	0	4	10	0	0	0	0	10928
% PM	0%	58%	7%	0%	1%	0%		0%	0%					65%
PM Peak Hour	13:00	15:00	16:00	15:00	12:00	14:00		12:00	19:00					15:00
Volume	1	1199	161	21	26	9		1	2					1380

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1961	↔ 12%	2318	↔ 14%	2670	↔ 16%	9744	↔ 58%

Classification Definitions

1 Motorcycles	4 Buses	7 > =4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

CLASSIFICATION

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Saturday
Date: 1/11/2025

City: Trumbull
Project #: CT25_700002_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	99	3	0	2	0	0	1	0	0	0	0	0	105
1:00	0	54	7	0	1	0	0	1	0	0	0	0	0	63
2:00	0	33	5	0	1	0	0	0	1	0	0	0	0	40
3:00	0	21	3	0	0	0	0	0	0	0	0	0	0	24
4:00	0	19	10	0	2	1	0	0	1	0	0	0	0	33
5:00	0	41	23	0	6	0	0	0	0	0	0	0	0	70
6:00	0	154	44	0	11	1	0	2	1	0	0	0	0	213
7:00	0	253	78	1	11	2	0	3	0	0	0	0	0	348
8:00	0	407	96	0	16	9	0	2	1	0	0	0	0	531
9:00	0	589	134	0	27	4	0	0	3	0	0	0	0	757
10:00	0	757	151	0	32	1	0	1	1	0	0	0	0	943
11:00	0	967	157	0	21	5	0	2	0	0	0	0	0	1152
12:00 PM	0	1026	151	0	7	0	0	0	0	0	0	0	0	1184
13:00	1	954	118	0	6	0	0	1	0	0	0	0	0	1080
14:00	0	904	94	0	6	1	0	0	0	0	0	0	0	1005
15:00	0	924	96	0	10	0	0	1	0	0	0	0	0	1031
16:00	0	916	87	0	4	0	0	6	0	0	0	0	0	1013
17:00	1	865	90	1	4	0	0	0	0	0	0	0	0	961
18:00	0	748	78	0	3	0	0	0	0	0	0	0	0	829
19:00	0	550	51	0	2	0	0	0	0	0	0	0	0	603
20:00	0	439	40	0	3	0	0	0	0	0	0	0	0	482
21:00	1	279	28	0	1	0	0	0	0	0	0	0	0	309
22:00	0	237	23	0	0	0	0	0	0	0	0	0	0	260
23:00	0	187	11	0	0	0	0	1	0	0	0	0	0	199
Totals	3	11423	1578	2	176	24		21	8					13235
% of Totals	0%	86%	12%	0%	1%	0%		0%	0%					100%

AM Volumes	0	3394	711	1	130	23	0	12	8	0	0	0	0	4279
% AM		26%	5%	0%	1%	0%		0%	0%					32%
AM Peak Hour		11:00	11:00	7:00	10:00	8:00		7:00	9:00					11:00
Volume		967	157	1	32	9		3	3					1152
PM Volumes	3	8029	867	1	46	1	0	9	0	0	0	0	0	8956
% PM	0%	61%	7%	0%	0%	0%		0%						68%
PM Peak Hour	13:00	12:00	12:00	17:00	15:00	14:00		16:00						12:00
Volume	1	1026	151	1	10	1		6						1184
Directional Peak Periods		AM 7-9				NOON 12-2				PM 4-6				Off Peak Volumes
All Classes		Volume		%		Volume		%		Volume		%		Volume
		879		↔		7%		2264		↔		17%		8118
														↔
														61%

Classification Definitions

1 Motorcycles	4 Buses	7 > =4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

VOLUME

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Saturday

Date: 1/25/2025

City: Trumbull

Project #: CT25_700005_001

DAILY TOTALS					NB	SB						EB	WB	Total	
					6,938	7,076						0	0	14,014	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
0:00	24	13	0	0	37		12:00	164	149	0	0	313			
0:15	12	4	0	0	16		12:15	147	145	0	0	292			
0:30	13	9	0	0	22		12:30	145	136	0	0	281			
0:45	13	62	5	31	0	0	12:45	145	601	177	607	0	0	322	1208
1:00	9	5	0	0	14		13:00	143	145	0	0	288			
1:15	7	5	0	0	12		13:15	138	153	0	0	291			
1:30	9	4	0	0	13		13:30	127	144	0	0	271			
1:45	2	27	5	19	0	0	13:45	133	541	153	595	0	0	286	1136
2:00	5	3	0	0	8		14:00	116	127	0	0	243			
2:15	4	9	0	0	13		14:15	143	124	0	0	267			
2:30	4	6	0	0	10		14:30	159	150	0	0	309			
2:45	8	21	3	21	0	0	14:45	142	560	135	536	0	0	277	1096
3:00	5	2	0	0	7		15:00	133	127	0	0	260			
3:15	3	3	0	0	6		15:15	148	131	0	0	279			
3:30	1	2	0	0	3		15:30	133	132	0	0	265			
3:45	2	11	3	10	0	0	15:45	138	552	135	525	0	0	273	1077
4:00	8	4	0	0	12		16:00	133	126	0	0	259			
4:15	5	2	0	0	7		16:15	127	143	0	0	270			
4:30	3	4	0	0	7		16:30	142	91	0	0	233			
4:45	7	23	3	13	0	0	16:45	113	515	113	473	0	0	226	988
5:00	4	9	0	0	13		17:00	134	111	0	0	245			
5:15	1	6	0	0	7		17:15	118	113	0	0	231			
5:30	6	13	0	0	19		17:30	142	125	0	0	267			
5:45	10	21	14	42	0	0	17:45	124	518	139	488	0	0	263	1006
6:00	8	24	0	0	32		18:00	128	138	0	0	266			
6:15	15	19	0	0	34		18:15	107	107	0	0	214			
6:30	23	26	0	0	49		18:30	102	77	0	0	179			
6:45	25	71	30	99	0	0	18:45	94	431	93	415	0	0	187	846
7:00	35	32	0	0	67		19:00	83	63	0	0	146			
7:15	34	39	0	0	73		19:15	100	77	0	0	177			
7:30	37	58	0	0	95		19:30	73	57	0	0	130			
7:45	56	162	66	195	0	0	19:45	82	338	57	254	0	0	139	592
8:00	50	71	0	0	121		20:00	64	65	0	0	129			
8:15	58	67	0	0	125		20:15	65	63	0	0	128			
8:30	76	103	0	0	179		20:30	69	31	0	0	100			
8:45	105	289	123	364	0	0	20:45	66	264	53	212	0	0	119	476
9:00	108	116	0	0	224		21:00	44	52	0	0	96			
9:15	97	124	0	0	221		21:15	55	39	0	0	94			
9:30	103	115	0	0	218		21:30	58	35	0	0	93			
9:45	99	407	166	521	0	0	21:45	44	201	35	161	0	0	79	362
10:00	116	138	0	0	254		22:00	32	33	0	0	65			
10:15	115	115	0	0	230		22:15	44	35	0	0	79			
10:30	140	159	0	0	299		22:30	39	27	0	0	66			
10:45	128	499	167	579	0	0	22:45	25	140	24	119	0	0	49	259
11:00	135	163	0	0	298		23:00	31	32	0	0	63			
11:15	163	173	0	0	336		23:15	32	23	0	0	55			
11:30	129	167	0	0	296		23:30	22	23	0	0	45			
11:45	148	575	193	696	0	0	23:45	24	109	23	101	0	0	47	210
TOTALS	2168	2590			4758		TOTALS	4770	4486			9256			
SPLIT %	45.6%	54.4%			34.0%		SPLIT %	51.5%	48.5%			66.0%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					6,938	7,076						0	0	14,014	
AM Peak Hour	11:15	11:00			11:15		PM Peak Hour	12:00	12:45			12:00			
AM Pk Volume	604	696			1286		PM Pk Volume	601	619			1208			
Pk Hr Factor	0.921	0.902			0.943		Pk Hr Factor	0.916	0.874			0.938			
7 - 9 Volume	451	559			1010		4 - 6 Volume	1033	961			1994			
7 - 9 Peak Hour	8:00	8:00			8:00		4 - 6 Peak Hour	17:00	17:00			17:00			
7 - 9 Pk Volume	289	364			653		4 - 6 Pk Volume	518	488			1006			
Pk Hr Factor	0.688	0.740			0.716		Pk Hr Factor	0.912	0.878			0.942			

SPEED**Main St/SR 111 Bet Walker Rd & Clark Rd**

Day: Saturday
Date: 1/25/2025

City: Trumbull
Project #: CT25_700005_001

Summary

Time	< 15	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 +	Total
0:00 AM	0	0	2	7	16	35	25	5	2	1	0	0	0	93
1:00	0	0	1	1	9	18	11	4	2	0	0	0	0	46
2:00	0	0	4	2	6	11	9	4	5	0	1	0	0	42
3:00	0	0	0	1	3	9	5	3	0	0	0	0	0	21
4:00	0	0	1	1	7	11	12	3	1	0	0	0	0	36
5:00	0	1	4	3	11	21	18	4	0	1	0	0	0	63
6:00	0	1	5	12	35	58	43	12	2	2	0	0	0	170
7:00	0	0	7	12	67	151	92	25	3	0	0	0	0	357
8:00	0	3	19	24	132	309	131	33	2	0	0	0	0	653
9:00	1	1	14	43	277	425	140	25	1	1	0	0	0	928
10:00	1	8	26	98	373	400	147	21	2	1	1	0	0	1078
11:00	2	12	32	151	449	456	145	22	1	1	0	0	0	1271
12:00 PM	0	7	24	80	394	486	193	22	2	0	0	0	0	1208
13:00	4	6	21	93	334	493	157	25	2	0	1	0	0	1136
14:00	0	3	19	79	306	471	186	29	1	2	0	0	0	1096
15:00	2	12	30	74	305	464	165	24	1	0	0	0	0	1077
16:00	0	3	18	42	262	465	168	27	3	0	0	0	0	988
17:00	0	9	29	111	351	386	108	12	0	0	0	0	0	1006
18:00	0	7	36	114	288	284	94	19	3	1	0	0	0	846
19:00	0	3	11	46	187	252	73	18	1	1	0	0	0	592
20:00	2	3	21	49	134	179	78	7	2	0	1	0	0	476
21:00	0	1	4	39	75	145	73	22	3	0	0	0	0	362
22:00	0	1	8	11	69	102	50	14	2	1	1	0	0	259
23:00	0	0	6	17	39	90	44	9	2	3	0	0	0	210
Totals	12	81	342	1110	4129	5721	2167	389	43	15	5			14014
% of Totals	0%	1%	2%	8%	29%	41%	15%	3%	0%	0%	0%			100%

AM Volumes	4	26	115	355	1385	1904	778	161	21	7	2	0	0	4758
% AM	0%	0%	1%	3%	10%	14%	6%	1%	0%	0%	0%			34%
AM Peak Hour	11:00	11:00	11:00	11:00	11:00	11:00	10:00	8:00	2:00	6:00	2:00			11:00
Volume	2	12	32	151	449	456	147	33	5	2	1			1271
PM Volumes	8	55	227	755	2744	3817	1389	228	22	8	3	0	0	9256
% PM	0%	0%	2%	5%	20%	27%	10%	2%	0%	0%	0%			66%
PM Peak Hour	13:00	15:00	18:00	18:00	12:00	13:00	12:00	14:00	16:00	23:00	13:00			12:00
Volume	4	12	36	114	394	493	193	29	3	3	1			1208
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Speeds			Volume		%	Volume		%	Volume		%	Volume		%
			1010	↔	7%	2344	↔	17%	1994	↔	14%	8666	↔	62%

Street Name	Direction	Percentiles					
		15th	50th	Average	85th	95th	ADT
Main St/SR 111	Summary	31	36	36	41	44	14014

CLASSIFICATION

Main St/SR 111 Bet Walker Rd & Clark Rd

Day: Saturday
Date: 1/25/2025City: Trumbull
Project #: CT25_700005_001**Summary**

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	84	7	0	2	0	0	0	0	0	0	0	0	93
1:00	0	41	5	0	0	0	0	0	0	0	0	0	0	46
2:00	0	39	2	0	0	0	0	0	0	1	0	0	0	42
3:00	0	18	1	0	1	0	0	0	0	1	0	0	0	21
4:00	0	31	3	0	2	0	0	0	0	0	0	0	0	36
5:00	0	53	8	0	2	0	0	0	0	0	0	0	0	63
6:00	0	145	20	0	4	0	0	0	1	0	0	0	0	170
7:00	0	287	55	0	12	2	0	0	1	0	0	0	0	357
8:00	0	536	104	0	11	0	0	0	1	1	0	0	0	653
9:00	0	801	107	0	18	0	0	0	1	1	0	0	0	928
10:00	0	929	130	0	17	1	0	0	0	1	0	0	0	1078
11:00	0	1116	135	0	18	1	0	0	1	0	0	0	0	1271
12:00 PM	0	1054	129	0	20	3	0	0	2	0	0	0	0	1208
13:00	1	1012	111	0	11	0	0	0	1	0	0	0	0	1136
14:00	0	983	99	2	12	0	0	0	0	0	0	0	0	1096
15:00	0	967	102	0	8	0	0	0	0	0	0	0	0	1077
16:00	0	872	105	1	9	0	0	1	0	0	0	0	0	988
17:00	0	905	96	0	5	0	0	0	0	0	0	0	0	1006
18:00	0	777	64	0	5	0	0	0	0	0	0	0	0	846
19:00	0	557	32	0	2	0	1	0	0	0	0	0	0	592
20:00	0	442	32	0	2	0	0	0	0	0	0	0	0	476
21:00	0	331	30	0	1	0	0	0	0	0	0	0	0	362
22:00	0	233	25	0	1	0	0	0	0	0	0	0	0	259
23:00	0	185	23	0	2	0	0	0	0	0	0	0	0	210
Totals	1	12398	1425	3	165	7	1	1	8	5				14014
% of Totals	0%	88%	10%	0%	1%	0%	0%	0%	0%	0%				100%

AM Volumes	0	4080	577	0	87	4	0	0	5	5	0	0	0	4758
% AM		29%	4%		1%	0%			0%	0%				34%
AM Peak Hour		11:00	11:00		9:00	7:00			6:00	2:00				11:00
Volume		1116	135		18	2			1	1				1271
PM Volumes	1	8318	848	3	78	3	1	1	3	0	0	0	0	9256
% PM	0%	59%	6%	0%	1%	0%	0%	0%	0%					66%
PM Peak Hour	13:00	12:00	12:00	14:00	12:00	12:00	19:00	16:00	12:00					12:00
Volume	1	1054	129	2	20	3	1	1	2					1208

Directional Peak Periods All Classes	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1010	↔ 7%	2344	↔ 17%	1994	↔ 14%	8666	↔ 62%

Classification Definitions

1 Motorcycles	4 Buses	7 > =4-Axle Single Units	10 >=6-Axle Single Trailers	13 >=7-Axle Multi-Trailers
2 Passenger Cars	5 2-Axle, 6-Tire Single Units	8 <=4-Axle Single Trailers	11 <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	6 3-Axle Single Units	9 5-Axle Single Trailers	12 6-Axle Multi-Trailers	

Project ID: 25-700001-002
 Location: Main St/SR 111 & Lake Ave/Turney Pl/Sunoco Dwy
 City: Trumbull

Day: Thursday
 Date: 1/9/2025

Groups Printed - Cars, PU, Vans - Heavy Trucks																										
	Main St/SR 111 Northbound						Main St/SR 111 Southbound						Lake Ave/Turney Pl/Sunoco Dwy Eastbound						Lake Ave/Turney Pl/Sunoco Dwy Westbound							
Start Time	Left	Thru	Rght	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total	
7:00 AM	23	58	0	0	0	81	0	61	12	0	0	73	16	0	24	0	0	40	3	0	0	0	0	3	197	
7:15 AM	16	56	0	0	0	72	0	89	16	0	0	105	13	0	37	0	0	50	1	1	0	0	0	2	229	
7:30 AM	16	59	0	0	0	75	0	94	10	0	0	104	8	0	49	0	0	57	0	2	1	0	0	3	239	
7:45 AM	11	65	0	0	0	76	1	92	9	0	0	102	16	1	31	0	0	48	1	0	1	0	0	2	228	
Total	66	238	0	0	0	304	1	336	47	0	0	384	53	1	141	0	0	195	5	3	2	0	0	10	893	
8:00 AM	14	81	0	0	0	95	1	136	15	0	0	152	20	0	33	0	0	53	3	0	0	0	0	3	303	
8:15 AM	13	66	1	0	0	80	0	131	21	0	0	152	18	1	34	0	0	53	3	0	0	0	0	3	288	
8:30 AM	18	121	0	0	0	139	1	116	16	0	0	133	20	0	33	0	0	53	2	0	3	0	0	5	330	
8:45 AM	18	119	0	0	0	137	0	105	8	0	0	113	20	0	39	0	0	59	2	0	0	0	0	2	311	
Total	63	387	1	0	0	451	2	488	60	0	0	550	78	1	139	0	0	218	10	0	3	0	0	13	1232	
BREAK																										
4:00 PM	25	130	1	0	0	156	0	136	15	0	0	151	24	0	24	0	0	48	1	0	0	0	0	1	356	
4:15 PM	32	140	4	0	0	176	0	119	19	0	0	138	28	0	30	0	1	58	1	1	0	0	0	2	374	
4:30 PM	38	131	1	0	0	170	1	105	10	0	0	116	21	0	40	0	1	61	1	0	0	0	0	1	348	
4:45 PM	31	134	0	0	0	165	1	125	17	0	0	143	19	0	27	0	0	46	1	0	0	0	0	1	355	
Total	126	535	6	0	0	667	2	485	61	0	0	548	92	0	121	0	2	213	4	1	0	0	0	5	1433	
5:00 PM	27	130	2	0	0	159	0	115	21	0	0	136	29	0	30	0	0	59	1	0	0	0	0	1	355	
5:15 PM	41	134	1	0	0	176	1	126	19	0	0	146	22	1	23	0	0	46	1	0	0	0	0	1	369	
5:30 PM	40	125	1	0	0	166	0	100	19	0	0	119	16	0	31	0	0	47	0	0	0	0	0	0	332	
5:45 PM	29	123	1	0	0	153	0	108	15	0	0	123	16	0	28	0	0	44	2	0	0	0	0	2	322	
Total	137	512	5	0	0	654	1	449	74	0	0	524	83	1	112	0	0	196	4	0	0	0	0	4	1378	
Grand Total	392	1672	12	0	0	2076	6	1758	242	0	0	2006	306	3	513	0	2	822	23	4	5	0	0	32	4936	
Apprch %	18.9	80.5	0.6	0.0	0.0		0.3	87.6	12.1	0.0	0.0		37.2	0.4	62.4	0.0	0.2		71.9	12.5	15.6	0.0	0.0			
Total %	7.9	33.9	0.2	0.0	0.0	42.1	0.1	35.6	4.9	0.0	0.0	40.6	6.2	0.1	10.4	0.0	0.0	16.7	0.5	0.1	0.1	0.0	0.0	0.6		
Cars, PU, Vans	382	1613	12	0		2007	6	1719	236	0		1961	294	3	505	0		802	23	4	4	0		31	4801	
% Cars, PU, Vans	97.4	96.5	100.0	0.0		96.7	100.0	97.8	97.5	0.0		97.8	96.1	100.0	98.4	0.0		97.6	100.0	100.0	80.0	0.0		96.9	97.3	
Heavy trucks	10	59	0	0		69	0	39	6	0		45	12	0	8	0		20	0	0	1	0		1	135	
%Heavy trucks	2.6	3.5	0.0	0.0		3.3	0.0	2.2	2.5	0.0		2.2	3.9	0.0	1.6	0.0		2.4	0.0	0.0	20.0	0.0		3.1	2.7	

Project ID: 25-700001-002

Location: Main St/SR 111 & Lake Ave/Turney Pl/Sunoco Dwy

City: Trumbull

PEAK HOURS

Day: Thursday

Date: 1/9/2025

AM

	Main St/SR 111 Northbound					Main St/SR 111 Southbound					Lake Ave/Turney Pl/Sunoco Dwy Eastbound					Lake Ave/Turney Pl/Sunoco Dwy Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
8:00 AM	14	81	0	0	95	1	136	15	0	152	20	0	33	0	53	3	0	0	0	3	303
8:15 AM	13	66	1	0	80	0	131	21	0	152	18	1	34	0	53	3	0	0	0	3	288
8:30 AM	18	121	0	0	139	1	116	16	0	133	20	0	33	0	53	2	0	3	0	5	330
8:45 AM	18	119	0	0	137	0	105	8	0	113	20	0	39	0	59	2	0	0	0	2	311
Total Volume	63	387	1	0	451	2	488	60	0	550	78	1	139	0	218	10	0	3	0	13	1232
% App. Total	14.0	85.8	0.2	0.0	100	0.4	88.7	10.9	0.0	100	35.8	0.5	63.8	0.0	100	76.9	0.0	23.1	0.0	100	
PHF	0.811					0.905					0.924					0.650					0.933
Cars, PU, Vans	59	355	1	0	415	2	468	57	0	527	70	1	137	0	208	10	0	3	0	13	1163
% Cars, PU, Vans	93.7	91.7	100.0	0.0	92.0	100.0	95.9	95.0	0.0	95.8	89.7	100.0	98.6	0.0	95.4	100.0	0.0	100.0	0.0	100.0	94.4
Heavy trucks	4	32	0	0	36	0	20	3	0	23	8	0	2	0	10	0	0	0	0	0	69
%Heavy trucks	6.3	8.3	0.0	0.0	8.0	0.0	4.1	5.0	0.0	4.2	10.3	0.0	1.4	0.0	4.6	0.0	0.0	0.0	0.0	0.0	5.6

PM

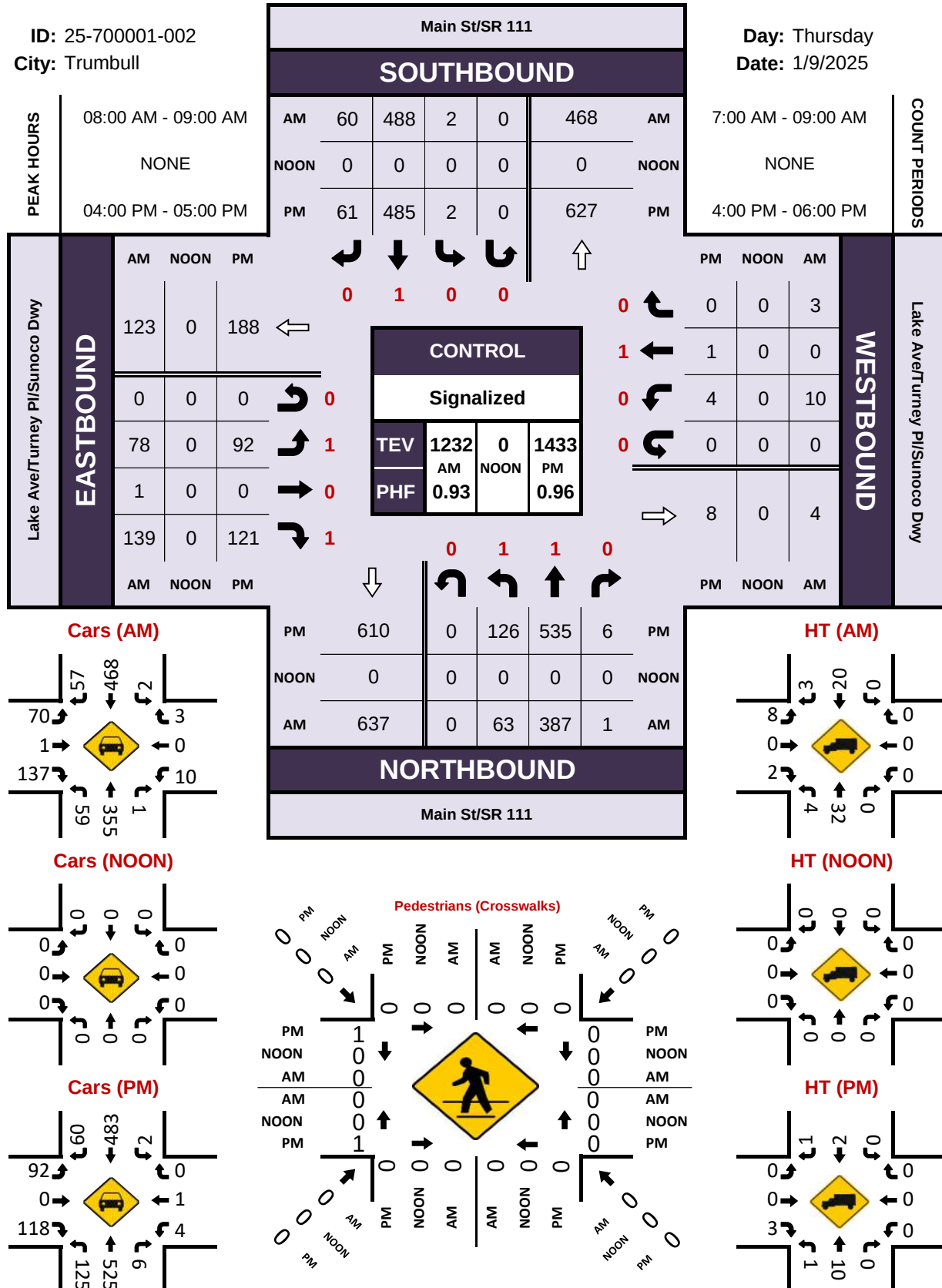
	Main St/SR 111 Northbound					Main St/SR 111 Southbound					Lake Ave/Turney Pl/Sunoco Dwy Eastbound					Lake Ave/Turney Pl/Sunoco Dwy Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM - 06:00 PM																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
4:00 PM	25	130	1	0	156	0	136	15	0	151	24	0	24	0	48	1	0	0	0	1	356
4:15 PM	32	140	4	0	176	0	119	19	0	138	28	0	30	0	58	1	1	0	0	2	374
4:30 PM	38	131	1	0	170	1	105	10	0	116	21	0	40	0	61	1	0	0	0	1	348
4:45 PM	31	134	0	0	165	1	125	17	0	143	19	0	27	0	46	1	0	0	0	1	355
Total Volume	126	535	6	0	667	2	485	61	0	548	92	0	121	0	213	4	1	0	0	5	1433
% App. Total	18.9	80.2	0.9	0.0	100	0.4	88.5	11.1	0.0	100	43.2	0.0	56.8	0.0	100	80.0	20.0	0.0	0.0	100	
PHF	0.947					0.907					0.873					0.625					0.958
Cars, PU, Vans	125	525	6	0	656	2	483	60	0	545	92	0	118	0	210	4	1	0	0	5	1416
% Cars, PU, Vans	99.2	98.1	100.0	0.0	98.4	100.0	99.6	98.4	0.0	99.5	100.0	0.0	97.5	0.0	98.6	100.0	100.0	0.0	0.0	100.0	98.8
Heavy trucks	1	10	0	0	11	0	2	1	0	3	0	0	3	0	3	0	0	0	0	0	17
%Heavy trucks	0.8	1.9	0.0	0.0	1.6	0.0	0.4	1.6	0.0	0.5	0.0	0.0	2.5	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.2

Main St/SR 111 & Lake Ave/Turney Pl/Sunoco Dwy

Peak Hour Turning Movement Count

ID: 25-700001-002
City: Trumbull

Day: Thursday
Date: 1/9/2025



Project ID: 25-700001-002

Location: Main St/SR 111 & Lake Ave/Turney Pl/Sunoco Dwy

City: Trumbull

Day: Saturday

Date: 1/11/2025

Groups Printed - Cars, PU, Vans - Heavy Trucks

Start Time	Main St/SR 111 Northbound						Main St/SR 111 Southbound						Lake Ave/Turney Pl/Sunoco Dwy Eastbound						Lake Ave/Turney Pl/Sunoco Dwy Westbound						Int. Total
	Left	Thru	Rgt	Utum	Peds	App. Total	Left	Thru	Rgt	Utum	Peds	App. Total	Left	Thru	Rgt	Utum	Peds	App. Total	Left	Thru	Rgt	Utum	Peds	App. Total	
11:00 AM	18	93	0	0	0	111	1	119	22	0	0	142	17	0	19	0	0	36	4	0	2	0	0	6	295
11:15 AM	18	93	2	0	0	113	0	94	22	0	0	116	11	0	22	0	0	33	1	0	0	0	0	1	263
11:30 AM	20	124	0	0	0	144	0	141	9	0	0	150	16	0	30	0	0	46	3	0	0	0	0	3	343
11:45 AM	30	108	0	0	0	138	0	132	15	0	0	147	19	0	24	0	0	43	1	1	0	0	0	2	330
Total	86	418	2	0	0	506	1	486	68	0	0	555	63	0	95	0	0	158	9	1	2	0	0	12	1231
12:00 PM	25	116	3	0	0	144	0	97	10	0	0	107	8	0	22	0	0	30	1	0	0	0	0	1	282
12:15 PM	26	105	1	0	0	132	1	109	12	0	0	122	18	0	17	0	2	35	3	1	0	0	0	4	293
12:30 PM	30	119	2	0	0	151	0	123	17	0	0	140	12	0	26	0	0	38	0	0	0	0	0	0	329
12:45 PM	22	121	1	0	0	144	1	116	13	0	0	130	11	0	28	0	0	39	1	0	0	0	0	1	314
Total	103	461	7	0	0	571	2	445	52	0	0	499	49	0	93	0	2	142	5	1	0	0	0	6	1218
BREAK																									
Grand Total	189	879	9	0	0	1077	3	931	120	0	0	1054	112	0	188	0	2	300	14	2	2	0	0	18	2449
Apprch %	17.5	81.6	0.8	0.0	0.0		0.3	88.3	11.4	0.0	0.0		37.3	0.0	62.7	0.0	0.7		77.8	11.1	11.1	0.0	0.0		
Total %	7.7	35.9	0.4	0.0	0.0	44.0	0.1	38.0	4.9	0.0	0.0	43.0	4.6	0.0	7.7	0.0	0.1	12.2	0.6	0.1	0.1	0.0	0.0	0.7	
Cars, PU, Vans	188	866	9	0		1063	3	919	116	0		1038	112	0	185	0		297	13	1	2	0		16	2414
% Cars, PU, Vans	99.5	98.5	100.0	0.0		98.7	100.0	98.7	96.7	0.0		98.5	100.0	0.0	98.4	0.0		99.0	92.9	50.0	100.0	0.0		88.9	98.6
Heavy trucks	1	13	0	0		14	0	12	4	0		16	0	0	3	0		3	1	1	0	0		2	35
%Heavy trucks	0.5	1.5	0.0	0.0		1.3	0.0	1.3	3.3	0.0		1.5	0.0	0.0	1.6	0.0		1.0	7.1	50.0	0.0	0.0		11.1	1.4

Project ID: 25-700001-002

Location: Main St/SR 111 & Lake Ave/Turney Pl/Sunoco Dwy

City: Trumbull

PEAK HOURS

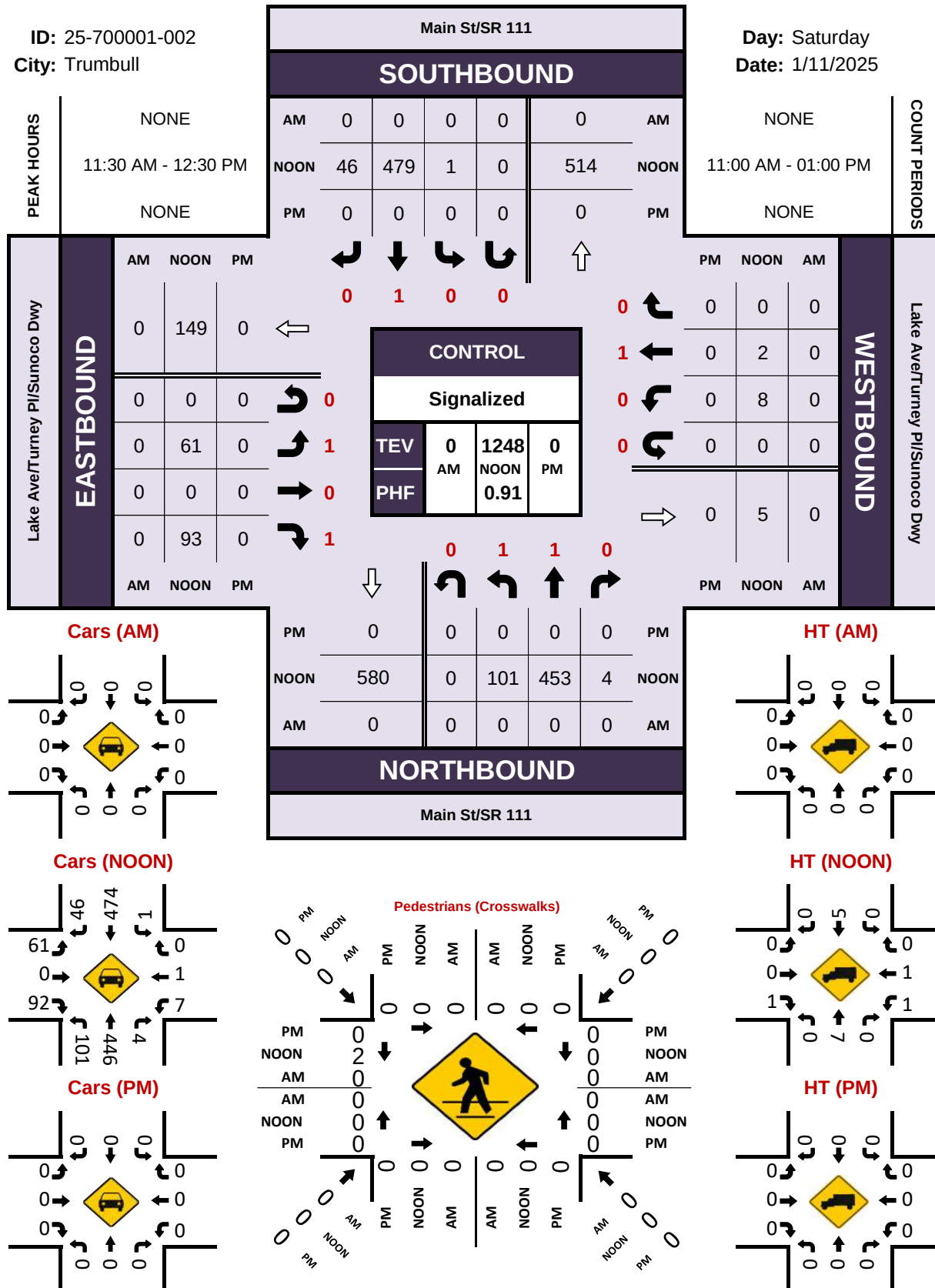
Day: Saturday

Date: 1/11/2025

NOON

	Main St/SR 111 Northbound					Main St/SR 111 Southbound					Lake Ave/Turney Pl/Sunoco Dwy Eastbound					Lake Ave/Turney Pl/Sunoco Dwy Westbound					
Start Time	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Int. Total
Peak Hour Analysis from 11:00 AM - 01:00 PM																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	20	124	0	0	144	0	141	9	0	150	16	0	30	0	46	3	0	0	0	3	343
11:45 AM	30	108	0	0	138	0	132	15	0	147	19	0	24	0	43	1	1	0	0	2	330
12:00 PM	25	116	3	0	144	0	97	10	0	107	8	0	22	0	30	1	0	0	0	1	282
12:15 PM	26	105	1	0	132	1	109	12	0	122	18	0	17	0	35	3	1	0	0	4	293
Total Volume	101	453	4	0	558	1	479	46	0	526	61	0	93	0	154	8	2	0	0	10	1248
% App. Total	18.1	81.2	0.7	0.0	100	0.2	91.1	8.7	0.0	100	39.6	0.0	60.4	0.0	100	80.0	20.0	0.0	0.0	100	
PHF	0.969					0.877					0.837					0.625					0.910
Cars, PU, Vans	101	446	4	0	551	1	474	46	0	521	61	0	92	0	153	7	1	0	0	8	1233
% Cars, PU, Vans	100.0	98.5	100.0	0.0	98.7	100.0	99.0	100.0	0.0	99.0	100.0	0.0	98.9	0.0	99.4	87.5	50.0	0.0	0.0	80.0	98.8
Heavy trucks	0	7	0	0	7	0	5	0	0	5	0	0	1	0	1	1	1	0	0	2	15
%Heavy trucks	0.0	1.5	0.0	0.0	1.3	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.1	0.0	0.6	12.5	50.0	0.0	0.0	20.0	1.2

Date: 1/11/2025



Project ID: 25-700001-001

Location: Main St/SR 111 & Church Hill Rd/SR 127/Shell - Petrol Pump Dwy

City: Trumbull

Day: Thursday

Date: 1/9/2025

Groups Printed - Cars, PU, Vans - Heavy Trucks

Start Time	Main St/SR 111 Northbound						Main St/SR 111 Southbound						Church Hill Rd/SR 127/Shell - Petrol Pump Dwy Eastbound						Church Hill Rd/SR 127/Shell - Petrol Pump Dwy Westbound						Int. Total
	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	
7:00 AM	0	48	2	0	0	50	40	50	0	0	0	90	0	1	1	0	0	2	4	0	47	0	0	51	193
7:15 AM	3	45	0	0	0	48	61	74	1	0	0	136	0	0	3	0	0	3	2	1	41	0	0	44	231
7:30 AM	1	37	6	0	0	44	77	83	0	0	0	160	0	2	1	0	0	3	2	1	34	0	0	37	244
7:45 AM	0	59	3	0	0	62	66	78	0	0	0	144	0	1	2	0	0	3	6	2	37	0	0	45	254
Total	4	189	11	0	0	204	244	285	1	0	0	530	0	4	7	0	0	11	14	4	159	0	0	177	922
8:00 AM	2	66	1	0	0	69	97	98	0	0	0	195	0	1	3	0	0	4	6	0	36	0	0	42	310
8:15 AM	0	51	7	0	0	58	98	99	0	0	0	197	0	0	3	0	0	3	4	0	42	0	0	46	304
8:30 AM	2	96	5	0	0	103	79	99	0	0	0	178	0	3	0	0	0	3	7	3	73	0	0	83	367
8:45 AM	2	87	5	0	0	94	75	90	0	0	0	165	1	0	0	0	1	1	6	1	55	0	0	62	322
Total	6	300	18	0	0	324	349	386	0	0	0	735	1	4	6	0	1	11	23	4	206	0	0	233	1303
BREAK																									
4:00 PM	2	120	3	0	0	125	74	97	0	0	0	171	0	3	7	0	1	10	3	0	62	0	0	65	371
4:15 PM	2	129	3	0	0	134	60	90	0	0	0	150	0	3	4	0	0	7	7	3	57	0	0	67	358
4:30 PM	3	117	7	0	0	127	48	89	1	0	0	138	0	1	5	0	0	6	4	1	75	0	0	80	351
4:45 PM	2	119	5	0	0	126	74	111	0	0	0	185	1	2	5	0	0	8	5	0	60	0	0	65	384
Total	9	485	18	0	0	512	256	387	1	0	0	644	1	9	21	0	1	31	19	4	254	0	0	277	1464
5:00 PM	4	140	0	0	0	144	57	101	1	0	0	159	1	1	1	0	0	3	5	0	51	0	0	56	362
5:15 PM	2	131	1	0	0	134	59	95	0	0	0	154	0	1	5	0	0	6	7	2	71	0	0	80	374
5:30 PM	2	104	3	0	0	109	56	90	0	0	0	146	0	0	1	0	0	1	5	1	87	0	0	93	349
5:45 PM	1	105	3	0	0	109	55	97	0	0	0	152	0	0	1	0	0	1	4	1	70	0	0	75	337
Total	9	480	7	0	0	496	227	383	1	0	0	611	1	2	8	0	0	11	21	4	279	0	0	304	1422
Grand Total	28	1454	54	0	0	1536	1076	1441	3	0	0	2520	3	19	42	0	2	64	77	16	898	0	0	991	5111
Apprch %	1.8	94.7	3.5	0.0	0.0		42.7	57.2	0.1	0.0	0.0		4.7	29.7	65.6	0.0	3.1		7.8	1.6	90.6	0.0	0.0		
Total %	0.5	28.4	1.1	0.0	0.0	30.1	21.1	28.2	0.1	0.0	0.0	49.3	0.1	0.4	0.8	0.0	0.0	1.3	1.5	0.3	17.6	0.0	0.0	19.4	
Cars, PU, Vans	28	1422	52	0		1502	1053	1419	3	0		2475	3	19	41	0		63	73	15	861	0		949	4989
% Cars, PU, Vans	100.0	97.8	96.3	0.0		97.8	97.9	98.5	100.0	0.0		98.2	100.0	100.0	97.6	0.0		98.4	94.8	93.8	95.9	0.0		95.8	97.6
Heavy trucks	0	32	2	0		34	23	22	0	0		45	0	0	1	0		1	4	1	37	0		42	122
%Heavy trucks	0.0	2.2	3.7	0.0		2.2	2.1	1.5	0.0	0.0		1.8	0.0	0.0	2.4	0.0		1.6	5.2	6.3	4.1	0.0		4.2	2.4

Project ID: 25-700001-001

Location: Main St/SR 111 & Church Hill Rd/SR 127/Shell - Petr

City: Trumbull

PEAK HOURS

Day: Thursday

Date: 1/9/2025

AM

	Main St/SR 111 Northbound					Main St/SR 111 Southbound					ch Hill Rd/SR 127/Shell - Petrol Pump Eastbound					ch Hill Rd/SR 127/Shell - Petrol Pump Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM - 09:00 AM																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
8:00 AM	2	66	1	0	69	97	98	0	0	195	0	1	3	0	4	6	0	36	0	42	310
8:15 AM	0	51	7	0	58	98	99	0	0	197	0	0	3	0	3	4	0	42	0	46	304
8:30 AM	2	96	5	0	103	79	99	0	0	178	0	3	0	0	3	7	3	73	0	83	367
8:45 AM	2	87	5	0	94	75	90	0	0	165	1	0	0	0	1	6	1	55	0	62	322
Total Volume	6	300	18	0	324	349	386	0	0	735	1	4	6	0	11	23	4	206	0	233	1303
% App. Total	1.9	92.6	5.6	0.0	100	47.5	52.5	0.0	0.0	100	9.1	36.4	54.5	0.0	100	9.9	1.7	88.4	0.0	100	
PHF	0.786					0.933					0.688					0.702					0.888
Cars, PU, Vans	6	284	18	0	308	337	375	0	0	712	1	4	6	0	11	22	4	185	0	211	1242
% Cars, PU, Vans	100.0	94.7	100.0	0.0	95.1	96.6	97.2	0.0	0.0	96.9	100.0	100.0	100.0	0.0	100.0	95.7	100.0	89.8	0.0	90.6	95.3
Heavy trucks	0	16	0	0	16	12	11	0	0	23	0	0	0	0	0	1	0	21	0	22	61
%Heavy trucks	0.0	5.3	0.0	0.0	4.9	3.4	2.8	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	4.3	0.0	10.2	0.0	9.4	4.7

PM

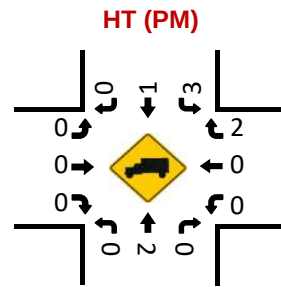
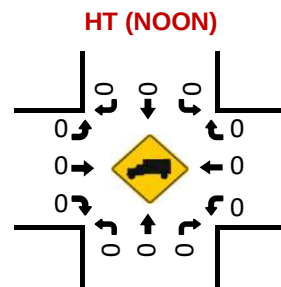
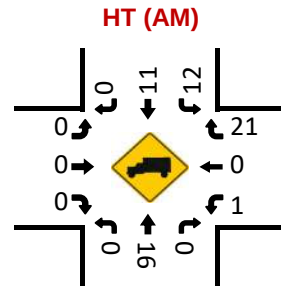
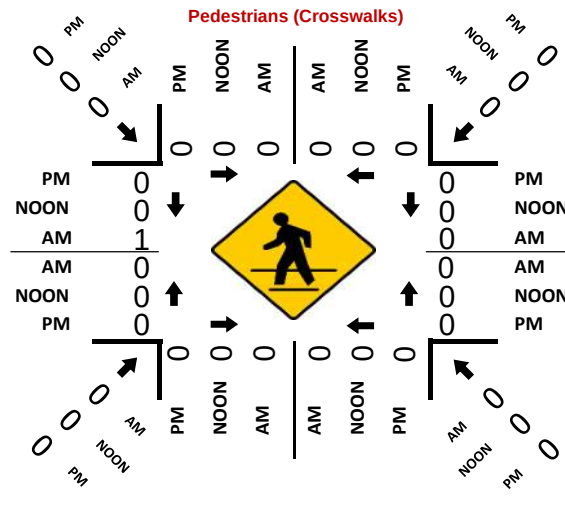
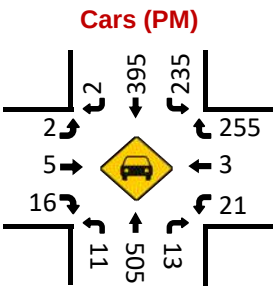
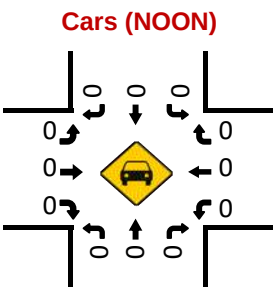
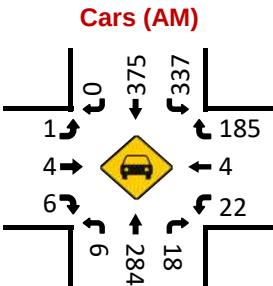
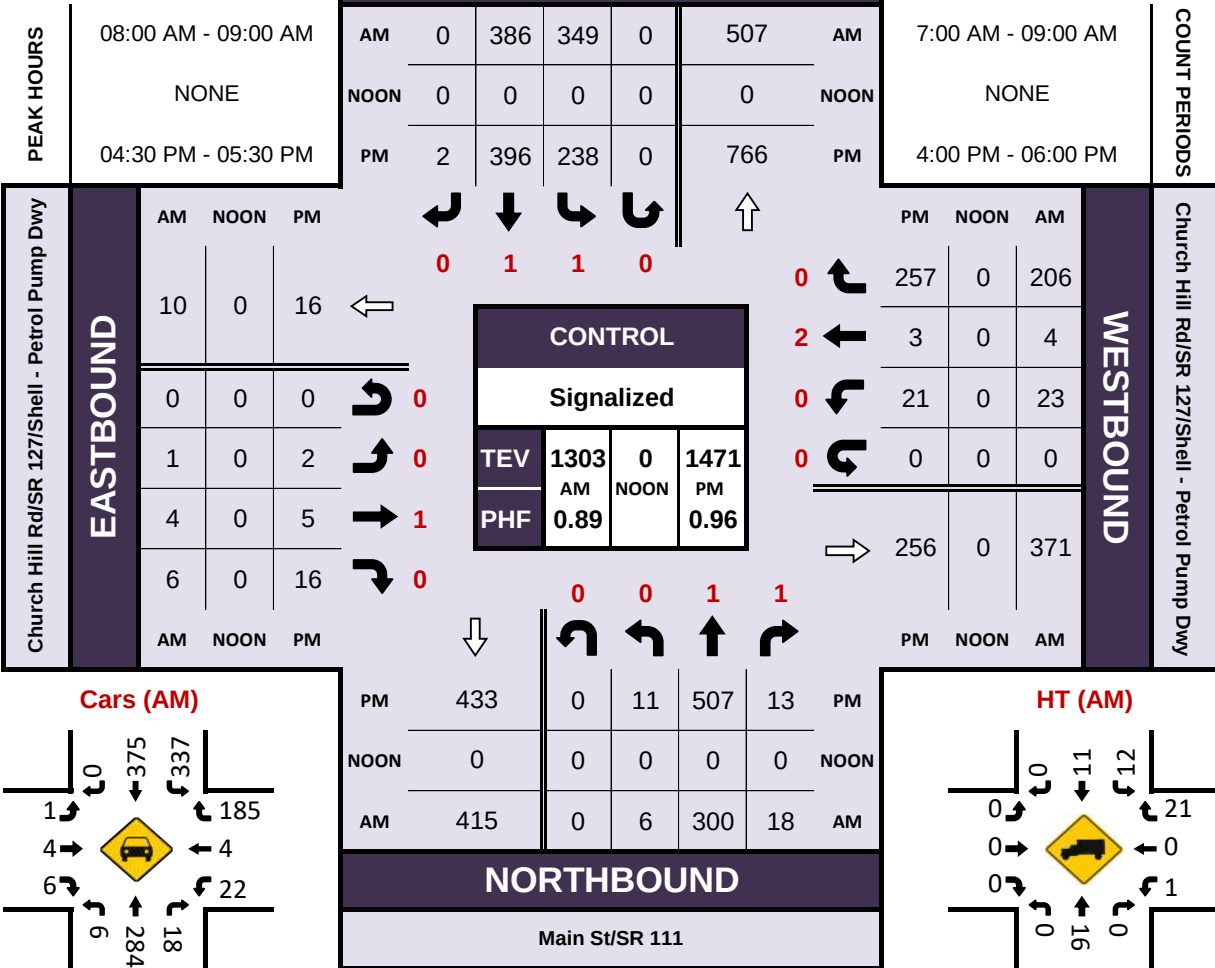
	Main St/SR 111 Northbound					Main St/SR 111 Southbound					ch Hill Rd/SR 127/Shell - Petrol Pump Eastbound					ch Hill Rd/SR 127/Shell - Petrol Pump Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM - 06:00 PM																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
4:30 PM	3	117	7	0	127	48	89	1	0	138	0	1	5	0	6	4	1	75	0	80	351
4:45 PM	2	119	5	0	126	74	111	0	0	185	1	2	5	0	8	5	0	60	0	65	384
5:00 PM	4	140	0	0	144	57	101	1	0	159	1	1	1	0	3	5	0	51	0	56	362
5:15 PM	2	131	1	0	134	59	95	0	0	154	0	1	5	0	6	7	2	71	0	80	374
Total Volume	11	507	13	0	531	238	396	2	0	636	2	5	16	0	23	21	3	257	0	281	1471
% App. Total	2.1	95.5	2.4	0.0	100	37.4	62.3	0.3	0.0	100	8.7	21.7	69.6	0.0	100	7.5	1.1	91.5	0.0	100	
PHF	0.922					0.859					0.719					0.878					0.958
Cars, PU, Vans	11	505	13	0	529	235	395	2	0	632	2	5	16	0	23	21	3	255	0	279	1463
% Cars, PU, Vans	100.0	99.6	100.0	0.0	99.6	98.7	99.7	100.0	0.0	99.4	100.0	100.0	100.0	0.0	100.0	100.0	100.0	99.2	0.0	99.3	99.5
Heavy trucks	0	2	0	0	2	3	1	0	0	4	0	0	0	0	0	0	0	2	0	2	8
%Heavy trucks	0.0	0.4	0.0	0.0	0.4	1.3	0.3	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.7	0.5

Main St/SR 111 & Church Hill Rd/SR 127/Shell - Petrol Pump Dwy

Peak Hour Turning Movement Count

ID: 25-700001-001
City: Trumbull

Day: Thursday
Date: 1/9/2025



Project ID: 25-700001-001

Location: Main St/SR 111 & Church Hill Rd/SR 127/Shell - Petrol Pump Dwy

City: Trumbull

Day: Saturday

Date: 1/11/2025

Groups Printed - Cars, PU, Vans - Heavy Trucks

Start Time	Main St/SR 111 Northbound						Main St/SR 111 Southbound						Church Hill Rd/SR 127/Shell - Petrol Pump Dwy Eastbound						Church Hill Rd/SR 127/Shell - Petrol Pump Dwy Westbound						Int. Total
	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	
11:00 AM	0	84	0	0	0	84	45	92	0	0	0	137	0	1	2	0	1	3	3	2	36	0	0	41	265
11:15 AM	0	72	1	0	0	73	47	87	0	0	0	134	0	3	1	0	0	4	2	0	45	0	0	47	258
11:30 AM	1	102	0	0	0	103	53	126	0	0	0	179	0	0	2	0	0	2	1	0	50	0	0	51	335
11:45 AM	1	86	2	0	0	89	60	99	0	0	0	159	0	4	2	0	1	6	2	2	64	0	0	68	322
Total	2	344	3	0	0	349	205	404	0	0	0	609	0	8	7	0	2	15	8	4	195	0	0	207	1180
12:00 PM	2	104	4	0	0	110	41	100	0	1	0	142	1	0	3	0	0	4	4	1	51	0	0	56	312
12:15 PM	1	90	3	0	0	94	41	95	0	0	0	136	0	2	2	0	1	4	2	1	49	0	0	52	286
12:30 PM	0	94	5	0	0	99	58	95	1	0	0	154	1	1	4	0	2	6	3	0	60	0	0	63	322
12:45 PM	0	116	3	0	0	119	58	93	0	0	0	151	0	0	3	0	0	3	5	1	33	0	1	39	312
Total	3	404	15	0	0	422	198	383	1	1	0	583	2	3	12	0	3	17	14	3	193	0	1	210	1232
BREAK																									
Grand Total	5	748	18	0	0	771	403	787	1	1	0	1192	2	11	19	0	5	32	22	7	388	0	1	417	2412
Apprch %	0.6	97.0	2.3	0.0	0.0		33.8	66.0	0.1	0.1	0.0		6.3	34.4	59.4	0.0	15.6		5.3	1.7	93.0	0.0	0.2		
Total %	0.2	31.0	0.7	0.0	0.0	32.0	16.7	32.6	0.0	0.0	0.0	49.4	0.1	0.5	0.8	0.0	0.2	1.3	0.9	0.3	16.1	0.0	0.0	17.3	
Cars, PU, Vans	5	737	17	0		759	393	779	0	1		1173	1	8	19	0		28	20	5	381	0		406	2366
% Cars, PU, Vans	100.0	98.5	94.4	0.0		98.4	97.5	99.0	0.0	100.0		98.4	50.0	72.7	100.0	0.0		87.5	90.9	71.4	98.2	0.0		97.4	98.1
Heavy trucks	0	11	1	0		12	10	8	1	0		19	1	3	0	0		4	2	2	7	0		11	46
%Heavy trucks	0.0	1.5	5.6	0.0		1.6	2.5	1.0	100.0	0.0		1.6	50.0	27.3	0.0	0.0		12.5	9.1	28.6	1.8	0.0		2.6	1.9

Project ID: 25-700001-001

Location: Main St/SR 111 & Church Hill Rd/SR 127/Shell - Petr

City: Trumbull

PEAK HOURS

Day: Saturday

Date: 1/11/2025

NOON

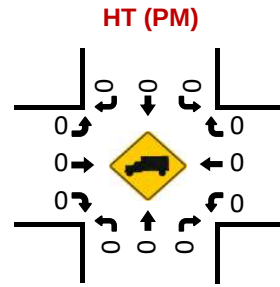
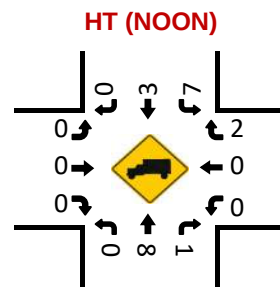
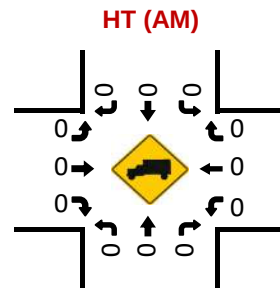
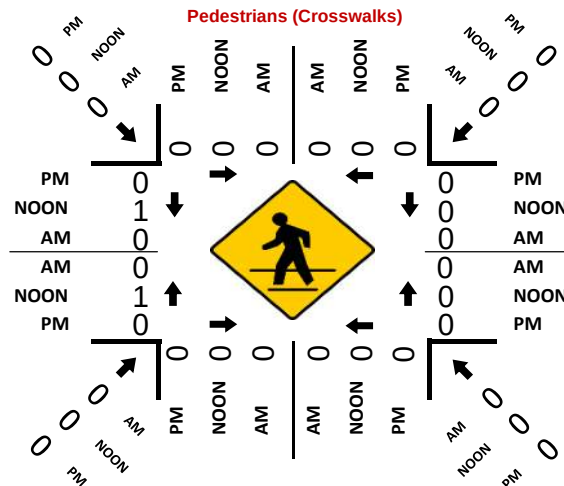
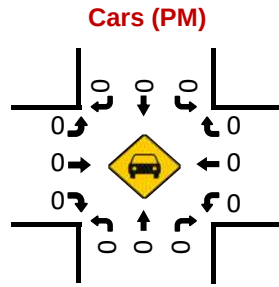
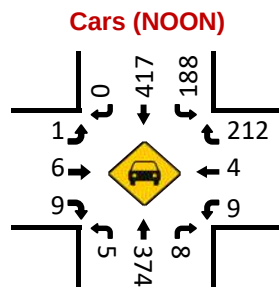
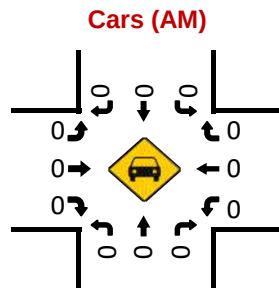
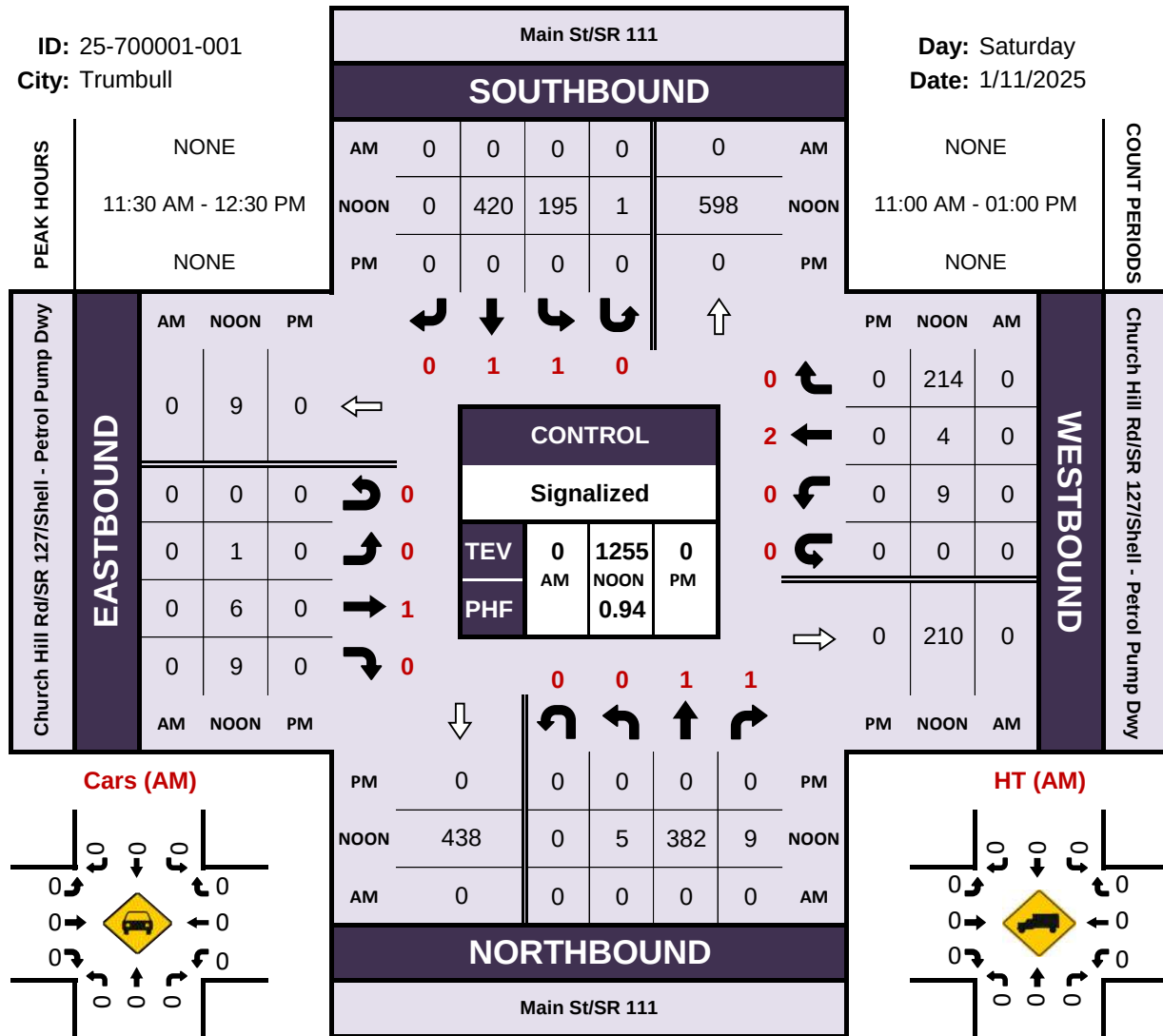
	Main St/SR 111 Northbound					Main St/SR 111 Southbound					ch Hill Rd/SR 127/Shell - Petrol Pump Eastbound					ch Hill Rd/SR 127/Shell - Petrol Pump Westbound					
Start Time	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Left	Thru	Rgt	Utum	App. Total	Int. Total
Peak Hour Analysis from 11:00 AM - 01:00 PM																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	1	102	0	0	103	53	126	0	0	179	0	0	2	0	2	1	0	50	0	51	335
11:45 AM	1	86	2	0	89	60	99	0	0	159	0	4	2	0	6	2	2	64	0	68	322
12:00 PM	2	104	4	0	110	41	100	0	1	142	1	0	3	0	4	4	1	51	0	56	312
12:15 PM	1	90	3	0	94	41	95	0	0	136	0	2	2	0	4	2	1	49	0	52	286
Total Volume	5	382	9	0	396	195	420	0	1	616	1	6	9	0	16	9	4	214	0	227	1255
% App. Total	1.3	96.5	2.3	0.0	100	31.7	68.2	0.0	0.2	100	6.3	37.5	56.3	0.0	100	4.0	1.8	94.3	0.0	100	
PHF	0.900					0.860					0.667					0.835					0.937
Cars, PU, Vans	5	374	8	0	387	188	417	0	1	606	1	6	9	0	16	9	4	212	0	225	1234
% Cars, PU, Vans	100.0	97.9	88.9	0.0	97.7	96.4	99.3	0.0	100.0	98.4	100.0	100.0	100.0	0.0	100.0	100.0	100.0	99.1	0.0	99.1	98.3
Heavy trucks	0	8	1	0	9	7	3	0	0	10	0	0	0	0	0	0	0	2	0	2	21
%Heavy trucks	0.0	2.1	11.1	0.0	2.3	3.6	0.7	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.9	1.7

Main St/SR 111 & Church Hill Rd/SR 127/Shell - Petrol Pump Dwy

Peak Hour Turning Movement Count

ID: 25-700001-001
City: Trumbull

Day: Saturday
Date: 1/11/2025



Trip Generation Study

Location: Wilton Parks & Recreation Department, 180 School Rd
City: Wilton, CT

Date: 1/9/2025
Day: Thursday

TIME	[001] W Dwy		[002] E Dwy		Trip		
	IN	OUT	IN	OUT	IN	OUT	OUTCOME
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	1	0	1
7:30 AM	0	6	6	0	6	6	0
7:45 AM	0	0	2	0	2	0	2
8:00 AM	0	2	7	0	7	2	5
8:15 AM	0	1	8	0	8	1	7
8:30 AM	0	4	6	0	6	4	2
8:45 AM	0	1	5	0	5	1	4
4:00 PM	0	4	6	0	6	4	2
4:15 PM	0	16	6	1	6	17	-11
4:30 PM	0	2	3	1	3	3	0
4:45 PM	0	8	8	0	8	8	0
5:00 PM	0	6	4	0	4	6	-2
5:15 PM	0	5	2	0	2	5	-3
5:30 PM	0	3	8	0	8	3	5
5:45 PM	0	4	14	0	14	4	10
Totals	0	62	86	2	86	64	22



Trip Generation Study

Location: Comstock Community Center, 180 School Rd
City: Wilton, CT

Date: 1/25/2025
Day: Saturday

TIME	[001] W Dwy		[002] E Dwy		Trip		
	IN	OUT	IN	OUT	IN	OUT	OUTCOME
11:00 AM	0	6	14	1	14	7	7
11:15 AM	0	2	6	0	6	2	4
11:30 AM	0	0	1	0	1	0	1
11:45 AM	0	5	1	0	1	5	-4
12:00 PM	0	6	1	4	1	10	-9
12:15 PM	0	3	3	0	3	3	0
12:30 PM	0	11	4	3	4	14	-10
12:45 PM	0	10	5	0	5	10	-5
Totals	0	43	35	8	35	51	-16



Prepared by Nationwide Traffic Data, LLC
Trip Generation Study

Location: Branford Community House, 46 Church St
City: Branford, CT

Date: 1/9/2025
Day: Thursday

TIME	[003]						[004]						[005]		Trip		
	East Dwy		West Dwy		Trip		North Dwy		South Dwy		Trip		IN	OUT	IN	OUT	OUTCOME
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT					
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	3	0	0	1	3	0	0	0	0	0	0	0	4	1	7	-6
7:45 AM	0	0	2	0	2	0	0	0	0	0	0	0	1	0	3	0	3
8:00 AM	0	1	14	0	14	1	0	0	0	0	0	0	2	0	16	1	15
8:15 AM	2	0	10	0	12	0	0	0	0	0	0	0	6	0	18	0	18
8:30 AM	0	9	12	0	12	9	0	0	0	0	0	0	15	4	27	13	14
8:45 AM	0	1	12	0	12	1	0	0	0	0	0	0	8	2	20	3	17
4:00 PM	0	6	3	3	3	9	0	0	0	0	0	0	3	9	6	18	-12
4:15 PM	0	1	6	0	6	1	0	0	0	0	0	0	2	2	8	3	5
4:30 PM	0	4	4	2	4	6	0	0	0	0	0	0	1	5	5	11	-6
4:45 PM	0	16	8	5	8	21	0	0	0	0	0	0	3	10	11	31	-20
5:00 PM	0	8	13	0	13	8	0	0	0	0	0	0	4	5	17	13	4
5:15 PM	0	14	16	1	16	15	0	0	0	0	0	0	2	4	18	19	-1
5:30 PM	0	8	3	0	3	8	0	0	0	0	0	0	2	2	5	10	-5
5:45 PM	1	3	10	0	11	3	0	0	0	0	0	0	3	0	14	3	11
Totals	4	74	113	11	117	85	0	0	0	0	0	0	52	47	169	132	37



Prepared by Nationwide Traffic Data, LLC
Trip Generation Study

Location: Branford Community House, 46 Church St
City: Branford, CT

Date: 1/25/2025
Day: Saturday

TIME	[001]						[002]						[003]		Trip [001 & 003]		
	East Dwy		West Dwy		Trip		North Dwy		South Dwy		Trip		IN	OUT	IN	OUT	OUTCOME
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT					
11:00 AM	0	3	2	1	2	4	0	0	0	0	0	0	1	4	3	8	-5
11:15 AM	1	7	22	0	23	7	0	0	0	0	0	0	15	3	38	10	28
11:30 AM	0	4	5	0	5	4	0	0	0	0	0	0	5	3	10	7	3
11:45 AM	0	6	3	0	3	6	0	0	0	0	0	0	2	3	5	9	-4
12:00 PM	1	10	4	4	5	14	0	0	0	0	0	0	2	3	7	17	-10
12:15 PM	0	21	12	4	12	25	0	0	0	0	0	0	8	18	20	43	-23
12:30 PM	0	4	4	0	4	4	1	0	0	1	1	1	4	9	8	13	-5
12:45 PM	1	0	4	0	5	0	0	0	0	0	0	0	2	0	7	0	7
Totals	3	55	56	9	59	64	1	0	0	1	1	1	39	43	98	107	-9



Connecticut Counts LLC

Kensington, Connecticut 06037
(860) 828-1693

Route 63 at Bond Road/JCC Drive
Woodbridge, Connecticut

File Name : 24097
Site Code : 24097
Start Date : 2/16/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

	Route 63 From North					Bond Road From East					Route 63 From South					JCC Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	178	1	0	180	1	0	0	0	1	0	143	5	0	148	6	0	1	0	7	336
07:15 AM	12	314	3	0	329	8	0	1	0	9	0	161	14	0	175	8	0	4	0	12	525
07:30 AM	11	235	1	0	247	1	1	2	1	5	0	90	10	0	100	3	0	1	0	4	356
07:45 AM	17	167	2	0	186	4	0	0	0	4	0	103	14	0	117	12	0	4	0	16	323
Total	41	894	7	0	942	14	1	3	1	19	0	497	43	0	540	29	0	10	0	39	1540
08:00 AM	7	178	2	0	187	2	1	0	2	5	0	91	14	0	105	7	0	4	0	11	308
08:15 AM	21	204	5	0	230	2	1	0	0	3	0	91	11	0	102	8	3	5	0	16	351
08:30 AM	21	238	3	0	262	2	0	0	0	2	0	122	28	0	150	15	0	10	0	25	439
08:45 AM	33	169	3	0	205	4	0	1	0	5	0	91	18	0	109	17	0	7	0	24	343
Total	82	789	13	0	884	10	2	1	2	15	0	395	71	0	466	47	3	26	0	76	1441
Grand Total	123	1683	20	0	1826	24	3	4	3	34	0	892	114	0	1006	76	3	36	0	115	2981
Apprch %	6.7	92.2	1.1	0		70.6	8.8	11.8	8.8		0	88.7	11.3	0		66.1	2.6	31.3	0		
Total %	4.1	56.5	0.7	0	61.3	0.8	0.1	0.1	0.1	1.1	0	29.9	3.8	0	33.7	2.5	0.1	1.2	0	3.9	
Lights	122	1651																			
% Lights	99.2	98.1	95	0	98.1	95.8	100	100	100	97.1	0	96.2	98.2	0	96.4	97.4	100	97.2	0	97.4	97.5
Trucks	0	20	1	0	21	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	31
% Trucks	0	1.2	5	0	1.2	0	0	0	0	0	0	1.1	0	0	1	0	0	0	0	0	1
Buses	1	12	0	0	13	1	0	0	0	1	0	24	2	0	26	2	0	1	0	3	43
% Buses	0.8	0.7	0	0	0.7	4.2	0	0	0	2.9	0	2.7	1.8	0	2.6	2.6	0	2.8	0	2.6	1.4

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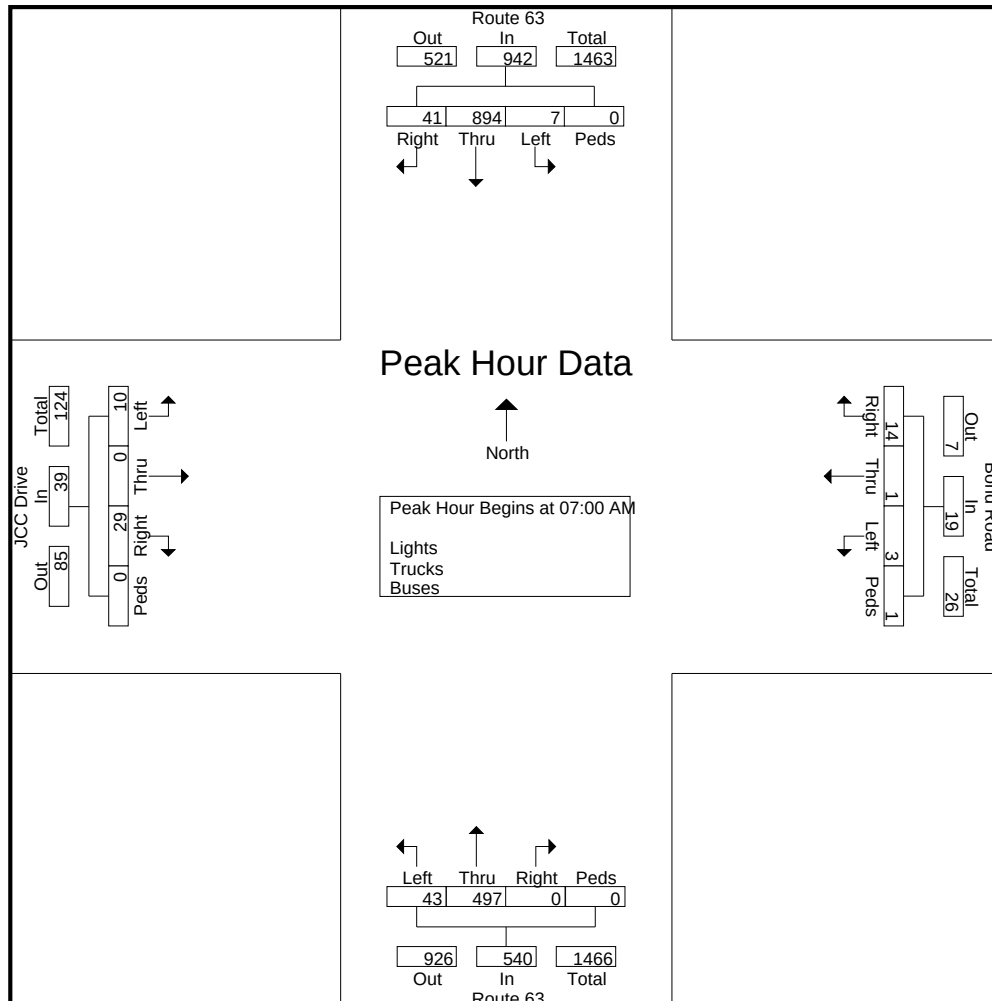
File Name : 24097
Site Code : 24097
Start Date : 2/16/2023
Page No : 2

	Route 63 From North					Bond Road From East					Route 63 From South					JCC Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	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	1	178	1	0	180	1	0	0	0	1	0	143	5	0	148	6	0	1	0	7	336
07:15 AM	12	314	3	0	329	8	0	1	0	9	0	161	14	0	175	8	0	4	0	12	525
07:30 AM	11	235	1	0	247	1	1	2	1	5	0	90	10	0	100	3	0	1	0	4	356
07:45 AM	17	167	2	0	186	4	0	0	0	4	0	103	14	0	117	12	0	4	0	16	323
Total Volume	41	894	7	0	942	14	1	3	1	19	0	497	43	0	540	29	0	10	0	39	1540
% App. Total	4.4	94.9	0.7	0		73.7	5.3	15.8	5.3		0	92	8	0		74.4	0	25.6	0		
PHF	.603	.712	.583	.000	.716	.438	.250	.375	.250	.528	.000	.772	.768	.000	.771	.604	.000	.625	.000	.609	.733



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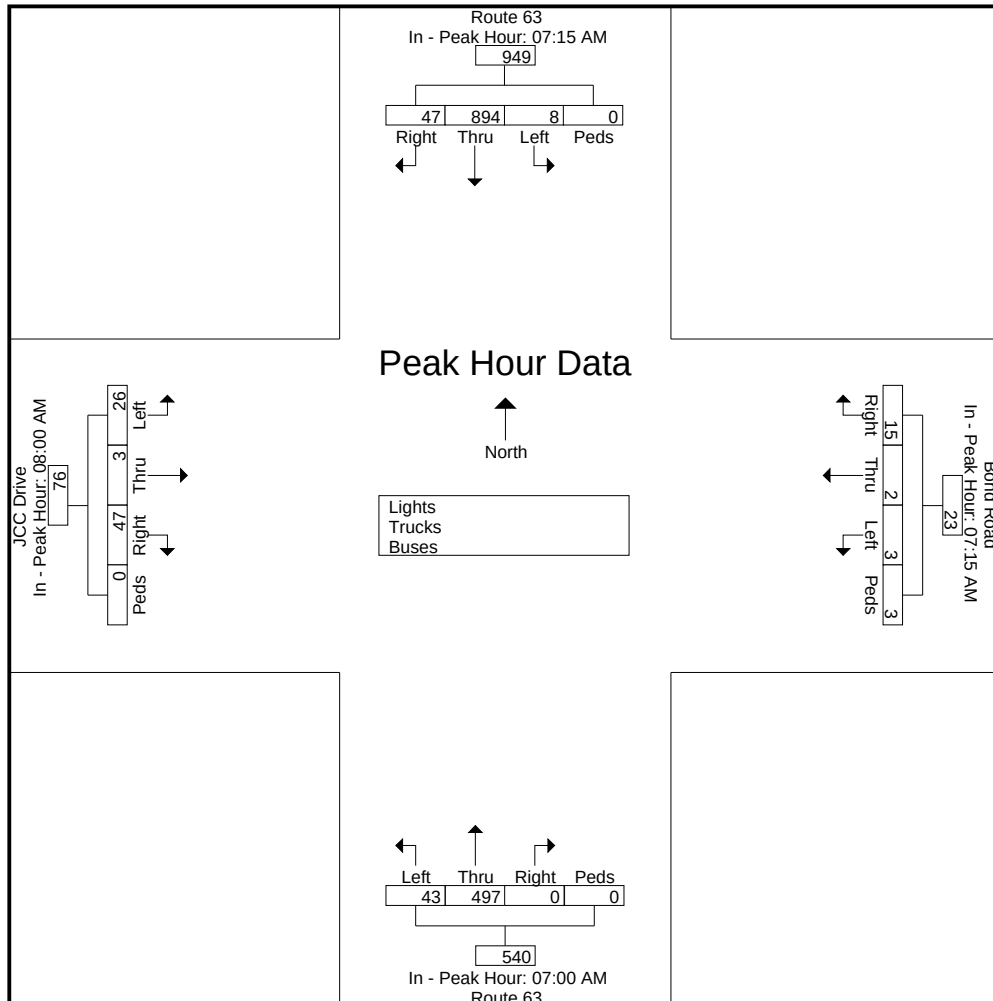
File Name : 24097
 Site Code : 24097
 Start Date : 2/16/2023
 Page No : 3

	Route 63 From North					Bond Road From East					Route 63 From South					JCC Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

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					07:15 AM					07:00 AM					08:00 AM				
+0 mins.	12	314	3	0	329	8	0	1	0	9	0	143	5	0	148	7	0	4	0	11
+15 mins.	11	235	1	0	247	1	1	2	1	5	0	161	14	0	175	8	3	5	0	16
+30 mins.	17	167	2	0	186	4	0	0	0	4	0	90	10	0	100	15	0	10	0	25
+45 mins.	7	178	2	0	187	2	1	0	2	5	0	103	14	0	117	17	0	7	0	24
Total Volume	47	894	8	0	949	15	2	3	3	23	0	497	43	0	540	47	3	26	0	76
% App. Total	5	94.2	0.8	0		65.2	8.7	13	13		0	92	8	0		61.8	3.9	34.2	0	
PHF	.691	.712	.667	.000	.721	.469	.500	.375	.375	.639	.000	.772	.768	.000	.771	.691	.250	.650	.000	.760



Connecticut Counts LLC

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Route 63 at Bond Road/JCC Drive
Woodbridge, Connecticut

File Name : 24098
Site Code : 24098
Start Date : 2/16/2023
Page No : 1

Groups Printed- Lights - Trucks - Buses

	Route 63 From North					Bond Road From East					Route 63 From South					JCC Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	13	156	4	0	173	6	0	0	0	6	0	189	11	0	200	9	0	7	0	16	395
04:15 PM	10	153	3	0	166	6	0	0	0	6	0	201	13	0	214	10	0	9	0	19	405
04:30 PM	15	162	1	0	178	4	0	0	0	4	0	208	20	0	228	12	0	8	0	20	430
04:45 PM	20	141	6	0	167	3	0	1	0	4	1	207	14	0	222	11	0	12	0	23	416
Total	58	612	14	0	684	19	0	1	0	20	1	805	58	0	864	42	0	36	0	78	1646
05:00 PM	24	166	2	0	192	5	1	1	1	8	0	222	25	0	247	34	0	30	0	64	511
05:15 PM	18	141	3	0	162	4	0	0	0	4	1	179	24	0	204	27	0	21	0	48	418
05:30 PM	4	107	2	0	113	6	0	1	0	7	0	243	13	0	256	28	0	26	0	54	430
05:45 PM	8	95	2	0	105	3	1	0	0	4	1	171	6	0	178	14	0	9	0	23	310
Total	54	509	9	0	572	18	2	2	1	23	2	815	68	0	885	103	0	86	0	189	1669
Grand Total	112	1121	23	0	1256	37	2	3	1	43	3	1620	126	0	1749	145	0	122	0	267	3315
Apprch %	8.9	89.3	1.8	0		86	4.7	7	2.3		0.2	92.6	7.2	0		54.3	0	45.7	0		
Total %	3.4	33.8	0.7	0	37.9	1.1	0.1	0.1	0	1.3	0.1	48.9	3.8	0	52.8	4.4	0	3.7	0	8.1	
Lights	109	1107									1603										
% Lights	97.3	98.8	100	0	98.6	100	100	100	100	100	100	99	97.6	0	98.9	97.2	0	99.2	0	98.1	98.7
Trucks	0	5	0	0	5	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	12
% Trucks	0	0.4	0	0	0.4	0	0	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0	0.4
Buses	3	9	0	0	12	0	0	0	0	0	0	10	3	0	13	4	0	1	0	5	30
% Buses	2.7	0.8	0	0	1	0	0	0	0	0	0	0.6	2.4	0	0.7	2.8	0	0.8	0	1.9	0.9

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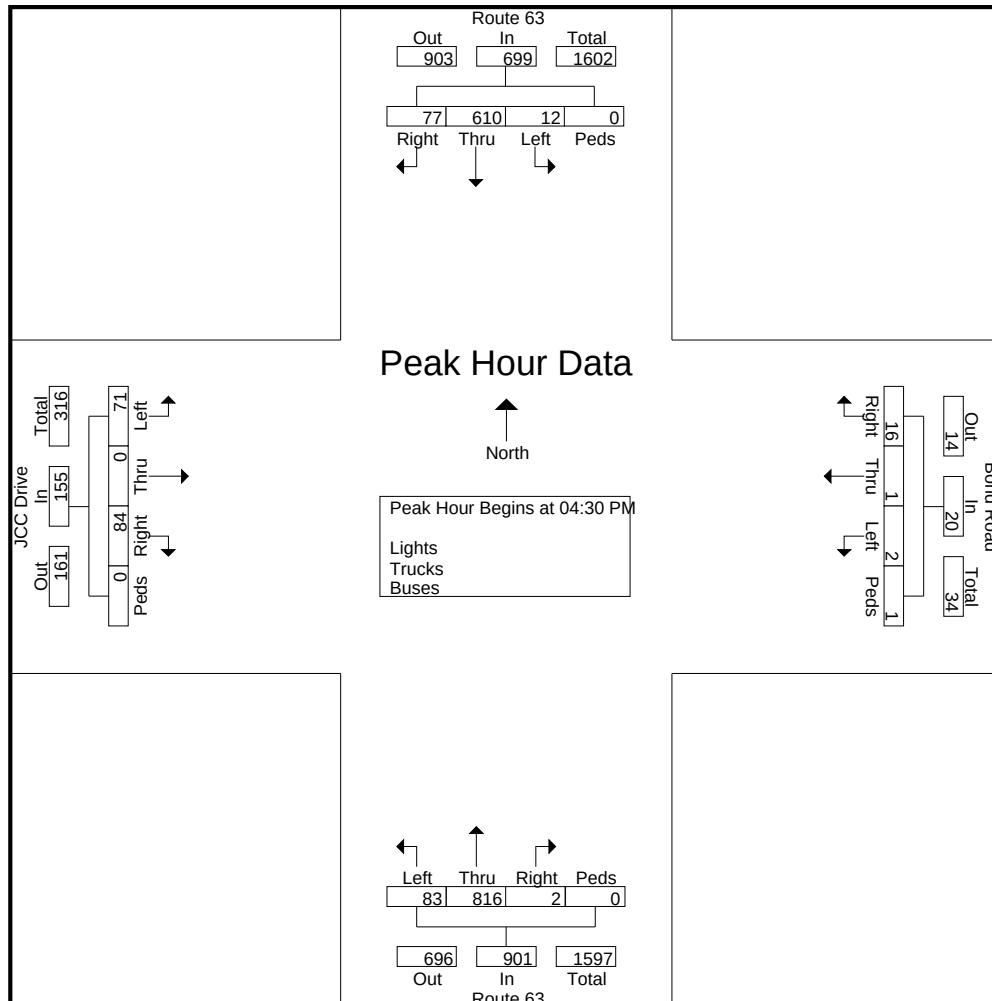
File Name : 24098
Site Code : 24098
Start Date : 2/16/2023
Page No : 2

	Route 63 From North					Bond Road From East					Route 63 From South					JCC Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	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 04:30 PM

04:30 PM	15	162	1	0	178	4	0	0	0	4	0	208	20	0	228	12	0	8	0	20	430
04:45 PM	20	141	6	0	167	3	0	1	0	4	1	207	14	0	222	11	0	12	0	23	416
05:00 PM	24	166	2	0	192	5	1	1	1	8	0	222	25	0	247	34	0	30	0	64	511
05:15 PM	18	141	3	0	162	4	0	0	0	4	1	179	24	0	204	27	0	21	0	48	418
Total Volume	77	610	12	0	699	16	1	2	1	20	2	816	83	0	901	84	0	71	0	155	1775
% App. Total	11	87.3	1.7	0		80	5	10	5		0.2	90.6	9.2	0		54.2	0	45.8	0		
PHF	.802	.919	.500	.000	.910	.800	.250	.500	.250	.625	.500	.919	.830	.000	.912	.618	.000	.592	.000	.605	.868



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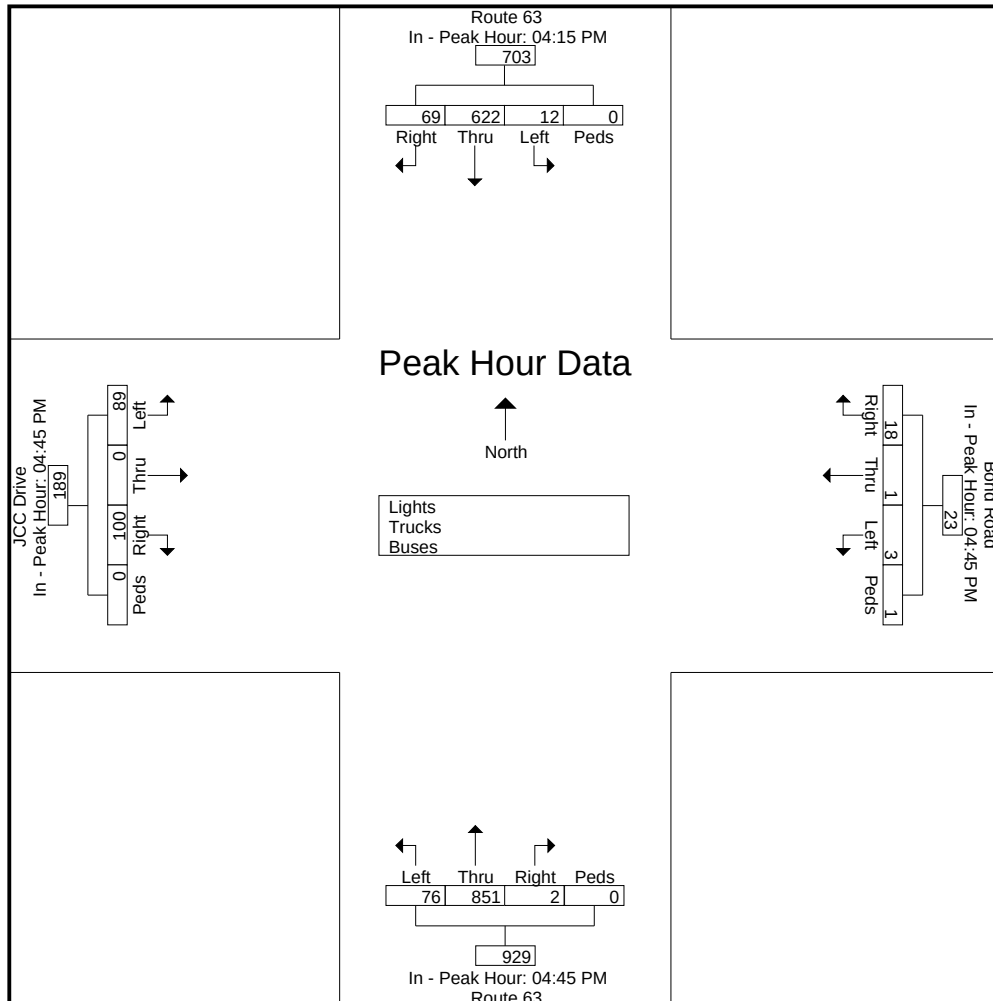
File Name : 24098
Site Code : 24098
Start Date : 2/16/2023
Page No : 3

	Route 63 From North					Bond Road From East					Route 63 From South					JCC Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

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

Peak Hour for Each Approach Begins at:

	04:15 PM					04:45 PM					04:45 PM					04:45 PM				
+0 mins.	10	153	3	0	166	3	0	1	0	4	1	207	14	0	222	11	0	12	0	23
+15 mins.	15	162	1	0	178	5	1	1	1	8	0	222	25	0	247	34	0	30	0	64
+30 mins.	20	141	6	0	167	4	0	0	0	4	1	179	24	0	204	27	0	21	0	48
+45 mins.	24	166	2	0	192	6	0	1	0	7	0	243	13	0	256	28	0	26	0	54
Total Volume	69	622	12	0	703	18	1	3	1	23	2	851	76	0	929	100	0	89	0	189
% App. Total	9.8	88.5	1.7	0		78.3	4.3	13	4.3		0.2	91.6	8.2	0		52.9	0	47.1	0	
PHF	.719	.937	.500	.000	.915	.750	.250	.750	.250	.719	.500	.876	.760	.000	.907	.735	.000	.742	.000	.738



File Name : 24099
Site Code : 24099
Start Date : 2/18/2023
Page No : 1

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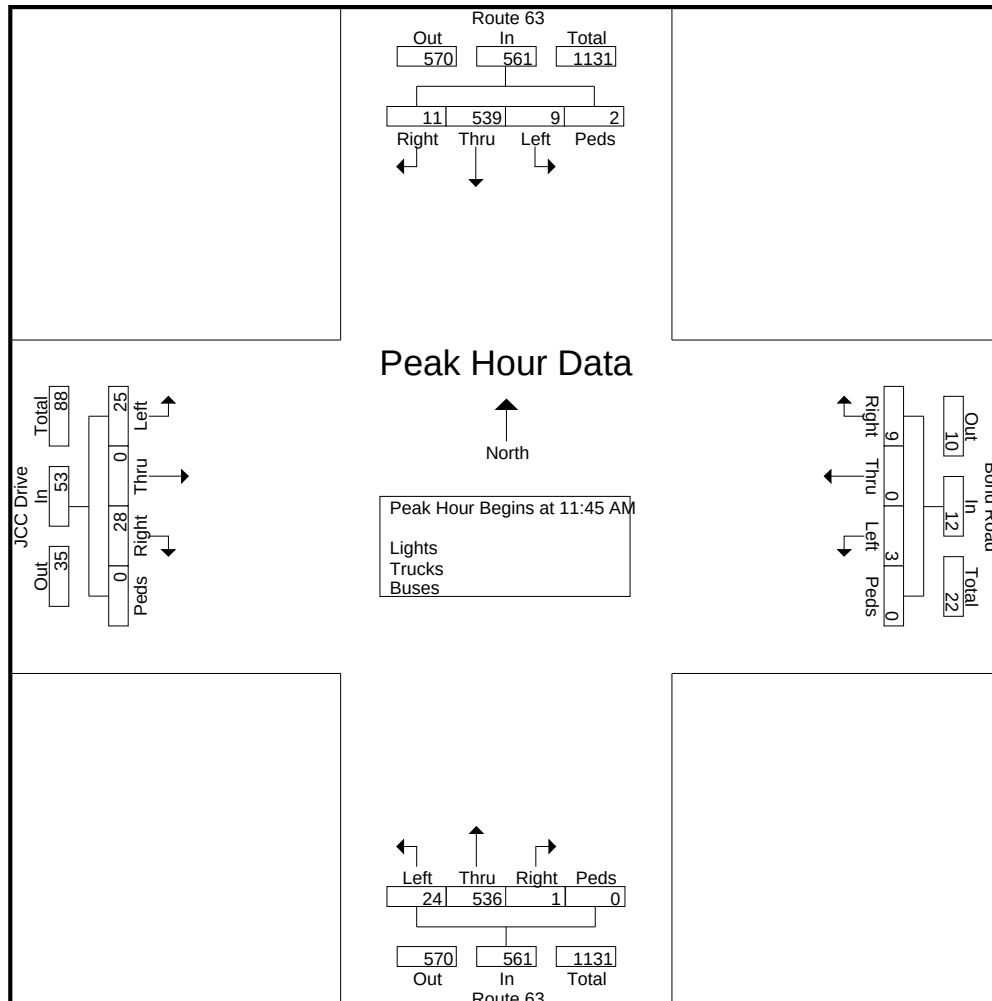
File Name : 24099
Site Code : 24099
Start Date : 2/18/2023
Page No : 2

	Route 63 From North					Bond Road From East					Route 63 From South					JCC Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 11:45 AM

11:45 AM	3	151	2	0	156	5	0	2	0	7	0	119	8	0	127	9	0	6	0	15	305
12:00 PM	1	139	2	1	143	0	0	1	0	1	0	128	5	0	133	8	0	8	0	16	293
12:15 PM	2	130	2	0	134	1	0	0	0	1	0	135	4	0	139	7	0	3	0	10	284
12:30 PM	5	119	3	1	128	3	0	0	0	3	1	154	7	0	162	4	0	8	0	12	305
Total Volume	11	539	9	2	561	9	0	3	0	12	1	536	24	0	561	28	0	25	0	53	1187
% App. Total	2	96.1	1.6	0.4		75	0	25	0		0.2	95.5	4.3	0		52.8	0	47.2	0		
PHF	.550	.892	.750	.500	.899	.450	.000	.375	.000	.429	.250	.870	.750	.000	.866	.778	.000	.781	.000	.828	.973



Connecticut Counts LLC

Kensington, Connecticut 06037
(860) 828-1693

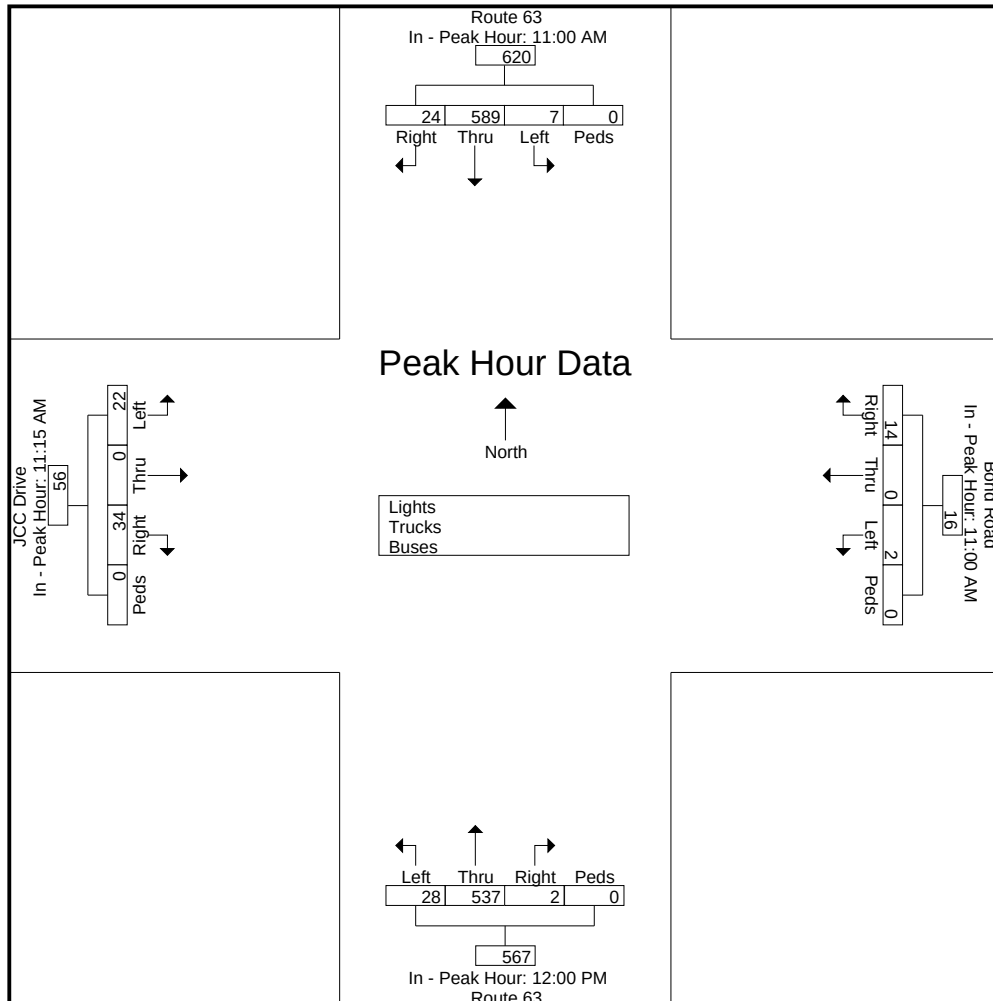
File Name : 24099
Site Code : 24099
Start Date : 2/18/2023
Page No : 3

	Route 63 From North					Bond Road From East					Route 63 From South					JCC Drive From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total

Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:00 AM					11:00 AM					12:00 PM					11:15 AM				
+0 mins.	13	152	0	0	165	3	0	0	0	3	0	128	5	0	133	14	0	3	0	17
+15 mins.	5	180	4	0	189	1	0	0	0	1	0	135	4	0	139	3	0	5	0	8
+30 mins.	3	106	1	0	110	5	0	0	0	5	1	154	7	0	162	9	0	6	0	15
+45 mins.	3	151	2	0	156	5	0	2	0	7	1	120	12	0	133	8	0	8	0	16
Total Volume	24	589	7	0	620	14	0	2	0	16	2	537	28	0	567	34	0	22	0	56
% App. Total	3.9	95	1.1	0		87.5	0	12.5	0		0.4	94.7	4.9	0		60.7	0	39.3	0	
PHF	.462	.818	.438	.000	.820	.700	.000	.250	.000	.571	.500	.872	.583	.000	.875	.607	.000	.688	.000	.824



APPENDIX B

Capacity Analysis Methodology

CAPACITY ANALYSIS METHODOLOGY

A primary result of capacity analysis is the assignment of levels of service to traffic facilities under various traffic flow conditions. The capacity analysis methodology is based on the concepts and procedures in the *Highway Capacity Manual* (HCM).¹ The concept of level of service (LOS) is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. 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 LOS A representing the best operating conditions and LOS F the worst. 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. A description of the operating condition under each level of service is provided below:

- LOS A describes conditions with little to no delay to motorists.
- LOS B represents a desirable level with relatively low delay to motorists.
- LOS C describes conditions with average delays to motorists.
- LOS D describes operations where the influence of congestion becomes more noticeable. Delays are still within an acceptable range.
- LOS E represents operating conditions with high delay values. This level is considered by many agencies to be the limit of acceptable delay.
- LOS F is considered to be unacceptable to most drivers with high delay values that often occur, when arrival flow rates exceed the capacity of the intersection.

Signalized Intersections

Levels of service for signalized intersections are also calculated using the operational analysis methodology of the HCM. The methodology for signalized intersections assesses the effects of signal type, timing, phasing, and progression; vehicle mix; and geometrics on average *control* delay. Control delay is used to establish the operating characteristics for an intersection or an approach to an intersection. Volume-to-capacity (v/c) ratios are also used to help signify the utilization of a lane group's capacity at an intersection. A v/c ratio of ≥ 1.00 represents conditions when the traffic signal cycle capacity is fully utilized and indicates a capacity failure. The level-of-service criteria for signalized intersections are shown in Table A-1.

¹*Highway Capacity Manual, 6TH Edition: A Guide for Multimodal Mobility Analysis*. Washington, D.C.: Transportation Research Board, 2016.

Unsignalized Intersections

Levels of service for unsignalized intersections are calculated using the operational analysis methodology of the HCM. The procedure accounts for lane configuration on both the minor and major street approaches, conflicting traffic stream volumes, and the type of intersection control (STOP, YIELD, or all-way STOP control). The definition of level of service for unsignalized intersections is a function of average *control* delay. Control delay at an unsignalized intersection is defined as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line. This time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position.

Volume-to-capacity (v/c) ratios are also used to help signify the utilization of a movement's capacity at an intersection. A v/c ratio of ≥ 1.00 represents conditions when the movement is fully utilized and indicates a capacity failure. The capacity of the movements is based on the distribution of gaps in the major street traffic stream, the selection of gaps to complete the desired movement, and the follow-up headways for each driver in the queue. When an unsignalized intersection is located within 0.25 miles of a signalized intersection, traffic flows may not be random and some platoon structure may exist, thereby affecting the minor street operations. The level-of-service criteria for unsignalized intersections are shown in Table A-1.

TABLE A-1
Level-of-Service Criteria for Intersections

Level of Service	Signalized Intersection Criteria Average Control Delay (Seconds per Vehicle)	Unsignalized Intersection Criteria Average Control Delay (Seconds per Vehicle)	V/C Ratio $> 1.00^a$
A	≤ 10	≤ 10	F
B	> 10 and ≤ 20	> 10 and ≤ 15	F
C	> 20 and ≤ 35	> 15 and ≤ 25	F
D	> 35 and ≤ 55	> 25 and ≤ 35	F
E	> 55 and ≤ 80	> 35 and ≤ 50	F
F	> 80	> 50	F

Note: ^aFor approach-based and intersection-wide assessments, LOS is defined solely by control delay.

Source: *Highway Capacity Manual, 6th Edition: A Guide for Multimodal Mobility Analysis*. Washington, D.C.: Transportation Research Board, 2016. Exhibit 19-8, Pg. 19-16.

For signalized intersections, this delay criterion may be applied in assigning level-of-service designations to individual lane groups, to individual intersection approaches, or to the entire intersection. For unsignalized intersections, this delay criterion may be applied in assigning level-of-service designations to individual lane groups on the minor street approaches or to the left turns from the major street approaches.

APPENDIX C

Capacity Analysis Worksheets

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2025 Existing Conditions Weekday AM Peak Hour

	→	↖	←	↗	↘	↑	↙	↘	↓	↖	↗	↘
Lane Group	EBT	WBL2	WBT	WBR	NBL2	NBT	NBR	SBL	SBT	SBR	NEL	NER2
Lane Configurations	↕		↕		↘	↗			↕		↘	↗
Traffic Volume (vph)	0	10	0	3	63	388	2	2	498	60	79	139
Future Volume (vph)	0	10	0	3	63	388	2	2	498	60	79	139
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	9	11	12	12	11	12	12	12
Storage Length (ft)				0			0	0		0	0	
Storage Lanes				0			0	0		0	1	
Taper Length (ft)								25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.966			0.999			0.986			0.850
Flt Protected			0.964		0.950						0.950	
Satd. Flow (prot)	1863	0	1769	0	1504	1699	0	0	1741	0	1719	1538
Flt Permitted					0.378				0.999		0.950	
Satd. Flow (perm)	1863	0	1835	0	598	1699	0	0	1740	0	1719	1538
Right Turn on Red				Yes			No					Yes
Satd. Flow (RTOR)			128									151
Link Speed (mph)	25		25			40			40		30	
Link Distance (ft)	148		324			2207			498		456	
Travel Time (s)	4.0		8.8			37.6			8.5		10.4	
Peak Hour Factor	0.92	0.65	0.65	0.65	0.81	0.81	0.81	0.91	0.91	0.91	0.92	0.92
Heavy Vehicles (%)	2%	0%	0%	0%	8%	8%	8%	4%	4%	4%	5%	5%
Adj. Flow (vph)	0	15	0	5	78	479	2	2	547	66	86	151
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	20	0	78	481	0	0	615	0	86	151
Turn Type		Perm	NA		D.P+P	NA		Perm	NA		Prot	pt+ov
Protected Phases	3		3		1	12			2		4	14
Permitted Phases		3			2			2				4
Detector Phase	3	3	3		1	2		2	2		4	14
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0		5.0			20.0	20.0		9.0	
Minimum Split (s)	11.6	11.6	11.6		9.0			26.6	26.6		13.0	
Total Split (s)	15.6	15.6	15.6		13.0			48.6	48.6		24.0	
Total Split (%)	11.7%	11.7%	11.7%		9.8%			36.5%	36.5%		18.0%	
Yellow Time (s)	3.0	3.0	3.0		3.0			4.1	4.1		3.0	
All-Red Time (s)	2.6	2.6	2.6		1.0			2.5	2.5		1.0	
Lost Time Adjust (s)	0.0		0.0		0.0				0.0		0.0	
Total Lost Time (s)	5.6		5.6		4.0				6.6		4.0	
Lead/Lag	Lead	Lead	Lead		Lead			Lag	Lag		Lag	
Lead-Lag Optimize?	Yes	Yes	Yes		Yes			Yes	Yes		Yes	
Recall Mode	None	None	None		None			Min	Min		None	
Act Effct Green (s)			6.1		51.2	55.3			42.4		9.8	20.1
Actuated g/C Ratio			0.08		0.66	0.72			0.55		0.13	0.26
v/c Ratio			0.08		0.17	0.40			0.64		0.40	0.30
Control Delay			0.5		5.6	6.6			18.0		38.8	6.3
Queue Delay			0.0		0.0	0.0			0.0		0.0	0.0
Total Delay			0.5		5.6	6.6			18.0		38.8	6.3
LOS			A		A	A			B		D	A
Approach Delay			0.5			6.5			18.0		18.1	
Approach LOS			A			A			B		B	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2025 Existing Conditions Weekday AM Peak Hour

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	32.0
Total Split (s)	32.0
Total Split (%)	24%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2025 Existing Conditions Weekday AM Peak Hour

												
Lane Group	EBT	WBL2	WBT	WBR	NBL2	NBT	NBR	SBL	SBT	SBR	NEL	NER2
Queue Length 50th (ft)			0		6	51			157		36	0
Queue Length 95th (ft)			0		27	155			403		89	44
Internal Link Dist (ft)	68		244			2127			418		376	
Turn Bay Length (ft)					50							65
Base Capacity (vph)			350		524	1215			954		448	562
Starvation Cap Reductn			0		0	0			0		0	0
Spillback Cap Reductn			0		0	0			0		0	0
Storage Cap Reductn			0		0	0			0		0	0
Reduced v/c Ratio			0.06		0.15	0.40			0.64		0.19	0.27

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 77.3

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 13.3

Intersection LOS: B

Intersection Capacity Utilization 73.5%

ICU Level of Service D

Analysis Period (min) 15

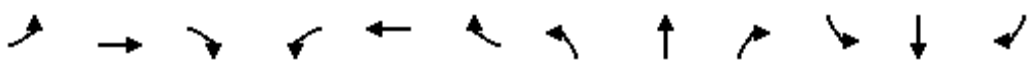
Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

 Ø1	 Ø2	 Ø9	 Ø3	 Ø4
13 s	48.6 s	32 s	15.6 s	24 s

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2025 Existing Conditions Weekday AM Peak Hour

Lane Group	Ø9
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2025 Existing Conditions Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	4	6	23	4	206	6	300	18	349	386	0
Future Volume (vph)	1	4	6	23	4	206	6	300	18	349	386	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.924				0.850			0.850			
Flt Protected		0.997			0.959			0.999		0.950		
Satd. Flow (prot)	0	1925	0	0	1560	1432	0	1747	1436	1636	1783	0
Flt Permitted		0.990			0.801			0.991		0.426		
Satd. Flow (perm)	0	1912	0	0	1303	1432	0	1733	1436	733	1783	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		9							85			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.69	0.69	0.69	0.70	0.70	0.70	0.79	0.79	0.79	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	9%	9%	9%	5%	5%	5%	3%	3%	3%
Adj. Flow (vph)	1	6	9	33	6	294	8	380	23	375	415	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	16	0	0	39	294	0	388	23	375	415	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	19.0	19.0		19.0	19.0		35.1	35.1	35.1	29.0		
Total Split (%)	16.4%	16.4%		16.4%	16.4%		30.2%	30.2%	30.2%	25.0%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		13.0			13.0	31.5		30.3	30.3	45.9	49.9	
Actuated g/C Ratio		0.18			0.18	0.44		0.43	0.43	0.65	0.70	
v/c Ratio		0.04			0.16	0.46		0.52	0.03	0.57	0.33	
Control Delay		18.9			27.9	16.0		20.0	0.1	8.2	5.1	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		18.9			27.9	16.0		20.0	0.1	8.2	5.1	
LOS		B			C	B		B	A	A	A	
Approach Delay		18.9			17.4			18.9			6.6	
Approach LOS		B			B			B			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2025 Existing Conditions Weekday AM Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	28%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2025 Existing Conditions Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			15	85		125	0	54	61	
Queue Length 95th (ft)		13			33	102		202	0	93	101	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		415			278	836		740	661	834	1253	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.04			0.14	0.35		0.52	0.03	0.45	0.33	

Intersection Summary

Area Type: Other

Cycle Length: 116.1

Actuated Cycle Length: 71

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 12.3

Intersection LOS: B

Intersection Capacity Utilization 55.5%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
29 s	35.1 s	33 s	19 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2025 Existing Conditions Weekday AM Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2025 Existing Conditions Weekday PM Peak Hour

												Ø9
Lane Group	EBT	WBL2	WBT	NBL2	NBT	NBR	SBL	SBT	SBR	NEL	NER2	Ø9
Lane Configurations	↕		↕	↗	↖			↕		↘	↗	
Traffic Volume (vph)	0	5	0	126	541	6	2	489	62	92	121	
Future Volume (vph)	0	5	0	126	541	6	2	489	62	92	121	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	9	11	12	12	11	12	12	12	
Storage Length (ft)						0	0		0	0		
Storage Lanes						0	0		0	1		
Taper Length (ft)							25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt					0.998			0.985			0.850	
Flt Protected			0.950	0.950						0.950		
Satd. Flow (prot)	1863	0	1805	1593	1797	0	0	1791	0	1770	1583	
Flt Permitted				0.383				0.999		0.950		
Satd. Flow (perm)	1863	0	1900	642	1797	0	0	1789	0	1770	1583	
Right Turn on Red						No					Yes	
Satd. Flow (RTOR)											139	
Link Speed (mph)	25		25		40			40		30		
Link Distance (ft)	148		324		2207			498		456		
Travel Time (s)	4.0		8.8		37.6			8.5		10.4		
Peak Hour Factor	0.92	0.63	0.63	0.95	0.95	0.95	0.91	0.91	0.91	0.87	0.87	
Heavy Vehicles (%)	2%	0%	0%	2%	2%	2%	1%	1%	1%	2%	2%	
Adj. Flow (vph)	0	8	0	133	569	6	2	537	68	106	139	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	8	133	575	0	0	607	0	106	139	
Turn Type		Perm	NA	D,P+P	NA		Perm	NA		Prot	pt+ov	
Protected Phases	3		3	1	1 2			2		4	14	9
Permitted Phases		3		2			2				4	
Detector Phase	3	3	3	1	2		2	2		4	14	
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	5.0			20.0	20.0		9.0	1.0	
Minimum Split (s)	11.6	11.6	11.6	9.0			26.6	26.6		13.0	32.0	
Total Split (s)	15.6	15.6	15.6	18.0			48.6	48.6		19.0	32.0	
Total Split (%)	11.7%	11.7%	11.7%	13.5%			36.5%	36.5%		14.3%	24%	
Yellow Time (s)	3.0	3.0	3.0	3.0			4.1	4.1		3.0	4.0	
All-Red Time (s)	2.6	2.6	2.6	1.0			2.5	2.5		1.0	0.0	
Lost Time Adjust (s)	0.0		0.0	0.0				0.0		0.0		
Total Lost Time (s)	5.6		5.6	4.0				6.6		4.0		
Lead/Lag	Lead	Lead	Lead	Lead			Lag	Lag		Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes		
Recall Mode	None	None	None	None			Min	Min		None	None	
Act Effct Green (s)			6.1	51.9	55.9			42.4		10.2	21.0	
Actuated g/C Ratio			0.08	0.68	0.73			0.56		0.13	0.28	
v/c Ratio			0.05	0.25	0.44			0.61		0.45	0.26	
Control Delay			37.0	5.3	6.1			16.3		38.2	5.7	
Queue Delay			0.0	0.0	0.0			0.0		0.0	0.0	
Total Delay			37.0	5.3	6.1			16.3		38.2	5.7	
LOS			D	A	A			B		D	A	
Approach Delay			37.0		6.0			16.3		19.8		
Approach LOS			D		A			B		B		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2025 Existing Conditions Weekday PM Peak Hour

												
Lane Group	EBT	WBL2	WBT	NBL2	NBT	NBR	SBL	SBT	SBR	NEL	NER2	Ø9
Queue Length 50th (ft)			3	11	64			154		45	0	
Queue Length 95th (ft)			13	51	242			418		103	37	
Internal Link Dist (ft)	68		244		2127			418		376		
Turn Bay Length (ft)				50								65
Base Capacity (vph)			252	648	1320			997		352	668	
Starvation Cap Reductn			0	0	0			0		0	0	
Spillback Cap Reductn			0	0	0			0		0	0	
Storage Cap Reductn			0	0	0			0		0	0	
Reduced v/c Ratio			0.03	0.21	0.44			0.61		0.30	0.21	

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 76.1

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 12.3

Intersection LOS: B

Intersection Capacity Utilization 87.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

 Ø1	 Ø2	 Ø9	 Ø3	 Ø4
18 s	48.6 s	32 s	15.6 s	19 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2025 Existing Conditions Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	5	16	21	3	257	11	507	13	238	396	2
Future Volume (vph)	2	5	16	21	3	257	11	507	13	238	396	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.907				0.850			0.850		0.999	
Flt Protected		0.995			0.957			0.999		0.950		
Satd. Flow (prot)	0	1886	0	0	1680	1546	0	1817	1492	1668	1817	0
Flt Permitted		0.983			0.803			0.989		0.284		
Satd. Flow (perm)	0	1863	0	0	1410	1546	0	1798	1492	499	1817	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		22							85			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.72	0.72	0.72	0.88	0.88	0.88	0.92	0.92	0.92	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	3	7	22	24	3	292	12	551	14	277	460	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	27	292	0	563	14	277	462	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	19.0	19.0		19.0	19.0		35.1	35.1	35.1	29.0		
Total Split (%)	16.4%	16.4%		16.4%	16.4%		30.2%	30.2%	30.2%	25.0%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		12.5			12.5	26.9		30.3	30.3	41.8	45.8	
Actuated g/C Ratio		0.19			0.19	0.41		0.46	0.46	0.63	0.69	
v/c Ratio		0.09			0.10	0.47		0.69	0.02	0.56	0.37	
Control Delay		14.1			24.5	16.7		21.8	0.1	9.1	5.5	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		14.1			24.5	16.7		21.8	0.1	9.1	5.5	
LOS		B			C	B		C	A	A	A	
Approach Delay		14.1			17.4			21.2			6.9	
Approach LOS		B			B			C			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2025 Existing Conditions Weekday PM Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	28%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2025 Existing Conditions Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			9	83		172	0	35	65	
Queue Length 95th (ft)		18			30	136		#387	0	63	108	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		442			321	962		820	726	788	1253	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.07			0.08	0.30		0.69	0.02	0.35	0.37	

Intersection Summary

Area Type: Other

Cycle Length: 116.1

Actuated Cycle Length: 66.4

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 14.0

Intersection LOS: B

Intersection Capacity Utilization 66.8%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
29 s	35.1 s	33 s	19 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2025 Existing Conditions Weekday PM Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2025 Existing Conditions Saturday Midday Peak Hour

												
Lane Group	EBT	WBL2	WBT	NBL2	NBT	NBR	SBL	SBT	SBR	NEL	NER2	Ø9
Lane Configurations												
Traffic Volume (vph)	0	11	0	107	484	4	1	516	51	65	99	
Future Volume (vph)	0	11	0	107	484	4	1	516	51	65	99	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	9	11	12	12	11	12	12	12	
Storage Length (ft)						0	0		0	0		
Storage Lanes						0	0		0	1		
Taper Length (ft)							25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt					0.999			0.988			0.850	
Flt Protected			0.950	0.950						0.950		
Satd. Flow (prot)	1863	0	1626	1608	1817	0	0	1797	0	1787	1599	
Flt Permitted				0.366						0.950		
Satd. Flow (perm)	1863	0	1712	620	1817	0	0	1797	0	1787	1599	
Right Turn on Red						No					Yes	
Satd. Flow (RTOR)											118	
Link Speed (mph)	25		25		40			40		30		
Link Distance (ft)	148		324		2207			498		456		
Travel Time (s)	4.0		8.8		37.6			8.5		10.4		
Peak Hour Factor	0.92	0.63	0.63	0.97	0.97	0.97	0.88	0.88	0.88	0.84	0.84	
Heavy Vehicles (%)	2%	11%	11%	1%	1%	1%	1%	1%	1%	1%	1%	
Adj. Flow (vph)	0	17	0	110	499	4	1	586	58	77	118	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	17	110	503	0	0	645	0	77	118	
Turn Type		Perm	NA	D,P+P	NA		Perm	NA		Prot	pt+ov	
Protected Phases	3		3	1	1 2			2		4	14	9
Permitted Phases		3		2			2				4	
Detector Phase	3	3	3	1	2		2	2		4	14	
Switch Phase												
Minimum Initial (s)	6.0	6.0	6.0	5.0			20.0	20.0		9.0		1.0
Minimum Split (s)	11.6	11.6	11.6	9.0			26.6	26.6		13.0		32.0
Total Split (s)	15.6	15.6	15.6	13.0			48.6	48.6		24.0		32.0
Total Split (%)	11.7%	11.7%	11.7%	9.8%			36.5%	36.5%		18.0%		24%
Yellow Time (s)	3.0	3.0	3.0	3.0			4.1	4.1		3.0		4.0
All-Red Time (s)	2.6	2.6	2.6	1.0			2.5	2.5		1.0		0.0
Lost Time Adjust (s)	0.0		0.0	0.0				0.0		0.0		
Total Lost Time (s)	5.6		5.6	4.0				6.6		4.0		
Lead/Lag	Lead	Lead	Lead	Lead			Lag	Lag		Lag		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes		
Recall Mode	None	None	None	None			Min	Min		None		None
Act Effct Green (s)			6.4	51.5	55.5			42.4		9.5	20.1	
Actuated g/C Ratio			0.08	0.68	0.74			0.56		0.13	0.27	
v/c Ratio			0.12	0.22	0.38			0.64		0.34	0.23	
Control Delay			36.5	4.9	5.4			16.6		36.4	6.3	
Queue Delay			0.0	0.0	0.0			0.0		0.0	0.0	
Total Delay			36.5	4.9	5.4			16.6		36.4	6.3	
LOS			D	A	A			B		D	A	
Approach Delay			36.5		5.3			16.6		18.2		
Approach LOS			D		A			B		B		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2025 Existing Conditions Saturday Midday Peak Hour

												Ø9
Lane Group	EBT	WBL2	WBT	NBL2	NBT	NBR	SBL	SBT	SBR	NEL	NER2	Ø9
Queue Length 50th (ft)			7	9	53			164		32	0	
Queue Length 95th (ft)			21	41	191			420		77	33	
Internal Link Dist (ft)	68		244		2127			418		376		
Turn Bay Length (ft)				50							65	
Base Capacity (vph)			229	564	1340			1010		478	562	
Starvation Cap Reductn			0	0	0			0		0	0	
Spillback Cap Reductn			0	0	0			0		0	0	
Storage Cap Reductn			0	0	0			0		0	0	
Reduced v/c Ratio			0.07	0.20	0.38			0.64		0.16	0.21	

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 75.3

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 12.3

Intersection LOS: B

Intersection Capacity Utilization 85.4%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

 Ø1	 Ø2	 Ø9	 Ø3	 Ø4
13 s	48.6 s	32 s	15.6 s	24 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2025 Existing Conditions Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕	↕	↕	↕	
Traffic Volume (vph)	1	6	10	10	4	227	5	405	10	208	445	0
Future Volume (vph)	1	6	10	10	4	227	5	405	10	208	445	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.919				0.850			0.850			
Flt Protected		0.998			0.966			0.999		0.950		
Satd. Flow (prot)	0	1917	0	0	1696	1546	0	1799	1478	1652	1801	0
Flt Permitted		0.992			0.846			0.993		0.395		
Satd. Flow (perm)	0	1905	0	0	1485	1546	0	1788	1478	687	1801	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		15							97			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.67	0.67	0.67	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1	9	15	12	5	270	6	450	11	242	517	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	17	270	0	456	11	242	517	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	14.0	14.0		14.0	14.0		30.1	30.1	30.1	24.0		
Total Split (%)	13.8%	13.8%		13.8%	13.8%		29.8%	29.8%	29.8%	23.7%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		9.4			9.4	21.4		25.1	25.1	34.2	38.2	
Actuated g/C Ratio		0.17			0.17	0.38		0.45	0.45	0.62	0.69	
v/c Ratio		0.07			0.07	0.45		0.57	0.02	0.43	0.42	
Control Delay		14.5			21.4	15.4		15.6	0.0	6.0	5.1	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		14.5			21.4	15.4		15.6	0.0	6.0	5.1	
LOS		B			C	B		B	A	A	A	
Approach Delay		14.5			15.7			15.2			5.4	
Approach LOS		B			B			B			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2025 Existing Conditions Saturday Midday Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	33%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2025 Existing Conditions Saturday MIDDAY Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			5	64		104	0	24	61	
Queue Length 95th (ft)		14			19	106		212	0	41	94	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		355			268	900		806	719	819	1236	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.07			0.06	0.30		0.57	0.02	0.30	0.42	

Intersection Summary

Area Type: Other

Cycle Length: 101.1

Actuated Cycle Length: 55.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.57

Intersection Signal Delay: 10.4

Intersection LOS: B

Intersection Capacity Utilization 61.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

 Ø1	 Ø2	 Ø3	 Ø4
24 s	30.1 s	33 s	14 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2025 Existing Conditions Saturday Midday Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Background Conditions Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	11	0	9	10	0	3	64	17	396	2	2	508
Future Volume (vph)	11	0	9	10	0	3	64	17	396	2	2	508
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	9	12	11	12	12	11
Storage Length (ft)	0		0			0		50		0	0	
Storage Lanes	0		0			0		1		0	0	
Taper Length (ft)	25							140			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.939			0.966				0.999			0.985
Flt Protected		0.973			0.964		0.950		0.998			
Satd. Flow (prot)	0	1702	0	0	1769	0	1504	0	1696	0	0	1740
Flt Permitted		0.819			0.921		0.363		0.969			0.999
Satd. Flow (perm)	0	1433	0	0	1690	0	575	0	1646	0	0	1738
Right Turn on Red						Yes				No		
Satd. Flow (RTOR)					128							
Link Speed (mph)		25			25				40			40
Link Distance (ft)		148			324				2207			498
Travel Time (s)		4.0			8.8				37.6			8.5
Peak Hour Factor	0.92	0.92	0.92	0.65	0.65	0.65	0.81	0.81	0.81	0.81	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	8%	8%	8%	8%	4%	4%
Adj. Flow (vph)	12	0	10	15	0	5	79	21	489	2	2	558
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	20	0	79	0	512	0	0	630
Turn Type	Perm	NA		Perm	NA		D,P+P	Perm	NA		Perm	NA
Protected Phases		3			3		1		1 2			2
Permitted Phases	3			3			2	1 2			2	
Detector Phase	3	3		3	3		1	1 2	2		2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		5.0				20.0	20.0
Minimum Split (s)	11.6	11.6		11.6	11.6		9.0				26.6	26.6
Total Split (s)	15.6	15.6		15.6	15.6		13.0				48.6	48.6
Total Split (%)	11.7%	11.7%		11.7%	11.7%		9.8%				36.5%	36.5%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0				4.1	4.1
All-Red Time (s)	2.6	2.6		2.6	2.6		1.0				2.5	2.5
Lost Time Adjust (s)		0.0			0.0		0.0					0.0
Total Lost Time (s)		5.6			5.6		4.0					6.6
Lead/Lag	Lead	Lead		Lead	Lead		Lead				Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes				Yes	Yes
Recall Mode	None	None		None	None		None				Min	Min
Act Effct Green (s)		6.5			6.5		51.4		55.5			42.5
Actuated g/C Ratio		0.08			0.08		0.64		0.69			0.53
v/c Ratio		0.19			0.08		0.18		0.45			0.69
Control Delay		41.8			0.6		6.7		8.5			21.1
Queue Delay		0.0			0.0		0.0		0.0			0.0
Total Delay		41.8			0.6		6.7		8.5			21.1
LOS		D			A		A		A			C
Approach Delay		41.8			0.6				8.2			21.1
Approach LOS		D			A				A			C

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Background Conditions Weekday AM Peak Hour

					
Lane Group	SBR	SBR2	NEL	NER2	Ø9
Lane Configurations					
Traffic Volume (vph)	61	3	81	142	
Future Volume (vph)	61	3	81	142	
Ideal Flow (vphpl)	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	
Storage Length (ft)	0		0		
Storage Lanes	0		1		
Taper Length (ft)			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	
Frt				0.850	
Flt Protected			0.950		
Satd. Flow (prot)	0	0	1719	1538	
Flt Permitted			0.950		
Satd. Flow (perm)	0	0	1719	1538	
Right Turn on Red		No		Yes	
Satd. Flow (RTOR)				154	
Link Speed (mph)			30		
Link Distance (ft)			456		
Travel Time (s)			10.4		
Peak Hour Factor	0.91	0.91	0.92	0.92	
Heavy Vehicles (%)	4%	4%	5%	5%	
Adj. Flow (vph)	67	3	88	154	
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	0	88	154	
Turn Type			Prot	pt+ov	
Protected Phases			4	1 4	9
Permitted Phases				4	
Detector Phase			4	1 4	
Switch Phase					
Minimum Initial (s)			9.0	1.0	
Minimum Split (s)			13.0	32.0	
Total Split (s)			24.0	32.0	
Total Split (%)			18.0%	24%	
Yellow Time (s)			3.0	4.0	
All-Red Time (s)			1.0	0.0	
Lost Time Adjust (s)			0.0		
Total Lost Time (s)			4.0		
Lead/Lag			Lag		
Lead-Lag Optimize?			Yes		
Recall Mode			None	None	
Act Effct Green (s)			9.9	20.3	
Actuated g/C Ratio			0.12	0.25	
v/c Ratio			0.42	0.31	
Control Delay			41.2	6.4	
Queue Delay			0.0	0.0	
Total Delay			41.2	6.4	
LOS			D	A	
Approach Delay			19.1		
Approach LOS			B		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Background Conditions Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT
Queue Length 50th (ft)		11			0		13		117			243
Queue Length 95th (ft)		36			0		30		185			443
Internal Link Dist (ft)		68			244				2127			418
Turn Bay Length (ft)							50					
Base Capacity (vph)		180			324		492		1135			918
Starvation Cap Reductn		0			0		0		0			0
Spillback Cap Reductn		0			0		0		0			0
Storage Cap Reductn		0			0		0		0			0
Reduced v/c Ratio		0.12			0.06		0.16		0.45			0.69

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 80.4

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 15.8

Intersection LOS: B

Intersection Capacity Utilization 74.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

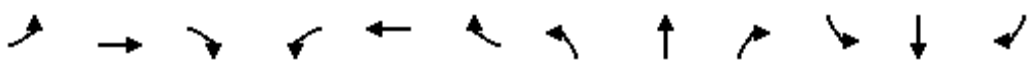
					
Ø1	Ø2	Ø9	Ø3	Ø4	
13 s	48.6 s	32 s	15.6 s	24 s	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Background Conditions Weekday AM Peak Hour



Lane Group	SBR	SBR2	NEL	NER2	Ø9
Queue Length 50th (ft)			44	0	
Queue Length 95th (ft)			93	45	
Internal Link Dist (ft)			376		
Turn Bay Length (ft)				65	
Base Capacity (vph)			432	551	
Starvation Cap Reductn			0	0	
Spillback Cap Reductn			0	0	
Storage Cap Reductn			0	0	
Reduced v/c Ratio			0.20	0.28	
Intersection Summary					

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Background Conditions Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗		↕	↗	↗	↗	
Traffic Volume (vph)	1	4	6	23	4	210	6	306	18	356	394	0
Future Volume (vph)	1	4	6	23	4	210	6	306	18	356	394	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.924				0.850			0.850			
Flt Protected		0.997			0.959			0.999		0.950		
Satd. Flow (prot)	0	1925	0	0	1560	1432	0	1747	1436	1636	1783	0
Flt Permitted		0.990			0.800			0.991		0.411		
Satd. Flow (perm)	0	1912	0	0	1302	1432	0	1733	1436	708	1783	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		9							85			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.69	0.69	0.69	0.70	0.70	0.70	0.79	0.79	0.79	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	9%	9%	9%	5%	5%	5%	3%	3%	3%
Adj. Flow (vph)	1	6	9	33	6	300	8	387	23	383	424	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	16	0	0	39	300	0	395	23	383	424	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	19.0	19.0		19.0	19.0		35.1	35.1	35.1	29.0		
Total Split (%)	16.4%	16.4%		16.4%	16.4%		30.2%	30.2%	30.2%	25.0%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		13.1			13.1	33.1		30.3	30.3	47.4	51.4	
Actuated g/C Ratio		0.18			0.18	0.46		0.42	0.42	0.65	0.71	
v/c Ratio		0.05			0.17	0.46		0.55	0.04	0.58	0.34	
Control Delay		19.2			28.6	15.7		21.2	0.1	8.2	5.1	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		19.2			28.6	15.7		21.2	0.1	8.2	5.1	
LOS		B			C	B		C	A	A	A	
Approach Delay		19.2			17.2			20.1			6.6	
Approach LOS		B			B			C			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Background Conditions Weekday AM Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	28%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Background Conditions Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			15	87		135	0	57	63	
Queue Length 95th (ft)		14			33	104		211	0	95	103	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		406			271	818		723	648	820	1262	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.04			0.14	0.37		0.55	0.04	0.47	0.34	

Intersection Summary

Area Type: Other

Cycle Length: 116.1

Actuated Cycle Length: 72.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 12.5

Intersection LOS: B

Intersection Capacity Utilization 56.2%

ICU Level of Service B

Analysis Period (min) 15

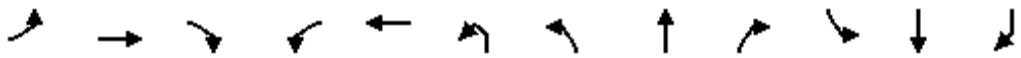
Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
29 s	35.1 s	33 s	19 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Background Conditions Weekday AM Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Background Conditions Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	0	10	5	0	129	19	552	6	2	499	63
Future Volume (vph)	13	0	10	5	0	129	19	552	6	2	499	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	9	12	11	12	12	11	12
Storage Length (ft)	0		0				50		0	0		0
Storage Lanes	0		0				1		0	0		0
Taper Length (ft)	25						140			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.941						0.999			0.984	
Flt Protected		0.973			0.950	0.950		0.998				
Satd. Flow (prot)	0	1706	0	0	1805	1593	0	1795	0	0	1789	0
Flt Permitted		0.822				0.358		0.976			0.999	
Satd. Flow (perm)	0	1441	0	0	1900	600	0	1756	0	0	1788	0
Right Turn on Red									No			
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		148			324			2207			498	
Travel Time (s)		4.0			8.8			37.6			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.63	0.63	0.95	0.95	0.95	0.95	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	14	0	11	8	0	136	20	581	6	2	548	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	8	136	0	607	0	0	623	0
Turn Type	Perm	NA		Perm	NA	D.P+P	Perm	NA		Perm	NA	
Protected Phases		3			3	1		1 2			2	
Permitted Phases	3			3		2	1 2			2		
Detector Phase	3	3		3	3	1	1 2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	5.0				20.0	20.0	
Minimum Split (s)	11.6	11.6		11.6	11.6	9.0				26.6	26.6	
Total Split (s)	15.6	15.6		15.6	15.6	18.0				48.6	48.6	
Total Split (%)	11.7%	11.7%		11.7%	11.7%	13.5%				36.5%	36.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				4.1	4.1	
All-Red Time (s)	2.6	2.6		2.6	2.6	1.0				2.5	2.5	
Lost Time Adjust (s)		0.0			0.0	0.0					0.0	
Total Lost Time (s)		5.6			5.6	4.0					6.6	
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes				Yes	Yes	
Recall Mode	None	None		None	None	None				Min	Min	
Act Effct Green (s)		6.7			6.7	52.7		56.8			42.6	
Actuated g/C Ratio		0.08			0.08	0.64		0.69			0.52	
v/c Ratio		0.22			0.05	0.29		0.50			0.67	
Control Delay		43.8			39.8	7.7		9.5			22.1	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		43.8			39.8	7.7		9.5			22.1	
LOS		D			D	A		A			C	
Approach Delay		43.8			39.8			9.1			22.1	
Approach LOS		D			D			A			C	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Background Conditions Weekday PM Peak Hour

				
Lane Group	SBR2	NEL	NER2	Ø9
Lane Configurations				
Traffic Volume (vph)	4	94	123	
Future Volume (vph)	4	94	123	
Ideal Flow (vphpl)	1900	1900	1900	
Lane Width (ft)	12	12	12	
Storage Length (ft)		0		
Storage Lanes		1		
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	
Frt			0.850	
Flt Protected		0.950		
Satd. Flow (prot)	0	1770	1583	
Flt Permitted		0.950		
Satd. Flow (perm)	0	1770	1583	
Right Turn on Red	No		Yes	
Satd. Flow (RTOR)			141	
Link Speed (mph)		30		
Link Distance (ft)		456		
Travel Time (s)		10.4		
Peak Hour Factor	0.91	0.87	0.87	
Heavy Vehicles (%)	1%	2%	2%	
Adj. Flow (vph)	4	108	141	
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	108	141	
Turn Type		Prot	pt+ov	
Protected Phases		4	1 4	9
Permitted Phases			4	
Detector Phase		4	1 4	
Switch Phase				
Minimum Initial (s)		9.0	1.0	
Minimum Split (s)		13.0	32.0	
Total Split (s)		19.0	32.0	
Total Split (%)		14.3%	24%	
Yellow Time (s)		3.0	4.0	
All-Red Time (s)		1.0	0.0	
Lost Time Adjust (s)		0.0		
Total Lost Time (s)		4.0		
Lead/Lag		Lag		
Lead-Lag Optimize?		Yes		
Recall Mode		None	None	
Act Effct Green (s)		10.7	22.2	
Actuated g/C Ratio		0.13	0.27	
v/c Ratio		0.47	0.27	
Control Delay		42.7	6.1	
Queue Delay		0.0	0.0	
Total Delay		42.7	6.1	
LOS		D	A	
Approach Delay		22.0		
Approach LOS		C		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Background Conditions Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		13			4	24		151			250	
Queue Length 95th (ft)		40			13	56		288			#465	
Internal Link Dist (ft)		68			244			2127			418	
Turn Bay Length (ft)						50						
Base Capacity (vph)		177			233	582		1207			923	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.14			0.03	0.23		0.50			0.67	

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 82.6

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 16.7

Intersection LOS: B

Intersection Capacity Utilization 90.2%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

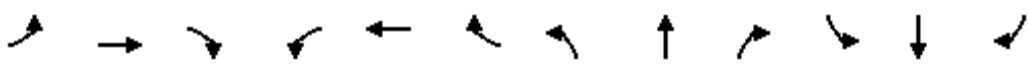
				
Ø1	Ø2	Ø9	Ø3	Ø4
18 s	48.6 s	32 s	15.6 s	19 s

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Background Conditions Weekday PM Peak Hour



Lane Group	SBR2	NEL	NER2	Ø9
Queue Length 50th (ft)		56	0	
Queue Length 95th (ft)		108	38	
Internal Link Dist (ft)		376		
Turn Bay Length (ft)			65	
Base Capacity (vph)		326	634	
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.33	0.22	
Intersection Summary				

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Background Conditions Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	5	16	21	3	262	11	517	13	243	404	2
Future Volume (vph)	2	5	16	21	3	262	11	517	13	243	404	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.907				0.850			0.850		0.999	
Flt Protected		0.995			0.957			0.999		0.950		
Satd. Flow (prot)	0	1886	0	0	1680	1546	0	1817	1492	1668	1817	0
Flt Permitted		0.983			0.803			0.989		0.272		
Satd. Flow (perm)	0	1863	0	0	1410	1546	0	1798	1492	478	1817	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		22							85			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.72	0.72	0.72	0.88	0.88	0.88	0.92	0.92	0.92	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	3	7	22	24	3	298	12	562	14	283	470	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	27	298	0	574	14	283	472	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	19.0	19.0		19.0	19.0		35.1	35.1	35.1	29.0		
Total Split (%)	16.4%	16.4%		16.4%	16.4%		30.2%	30.2%	30.2%	25.0%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		12.6			12.6	27.3		30.3	30.3	42.1	46.1	
Actuated g/C Ratio		0.19			0.19	0.41		0.45	0.45	0.63	0.69	
v/c Ratio		0.09			0.10	0.47		0.70	0.02	0.58	0.38	
Control Delay		14.2			24.8	16.7		22.7	0.1	9.7	5.6	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		14.2			24.8	16.7		22.7	0.1	9.7	5.6	
LOS		B			C	B		C	A	A	A	
Approach Delay		14.2			17.4			22.2			7.1	
Approach LOS		B			B			C			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Background Conditions Weekday PM Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	28%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Background Conditions Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			9	85		180	0	36	68	
Queue Length 95th (ft)		18			31	139		#402	0	64	111	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		439			319	957		815	723	779	1253	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.07			0.08	0.31		0.70	0.02	0.36	0.38	

Intersection Summary

Area Type: Other

Cycle Length: 116.1

Actuated Cycle Length: 66.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 14.4

Intersection LOS: B

Intersection Capacity Utilization 67.8%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

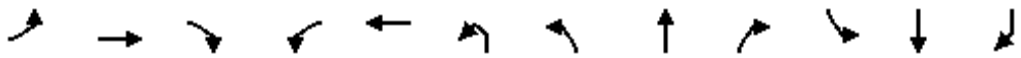
Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
29 s	35.1 s	33 s	19 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Background Conditions Weekday PM Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Background Conditions Sturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	0	9	11	0	109	17	494	4	1	526	52
Future Volume (vph)	11	0	9	11	0	109	17	494	4	1	526	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	9	12	11	12	12	11	12
Storage Length (ft)	0		0				50		0	0		0
Storage Lanes	0		0				1		0	0		0
Taper Length (ft)	25						140			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.939						0.999			0.987	
Flt Protected		0.973			0.950	0.950		0.998				
Satd. Flow (prot)	0	1702	0	0	1626	1608	0	1813	0	0	1795	0
Flt Permitted		0.821				0.347		0.975				
Satd. Flow (perm)	0	1436	0	0	1712	587	0	1771	0	0	1795	0
Right Turn on Red									No			
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		148			324			2207			498	
Travel Time (s)		4.0			8.8			37.6			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.63	0.63	0.97	0.97	0.97	0.97	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	11%	11%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	12	0	10	17	0	112	18	509	4	1	598	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	17	112	0	531	0	0	661	0
Turn Type	Perm	NA		Perm	NA	D.P+P	Perm	NA		Perm	NA	
Protected Phases		3			3	1		1 2			2	
Permitted Phases	3			3		2	1 2			2		
Detector Phase	3	3		3	3	1	1 2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	5.0				20.0	20.0	
Minimum Split (s)	11.6	11.6		11.6	11.6	9.0				26.6	26.6	
Total Split (s)	15.6	15.6		15.6	15.6	13.0				48.6	48.6	
Total Split (%)	11.7%	11.7%		11.7%	11.7%	9.8%				36.5%	36.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				4.1	4.1	
All-Red Time (s)	2.6	2.6		2.6	2.6	1.0				2.5	2.5	
Lost Time Adjust (s)		0.0			0.0	0.0					0.0	
Total Lost Time (s)		5.6			5.6	4.0					6.6	
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes				Yes	Yes	
Recall Mode	None	None		None	None	None				Min	Min	
Act Effct Green (s)		6.5			6.5	51.8		55.8			42.4	
Actuated g/C Ratio		0.08			0.08	0.64		0.69			0.53	
v/c Ratio		0.19			0.12	0.24		0.43			0.70	
Control Delay		41.7			39.6	6.8		7.8			21.3	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		41.7			39.6	6.8		7.8			21.3	
LOS		D			D	A		A			C	
Approach Delay		41.7			39.6			7.6			21.3	
Approach LOS		D			D			A			C	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Background Conditions Sturday Midday Peak Hour

				
Lane Group	SBR2	NEL	NER2	Ø9
Lane Configurations				
Traffic Volume (vph)	3	66	101	
Future Volume (vph)	3	66	101	
Ideal Flow (vphpl)	1900	1900	1900	
Lane Width (ft)	12	12	12	
Storage Length (ft)		0		
Storage Lanes		1		
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	
Frt			0.850	
Flt Protected		0.950		
Satd. Flow (prot)	0	1787	1599	
Flt Permitted		0.950		
Satd. Flow (perm)	0	1787	1599	
Right Turn on Red	No		Yes	
Satd. Flow (RTOR)			120	
Link Speed (mph)		30		
Link Distance (ft)		456		
Travel Time (s)		10.4		
Peak Hour Factor	0.88	0.84	0.84	
Heavy Vehicles (%)	1%	1%	1%	
Adj. Flow (vph)	3	79	120	
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	79	120	
Turn Type		Prot	pt+ov	
Protected Phases		4	1 4	9
Permitted Phases			4	
Detector Phase		4	1 4	
Switch Phase				
Minimum Initial (s)		9.0		1.0
Minimum Split (s)		13.0		32.0
Total Split (s)		24.0		32.0
Total Split (%)		18.0%		24%
Yellow Time (s)		3.0		4.0
All-Red Time (s)		1.0		0.0
Lost Time Adjust (s)		0.0		
Total Lost Time (s)		4.0		
Lead/Lag		Lag		
Lead-Lag Optimize?		Yes		
Recall Mode		None		None
Act Effct Green (s)		9.6	20.4	
Actuated g/C Ratio		0.12	0.25	
v/c Ratio		0.37	0.24	
Control Delay		40.5	6.6	
Queue Delay		0.0	0.0	
Total Delay		40.5	6.6	
LOS		D	A	
Approach Delay		20.1		
Approach LOS		C		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Background Conditions Sturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		11			9	19		119			262	
Queue Length 95th (ft)		36			21	43		212			442	
Internal Link Dist (ft)		68			244			2127			418	
Turn Bay Length (ft)						50						
Base Capacity (vph)		180			215	510		1229			947	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.12			0.08	0.22		0.43			0.70	

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 80.4

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 15.9

Intersection LOS: B

Intersection Capacity Utilization 87.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

				
Ø1	Ø2	Ø9	Ø3	Ø4
13 s	48.6 s	32 s	15.6 s	24 s

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Background Conditions Sturday Midday Peak Hour



Lane Group	SBR2	NEL	NER2	Ø9
Queue Length 50th (ft)		40	0	
Queue Length 95th (ft)		80	34	
Internal Link Dist (ft)		376		
Turn Bay Length (ft)			65	
Base Capacity (vph)		449	538	
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.18	0.22	
Intersection Summary				

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Background Conditions Sturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	6	10	10	4	232	5	413	10	212	454	0
Future Volume (vph)	1	6	10	10	4	232	5	413	10	212	454	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.919				0.850			0.850			
Flt Protected		0.998			0.966			0.999		0.950		
Satd. Flow (prot)	0	1917	0	0	1696	1546	0	1799	1478	1652	1801	0
Flt Permitted		0.992			0.846			0.993		0.385		
Satd. Flow (perm)	0	1905	0	0	1485	1546	0	1788	1478	669	1801	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		15							97			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.67	0.67	0.67	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1	9	15	12	5	276	6	459	11	247	528	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	17	276	0	465	11	247	528	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	14.0	14.0		14.0	14.0		30.1	30.1	30.1	24.0		
Total Split (%)	13.8%	13.8%		13.8%	13.8%		29.8%	29.8%	29.8%	23.7%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		9.5			9.5	21.7		25.1	25.1	34.4	38.4	
Actuated g/C Ratio		0.17			0.17	0.39		0.45	0.45	0.62	0.69	
v/c Ratio		0.07			0.07	0.46		0.58	0.02	0.45	0.43	
Control Delay		14.5			21.6	15.4		16.0	0.0	6.2	5.2	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		14.5			21.6	15.4		16.0	0.0	6.2	5.2	
LOS		B			C	B		B	A	A	A	
Approach Delay		14.5			15.8			15.6			5.5	
Approach LOS		B			B			B			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Background Conditions Sturday Midday Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	33%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Background Conditions Sturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			5	66		108	0	24	62	
Queue Length 95th (ft)		14			19	108		220	0	42	97	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		354			266	897		803	717	813	1237	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.07			0.06	0.31		0.58	0.02	0.30	0.43	

Intersection Summary

Area Type: Other

Cycle Length: 101.1

Actuated Cycle Length: 55.9

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 10.6

Intersection LOS: B

Intersection Capacity Utilization 62.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
24 s	30.1 s	33 s	14 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Background Conditions Sturday Midday Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	11	0	9	10	0	3	65	17	403	2	2	540
Future Volume (vph)	11	0	9	10	0	3	65	17	403	2	2	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	9	12	11	12	12	11
Storage Length (ft)	0		0			0		50		0	0	
Storage Lanes	0		0			0		1		0	0	
Taper Length (ft)	25							140			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.939			0.966				0.999			0.986
Flt Protected		0.973			0.964		0.950		0.998			
Satd. Flow (prot)	0	1702	0	0	1769	0	1504	0	1696	0	0	1741
Flt Permitted		0.819			0.921		0.345		0.968			0.999
Satd. Flow (perm)	0	1433	0	0	1690	0	546	0	1645	0	0	1740
Right Turn on Red						Yes				No		
Satd. Flow (RTOR)					128							
Link Speed (mph)		25			25				40			40
Link Distance (ft)		148			324				2207			498
Travel Time (s)		4.0			8.8				37.6			8.5
Peak Hour Factor	0.92	0.92	0.92	0.65	0.65	0.65	0.81	0.81	0.81	0.81	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	8%	8%	8%	8%	4%	4%
Adj. Flow (vph)	12	0	10	15	0	5	80	21	498	2	2	593
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	20	0	80	0	521	0	0	665
Turn Type	Perm	NA		Perm	NA		D.P+P	Perm	NA		Perm	NA
Protected Phases		3			3		1		1 2			2
Permitted Phases	3			3			2	1 2			2	
Detector Phase	3	3		3	3		1	1 2	2		2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		5.0				20.0	20.0
Minimum Split (s)	11.6	11.6		11.6	11.6		9.0				26.6	26.6
Total Split (s)	15.6	15.6		15.6	15.6		13.0				48.6	48.6
Total Split (%)	11.7%	11.7%		11.7%	11.7%		9.8%				36.5%	36.5%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0				4.1	4.1
All-Red Time (s)	2.6	2.6		2.6	2.6		1.0				2.5	2.5
Lost Time Adjust (s)		0.0			0.0		0.0					0.0
Total Lost Time (s)		5.6			5.6		4.0					6.6
Lead/Lag	Lead	Lead		Lead	Lead		Lead				Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes				Yes	Yes
Recall Mode	None	None		None	None		None				Min	Min
Act Effct Green (s)		6.5			6.5		51.4		55.5			42.5
Actuated g/C Ratio		0.08			0.08		0.64		0.69			0.53
v/c Ratio		0.19			0.08		0.19		0.46			0.72
Control Delay		41.8			0.6		6.8		8.5			22.6
Queue Delay		0.0			0.0		0.0		0.0			0.0
Total Delay		41.8			0.6		6.8		8.5			22.6
LOS		D			A		A		A			C
Approach Delay		41.8			0.6				8.3			22.6
Approach LOS		D			A				A			C

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour



Lane Group	SBR	SBR2	NEL	NER2	Ø9
Lane Configurations					
Traffic Volume (vph)	61	3	81	146	
Future Volume (vph)	61	3	81	146	
Ideal Flow (vphpl)	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	
Storage Length (ft)	0		0		
Storage Lanes	0		1		
Taper Length (ft)			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	
Frt				0.850	
Flt Protected			0.950		
Satd. Flow (prot)	0	0	1719	1538	
Flt Permitted			0.950		
Satd. Flow (perm)	0	0	1719	1538	
Right Turn on Red		No		Yes	
Satd. Flow (RTOR)				159	
Link Speed (mph)			30		
Link Distance (ft)			456		
Travel Time (s)			10.4		
Peak Hour Factor	0.91	0.91	0.92	0.92	
Heavy Vehicles (%)	4%	4%	5%	5%	
Adj. Flow (vph)	67	3	88	159	
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	0	88	159	
Turn Type			Prot	pt+ov	
Protected Phases			4	14	9
Permitted Phases				4	
Detector Phase			4	14	
Switch Phase					
Minimum Initial (s)			9.0	1.0	
Minimum Split (s)			13.0	32.0	
Total Split (s)			24.0	32.0	
Total Split (%)			18.0%	24%	
Yellow Time (s)			3.0	4.0	
All-Red Time (s)			1.0	0.0	
Lost Time Adjust (s)			0.0		
Total Lost Time (s)			4.0		
Lead/Lag			Lag		
Lead-Lag Optimize?			Yes		
Recall Mode			None	None	
Act Effct Green (s)			9.9	20.3	
Actuated g/C Ratio			0.12	0.25	
v/c Ratio			0.42	0.31	
Control Delay			41.2	6.4	
Queue Delay			0.0	0.0	
Total Delay			41.2	6.4	
LOS			D	A	
Approach Delay			18.8		
Approach LOS			B		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT
Queue Length 50th (ft)		11			0		13		120			265
Queue Length 95th (ft)		36			0		30		190			#529
Internal Link Dist (ft)		68			244				2127			418
Turn Bay Length (ft)							50					
Base Capacity (vph)		180			324		476		1135			919
Starvation Cap Reductn		0			0		0		0			0
Spillback Cap Reductn		0			0		0		0			0
Storage Cap Reductn		0			0		0		0			0
Reduced v/c Ratio		0.12			0.06		0.17		0.46			0.72

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 80.4

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 16.5

Intersection LOS: B

Intersection Capacity Utilization 75.3%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

				
Ø1	Ø2	Ø9	Ø3	Ø4
13 s	48.6 s	32 s	15.6 s	24 s

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour



Lane Group	SBR	SBR2	NEL	NER2	Ø9
Queue Length 50th (ft)			44	0	
Queue Length 95th (ft)			93	45	
Internal Link Dist (ft)			376		
Turn Bay Length (ft)				65	
Base Capacity (vph)			432	554	
Starvation Cap Reductn			0	0	
Spillback Cap Reductn			0	0	
Storage Cap Reductn			0	0	
Reduced v/c Ratio			0.20	0.29	
Intersection Summary					

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕	↕	↕	↕	
Traffic Volume (vph)	1	4	6	23	4	230	6	331	18	360	399	0
Future Volume (vph)	1	4	6	23	4	230	6	331	18	360	399	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.924				0.850			0.850			
Flt Protected		0.997			0.959			0.999		0.950		
Satd. Flow (prot)	0	1925	0	0	1560	1432	0	1747	1436	1636	1783	0
Flt Permitted		0.990			0.801			0.991		0.354		
Satd. Flow (perm)	0	1912	0	0	1303	1432	0	1733	1436	609	1783	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		9							85			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.69	0.69	0.69	0.70	0.70	0.70	0.79	0.79	0.79	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	9%	9%	9%	5%	5%	5%	3%	3%	3%
Adj. Flow (vph)	1	6	9	33	6	329	8	419	23	387	429	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	16	0	0	39	329	0	427	23	387	429	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	19.0	19.0		19.0	19.0		35.1	35.1	35.1	29.0		
Total Split (%)	16.4%	16.4%		16.4%	16.4%		30.2%	30.2%	30.2%	25.0%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		13.7			13.7	37.3		30.2	30.2	51.0	55.0	
Actuated g/C Ratio		0.18			0.18	0.49		0.39	0.39	0.66	0.72	
v/c Ratio		0.05			0.17	0.47		0.63	0.04	0.58	0.34	
Control Delay		20.1			30.0	15.4		25.1	0.1	8.5	5.0	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		20.1			30.0	15.4		25.1	0.1	8.5	5.0	
LOS		C			C	B		C	A	A	A	
Approach Delay		20.1			16.9			23.8			6.7	
Approach LOS		C			B			C			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	28%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			16	98		169	0	60	67	
Queue Length 95th (ft)		14			34	114		239	0	96	104	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		383			256	791		682	617	764	1278	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.04			0.15	0.42		0.63	0.04	0.51	0.34	

Intersection Summary

Area Type: Other

Cycle Length: 116.1

Actuated Cycle Length: 76.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 13.8

Intersection LOS: B

Intersection Capacity Utilization 57.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
29 s	35.1 s	33 s	19 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	7	7	509	33	24	709
Future Volume (vph)	7	7	509	33	24	709
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	50		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.992			
Flt Protected	0.950					0.998
Satd. Flow (prot)	1787	1599	1739	0	0	1748
Flt Permitted	0.950					0.998
Satd. Flow (perm)	1787	1599	1739	0	0	1748
Link Speed (mph)	25		40			40
Link Distance (ft)	221		227			2207
Travel Time (s)	6.0		3.9			37.6
Peak Hour Factor	0.80	0.80	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	5%	1%	1%	5%
Adj. Flow (vph)	9	9	536	35	25	746
Shared Lane Traffic (%)						
Lane Group Flow (vph)	9	9	571	0	0	771
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	66.7%			ICU Level of Service C		
Analysis Period (min)	15					

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	7	509	33	24	709
Future Vol, veh/h	7	7	509	33	24	709
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	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	95	95	95	95
Heavy Vehicles, %	1	1	5	1	1	5
Mvmt Flow	9	9	536	35	25	746
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1350	554	0	0	571	0
Stage 1	554	-	-	-	-	-
Stage 2	796	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	167	534	-	-	1007	-
Stage 1	577	-	-	-	-	-
Stage 2	446	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	160	534	-	-	1007	-
Mov Cap-2 Maneuver	160	-	-	-	-	-
Stage 1	577	-	-	-	-	-
Stage 2	427	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	20.4	0		0.3		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	160	534	1007	-
HCM Lane V/C Ratio	-	-	0.055	0.016	0.025	-
HCM Control Delay (s)	-	-	28.8	11.9	8.7	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0.1	-

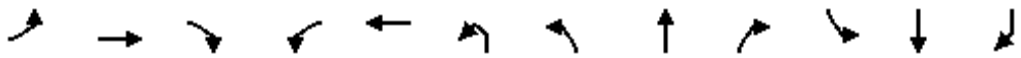
202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	2	1	541	12	12	704
Future Volume (vph)	2	1	541	12	12	704
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.966		0.997			
Flt Protected	0.964					0.999
Satd. Flow (prot)	1752	0	1745	0	0	1749
Flt Permitted	0.964					0.999
Satd. Flow (perm)	1752	0	1745	0	0	1749
Link Speed (mph)	25		40			40
Link Distance (ft)	213		479			227
Travel Time (s)	5.8		8.2			3.9
Peak Hour Factor	0.80	0.80	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	5%	1%	1%	5%
Adj. Flow (vph)	3	1	569	13	13	741
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4	0	582	0	0	754
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	56.7%			ICU Level of Service B		
Analysis Period (min)	15					

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 1 Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	1	541	12	12	704
Future Vol, veh/h	2	1	541	12	12	704
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	95	95	95	95
Heavy Vehicles, %	1	1	5	1	1	5
Mvmt Flow	3	1	569	13	13	741
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1343	576	0	0	582	0
Stage 1	576	-	-	-	-	-
Stage 2	767	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	168	519	-	-	997	-
Stage 1	564	-	-	-	-	-
Stage 2	460	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	164	519	-	-	997	-
Mov Cap-2 Maneuver	164	-	-	-	-	-
Stage 1	564	-	-	-	-	-
Stage 2	450	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	22.3	0		0.1		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	212	997	-	
HCM Lane V/C Ratio	-	-	0.018	0.013	-	
HCM Control Delay (s)	-	-	22.3	8.7	0	
HCM Lane LOS	-	-	C	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	0	10	5	0	133	19	581	6	2	519	63
Future Volume (vph)	13	0	10	5	0	133	19	581	6	2	519	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	9	12	11	12	12	11	12
Storage Length (ft)	0		0				50		0	0		0
Storage Lanes	0		0				1		0	0		0
Taper Length (ft)	25						140			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.941						0.999			0.985	
Flt Protected		0.973			0.950	0.950		0.998				
Satd. Flow (prot)	0	1706	0	0	1805	1593	0	1795	0	0	1791	0
Flt Permitted		0.822				0.347		0.976			0.999	
Satd. Flow (perm)	0	1441	0	0	1900	582	0	1756	0	0	1789	0
Right Turn on Red									No			
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		148			324			2207			498	
Travel Time (s)		4.0			8.8			37.6			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.63	0.63	0.95	0.95	0.95	0.95	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	14	0	11	8	0	140	20	612	6	2	570	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	8	140	0	638	0	0	645	0
Turn Type	Perm	NA		Perm	NA	D.P+P	Perm	NA		Perm	NA	
Protected Phases		3			3	1		1 2			2	
Permitted Phases	3			3		2	1 2			2		
Detector Phase	3	3		3	3	1	1 2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	5.0				20.0	20.0	
Minimum Split (s)	11.6	11.6		11.6	11.6	9.0				26.6	26.6	
Total Split (s)	15.6	15.6		15.6	15.6	18.0				48.6	48.6	
Total Split (%)	11.7%	11.7%		11.7%	11.7%	13.5%				36.5%	36.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				4.1	4.1	
All-Red Time (s)	2.6	2.6		2.6	2.6	1.0				2.5	2.5	
Lost Time Adjust (s)		0.0			0.0	0.0					0.0	
Total Lost Time (s)		5.6			5.6	4.0					6.6	
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes				Yes	Yes	
Recall Mode	None	None		None	None	None				Min	Min	
Act Effct Green (s)		6.7			6.7	52.8		56.9			42.6	
Actuated g/C Ratio		0.08			0.08	0.64		0.69			0.52	
v/c Ratio		0.22			0.05	0.30		0.53			0.70	
Control Delay		43.9			40.0	7.8		9.9			23.1	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		43.9			40.0	7.8		9.9			23.1	
LOS		D			D	A		A			C	
Approach Delay		43.9			40.0			9.5			23.1	
Approach LOS		D			D			A			C	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour



Lane Group	SBR2	NEL	NER2	Ø9
Lane Configurations				
Traffic Volume (vph)	4	94	126	
Future Volume (vph)	4	94	126	
Ideal Flow (vphpl)	1900	1900	1900	
Lane Width (ft)	12	12	12	
Storage Length (ft)		0		
Storage Lanes		1		
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	
Frt			0.850	
Flt Protected		0.950		
Satd. Flow (prot)	0	1770	1583	
Flt Permitted		0.950		
Satd. Flow (perm)	0	1770	1583	
Right Turn on Red	No		Yes	
Satd. Flow (RTOR)			145	
Link Speed (mph)		30		
Link Distance (ft)		456		
Travel Time (s)		10.4		
Peak Hour Factor	0.91	0.87	0.87	
Heavy Vehicles (%)	1%	2%	2%	
Adj. Flow (vph)	4	108	145	
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	108	145	
Turn Type		Prot	pt+ov	
Protected Phases		4	1 4	9
Permitted Phases			4	
Detector Phase		4	1 4	
Switch Phase				
Minimum Initial (s)		9.0		1.0
Minimum Split (s)		13.0		32.0
Total Split (s)		19.0		32.0
Total Split (%)		14.3%		24%
Yellow Time (s)		3.0		4.0
All-Red Time (s)		1.0		0.0
Lost Time Adjust (s)		0.0		
Total Lost Time (s)		4.0		
Lead/Lag		Lag		
Lead-Lag Optimize?		Yes		
Recall Mode		None		None
Act Effct Green (s)		10.7	22.3	
Actuated g/C Ratio		0.13	0.27	
v/c Ratio		0.47	0.27	
Control Delay		42.9	6.0	
Queue Delay		0.0	0.0	
Total Delay		42.9	6.0	
LOS		D	A	
Approach Delay		21.7		
Approach LOS		C		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		13			4	25		163			264	
Queue Length 95th (ft)		40			13	58		312			#532	
Internal Link Dist (ft)		68			244			2127			418	
Turn Bay Length (ft)						50						
Base Capacity (vph)		176			233	573		1208			922	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.14			0.03	0.24		0.53			0.70	

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 82.7

Natural Cycle: 105

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 17.1

Intersection LOS: B

Intersection Capacity Utilization 92.8%

ICU Level of Service F

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

				
Ø1	Ø2	Ø9	Ø3	Ø4
18 s	48.6 s	32 s	15.6 s	19 s

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour



Lane Group	SBR2	NEL	NER2	Ø9
Queue Length 50th (ft)		56	0	
Queue Length 95th (ft)		108	39	
Internal Link Dist (ft)		376		
Turn Bay Length (ft)			65	
Base Capacity (vph)		325	636	
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.33	0.23	
Intersection Summary				

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔	↔	↔	↔	
Traffic Volume (vph)	2	5	16	21	3	275	11	532	13	262	426	2
Future Volume (vph)	2	5	16	21	3	275	11	532	13	262	426	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.907				0.850			0.850		0.999	
Flt Protected		0.995			0.957			0.999		0.950		
Satd. Flow (prot)	0	1886	0	0	1680	1546	0	1817	1492	1668	1817	0
Flt Permitted		0.983			0.804			0.988		0.247		
Satd. Flow (perm)	0	1863	0	0	1412	1546	0	1797	1492	434	1817	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		22							85			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.72	0.72	0.72	0.88	0.88	0.88	0.92	0.92	0.92	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	3	7	22	24	3	313	12	578	14	305	495	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	27	313	0	590	14	305	497	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	19.0	19.0		19.0	19.0		35.1	35.1	35.1	29.0		
Total Split (%)	16.4%	16.4%		16.4%	16.4%		30.2%	30.2%	30.2%	25.0%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		12.9			12.9	28.8		30.3	30.3	43.3	47.3	
Actuated g/C Ratio		0.19			0.19	0.42		0.44	0.44	0.63	0.69	
v/c Ratio		0.09			0.10	0.48		0.74	0.02	0.62	0.40	
Control Delay		14.6			25.4	16.6		25.1	0.1	11.9	5.7	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		14.6			25.4	16.6		25.1	0.1	11.9	5.7	
LOS		B			C	B		C	A	B	A	
Approach Delay		14.6			17.3			24.5			8.1	
Approach LOS		B			B			C			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	28%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			9	90		200	0	41	76	
Queue Length 95th (ft)		19			31	146		#435	0	80	118	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		430			312	938		797	708	756	1258	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.07			0.09	0.33		0.74	0.02	0.40	0.40	

Intersection Summary

Area Type: Other

Cycle Length: 116.1

Actuated Cycle Length: 68.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 15.5

Intersection LOS: B

Intersection Capacity Utilization 69.7%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
29 s	35.1 s	33 s	19 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	29	772	20	15	650
Future Volume (vph)	30	29	772	20	15	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	50		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.997			
Flt Protected	0.950					0.999
Satd. Flow (prot)	1787	1599	1796	0	0	1799
Flt Permitted	0.950					0.999
Satd. Flow (perm)	1787	1599	1796	0	0	1799
Link Speed (mph)	25		40			40
Link Distance (ft)	221		227			2207
Travel Time (s)	6.0		3.9			37.6
Peak Hour Factor	0.80	0.80	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	2%	1%	1%	2%
Adj. Flow (vph)	38	36	796	21	15	670
Shared Lane Traffic (%)						
Lane Group Flow (vph)	38	36	817	0	0	685
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	56.3%			ICU Level of Service B		
Analysis Period (min)	15					

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	29	772	20	15	650
Future Vol, veh/h	30	29	772	20	15	650
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	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	97	97	97	97
Heavy Vehicles, %	1	1	2	1	1	2
Mvmt Flow	38	36	796	21	15	670
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1507	807	0	0	817	0
Stage 1	807	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	134	383	-	-	815	-
Stage 1	441	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	130	383	-	-	815	-
Mov Cap-2 Maneuver	130	-	-	-	-	-
Stage 1	441	-	-	-	-	-
Stage 2	480	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	29.7	0		0.2		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT		
Capacity (veh/h)	-	- 130 383	815	-		
HCM Lane V/C Ratio	-	- 0.288 0.095	0.019	-		
HCM Control Delay (s)	-	- 43.6 15.4	9.5	0		
HCM Lane LOS	-	- E C	A	A		
HCM 95th %tile Q(veh)	-	- 1.1 0.3	0.1	-		

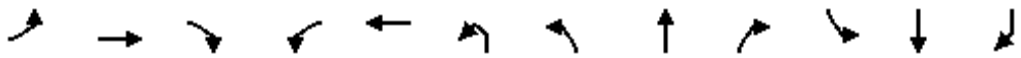
202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	11	4	788	8	8	672
Future Volume (vph)	11	4	788	8	8	672
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.964		0.999			
Flt Protected	0.964					0.999
Satd. Flow (prot)	1748	0	1799	0	0	1799
Flt Permitted	0.964					0.999
Satd. Flow (perm)	1748	0	1799	0	0	1799
Link Speed (mph)	25		40			40
Link Distance (ft)	213		479			227
Travel Time (s)	5.8		8.2			3.9
Peak Hour Factor	0.80	0.80	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	2%	1%	1%	2%
Adj. Flow (vph)	14	5	812	8	8	693
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	0	820	0	0	701
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	52.0%			ICU Level of Service A		
Analysis Period (min)	15					

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 1 Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	4	788	8	8	672
Future Vol, veh/h	11	4	788	8	8	672
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	97	97	97	97
Heavy Vehicles, %	1	1	2	1	1	2
Mvmt Flow	14	5	812	8	8	693
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1525	816	0	0	820	0
Stage 1	816	-	-	-	-	-
Stage 2	709	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	130	378	-	-	813	-
Stage 1	436	-	-	-	-	-
Stage 2	490	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	128	378	-	-	813	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	436	-	-	-	-	-
Stage 2	482	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	31.4	0		0.1		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	155	813	-	
HCM Lane V/C Ratio	-	-	0.121	0.01	-	
HCM Control Delay (s)	-	-	31.4	9.5	0	
HCM Lane LOS	-	-	D	A	A	
HCM 95th %tile Q(veh)	-	-	0.4	0	-	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	0	9	11	0	113	17	527	4	1	542	52
Future Volume (vph)	11	0	9	11	0	113	17	527	4	1	542	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	9	12	11	12	12	11	12
Storage Length (ft)	0		0				50		0	0		0
Storage Lanes	0		0				1		0	0		0
Taper Length (ft)	25						140			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.939						0.999			0.988	
Flt Protected		0.973			0.950	0.950		0.998				
Satd. Flow (prot)	0	1702	0	0	1626	1608	0	1813	0	0	1797	0
Flt Permitted		0.821				0.338		0.976				
Satd. Flow (perm)	0	1436	0	0	1712	572	0	1773	0	0	1797	0
Right Turn on Red	No											
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		148			324			2207			498	
Travel Time (s)		4.0			8.8			37.6			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.63	0.63	0.97	0.97	0.97	0.97	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	11%	11%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	12	0	10	17	0	116	18	543	4	1	616	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	17	116	0	565	0	0	679	0
Turn Type	Perm	NA		Perm	NA	D.P+P	Perm	NA		Perm	NA	
Protected Phases		3			3	1		1 2			2	
Permitted Phases	3			3		2	1 2			2		
Detector Phase	3	3		3	3	1	1 2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	5.0				20.0	20.0	
Minimum Split (s)	11.6	11.6		11.6	11.6	9.0				26.6	26.6	
Total Split (s)	15.6	15.6		15.6	15.6	13.0				48.6	48.6	
Total Split (%)	11.7%	11.7%		11.7%	11.7%	9.8%				36.5%	36.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				4.1	4.1	
All-Red Time (s)	2.6	2.6		2.6	2.6	1.0				2.5	2.5	
Lost Time Adjust (s)		0.0			0.0	0.0					0.0	
Total Lost Time (s)		5.6			5.6	4.0					6.6	
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes				Yes	Yes	
Recall Mode	None	None		None	None	None				Min	Min	
Act Effct Green (s)		6.5			6.5	51.8		55.8			42.4	
Actuated g/C Ratio		0.08			0.08	0.64		0.69			0.53	
v/c Ratio		0.19			0.12	0.25		0.46			0.72	
Control Delay		41.7			39.6	6.9		8.1			22.1	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		41.7			39.6	6.9		8.1			22.1	
LOS		D			D	A		A			C	
Approach Delay		41.7			39.6			7.9			22.1	
Approach LOS		D			D			A			C	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

				
Lane Group	SBR2	NEL	NER2	Ø9
Lane Configurations				
Traffic Volume (vph)	3	66	103	
Future Volume (vph)	3	66	103	
Ideal Flow (vphpl)	1900	1900	1900	
Lane Width (ft)	12	12	12	
Storage Length (ft)		0		
Storage Lanes		1		
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	
Frt			0.850	
Flt Protected		0.950		
Satd. Flow (prot)	0	1787	1599	
Flt Permitted		0.950		
Satd. Flow (perm)	0	1787	1599	
Right Turn on Red	No		Yes	
Satd. Flow (RTOR)			123	
Link Speed (mph)		30		
Link Distance (ft)		456		
Travel Time (s)		10.4		
Peak Hour Factor	0.88	0.84	0.84	
Heavy Vehicles (%)	1%	1%	1%	
Adj. Flow (vph)	3	79	123	
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	79	123	
Turn Type		Prot	pt+ov	
Protected Phases		4	1 4	9
Permitted Phases			4	
Detector Phase		4	1 4	
Switch Phase				
Minimum Initial (s)		9.0		1.0
Minimum Split (s)		13.0		32.0
Total Split (s)		24.0		32.0
Total Split (%)		18.0%		24%
Yellow Time (s)		3.0		4.0
All-Red Time (s)		1.0		0.0
Lost Time Adjust (s)		0.0		
Total Lost Time (s)		4.0		
Lead/Lag		Lag		
Lead-Lag Optimize?		Yes		
Recall Mode		None		None
Act Effct Green (s)		9.6	20.4	
Actuated g/C Ratio		0.12	0.25	
v/c Ratio		0.37	0.25	
Control Delay		40.5	6.6	
Queue Delay		0.0	0.0	
Total Delay		40.5	6.6	
LOS		D	A	
Approach Delay		19.9		
Approach LOS		B		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		11			9	20		130			274	
Queue Length 95th (ft)		36			21	44		232			#462	
Internal Link Dist (ft)		68			244			2127			418	
Turn Bay Length (ft)						50						
Base Capacity (vph)		180			215	502		1231			948	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.12			0.08	0.23		0.46			0.72	

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 80.4

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 16.2

Intersection LOS: B

Intersection Capacity Utilization 90.2%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

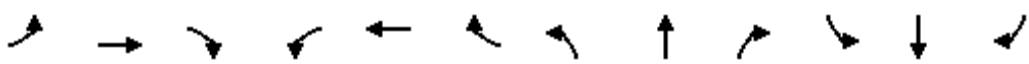
				
Ø1	Ø2	Ø9	Ø3	Ø4
13 s	48.6 s	32 s	15.6 s	24 s

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour



Lane Group	SBR2	NEL	NER2	Ø9
Queue Length 50th (ft)		40	0	
Queue Length 95th (ft)		80	34	
Internal Link Dist (ft)		376		
Turn Bay Length (ft)			65	
Base Capacity (vph)		448	540	
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.18	0.23	
Intersection Summary				

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	6	10	10	4	242	5	425	10	232	479	0
Future Volume (vph)	1	6	10	10	4	242	5	425	10	232	479	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.919				0.850			0.850			
Flt Protected		0.998			0.966			0.999		0.950		
Satd. Flow (prot)	0	1917	0	0	1696	1546	0	1799	1478	1652	1801	0
Flt Permitted		0.992			0.847			0.993		0.367		
Satd. Flow (perm)	0	1905	0	0	1487	1546	0	1788	1478	638	1801	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		15							97			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.67	0.67	0.67	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1	9	15	12	5	288	6	472	11	270	557	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	17	288	0	478	11	270	557	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	14.0	14.0		14.0	14.0		30.1	30.1	30.1	24.0		
Total Split (%)	13.8%	13.8%		13.8%	13.8%		29.8%	29.8%	29.8%	23.7%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		9.6			9.6	22.5		25.1	25.1	35.1	39.1	
Actuated g/C Ratio		0.17			0.17	0.40		0.44	0.44	0.62	0.69	
v/c Ratio		0.08			0.07	0.47		0.60	0.02	0.49	0.45	
Control Delay		14.9			22.1	15.4		17.0	0.0	6.7	5.3	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		14.9			22.1	15.4		17.0	0.0	6.7	5.3	
LOS		B			C	B		B	A	A	A	
Approach Delay		14.9			15.7			16.6			5.8	
Approach LOS		B			B			B			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	33%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			5	69		117	0	27	67	
Queue Length 95th (ft)		14			19	113		236	0	45	104	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		349			263	906		791	708	799	1242	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.07			0.06	0.32		0.60	0.02	0.34	0.45	

Intersection Summary

Area Type: Other

Cycle Length: 101.1

Actuated Cycle Length: 56.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 11.0

Intersection LOS: B

Intersection Capacity Utilization 64.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

 Ø1	 Ø2	 Ø3	 Ø4
24 s	30.1 s	33 s	14 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	33	33	620	16	12	702
Future Volume (vph)	33	33	620	16	12	702
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	50		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.997			
Flt Protected	0.950					0.999
Satd. Flow (prot)	1787	1599	1796	0	0	1799
Flt Permitted	0.950					0.999
Satd. Flow (perm)	1787	1599	1796	0	0	1799
Link Speed (mph)	25		40			40
Link Distance (ft)	221		227			2207
Travel Time (s)	6.0		3.9			37.6
Peak Hour Factor	0.80	0.80	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	2%	1%	1%	2%
Adj. Flow (vph)	41	41	639	16	12	724
Shared Lane Traffic (%)						
Lane Group Flow (vph)	41	41	655	0	0	736
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	56.6%			ICU Level of Service B		
Analysis Period (min)	15					

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	33	620	16	12	702
Future Vol, veh/h	33	33	620	16	12	702
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	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	97	97	97	97
Heavy Vehicles, %	1	1	2	1	1	2
Mvmt Flow	41	41	639	16	12	724
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1395	647	0	0	655	0
Stage 1	647	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	157	473	-	-	937	-
Stage 1	523	-	-	-	-	-
Stage 2	470	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	154	473	-	-	937	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	460	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	25	0		0.1		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	154	473	937	-
HCM Lane V/C Ratio	-	-	0.268	0.087	0.013	-
HCM Control Delay (s)	-	-	36.7	13.3	8.9	0
HCM Lane LOS	-	-	E	B	A	A
HCM 95th %tile Q(veh)	-	-	1	0.3	0	-

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	12	4	632	6	6	729
Future Volume (vph)	12	4	632	6	6	729
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.966		0.999			
Flt Protected	0.964					
Satd. Flow (prot)	1752	0	1799	0	0	1801
Flt Permitted	0.964					
Satd. Flow (perm)	1752	0	1799	0	0	1801
Link Speed (mph)	25		40			40
Link Distance (ft)	213		479			227
Travel Time (s)	5.8		8.2			3.9
Peak Hour Factor	0.80	0.80	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	2%	1%	1%	2%
Adj. Flow (vph)	15	5	652	6	6	752
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	658	0	0	758
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	53.1%			ICU Level of Service A		
Analysis Period (min)	15					

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 1 Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	4	632	6	6	729
Future Vol, veh/h	12	4	632	6	6	729
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	97	97	97	97
Heavy Vehicles, %	1	1	2	1	1	2
Mvmt Flow	15	5	652	6	6	752
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1419	655	0	0	658	0
Stage 1	655	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	151	468	-	-	935	-
Stage 1	519	-	-	-	-	-
Stage 2	462	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	149	468	-	-	935	-
Mov Cap-2 Maneuver	149	-	-	-	-	-
Stage 1	519	-	-	-	-	-
Stage 2	457	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	27.5	0		0.1		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	180	935	-	
HCM Lane V/C Ratio	-	-	0.111	0.007	-	
HCM Control Delay (s)	-	-	27.5	8.9	0	
HCM Lane LOS	-	-	D	A	A	
HCM 95th %tile Q(veh)	-	-	0.4	0	-	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	11	0	9	10	0	3	68	17	430	2	2	523
Future Volume (vph)	11	0	9	10	0	3	68	17	430	2	2	523
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	9	12	11	12	12	11
Storage Length (ft)	0		0			0		50		0	0	
Storage Lanes	0		0			0		1		0	0	
Taper Length (ft)	25							140			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.939			0.966				0.999			0.985
Flt Protected		0.973			0.964		0.950		0.998			
Satd. Flow (prot)	0	1702	0	0	1769	0	1504	0	1696	0	0	1740
Flt Permitted		0.819			0.921		0.354		0.971			0.999
Satd. Flow (perm)	0	1433	0	0	1690	0	560	0	1650	0	0	1738
Right Turn on Red						Yes				No		
Satd. Flow (RTOR)					128							
Link Speed (mph)		25			25				40			40
Link Distance (ft)		148			324				2207			498
Travel Time (s)		4.0			8.8				37.6			8.5
Peak Hour Factor	0.92	0.92	0.92	0.65	0.65	0.65	0.81	0.81	0.81	0.81	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	0%	0%	0%	8%	8%	8%	8%	4%	4%
Adj. Flow (vph)	12	0	10	15	0	5	84	21	531	2	2	575
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	20	0	84	0	554	0	0	647
Turn Type	Perm	NA		Perm	NA		D,P+P	Perm	NA		Perm	NA
Protected Phases		3			3		1		1 2			2
Permitted Phases	3			3			2	1 2			2	
Detector Phase	3	3		3	3		1	1 2	2		2	2
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		5.0				20.0	20.0
Minimum Split (s)	11.6	11.6		11.6	11.6		9.0				26.6	26.6
Total Split (s)	15.6	15.6		15.6	15.6		13.0				48.6	48.6
Total Split (%)	11.7%	11.7%		11.7%	11.7%		9.8%				36.5%	36.5%
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0				4.1	4.1
All-Red Time (s)	2.6	2.6		2.6	2.6		1.0				2.5	2.5
Lost Time Adjust (s)		0.0			0.0		0.0					0.0
Total Lost Time (s)		5.6			5.6		4.0					6.6
Lead/Lag	Lead	Lead		Lead	Lead		Lead				Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes				Yes	Yes
Recall Mode	None	None		None	None		None				Min	Min
Act Effct Green (s)		6.5			6.5		51.5		55.6			42.5
Actuated g/C Ratio		0.08			0.08		0.64		0.69			0.53
v/c Ratio		0.19			0.08		0.19		0.49			0.71
Control Delay		41.8			0.6		6.8		8.9			21.9
Queue Delay		0.0			0.0		0.0		0.0			0.0
Total Delay		41.8			0.6		6.8		8.9			21.9
LOS		D			A		A		A			C
Approach Delay		41.8			0.6				8.6			21.9
Approach LOS		D			A				A			C

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

					
Lane Group	SBR	SBR2	NEL	NER2	Ø9
Lane Configurations					
Traffic Volume (vph)	61	3	81	144	
Future Volume (vph)	61	3	81	144	
Ideal Flow (vphpl)	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	
Storage Length (ft)	0		0		
Storage Lanes	0		1		
Taper Length (ft)			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	
Frt				0.850	
Flt Protected			0.950		
Satd. Flow (prot)	0	0	1719	1538	
Flt Permitted			0.950		
Satd. Flow (perm)	0	0	1719	1538	
Right Turn on Red		No		Yes	
Satd. Flow (RTOR)				157	
Link Speed (mph)			30		
Link Distance (ft)			456		
Travel Time (s)			10.4		
Peak Hour Factor	0.91	0.91	0.92	0.92	
Heavy Vehicles (%)	4%	4%	5%	5%	
Adj. Flow (vph)	67	3	88	157	
Shared Lane Traffic (%)					
Lane Group Flow (vph)	0	0	88	157	
Turn Type			Prot	pt+ov	
Protected Phases			4	14	9
Permitted Phases				4	
Detector Phase			4	14	
Switch Phase					
Minimum Initial (s)			9.0	1.0	
Minimum Split (s)			13.0	32.0	
Total Split (s)			24.0	32.0	
Total Split (%)			18.0%	24%	
Yellow Time (s)			3.0	4.0	
All-Red Time (s)			1.0	0.0	
Lost Time Adjust (s)			0.0		
Total Lost Time (s)			4.0		
Lead/Lag			Lag		
Lead-Lag Optimize?			Yes		
Recall Mode			None	None	
Act Effct Green (s)			9.9	20.4	
Actuated g/C Ratio			0.12	0.25	
v/c Ratio			0.42	0.31	
Control Delay			41.3	6.4	
Queue Delay			0.0	0.0	
Total Delay			41.3	6.4	
LOS			D	A	
Approach Delay			18.9		
Approach LOS			B		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	WBR	NBL2	NBL	NBT	NBR	SBL	SBT
Queue Length 50th (ft)		11			0		14		131			255
Queue Length 95th (ft)		36			0		31		206			#484
Internal Link Dist (ft)		68			244				2127			418
Turn Bay Length (ft)							50					
Base Capacity (vph)		180			324		483		1139			917
Starvation Cap Reductn		0			0		0		0			0
Spillback Cap Reductn		0			0		0		0			0
Storage Cap Reductn		0			0		0		0			0
Reduced v/c Ratio		0.12			0.06		0.17		0.49			0.71

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 80.5

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 16.1

Intersection LOS: B

Intersection Capacity Utilization 77.6%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

				
Ø1	Ø2	Ø9	Ø3	Ø4
13 s	48.6 s	32 s	15.6 s	24 s

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour



Lane Group	SBR	SBR2	NEL	NER2	Ø9
Queue Length 50th (ft)			44	0	
Queue Length 95th (ft)			93	45	
Internal Link Dist (ft)			376		
Turn Bay Length (ft)				65	
Base Capacity (vph)			431	553	
Starvation Cap Reductn			0	0	
Spillback Cap Reductn			0	0	
Storage Cap Reductn			0	0	
Reduced v/c Ratio			0.20	0.28	
Intersection Summary					

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕		↕	↕	↕	↕	
Traffic Volume (vph)	1	4	6	23	4	220	6	318	18	377	420	0
Future Volume (vph)	1	4	6	23	4	220	6	318	18	377	420	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.924				0.850			0.850			
Flt Protected		0.997			0.959			0.999		0.950		
Satd. Flow (prot)	0	1925	0	0	1560	1432	0	1747	1436	1636	1783	0
Flt Permitted		0.990			0.799			0.991		0.371		
Satd. Flow (perm)	0	1912	0	0	1300	1432	0	1733	1436	639	1783	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		9							85			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.69	0.69	0.69	0.70	0.70	0.70	0.79	0.79	0.79	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	9%	9%	9%	5%	5%	5%	3%	3%	3%
Adj. Flow (vph)	1	6	9	33	6	314	8	403	23	405	452	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	16	0	0	39	314	0	411	23	405	452	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	19.0	19.0		19.0	19.0		35.1	35.1	35.1	29.0		
Total Split (%)	16.4%	16.4%		16.4%	16.4%		30.2%	30.2%	30.2%	25.0%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		13.4			13.4	37.6		30.2	30.2	51.4	55.4	
Actuated g/C Ratio		0.17			0.17	0.49		0.39	0.39	0.67	0.72	
v/c Ratio		0.05			0.17	0.45		0.61	0.04	0.59	0.35	
Control Delay		20.1			30.3	14.9		24.6	0.1	8.5	5.0	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		20.1			30.3	14.9		24.6	0.1	8.5	5.0	
LOS		C			C	B		C	A	A	A	
Approach Delay		20.1			16.6			23.3			6.7	
Approach LOS		C			B			C			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	28%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			16	92		163	0	63	71	
Queue Length 95th (ft)		14			34	108		229	0	101	111	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		382			255	772		679	615	776	1285	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.04			0.15	0.41		0.61	0.04	0.52	0.35	

Intersection Summary

Area Type: Other

Cycle Length: 116.1

Actuated Cycle Length: 76.9

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 13.3

Intersection LOS: B

Intersection Capacity Utilization 58.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
29 s	35.1 s	33 s	19 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	34	34	512	16	11	703
Future Volume (vph)	34	34	512	16	11	703
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	50		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.996			
Flt Protected	0.950					0.999
Satd. Flow (prot)	1787	1599	1744	0	0	1749
Flt Permitted	0.950					0.999
Satd. Flow (perm)	1787	1599	1744	0	0	1749
Link Speed (mph)	25		40			40
Link Distance (ft)	221		227			2207
Travel Time (s)	6.0		3.9			37.6
Peak Hour Factor	0.80	0.80	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	5%	1%	1%	5%
Adj. Flow (vph)	43	43	539	17	12	740
Shared Lane Traffic (%)						
Lane Group Flow (vph)	43	43	556	0	0	752
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	55.8%			ICU Level of Service B		
Analysis Period (min)	15					

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	34	512	16	11	703
Future Vol, veh/h	34	34	512	16	11	703
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	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	95	95	95	95
Heavy Vehicles, %	1	1	5	1	1	5
Mvmt Flow	43	43	539	17	12	740
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1312	548	0	0	556	0
Stage 1	548	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	176	538	-	-	1020	-
Stage 1	581	-	-	-	-	-
Stage 2	462	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	172	538	-	-	1020	-
Mov Cap-2 Maneuver	172	-	-	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	22.5	0		0.1		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	172	538	1020	-
HCM Lane V/C Ratio	-	-	0.247	0.079	0.011	-
HCM Control Delay (s)	-	-	32.7	12.3	8.6	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.3	0	-

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	13	4	524	6	6	731
Future Volume (vph)	13	4	524	6	6	731
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968		0.999			
Flt Protected	0.963					
Satd. Flow (prot)	1754	0	1748	0	0	1750
Flt Permitted	0.963					
Satd. Flow (perm)	1754	0	1748	0	0	1750
Link Speed (mph)	25		40			40
Link Distance (ft)	213		479			227
Travel Time (s)	5.8		8.2			3.9
Peak Hour Factor	0.80	0.80	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	5%	1%	1%	5%
Adj. Flow (vph)	16	5	552	6	6	769
Shared Lane Traffic (%)						
Lane Group Flow (vph)	21	0	558	0	0	775
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	53.3%			ICU Level of Service A		
Analysis Period (min)	15					

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 2 Weekday AM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	4	524	6	6	731
Future Vol, veh/h	13	4	524	6	6	731
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	95	95	95	95
Heavy Vehicles, %	1	1	5	1	1	5
Mvmt Flow	16	5	552	6	6	769
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1336	555	0	0	558	0
Stage 1	555	-	-	-	-	-
Stage 2	781	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	170	533	-	-	1018	-
Stage 1	577	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	168	533	-	-	1018	-
Mov Cap-2 Maneuver	168	-	-	-	-	-
Stage 1	577	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	25.1	0		0.1		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	200		1018	-	
HCM Lane V/C Ratio	-	0.106		0.006	-	
HCM Control Delay (s)	-	25.1		8.6	0	
HCM Lane LOS	-	D		A	A	
HCM 95th %tile Q(veh)	-	0.4		0	-	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	0	10	5	0	137	19	617	6	2	561	63
Future Volume (vph)	13	0	10	5	0	137	19	617	6	2	561	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	9	12	11	12	12	11	12
Storage Length (ft)	0		0				50		0	0		0
Storage Lanes	0		0				1		0	0		0
Taper Length (ft)	25						140			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.941						0.999			0.986	
Flt Protected		0.973			0.950	0.950		0.999				
Satd. Flow (prot)	0	1706	0	0	1805	1593	0	1797	0	0	1793	0
Flt Permitted		0.822				0.324		0.976			0.999	
Satd. Flow (perm)	0	1441	0	0	1900	543	0	1756	0	0	1791	0
Right Turn on Red	No											
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		148			324			2207			498	
Travel Time (s)		4.0			8.8			37.6			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.63	0.63	0.95	0.95	0.95	0.95	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	0%	0%	2%	2%	2%	2%	1%	1%	1%
Adj. Flow (vph)	14	0	11	8	0	144	20	649	6	2	616	69
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	8	144	0	675	0	0	691	0
Turn Type	Perm	NA		Perm	NA	D.P+P	Perm	NA		Perm	NA	
Protected Phases		3			3	1		1 2			2	
Permitted Phases	3			3		2	1 2			2		
Detector Phase	3	3		3	3	1	1 2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	5.0				20.0	20.0	
Minimum Split (s)	11.6	11.6		11.6	11.6	9.0				26.6	26.6	
Total Split (s)	15.6	15.6		15.6	15.6	18.0				48.6	48.6	
Total Split (%)	11.7%	11.7%		11.7%	11.7%	13.5%				36.5%	36.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				4.1	4.1	
All-Red Time (s)	2.6	2.6		2.6	2.6	1.0				2.5	2.5	
Lost Time Adjust (s)		0.0			0.0	0.0					0.0	
Total Lost Time (s)		5.6			5.6	4.0					6.6	
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes				Yes	Yes	
Recall Mode	None	None		None	None	None				Min	Min	
Act Effct Green (s)		6.7			6.7	53.1		57.1			42.6	
Actuated g/C Ratio		0.08			0.08	0.64		0.69			0.51	
v/c Ratio		0.22			0.05	0.32		0.56			0.75	
Control Delay		44.1			40.2	8.0		10.3			25.3	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		44.1			40.2	8.0		10.3			25.3	
LOS		D			D	A		B			C	
Approach Delay		44.1			40.2			9.9			25.3	
Approach LOS		D			D			A			C	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

				
Lane Group	SBR2	NEL	NER2	Ø9
Lane Configurations				
Traffic Volume (vph)	4	94	131	
Future Volume (vph)	4	94	131	
Ideal Flow (vphpl)	1900	1900	1900	
Lane Width (ft)	12	12	12	
Storage Length (ft)		0		
Storage Lanes		1		
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	
Frt			0.850	
Flt Protected		0.950		
Satd. Flow (prot)	0	1770	1583	
Flt Permitted		0.950		
Satd. Flow (perm)	0	1770	1583	
Right Turn on Red	No		Yes	
Satd. Flow (RTOR)			151	
Link Speed (mph)		30		
Link Distance (ft)		456		
Travel Time (s)		10.4		
Peak Hour Factor	0.91	0.87	0.87	
Heavy Vehicles (%)	1%	2%	2%	
Adj. Flow (vph)	4	108	151	
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	108	151	
Turn Type		Prot	pt+ov	
Protected Phases		4	1 4	9
Permitted Phases			4	
Detector Phase		4	1 4	
Switch Phase				
Minimum Initial (s)		9.0		1.0
Minimum Split (s)		13.0		32.0
Total Split (s)		19.0		32.0
Total Split (%)		14.3%		24%
Yellow Time (s)		3.0		4.0
All-Red Time (s)		1.0		0.0
Lost Time Adjust (s)		0.0		
Total Lost Time (s)		4.0		
Lead/Lag		Lag		
Lead-Lag Optimize?		Yes		
Recall Mode		None		None
Act Effct Green (s)		10.7	22.5	
Actuated g/C Ratio		0.13	0.27	
v/c Ratio		0.47	0.28	
Control Delay		43.1	5.9	
Queue Delay		0.0	0.0	
Total Delay		43.1	5.9	
LOS		D	A	
Approach Delay		21.4		
Approach LOS		C		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		13			4	26		178			296	
Queue Length 95th (ft)		41			13	59		341			#603	
Internal Link Dist (ft)		68			244			2127			418	
Turn Bay Length (ft)						50						
Base Capacity (vph)		176			232	552		1209			921	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.14			0.03	0.26		0.56			0.75	

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 82.9

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 18.1

Intersection LOS: B

Intersection Capacity Utilization 96.9%

ICU Level of Service F

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

				
Ø1	Ø2	Ø9	Ø3	Ø4
18 s	48.6 s	32 s	15.6 s	19 s

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour



Lane Group	SBR2	NEL	NER2	Ø9
Queue Length 50th (ft)		56	0	
Queue Length 95th (ft)		109	39	
Internal Link Dist (ft)		376		
Turn Bay Length (ft)			65	
Base Capacity (vph)		325	639	
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.33	0.24	
Intersection Summary				

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔		↔	↔	↔	↔	
Traffic Volume (vph)	2	5	16	21	3	301	11	563	13	283	452	2
Future Volume (vph)	2	5	16	21	3	301	11	563	13	283	452	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.907				0.850			0.850		0.999	
Flt Protected		0.995			0.957			0.999		0.950		
Satd. Flow (prot)	0	1886	0	0	1680	1546	0	1817	1492	1668	1817	0
Flt Permitted		0.984			0.806			0.988		0.199		
Satd. Flow (perm)	0	1865	0	0	1415	1546	0	1797	1492	349	1817	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		22							85			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.72	0.72	0.72	0.88	0.88	0.88	0.92	0.92	0.92	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	3	7	22	24	3	342	12	612	14	329	526	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	32	0	0	27	342	0	624	14	329	528	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	19.0	19.0		19.0	19.0		35.1	35.1	35.1	29.0		
Total Split (%)	16.4%	16.4%		16.4%	16.4%		30.2%	30.2%	30.2%	25.0%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		13.5			13.5	31.2		30.3	30.3	45.0	49.1	
Actuated g/C Ratio		0.19			0.19	0.44		0.43	0.43	0.64	0.69	
v/c Ratio		0.09			0.10	0.50		0.81	0.02	0.69	0.42	
Control Delay		15.0			26.3	16.6		30.2	0.1	17.0	6.0	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		15.0			26.3	16.6		30.2	0.1	17.0	6.0	
LOS		B			C	B		C	A	B	A	
Approach Delay		15.0			17.3			29.6			10.2	
Approach LOS		B			B			C			B	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	28%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		4			10	101		240	0	53	88	
Queue Length 95th (ft)		19			32	160		#490	0	124	126	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		416			303	927		769	687	713	1261	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.08			0.09	0.37		0.81	0.02	0.46	0.42	

Intersection Summary

Area Type: Other

Cycle Length: 116.1

Actuated Cycle Length: 70.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 18.2

Intersection LOS: B

Intersection Capacity Utilization 72.7%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
29 s	35.1 s	33 s	19 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	64	65	776	62	47	665
Future Volume (vph)	64	65	776	62	47	665
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	50		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.990			
Flt Protected	0.950					0.997
Satd. Flow (prot)	1787	1599	1784	0	0	1796
Flt Permitted	0.950					0.997
Satd. Flow (perm)	1787	1599	1784	0	0	1796
Link Speed (mph)	25		40			40
Link Distance (ft)	221		227			2207
Travel Time (s)	6.0		3.9			37.6
Peak Hour Factor	0.80	0.80	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	2%	1%	1%	2%
Adj. Flow (vph)	80	81	800	64	48	686
Shared Lane Traffic (%)						
Lane Group Flow (vph)	80	81	864	0	0	734
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	83.8%			ICU Level of Service E		
Analysis Period (min)	15					

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	64	65	776	62	47	665
Future Vol, veh/h	64	65	776	62	47	665
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	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	97	97	97	97
Heavy Vehicles, %	1	1	2	1	1	2
Mvmt Flow	80	81	800	64	48	686
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1614	832	0	0	864	0
Stage 1	832	-	-	-	-	-
Stage 2	782	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	115	371	-	-	783	-
Stage 1	429	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	104	371	-	-	783	-
Mov Cap-2 Maneuver	104	-	-	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	62.7	0		0.7		
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	104	371	783	-
HCM Lane V/C Ratio	-	-	0.769	0.219	0.062	-
HCM Control Delay (s)	-	-	108.8	17.4	9.9	0
HCM Lane LOS	-	-	F	C	A	A
HCM 95th %tile Q(veh)	-	-	4.2	0.8	0.2	-

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	24	8	830	23	23	706
Future Volume (vph)	24	8	830	23	23	706
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.966		0.996			
Flt Protected	0.964					0.998
Satd. Flow (prot)	1752	0	1794	0	0	1798
Flt Permitted	0.964					0.998
Satd. Flow (perm)	1752	0	1794	0	0	1798
Link Speed (mph)	25		40			40
Link Distance (ft)	213		479			227
Travel Time (s)	5.8		8.2			3.9
Peak Hour Factor	0.80	0.80	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	2%	1%	1%	2%
Adj. Flow (vph)	30	10	856	24	24	728
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	0	880	0	0	752
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	65.7%			ICU Level of Service C		
Analysis Period (min)	15					

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 2 Weekday PM Peak Hour

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	8	830	23	23	706
Future Vol, veh/h	24	8	830	23	23	706
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	97	97	97	97
Heavy Vehicles, %	1	1	2	1	1	2
Mvmt Flow	30	10	856	24	24	728
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1644	868	0	0	880	0
Stage 1	868	-	-	-	-	-
Stage 2	776	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	110	353	-	-	772	-
Stage 1	413	-	-	-	-	-
Stage 2	456	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	104	353	-	-	772	-
Mov Cap-2 Maneuver	104	-	-	-	-	-
Stage 1	413	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	46.3	0		0.3		
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	- 126		772	-	
HCM Lane V/C Ratio	-	- 0.317		0.031	-	
HCM Control Delay (s)	-	- 46.3		9.8	0	
HCM Lane LOS	-	- E		A	A	
HCM 95th %tile Q(veh)	-	- 1.2		0.1	-	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	0	9	11	0	111	17	508	4	1	547	52
Future Volume (vph)	11	0	9	11	0	111	17	508	4	1	547	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	9	12	11	12	12	11	12
Storage Length (ft)	0		0				50		0	0		0
Storage Lanes	0		0				1		0	0		0
Taper Length (ft)	25						140			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.939						0.999			0.988	
Flt Protected		0.973			0.950	0.950		0.998				
Satd. Flow (prot)	0	1702	0	0	1626	1608	0	1813	0	0	1797	0
Flt Permitted		0.821				0.335		0.975				
Satd. Flow (perm)	0	1436	0	0	1712	567	0	1771	0	0	1797	0
Right Turn on Red									No			
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		148			324			2207			498	
Travel Time (s)		4.0			8.8			37.6			8.5	
Peak Hour Factor	0.92	0.92	0.92	0.63	0.63	0.97	0.97	0.97	0.97	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	11%	11%	1%	1%	1%	1%	1%	1%	1%
Adj. Flow (vph)	12	0	10	17	0	114	18	524	4	1	622	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	22	0	0	17	114	0	546	0	0	685	0
Turn Type	Perm	NA		Perm	NA	D.P+P	Perm	NA		Perm	NA	
Protected Phases		3			3	1		1 2			2	
Permitted Phases	3			3		2	1 2			2		
Detector Phase	3	3		3	3	1	1 2	2		2	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0	5.0				20.0	20.0	
Minimum Split (s)	11.6	11.6		11.6	11.6	9.0				26.6	26.6	
Total Split (s)	15.6	15.6		15.6	15.6	13.0				48.6	48.6	
Total Split (%)	11.7%	11.7%		11.7%	11.7%	9.8%				36.5%	36.5%	
Yellow Time (s)	3.0	3.0		3.0	3.0	3.0				4.1	4.1	
All-Red Time (s)	2.6	2.6		2.6	2.6	1.0				2.5	2.5	
Lost Time Adjust (s)		0.0			0.0	0.0					0.0	
Total Lost Time (s)		5.6			5.6	4.0					6.6	
Lead/Lag	Lead	Lead		Lead	Lead	Lead				Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes				Yes	Yes	
Recall Mode	None	None		None	None	None				Min	Min	
Act Effct Green (s)		6.5			6.5	51.8		55.8			42.4	
Actuated g/C Ratio		0.08			0.08	0.64		0.69			0.53	
v/c Ratio		0.19			0.12	0.25		0.44			0.72	
Control Delay		41.7			39.6	6.9		8.0			22.3	
Queue Delay		0.0			0.0	0.0		0.0			0.0	
Total Delay		41.7			39.6	6.9		8.0			22.3	
LOS		D			D	A		A			C	
Approach Delay		41.7			39.6			7.8			22.3	
Approach LOS		D			D			A			C	

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour



Lane Group	SBR2	NEL	NER2	Ø9
Lane Configurations				
Traffic Volume (vph)	3	66	104	
Future Volume (vph)	3	66	104	
Ideal Flow (vphpl)	1900	1900	1900	
Lane Width (ft)	12	12	12	
Storage Length (ft)		0		
Storage Lanes		1		
Taper Length (ft)		25		
Lane Util. Factor	1.00	1.00	1.00	
Frt			0.850	
Flt Protected		0.950		
Satd. Flow (prot)	0	1787	1599	
Flt Permitted		0.950		
Satd. Flow (perm)	0	1787	1599	
Right Turn on Red	No		Yes	
Satd. Flow (RTOR)			124	
Link Speed (mph)		30		
Link Distance (ft)		456		
Travel Time (s)		10.4		
Peak Hour Factor	0.88	0.84	0.84	
Heavy Vehicles (%)	1%	1%	1%	
Adj. Flow (vph)	3	79	124	
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	79	124	
Turn Type		Prot	pt+ov	
Protected Phases		4	1 4	9
Permitted Phases			4	
Detector Phase		4	1 4	
Switch Phase				
Minimum Initial (s)		9.0		1.0
Minimum Split (s)		13.0		32.0
Total Split (s)		24.0		32.0
Total Split (%)		18.0%		24%
Yellow Time (s)		3.0		4.0
All-Red Time (s)		1.0		0.0
Lost Time Adjust (s)		0.0		
Total Lost Time (s)		4.0		
Lead/Lag		Lag		
Lead-Lag Optimize?		Yes		
Recall Mode		None		None
Act Effct Green (s)		9.6	20.4	
Actuated g/C Ratio		0.12	0.25	
v/c Ratio		0.37	0.25	
Control Delay		40.5	6.6	
Queue Delay		0.0	0.0	
Total Delay		40.5	6.6	
LOS		D	A	
Approach Delay		19.8		
Approach LOS		B		

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL2	WBT	NBL2	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		11			9	19		124			277	
Queue Length 95th (ft)		36			21	43		221			#474	
Internal Link Dist (ft)		68			244			2127			418	
Turn Bay Length (ft)						50						
Base Capacity (vph)		180			215	499		1229			948	
Starvation Cap Reductn		0			0	0		0			0	
Spillback Cap Reductn		0			0	0		0			0	
Storage Cap Reductn		0			0	0		0			0	
Reduced v/c Ratio		0.12			0.08	0.23		0.44			0.72	

Intersection Summary

Area Type: Other

Cycle Length: 133.2

Actuated Cycle Length: 80.4

Natural Cycle: 115

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 16.4

Intersection LOS: B

Intersection Capacity Utilization 89.4%

ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place

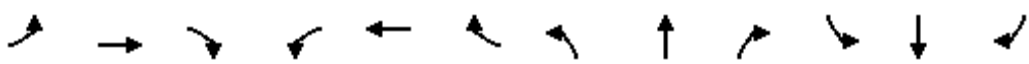
				
Ø1	Ø2	Ø9	Ø3	Ø4
13 s	48.6 s	32 s	15.6 s	24 s

101: Lake Avenue & Route 111 (Main Street) & Gas Station Driveway/Turney Place
 2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour



Lane Group	SBR2	NEL	NER2	Ø9
Queue Length 50th (ft)		40	0	
Queue Length 95th (ft)		80	34	
Internal Link Dist (ft)		376		
Turn Bay Length (ft)			65	
Base Capacity (vph)		449	541	
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.18	0.23	
Intersection Summary				

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	6	10	10	4	245	5	429	10	221	465	0
Future Volume (vph)	1	6	10	10	4	245	5	429	10	221	465	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	15	12	12	10	11	12	11	10	10	11	12
Storage Length (ft)	0		0	100		0	0		0	200		0
Storage Lanes	0		0	1		1	0		1	1		0
Taper Length (ft)	25			140			25			85		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.919				0.850			0.850			
Flt Protected		0.998			0.966			0.999		0.950		
Satd. Flow (prot)	0	1917	0	0	1696	1546	0	1799	1478	1652	1801	0
Flt Permitted		0.992			0.848			0.994		0.365		
Satd. Flow (perm)	0	1905	0	0	1489	1546	0	1790	1478	635	1801	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		15							97			
Link Speed (mph)		25			40			40			40	
Link Distance (ft)		180			519			408			355	
Travel Time (s)		4.9			8.8			7.0			6.1	
Peak Hour Factor	0.67	0.67	0.67	0.84	0.84	0.84	0.90	0.90	0.90	0.86	0.86	0.86
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	1	9	15	12	5	292	6	477	11	257	541	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	25	0	0	17	292	0	483	11	257	541	0
Turn Type	Perm	NA		Perm	NA	pt+ov	Perm	NA	Perm	D.P+P	NA	
Protected Phases		4			4	14		2		1	12	
Permitted Phases	4			4			2		2	2		
Detector Phase	4	4		4	4	14	2	2	2	1	2	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		15.0	15.0	15.0	5.0		
Minimum Split (s)	11.0	11.0		11.0	11.0		20.1	20.1	20.1	9.0		
Total Split (s)	14.0	14.0		14.0	14.0		30.1	30.1	30.1	24.0		
Total Split (%)	13.8%	13.8%		13.8%	13.8%		29.8%	29.8%	29.8%	23.7%		
Yellow Time (s)	3.0	3.0		3.0	3.0		4.1	4.1	4.1	3.0		
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0		
Lost Time Adjust (s)		0.0			0.0			0.0	0.0	0.0		
Total Lost Time (s)		4.0			4.0			5.1	5.1	4.0		
Lead/Lag	Lag	Lag		Lag	Lag		Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes		
Recall Mode	None	None		None	None		Max	Max	Max	None		
Act Effct Green (s)		9.6			9.6	22.1		25.1	25.1	34.7	38.7	
Actuated g/C Ratio		0.17			0.17	0.39		0.45	0.45	0.62	0.69	
v/c Ratio		0.07			0.07	0.48		0.61	0.02	0.47	0.44	
Control Delay		14.8			21.8	15.7		16.8	0.0	6.6	5.3	
Queue Delay		0.0			0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay		14.8			21.8	15.7		16.8	0.0	6.6	5.3	
LOS		B			C	B		B	A	A	A	
Approach Delay		14.8			16.0			16.4			5.7	
Approach LOS		B			B			B			A	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

Lane Group	Ø3
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	3
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	33.0
Total Split (s)	33.0
Total Split (%)	33%
Yellow Time (s)	4.0
All-Red Time (s)	0.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
 2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)		3			5	70		116	0	25	65	
Queue Length 95th (ft)		14			19	115		234	0	43	100	
Internal Link Dist (ft)		100			439			328			275	
Turn Bay Length (ft)										200		
Base Capacity (vph)		351			265	912		797	712	798	1237	
Starvation Cap Reductn		0			0	0		0	0	0	0	
Spillback Cap Reductn		0			0	0		0	0	0	0	
Storage Cap Reductn		0			0	0		0	0	0	0	
Reduced v/c Ratio		0.07			0.06	0.32		0.61	0.02	0.32	0.44	

Intersection Summary

Area Type: Other

Cycle Length: 101.1

Actuated Cycle Length: 56.3

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 11.1

Intersection LOS: B

Intersection Capacity Utilization 64.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)

			
Ø1	Ø2	Ø3	Ø4
24 s	30.1 s	33 s	14 s

102: Route 111 (Main Street) & Gas Station Driveway/Route 127 (Church Hill Road)
2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

Lane Group	Ø3
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	
Intersection Summary	

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	14	14	618	21	16	704
Future Volume (vph)	14	14	618	21	16	704
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Storage Length (ft)	0	50		0	0	
Storage Lanes	1	1		0	0	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850	0.995			
Flt Protected	0.950					0.999
Satd. Flow (prot)	1787	1599	1792	0	0	1799
Flt Permitted	0.950					0.999
Satd. Flow (perm)	1787	1599	1792	0	0	1799
Link Speed (mph)	25		40			40
Link Distance (ft)	221		227			2207
Travel Time (s)	6.0		3.9			37.6
Peak Hour Factor	0.80	0.80	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	2%	1%	1%	2%
Adj. Flow (vph)	18	18	637	22	16	726
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	18	659	0	0	742
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	59.9%			ICU Level of Service B		
Analysis Period (min)	15					

201: Route 111 (Main Street) & North Site Driveway
2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	14	618	21	16	704
Future Vol, veh/h	14	14	618	21	16	704
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	50	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	97	97	97	97
Heavy Vehicles, %	1	1	2	1	1	2
Mvmt Flow	18	18	637	22	16	726
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	1406	648	0	0	659	0
Stage 1	648	-	-	-	-	-
Stage 2	758	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	154	472	-	-	934	-
Stage 1	523	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	150	472	-	-	934	-
Mov Cap-2 Maneuver	150	-	-	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	452	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	22.5	0		0.2		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	150	472	934	-
HCM Lane V/C Ratio	-	-	0.117	0.037	0.018	-
HCM Control Delay (s)	-	-	32.1	12.9	8.9	0
HCM Lane LOS	-	-	D	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	0.1	-

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	5	2	637	8	8	710
Future Volume (vph)	5	2	637	8	8	710
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	11	11	11	11
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.955		0.998			
Flt Protected	0.968					0.999
Satd. Flow (prot)	1739	0	1797	0	0	1799
Flt Permitted	0.968					0.999
Satd. Flow (perm)	1739	0	1797	0	0	1799
Link Speed (mph)	25		40			40
Link Distance (ft)	213		479			227
Travel Time (s)	5.8		8.2			3.9
Peak Hour Factor	0.80	0.80	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	1%	1%	2%	1%	1%	2%
Adj. Flow (vph)	6	3	657	8	8	732
Shared Lane Traffic (%)						
Lane Group Flow (vph)	9	0	665	0	0	740
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	53.7%			ICU Level of Service A		
Analysis Period (min)	15					

202: Route 111 (Main Street) & South Site Driveway
2027 Combined Conditions - Scenario 2 Saturday Midday Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	2	637	8	8	710
Future Vol, veh/h	5	2	637	8	8	710
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	97	97	97	97
Heavy Vehicles, %	1	1	2	1	1	2
Mvmt Flow	6	3	657	8	8	732
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1409	661	0	0	665	0
Stage 1	661	-	-	-	-	-
Stage 2	748	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	154	464	-	-	929	-
Stage 1	515	-	-	-	-	-
Stage 2	470	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	152	464	-	-	929	-
Mov Cap-2 Maneuver	152	-	-	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	25.1	0		0.1		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	188	929	-	
HCM Lane V/C Ratio	-	-	0.047	0.009	-	
HCM Control Delay (s)	-	-	25.1	8.9	0	
HCM Lane LOS	-	-	D	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

APPENDIX D

Collision History Summary

TABLE A-1
Intersection Collision History Summary

Intersection: **Route 111 (Main Street)**
at
Lake Avenue / Turney Place

COLLISION TYPE

	2020	2021	2022	2023	2024	Total	Percent
Rear-End	3	1	2	1	3	10	52.6%
Angle	1	0	2	1	0	4	21.1%
Sideswipe, Same Direction	0	1	1	0	1	3	15.8%
Animal	0	0	0	1	0	1	5.3%
Bicycle	1	0	0	0	0	1	5.3%
TOTAL	5	2	5	3	4	19	100%

COLLISION EVENT

	2020	2021	2022	2023	2024	Total	Percent
Motor Vehicle	5	2	5	3	4	19	95.0%
Pedestrian / Cyclist	1	0	0	0	0	1	5.0%
TOTAL	6	2	5	3	4	20	100%

SEVERITY

	2020	2021	2022	2023	2024	Total	Percent
Fatal	0	0	0	0	0	0	0.0%
Serious Injury	0	0	0	0	0	0	0.0%
Minor Injury	2	0	2	1	1	6	31.6%
Property Damage Only (PDO)	3	2	3	2	3	13	68.4%
TOTAL	5	2	5	3	4	19	100%

DAY & TIME

	2020	2021	2022	2023	2024	Total	Percent
Weekday 6-9 A.M.	0	0	0	0	0	0	0.0%
Weekday 3-6 P.M.	1	1	0	0	2	4	21.1%
Weekday Off-Peak	3	1	4	2	0	10	52.6%
Saturday 11 A.M. - 2 P.M.	0	0	0	0	1	1	5.3%
Weekend Off-Peak	1	0	1	1	1	4	21.1%
TOTAL	5	2	5	3	4	19	100%

WEATHER

	2020	2021	2022	2023	2024	Total	Percent
Clear	5	1	5	2	3	16	84.2%
Rain	0	1	0	1	1	3	15.8%
Snow	0	0	0	0	0	0	0.0%
Ice	0	0	0	0	0	0	0.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	5	2	5	3	4	19	100%

ROAD SURFACE CONDITION

	2020	2021	2022	2023	2024	Total	Percent
Dry	5	1	4	2	3	15	78.9%
Wet	0	1	1	1	1	4	21.1%
Snow	0	0	0	0	0	0	0.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	5	2	5	3	4	19	100%

LIGHT CONDITIONS

	2020	2021	2022	2023	2024	Total	Percent
Light	5	1	3	2	2	13	68.4%
Dark	0	1	2	1	2	6	31.6%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	5	2	5	3	4	19	100%

TABLE A-2
Intersection Collision History Summary

Intersection: **Route 111 (Main Street)**
at
Route 127 (Church Hill Road)

COLLISION TYPE

	2020	2021	2022	2023	2024	Total	Percent
Angle	4	3	2	7	3	19	47.5%
Rear-End	4	1	4	1	3	13	32.5%
Sideswipe, Same Direction	0	0	1	2	0	3	7.5%
Fixed Object	0	0	2	0	0	2	5.0%
Backing	1	0	0	0	0	1	2.5%
Bicycle	1	0	0	0	0	1	2.5%
Pedestrian	0	0	0	0	1	1	2.5%
TOTAL	10	4	9	10	7	40	100%

COLLISION EVENT

	2020	2021	2022	2023	2024	Total	Percent
Motor Vehicle	9	4	9	10	6	38	95.0%
Pedestrian / Cyclist	1	0	0	0	1	2	5.0%
TOTAL	10	4	9	10	7	40	100%

SEVERITY

	2020	2021	2022	2023	2024	Total	Percent
Fatal	0	0	0	0	1	1	2.5%
Serious Injury	0	0	0	0	0	0	0.0%
Minor Injury	1	2	0	2	2	7	17.5%
Property Damage Only (PDO)	9	2	9	8	4	32	80.0%
TOTAL	10	4	9	10	7	40	100%

DAY & TIME

	2020	2021	2022	2023	2024	Total	Percent
Weekday 6-9 A.M.	0	0	1	1	0	2	5.0%
Weekday 3-6 P.M.	1	1	3	2	2	9	22.5%
Weekday Off-Peak	7	3	3	3	4	20	50.0%
Saturday 11 A.M. - 2 P.M.	0	0	0	0	0	0	0.0%
Weekend Off-Peak	2	0	2	4	1	9	22.5%
TOTAL	10	4	9	10	7	40	100%

WEATHER

	2020	2021	2022	2023	2024	Total	Percent
Clear	6	4	8	9	3	30	75.0%
Rain	4	0	1	1	4	10	25.0%
Snow	0	0	0	0	0	0	0.0%
Ice	0	0	0	0	0	0	0.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	10	4	9	10	7	40	100%

ROAD SURFACE CONDITION

	2020	2021	2022	2023	2024	Total	Percent
Dry	5	4	7	8	3	27	67.5%
Wet	5	0	2	2	4	13	32.5%
Snow	0	0	0	0	0	0	0.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	10	4	9	10	7	40	100%

LIGHT CONDITIONS

	2020	2021	2022	2023	2024	Total	Percent
Light	8	2	6	7	5	28	70.0%
Dark	2	2	3	3	2	12	30.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	10	4	9	10	7	40	100%

TABLE A-3
Segment Collision History Summary

Segment: 5958 Main Street Site Frontage

COLLISION TYPE

	2020	2021	2022	2023	2024	Total	Percent
Rear-End	1	0	2	0	2	5	100.0%
TOTAL	1	0	2	0	2	5	100%

COLLISION EVENT

	2020	2021	2022	2023	2024	Total	Percent
Motor Vehicle	1	0	2	0	2	5	100.0%
Pedestrian / Cyclist	0	0	0	0	0	0	0.0%
TOTAL	1	0	2	0	2	5	100%

SEVERITY

	2020	2021	2022	2023	2024	Total	Percent
Fatal	0	0	0	0	0	0	0.0%
Serious Injury	0	0	0	0	0	0	0.0%
Minor Injury	0	0	1	0	0	1	20.0%
Property Damage Only (PDO)	1	0	1	0	2	4	80.0%
TOTAL	1	0	2	0	2	5	100%

DAY & TIME

	2020	2021	2022	2023	2024	Total	Percent
Weekday 6-9 A.M.	0	0	1	0	0	1	20.0%
Weekday 3-6 P.M.	0	0	0	0	0	0	0.0%
Weekday Off-Peak	1	0	1	0	1	3	60.0%
Saturday 11 A.M. - 2 P.M.	0	0	0	0	1	1	20.0%
Weekend Off-Peak	0	0	0	0	0	0	0.0%
TOTAL	1	0	2	0	2	5	100%

WEATHER

	2020	2021	2022	2023	2024	Total	Percent
Clear	1	0	2	0	2	5	100.0%
Rain	0	0	0	0	0	0	0.0%
Snow	0	0	0	0	0	0	0.0%
Ice	0	0	0	0	0	0	0.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	1	0	2	0	2	5	100%

ROAD SURFACE CONDITION

	2020	2021	2022	2023	2024	Total	Percent
Dry	1	0	1	0	1	3	60.0%
Wet	0	0	1	0	1	2	40.0%
Snow	0	0	0	0	0	0	0.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	1	0	2	0	2	5	100%

LIGHT CONDITIONS

	2020	2021	2022	2023	2024	Total	Percent
Light	1	0	2	0	2	5	100.0%
Dark	0	0	0	0	0	0	0.0%
Other/Unknown	0	0	0	0	0	0	0.0%
TOTAL	1	0	2	0	2	5	100%

