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**CITY OF STAMFORD  
ZONING BOARD  
LAND USE BUREAU**  
888 WASHINGTON BOULEVARD  
STAMFORD, CT 06904 -2152

**RECEIVED**

March 28, 2024

**MAR 28 2024**

Ms. Theresa Dell, Chair, Planning Board  
Land Use Bureau, City of Stamford  
888 Washington Blvd.  
Stamford, CT 06904

**PLANNING BOARD**

**RE: Application 224-16 – Nautilus Botanicals EJVI LLC and 1308 East Main Street, 1308 East Main Street, Stamford, CT –Special Permit & Coastal Site Plan Review-** Applicant is seeking approval to operate a hybrid cannabis retail facility servicing both medical patients and adult-use consumers. Property is located within the C-N Zone.

Dear Ms. Dell:

In accordance with Section C6-40-10 of the Charter of the City of Stamford, the above captioned Applications for a Special Permit and a Coastal Site Plan Review are hereby referred to the Planning Board of the City of Stamford for its advisory report.

A public hearing has not yet been scheduled. Referral comments should be filed with the Zoning Board Office by **May 2, 2024**.

If you have any questions, please feel free to contact me at (203) 977-4716.

Sincerely,

  
Vineeta Mathur  
Principal Planner



**APPLICATION FOR SPECIAL PERMIT**

Complete, notarize, and forward **thirteen (13) hard copies and (1) electronic copy in PDF format** to Clerk of the Zoning Board with a **\$1,000.00 Public Hearing Fee** and the required application filling fee (see **Fee Schedule below**), payable to the City of Stamford.

**NOTE:** Cost of required advertisements are payable by the Applicant and performance of required mailing to surrounding property owners is the sole responsibility of the applicant. **LAND RECORDS RECORDING FEE:** \$60.00 for First page - \$5.00 for each additional page)

**Fee Schedule**

Special Permit 20,000 sq. ft. or less	\$460.00
Special Permit more than 20,000 sq. ft.	\$460.00 + \$30 per 1,000 sq. ft. or portion thereof in excess of 20,000 sq. ft.

APPLICANT NAME (S): Nautilus Botanicals EJV1 LLC and 1308 East Main Street LLC

APPLICANT ADDRESS: c/o Leonard Braman, Wofsey Rosen, 600 Summer Street, 7th Fl., Stamford, CT 06901

APPLICANT PHONE #: 203-354-1282

IS APPLICANT AN OWNER OF PROPERTY IN THE CITY OF STAMFORD? Yes - 1308 East Main Street LLC owns property in Stamford

LOCATION OF PROPERTY IN STAMFORD OWNED BY APPLICANT (S): 1308 East Main Street (Parcel ID 118 308 B)

ADDRESS OF SUBJECT PROPERTY: 1308 East Main Street (Parcel ID 118 308 B)

PRESENT ZONING DISTRICT: C-N (Neighborhood Business)

TITLE OF SITE PLANS & ARCHITECTURAL PLANS: Site Plan SD-11.3; Layout Plan SD-11.3; Color-coded Layout Plan SD-11.3

REQUESTED SPECIAL PERMIT: (Attach written statement describing request)  
 Special Permit for a Hybrid Cannabis Retailer pursuant to Sec. 5.E of the Stamford Zoning Regulations  
 See attached Project Description and Statement of Findings.

LOCATION: (Give boundaries of land affected, distance from nearest intersecting streets, lot depths and Town Clerk's Block Number)  
 See attached Property Description

NAME AND ADDRESS OF OWNERS OF ALL PROPERTY INVOLVED IN REQUEST:

<u>NAME &amp; ADDRESS</u>	<u>LOCATION</u>
1308 East Main Street LLC	1308 East Main Street
1308 East Main Street	
Stamford, CT 06902-3530	

DOES ANY PORTION OF THE PREMISES AFFECTED BY THIS APPLICATION LIE WITHIN 500 FEET OF THE BORDER LINE WITH GREENWICH, DARIEN OR NEW CANAAN? **Yes - Darien** (If yes, notification must be sent to Town Clerk of neighboring community by registered mail within 7 days of receipt of application – PA 87-307).

DOES THE PROJECT RESULT IN THE CREATION OF 10 OR MORE UNITS OR 10,000 SF OR MORE IN FLOOR AREA OR DISTURBANCE OF 20,000 SF OR MORE IN LAND AREA, THROUGH NEW DEVELOPMENT, RECONSTRUCTION, ENLARGEMENT OR SUBSTANTIAL ALTERATIONS? **No** (If yes, then complete the Stamford Sustainability Scorecard per Section 15.F).



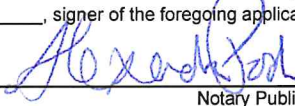


DATED AT STAMFORD, CONNECTICUT, THIS 19th DAY OF March 2024

SIGNED: 

NOTE: Application cannot be scheduled for Public Hearing until 35 days have elapsed from the date of referral to the Stamford Planning Board. If applicant wishes to withdraw application, please notify the Zoning Board at least three (3) days prior to Public Hearing so that the Board may have sufficient time to publicize the withdrawal.

STATE OF CONNECTICUT  
 ss STAMFORD This 19<sup>th</sup> day of March, 2024  
 COUNTY OF FAIRFIELD

Personally appeared Leonard M. Braman, signer of the foregoing application, who makes known the contents thereof, before me.  
  
**ALEXANDRA POCHINA**  
 Notary Public State of Connecticut My Commission Expires April 30, 2028  
 Notary Public - Commissioner of the Superior Court

**FOR OFFICE USE ONLY**

APPL. #: 224-16 Received in the office of the Zoning Board: Date: \_\_\_\_\_

By: \_\_\_\_\_

Revised 09/02/2020





What possible adverse or beneficial impacts may occur as a result of the project? (Attach additional sheet if necessary)

See attached Coastal Resource Evaluation. The project involves fit-up/renovation and small second-floor addition, all within existing building footprint, to change the use of an existing structure. There will be no adverse impacts.

How is the proposal consistent with all applicable goals and policies of the CAM Act?

See attached report. The project is consistent with the goals and policies of the CAM Act as it will result in no adverse impacts to coastal resources. It will enhance the existing structure's flood resiliency by limiting areas below the base flood elevation to storage only and adding flood vents.

What measures are being taken to mitigate adverse impacts and eliminate inconsistencies with the CAM Act? (Attach additional sheet if necessary)

See attached report. There will be no adverse impacts. There will be no construction outside the existing building footprint.

Is there any deed restriction(s) that may prohibit the construction proposed in this application? \_\_\_\_\_ No \_\_\_\_\_

If yes, list Town Clerk Book & Page reference: \_\_\_\_\_

Is any injunction or other litigation pending concerning this property? \_\_\_\_\_ No \_\_\_\_\_

If yes, include citation: \_\_\_\_\_



DATED AT STAMFORD, CONNECTICUT, THIS 18<sup>th</sup> DAY OF March, 2024

SIGNED:

STATE OF CONNECTICUT  
 COUNTY OF FAIRFIELD ss STAMFORD 18<sup>th</sup> day of March 2024

Personally appeared Leonard M. Braman, signer of the foregoing application, who made oath to the truth of the contents thereof, before me.

**ALEXANDRA POCHNA**  
 Notary Public State of Connecticut My  
 Commission Expires April 30, 2028  
Notary Public, Commissioner of the Superior Court

**FOR OFFICE USE ONLY**

APPL. #: \_\_\_\_\_ Received in the office of the Zoning Board: Date: \_\_\_\_\_

By: \_\_\_\_\_



## **Project Description – 3/25/2024**

### **Company Profile**

#### ***Licensure & Eligibility***

On November 21, 2022, Nautilus Botanicals LLC (“Nautilus Botanicals”) was awarded a provisional cannabis cultivation license (License No. ACCE.0000005) pursuant to Section 21a-420(o) of the Connecticut “Responsible and Equitable Regulation of Adult-Use Cannabis Act”, or “RERACA.”

Section 5 of Public Act 22-103, which amended and supplemented RERACA, provides that a cultivator licensed under Section 21a-420(o) of RERACA may create two equity joint ventures in any cannabis establishment licensed business other than cultivation. Licensees under Section 21a-420(o) are therefore entitled to open two retail cannabis dispensaries in Connecticut, subject to local approval, approval by the CT Social Equity Council, and final state licensure from the CT Department of Consumer Protection. Nautilus Botanicals has formed an equity joint venture, Nautilus Botanicals EJV1 LLC, for the purpose of opening a retail hybrid cannabis dispensary in Stamford, CT. A hybrid cannabis dispensary is a retail operation that sells both medical marijuana and adult-use recreational cannabis products.

#### ***Corporate Structure***

As noted above, Nautilus Botanicals LLC owns the cultivation license. The special permit applicant, Nautilus Botanicals EJV1 LLC, is a subsidiary of Nautilus Botanicals LLC and was formed as an equity joint venture for the hybrid retail cannabis license. This license will be used to operate a hybrid medical/adult use dispensary in Stamford, CT, pending zoning approval.

In terms of ownership structure, as required by the CT Department of Consumer Protection, Luis Vega, our social equity applicant, owns 65% and Merida Capital, the backer, owns the remaining 35% of Nautilus. Nautilus Botanicals EJV1 LLC is owned 51% by Luis Vega, 48% by Merida Capital and 1% by Nautilus Botanicals LLC, and, as noted above, is a subsidiary of Nautilus Botanicals.

#### ***Background on Luis Vega, CEO & social equity applicant of Nautilus Botanicals LLC & Nautilus Botanicals EJV1 LLC***

Luis Vega has been a passionate advocate of cannabis and has worked tirelessly in the industry. His interest began when he was a teenager diagnosed with Crohn’s disease and ulcerative colitis. The use of cannabis gave him the quality of life he enjoyed prior to surgery.

Mr. Vega studied finance at the University of New Haven and began working in corporate contract facility management. However, he remained passionate about cannabis and involved in the industry. He started with CBD sales for a college friend. His big opportunity came when Connecticut legalized hemp in 2019. Mr. Vega established Vega Holdings and used his own savings to obtain a USDA hemp license, purchase land and seeds and begin growing hemp. As part of the Connecticut Department of Agriculture’s hemp pilot program, he was awarded a license to cultivate hemp and was the only Latino farmer to receive such a license. As his business developed, he added a processing license to allow for the harvest and processing of hemp. This led to the opening of a farm-to-store business, offering an array of hemp products from flower and pre-rolls to tinctures, edibles and topicals.

In November 2019, Vega Holdings was named one of five winners of the Merida Capital i2 (Inclusive Industry) minority entrepreneur accelerator program. As a result, he received seed money from Merida to start Vega Holdings’ hemp farm, as well as access to Merida’s strategic advice, network and resources.

Connecticut legalized adult use cannabis in July 2021. In January 2022, the requirements for applicants for Section 149 Cannabis Cultivator licenses were published, which were only made available to social equity applicants who met the residency and income requirements. Luis Vega met these requirements and applied for the Section 149 license in February 2022. He is the managing member and Chief Executive Officer for Nautilus Botanicals LLC.

### **Background on Merida Capital, backer for Nautilus Botanicals LLC & Nautilus Botanicals EJV1 LLC**

Merida Capital Holdings was founded in 2016 and is one of the largest private equity firms in the state-legal cannabis industry. The firm is the only cannabis private equity firm to own and directly operate licensed cannabis businesses across multiple states. In addition, the firm's partners and co-founders have multiple years of experience launching licensed cultivation, manufacturing and retail businesses across multiple states. Current and past Merida operations include the following:

- Nautilus Botanicals in Connecticut: awarded a provisional Section 149 cultivation and manufacturing license, with a provision that allows for the formation of 2 equity joint ventures for any non-cultivation licenses. These will be used to open 2 hybrid retail stores.
- Harvest Care Medical in West Virginia: one of ten vertical licensees, with the ability to open up to ten dispensary locations; won the maximum number of dispensary licenses allowed. The cultivation and processing facility is operational, as are 5 dispensaries.
- COMO Health (d/b/a 3Fifteen Primo) in Missouri: five licenses for medical cannabis dispensaries operational, including a Cookies-branded store in St Louis. The stores have converted to adult use and are benefiting from a strong start to adult use sales.
- Jova and Storehouse in Maryland: awarded three retail licenses, with all 3 dispensaries operational. This includes the state's first black-owned dispensary in the state, which has 100% BIPOC staffing
- Dharma Pharmaceuticals in Virginia: one of five vertical licensees, with the ability to open up to six dispensary locations. The cultivation and processing facility is operational, and five dispensaries are open and operational. **Sold to GTI in July '21.**
- Laurel Harvest in Pennsylvania: Grower-processor licensee with the ability to open up to six dispensary locations. **Sold to Cresco in December '21.**
- Valley Ag in New York: overcame industry challenges in the early days of the industry to get the cultivation facility and four dispensaries operational. **Sold to Cresco in October '19.**

In addition, Merida's partners and co-founders bring direct experience with numerous cannabis businesses:

- Co-Founder & Managing Partner Mitch Baruchowitz brings 12 years of cannabis investment experience. He is an expert in the regulatory component of cannabis limited licensing and multi-state cultivation operations, and a frequent speaker and author on cannabis investment strategy and diligence. Prior to Merida, he was a (1) Co-Founder of Manticorp (d/b/a Grow West) in Maryland, which operates a cultivation facility; (2) Founder of Leafline Labs in Minnesota, one of only two licensed vertical medical cannabis operations; and, (3) Founder of Theraplant in Connecticut, one of the state's four vertical licensees.
- Co-Founder & Senior Operating Partner Kevin Gibbs currently oversees all of Merida's operating team and specifically oversees the firm's direct license operations. He first developed a deep expertise in cannabis-related regulatory affairs and operations through his work with Greenfield and Peak Harvest Health. He then went on to be a Co-Founder of Manticorp (d/b/a Grow West) in Maryland, a licensed medical cannabis cultivation facility.
- Operating Partner Colin Kelly is part of Merida's operating team and helps oversee the firm's direct license operations, including Connecticut. Mr. Kelley has 16 years of experience in ensuring operational compliance with all applicable regulations and maximizing company productivity. He joined the cannabis industry in 2015, serving as the Chief Financial Officer and Chief Operating officer of Leafline Labs, one of two operators in Minnesota.
- Partner Connie DeBoever is part of Merida's investment team and oversees many of Merida's branded portfolio companies as well as the i2 Minority Accelerator Program. In addition, she is overseeing the licensed operations in Connecticut, including the cultivation and manufacturing as well as the retail facilities.

### **Site Information**

The applicant proposes to operate a hybrid cannabis retail facility located at 1308 East Main Street, Stamford CT 06902. The applicant has a signed purchase agreement with the owner of the property, 1308 East Main Street LLC.

The proposed hybrid cannabis retail facility at 1308 East Main Street will be a split-level building with ~6,072 square feet of gross floor area on 0.5 acres. It is located in the C-N zone in Stamford.

### **Description of the Surrounding Area**

The project is located in the East Side neighborhood of Stamford. It is on the easternmost edge of Stamford, on the north side of East Main Street, south of I-95, directly on the west bank of the Noroton River and across from Darien. South of the bridge that carries East Main Street over the Noroton River lies Holly Pond and Gerli Park. The prevailing built forms and uses in the area are commercial office and retail/restaurant buildings/uses. Directly to the west of the property is the four-story brick Chilton Investment office building at 1290 East Main, and to the southwest is the seven-story brick Holly Pond Plaza office building at 1281 East Main. The property has an extended parking area in its rear, which backs up to a wooded buffer area. To the north of the Chilton Investment office building, there are some single-family homes along Cove View Drive. The property slopes down as it goes north; the northern portion is at a significantly lower elevation than the surrounding property to the east and is separated by a large retaining wall. There is no access from the homes on Cove View Drive to the property without driving down Cove View Drive, past the Chilton office building along East Main Street. Only one or two residential properties on Cove View Drive have obstructed, screened views of the property, between the rear yards, over the retaining wall. As required by zoning for cannabis retail facilities, there are no public or private schools within 1,000 feet, and no existing or proposed other cannabis dispensaries within 3,000 feet.

The site is in the C-N zone, as are the office buildings to the west and southwest. Gerli Park to the south is in the P (park) zone, and the single-family homes north of the site past the Chilton building and wooded area are in the RM-1 zone. The site is not in the Architectural Review Design District.

### **Description of the Proposed Project Area**

The project area is on the north side of East Main Street, east of Weed Avenue, and is bordered by the Noroton River to the east. Gerli Park and Holly Pond lie across East Main Street from the property. It is Map ID 002 /3311, Parcel ID 118 308 B. Existing land uses are predominantly commercial office and retail/restaurant, as is the predominant built form. Because the proposed project seeks only to retrofit a new retail use into the existing restaurant building with a modest second-floor addition for flood-zone compliance, all within the pre-existing building footprint, there will be no adverse impacts on surrounding properties. The proposed retail use will have no noticeable impact on traffic patterns in the area, and the site has more than adequate parking for the proposed use.

### **Project Overview**

#### ***Proposed Plans***

Our proposed use is a hybrid retail cannabis facility, which will serve both adult use customers and medical patients, in compliance with the state's licensing and regulatory requirements. We hope to locate the dispensary at 1308 East Main Street in Stamford. Our renovations will occur within the existing footprint and will mostly be interior-based, except for a modest second-floor addition in the rear section of the property. This second-floor addition will allow the ground floor to be used solely for storage and be fitted with flood vents, as is necessary to comply with the flood zone regulations. (This requirement is triggered because renovations to the existing structure are expected to cost more than 50% of the structure's appraised value according to the Stamford tax records.)

The customer entrance will be on the street level on what is considered the second/main floor. The windows will be frosted or painted opaque to comply with the state's privacy requirements. Interior work will consist of building a





storage space. Based on the above floor plans, we have 1,191 square feet of retail space, which generates a requirement for 5 parking spaces. In addition, we plan to have 2,689 square feet of office space, which will require 9 parking spaces. Finally, our storage use of 2,192 square feet will generate a parking requirement of 2 spaces. In total, we estimate sixteen (16) parking spaces are needed to comply with the Stamford parking regulations. This compares with 21 parking spaces provided, including one (1) handicap space. Additional spaces are available if necessary.

## **Operational Overview**

We will be open seven days a week, with maximum hours from 9am to 9pm. On lighter traffic days, we may choose to be open from 10am to 8pm. Customers will be highly encouraged to place their orders online and pick up in the store. We plan to have five (5) point-of-sale (“POS”) systems available to customers. Between this and online orders, we believe most customers will spend no more than 5 minutes in the store.

## **Management Experience**

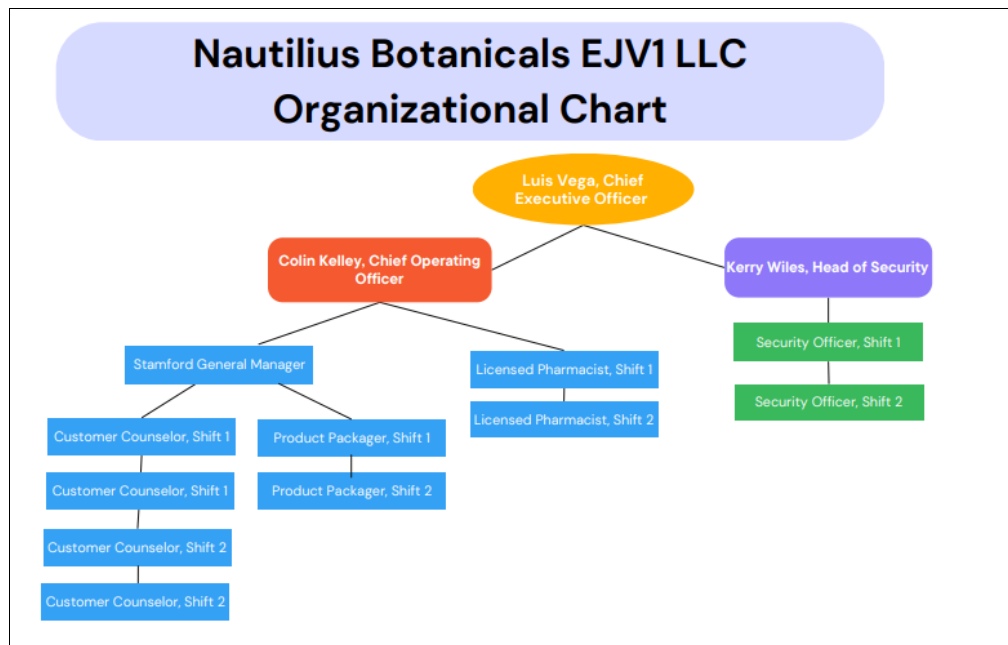
Nautilus Botanical EJV1’s owners and team members bring a significant level of experience and professionalism in the cannabis industry. Merida Capital, the backer, has several years of experience in the industry, including experience operating more than 10 dispensaries in multiple states.

Within our management team, our Chief Executive Officer (“CEO”) Luis Vega has had several years of experience as the only Latino hemp farmer in CT. Our Chief Operating Officer (“COO”), Colin Kelley, has over 8 years of experience in the cannabis industry, serving as Chief Financial Officer and COO of Leafline Labs in Minnesota and more recently as an operating partner at Merida Capital.

## **Key People**

Our hybrid retail cannabis facility will be overseen by our CEO Luis Vega. He will oversee our COO, Colin Kelley, and the Head of Security, Kerry Wiles. Our COO will oversee the primary dispensary operations, including the general manager and the counselors and product packagers who report to him/her, as well as the licensed pharmacists. Our Head of Security will oversee the security officers, who will be responsible for checking IDs for compliance with the age and medical card requirements.

We plan to staff our store with 5-8 employees over two, six-hour shifts. This includes one required pharmacist for medical patients and one general manager. The remainder of the employees will be split between budtenders (2-4 per shift) and product packagers (1-2 per shift).



### ***Operational Highlights***

Customers will enter through the front door and will initially only have access to the public zone, which consists of the customer ingress and secure vestibule/check-in area. In the check-in booth, the security officer will be responsible for scanning their valid, government-issued IDs and verifying their age and, for medical patients, their medical card. Once their age and medical card have been verified, they will be allowed to enter the retail floor, which will be controlled access via RFID card. After picking up or making their purchase, customers will leave through a separate exit (customer egress).

Medical patients will be greeted by the security officer, who will verify their ID for age compliance as well as a state-issued medical card. After entering the facility, they will have a dedicated area for their use if they wish to have a consultation. In accordance with state regulations, medical patients will be given preferred access ahead of adult use customers. The on-site licensed pharmacist will be available for customers who have questions or request a consultation, in accordance with state requirements.

On the retail floor, customers will have access to five (5) point-of sale (“POS”) systems. One of these POS will be a dedicated register for online orders and medical patients, with the other ones for walk-in or adult use customers. Customer counselors will be on hand with iPads to take orders, answer questions about products, help with orders and complete product purchases. Based on our operations in other states, we expect customers to spend less than 5 minutes in the store. This time will be further reduced for orders placed online.

Prior to completing a purchase, the customer counselor will ask to see the customer’s valid, government-issued ID to verify their name and date of birth and to ensure they have not reached the state’s mandated product purchase limit (currently ½ ounce of flower, or its equivalent, for adult use customers and 5 ounces of flower, or its equivalent, for medical patients). Medical patients will be required to show their state-issued medical card as well. After all these verifications have been completed, the customer counselors will review the product(s) being purchased with the customer before putting them back into the bag and stapling it shut. For online orders, staff will need to verify the customer’s age and the products ordered before they can process payment. In accordance with state regulations, the customer counselor will inform customers of state regulations, especially consumption rules. Customers will then be directed to leave the store via a separate exit door.

Orders are sent by the POS to the packaging employee via tickets/receipts. Similar to restaurants, these tickets will be reviewed and processed by the fulfillment/packaging employee, who will place the products into a bag. Once



products are packaged in a bag, the bag will be passed through a window to the retail counter. The customer counselor will retrieve the exit bag from the secure pass-through door, which requires keycard access, and review with customers prior to completing the purchase.

No products will be available on the floor or in display cases. All products will only be available in the product packaging/fulfillment area (only during open hours) and be stored in the secure vault, especially overnight. In the product packaging/fulfillment area, products will be kept on mobile shelving to allow for easy movement and flexibility between this area and the secure vault.

### Security Plan

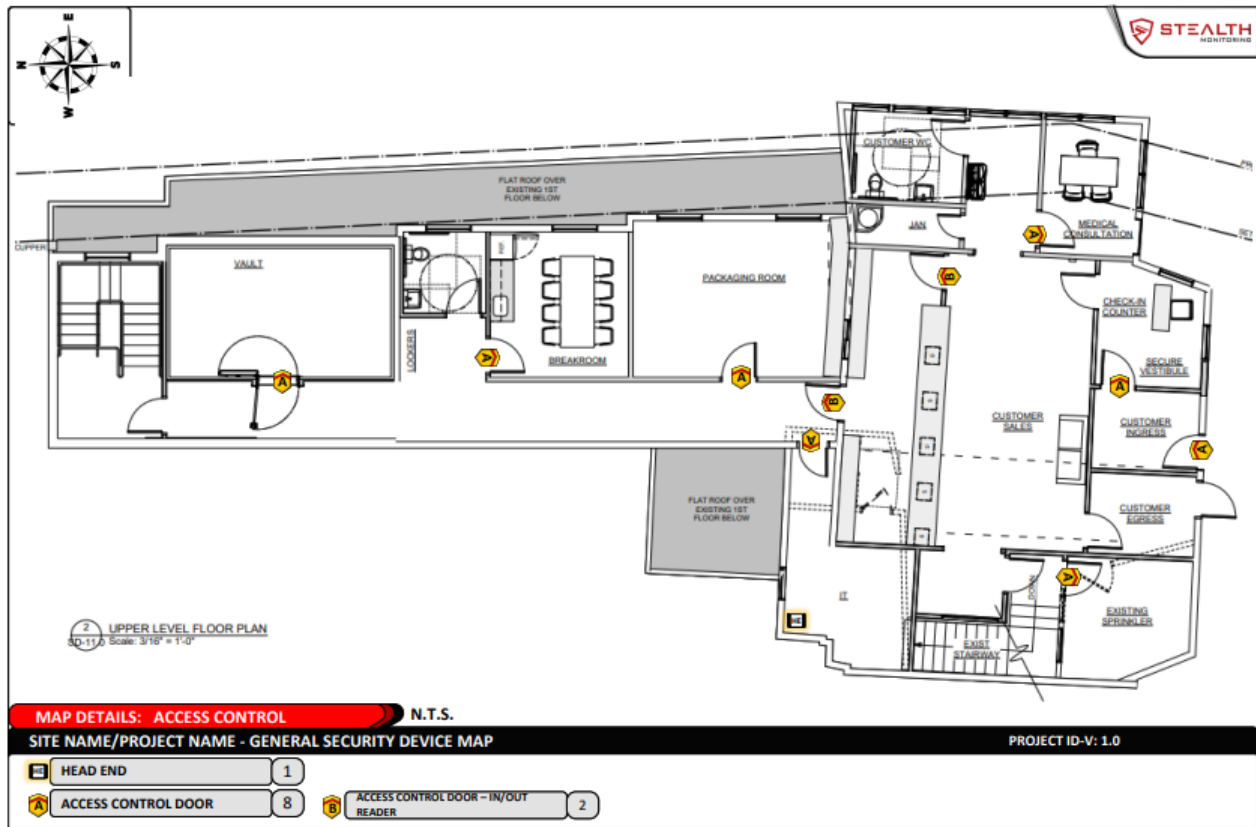
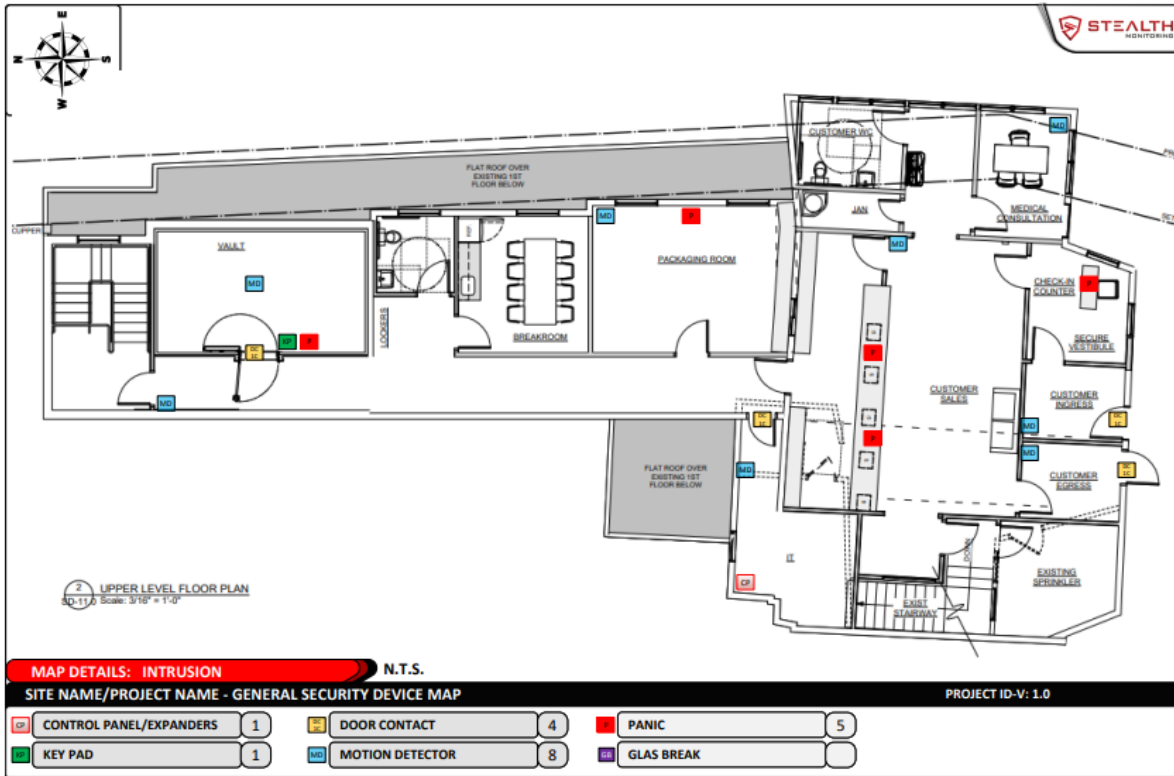
We will hire a security officer, who will be stationed in the check-in booth to scan IDs for age compliance and track purchases and any recalls. We will also place cameras and motion detectors in and around the facility for security purposes. The windows will be reinforced and have tinted film that allows those inside to see out but not vice versa. They will also be equipped with hefty window locks that are visible from the outside and with alarms that are monitored in the security room and at the off-site monitoring center. We plan to review our proposed plans with the fire marshal and building department when we file for a building permit.

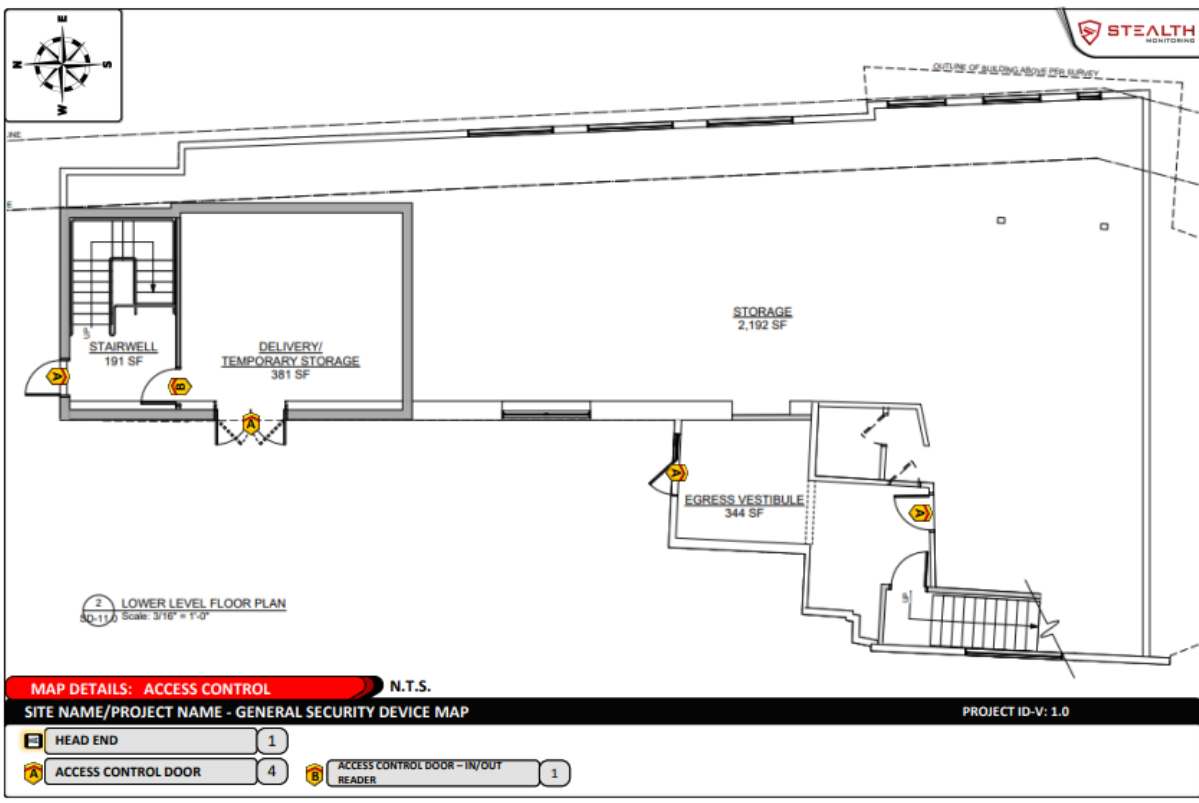
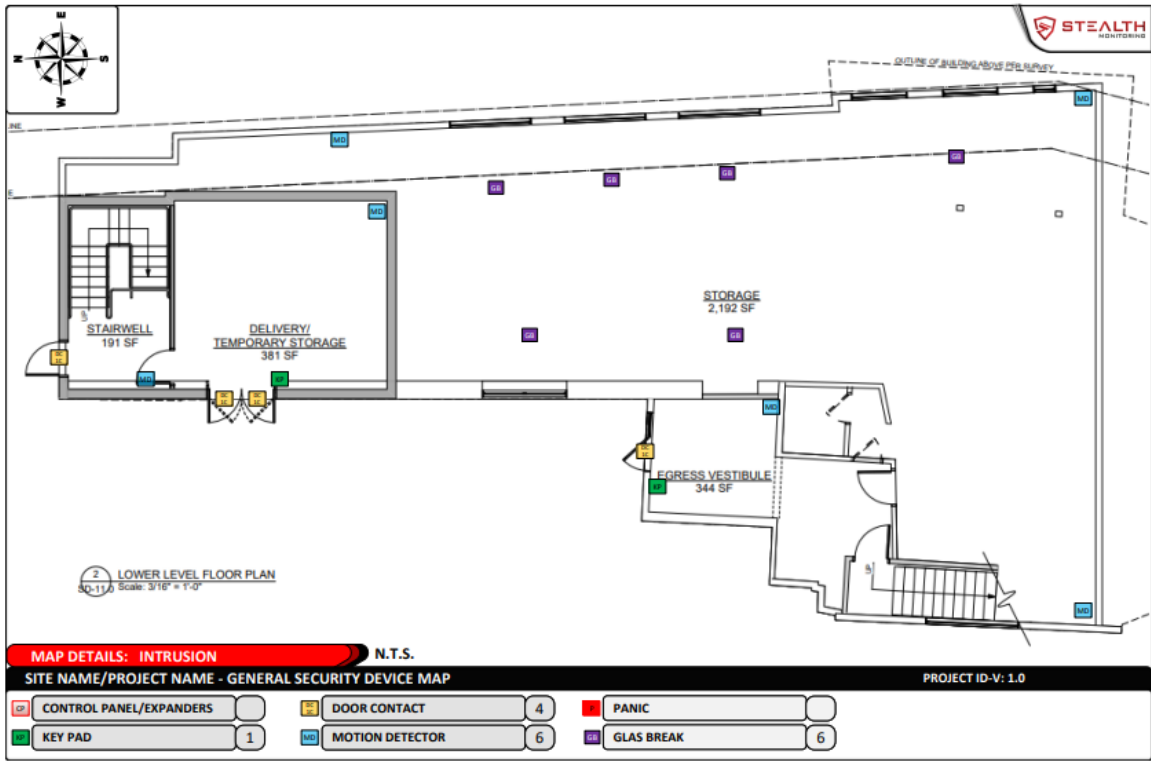
To facilitate the safest facility, we have separated our facility into four separate zones. The public zone is accessible to anyone who has been age-verified, and is where customers enter and check-in. The operations zone consists of the retail sales floor and product packaging/fulfillment areas. The limited access zone consists of employee areas and can only be accessed by an employee RFID card. Finally, the restricted access zone consists of the secure vault, secure delivery and the IT closet. All of the restricted access areas will only be accessible by specific employees with specific RFID access cards, surveillance or security personnel and state regulators and law enforcement agencies.



From an access perspective, all doors in the facility, including entry and exit doors, will have access controls via keypad entry and require RFID cards. The security desk will be equipped with a siren, an intrusion alarm panel and

a panic button. Panic buttons will be spaced through-out the POS area, below the counter and not visible to the public. Finally, alarmed keypads will be placed inside the entries to the check-in area and the secure vault.

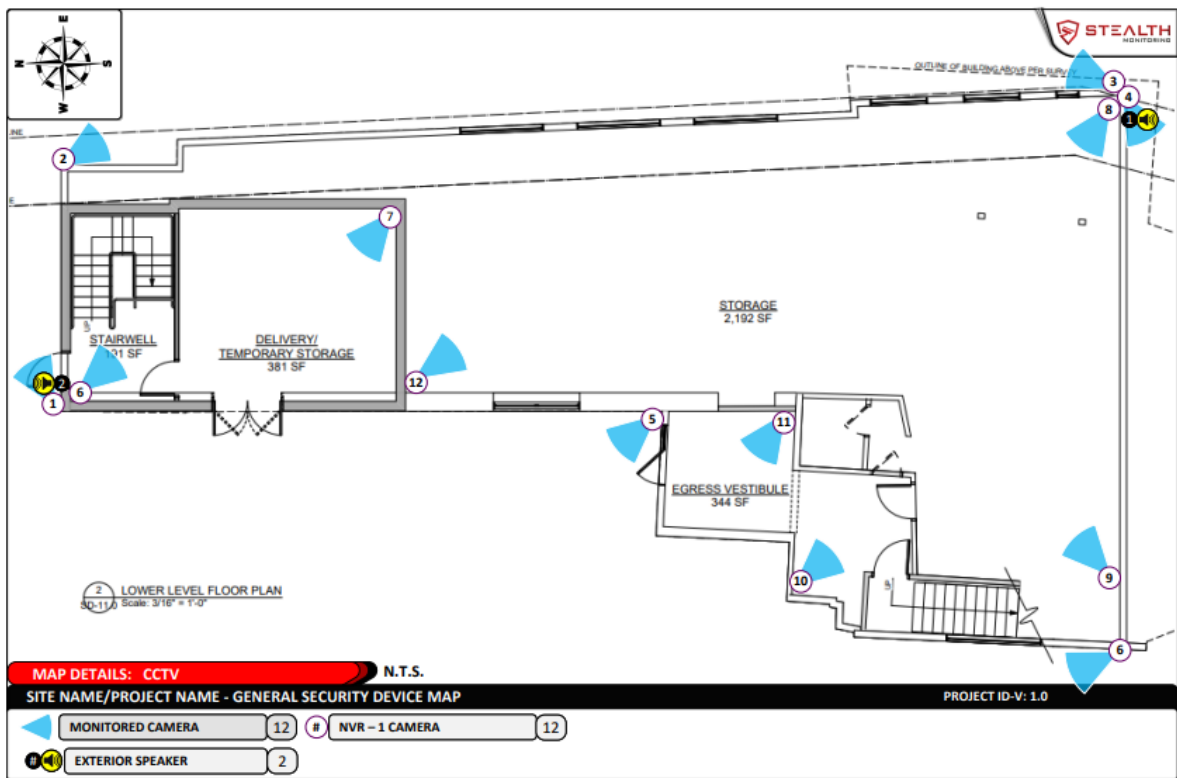
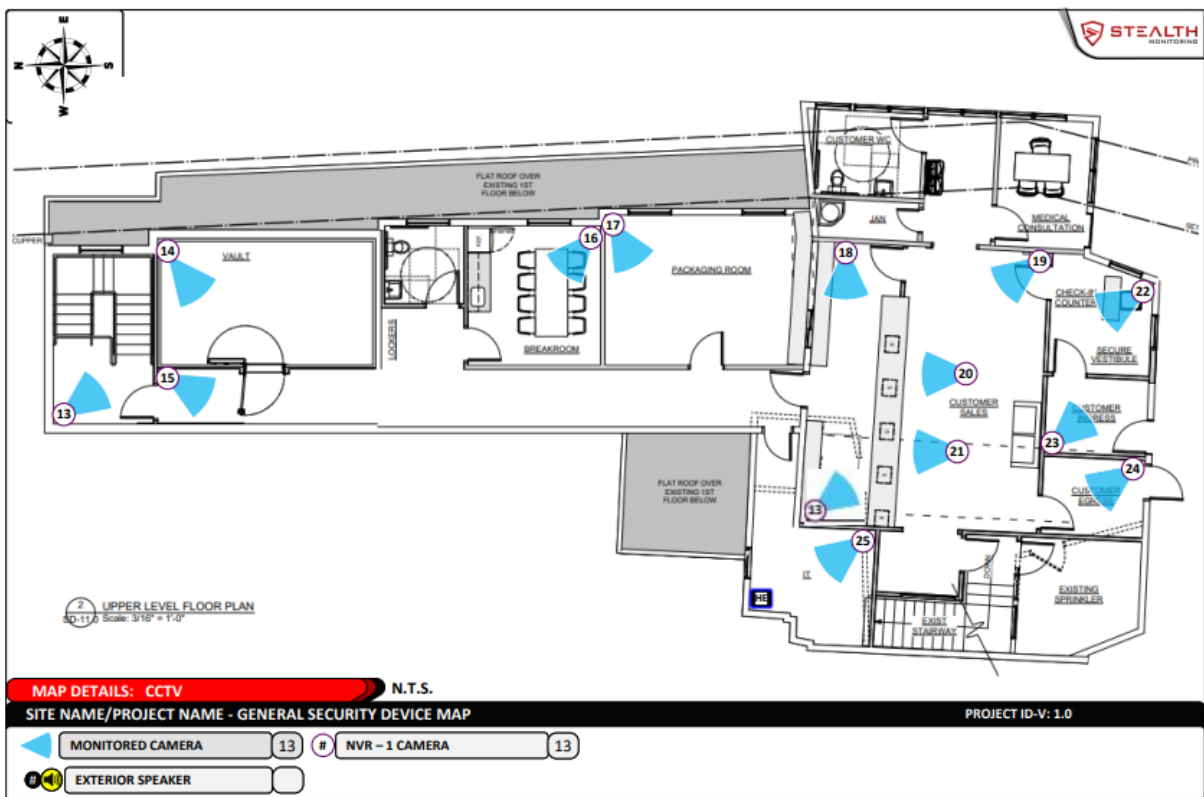




As required by the state, all cannabis products will be stored in the secure vault, which will be surrounded by 8" thick concrete. It will have an alarmed key pad and panic button. All products will be stored here. The vault can only be opened by the General Manager and has a timed lock.



Security cameras and surveillance monitors will be placed through-out the facility, as required by the Department of Consumer Protection. All security footage will be backed up and stored for at least 90 days.



**Security Policies & Procedures**

## ***Opening and Closing***

It is the responsibility of the Head of Security to adopt and implement opening and closing daily security inspections at Nautilus Botanical EJV1 LLC's ("Nautilus") facility. Security personnel, including Nautilus employees, third-party service providers, or contractors, and Nautilus' General Managers will perform or oversee opening and closing daily security inspection to ensure compliance with Nautilus policy, the rules set forth by the Department of Consumer Protection, and all applicable state and local laws, regulations, ordinances, and other requirements.

When closing the facility, Nautilus' Head of Security and Closing General Manager will perform initial and final walk throughs of the facility and perimeter of the premises to ensure: a) no employees, authorized individuals, or any other individuals are still present in the facility; b) all inventory and cash are secure; c) all alarm and surveillance systems and other devices to detect unauthorized intrusion are properly functioning; and d) the premises are generally secure when all Nautilus personnel leave.

## ***Access Control- Employees***

Given the significant security within and around Nautilus Botanicals EJV1 LLC's ("Nautilus") dispensary facility, it will be crucial to maintain access control. This will include proper signage that prominently displays security system and private property notifications. In addition, all perimeter doors will be equipped with manual and electronic locking mechanisms using commercial-grade, non-residential door locks. These locks will remain engaged in the event of a power outage. Within the facility, employee access will be controlled via electronic door strikes and electronic keycard access hardware, as well as contact and silent alarms to prevent unauthorized entry or exit. Video cameras will be installed in all limited access areas, point-of-sale locations, security rooms, all points of entry and exit and all areas containing cannabis.

On the exterior, LED flood lights will be utilized to facilitate surveillance and to light the exterior of the facility without impacting the neighboring properties.

When working, all employees will be required to wear their agent identification cards and to have their IDs be visible to others and in their immediate possession at all times. We will also prevent the sharing of any employee-specific access credentials and limit the use of combination numbers, passwords, or electronic or biometric security systems to registered, authorized employees.

To prevent unauthorized access to Nautilus' dispensary facility, we will have:

1. Security equipment to deter and prevent unauthorized access into limited access areas, including a) devices to detect unauthorized intrusion; b) exterior lighting to facilitate surveillance; c) manual and silent alarms; d) electronic monitoring; and e) immediate automatic or electronic notification to alert local law enforcement agencies of an unauthorized breach of security.
2. Policies and procedures in place that: a) restrict access to the areas of Nautilus' dispensary that contain cannabis to authorized individuals, including patients and caregivers; b) provide for the identification of persons authorized to be in the areas of the dispensary that contains cannabis, including medical patients and adult use customers on the sales floor and Nautilus employees responsible for inventory control activities; c) cover electronic monitoring and the use of automatic or electronic notification and manual, silent alarms to alert local law enforcement agencies of an unauthorized breach of security at the facility, including designation of on-call facility personnel to respond to, and to be available to law enforcement personnel who respond to, any alarms; and d) allow for easy communication with law enforcement agencies.
3. Install a commercial-grade, up-to-date security alarm system and video surveillance system to prevent and detect diversion, theft, or loss of marijuana or marijuana-infused products, or unauthorized access to the facility. For doors into limited access areas and all entries and exits into the licensed premises, Nautilus will

use Underwriter's Lab (UL) approved locks and lock cylinders, which are burglary resistant, non-residential, and commercial-grade.

4. All facility windows will be of reinforced glass and will be tinted, in addition to being monitored by the facility's central alarm system.
5. Employee proximity cards, access codes, and other access hardware credentials will be distributed on a limited and individual basis to pre-authorized essential Nautilus personnel. The Head of Security will ensure the Access Control System at the facility allows for programming or uploading individual user permissions and allowed entry times, as well as operations-specific information including employee photos. Access to the facility will be limited to Nautilus employees, medical patients, adult use customers and authorized adult visitors, including authorized representatives of the Department of Consumer Protection and other government officials when necessary to perform their official duties.
6. Ensure that the Access Control System monitors and records: a) the identity of all individuals entering and exiting the facility; b) all keycard entry and exit activity, including dates and times; c) lengths of time in specific areas; and d) any unauthorized access attempts. Records of limited access area entry will be maintained for at least one year and be made available to the Department of Consumer Protection for inspection purposes upon request.

### ***Access Control- Medical Patients***

Patient access control into Nautilus' dispensary facility is comprised of two main objectives: a) controlling and safeguarding access to certain areas where medical marijuana will be sold; and b) determining guidelines for the acceptable forms of identification that verify the lawful sale of medical marijuana to patients and caregivers.

The general public, qualifying patients, and primary caregivers will only enter the facility through one access point into an area where security personnel will screen individuals for qualifying patient or adult use age requirements, which requires a valid, government-issue ID. These IDs are then scanned and used to verify the name and birth date of the patient or adult use customer. Medical patients will also be required to show their state-issued medical card, which will be checked against their government-issued ID for name matching purposes.

No cannabis will be accessible in this area. Only qualifying patients, primary caregivers, and adult use customers will be allowed to enter any areas beyond the check-in area.

### ***Access Controls- Visitors***

Other than short-term contractors or vendors and officials from the Department of Consumer Protection ("DCP") and local law enforcement agencies, visitors are generally discouraged from Nautilus' dispensary facility. If visitor entry is requested, visitors must be accompanied by Nautilus employees or the Head of Security at all times. All visitors must sign in and out of the Nautilus Visitor Access Log and include the reason for their visit and the date of their visit. The visitor's valid, government-issued ID must match their name on the Visitor Access Log. Once they have been screened and passed, they will be given a visitor ID badge, which is required to be worn and visible to others at all times. Only employees with assigned access permissions to the dispensary may escort the visitor(s). Nautilus will maintain the Visitor Access Log and make it available to the DCP for inspection purposes upon request.

### **Signage Plan**

We will adhere to and comply with the Stamford signage requirements for cannabis retailers. As such, we will have a sign on our building about 16" x 18" in size. There is an existing ground-mounted sign, which we plan to repurpose with the name of our dispensary. It will be approximately 5' high, with dimensions of 4' x 4'. As required, there will be no illumination nor cannabis-related graphics on any of our signs or windows.

## **Actions Needed to Facilitate the Project**

The project requires a Special Permit under Section 5.E and Appendix A, Table I of the Zoning Regulations, and Coastal Site Plan approval from the Zoning Board under Section 15.A of the Regulations. Pursuant to Section 15.B.5(b) of the Regulations, the required Flood Hazard Area Permit review is performed as part of the Coastal Site Plan application. As discussed above, as a Hybrid Cannabis Retailer, the facility will be subject to the approval of the Connecticut Department of Consumer Protection. Because the proposed use is permitted by special permit in the C-N zone and the project more than meets all the criteria for a special permit for a Hybrid Cannabis Retailer, the special permit should be granted. Because the project will have no adverse impacts on coastal resources, and in fact will increase the resiliency of the existing structure by limiting areas below the base flood elevation to storage only, Coastal Site Plan approval should be granted.

The project site has ample parking, currently consisting of about 40 faintly-striped parking spaces. The Applicants will provide 21 newly-striped compliant spaces, five more than the 16 spaces required per zoning. Additional parking spaces are available on site if required. The Applicants therefore respectfully request waiver of the requirement of a Parking Management Plan. Additionally, the project does not involve an increase in Gross Floor Area of 5,000 sf. or more or meet any other criteria that would trigger either the need for Electric Vehicle charging spaces or any need to seek a waiver of this requirement. (Bicycle parking will be provided per zoning.)

As described in the accompanying traffic report prepared by Langan, the project will have no noticeable impact on traffic patterns in the area. Accordingly, the Applicants respectfully request exemption from the requirement of a Transportation Demand Management Plan.

Pursuant to Section 12.K.6.c of the Zoning Regulations, once they have the opportunity to consult with the City's bureau of Traffic, Transportation and Parking as to the feasibility and desirability of planting street trees along the property's frontage, the Applicants will plant the required number of small and/or medium-large street trees or will pay the required fee in lieu of such trees.

Lastly, pursuant to Section 12.K.4(5) of the Zoning Regulations, because there is an existing sidewalk along the Property's entire street frontage which is at least five feet, in a state of good repair, and meets all ADA requirements, the Applicants respectfully submit that no new sidewalk is required.

## **Conclusion**

The Property is located in Master Plan Category 7 (Commercial Arterial). The purpose of this category is to provide for and protect business-oriented development (1) extending from the Downtown or (2) along major arterial routes. The proposed Hybrid Cannabis Retailer is a new business in the State, and the proposed location is on East Main Street, a major arterial roadway. Moreover, the proposed use also forwards the City's economic development initiatives. Luis Vega, Nautilus' majority owner, is a Connecticut native and social equity applicant who has met the requisite residency and income requirements for obtaining a license. Mr. Vega is committed to contributing to Stamford's already thriving business community by adding a new business that will contribute jobs and revenue.

The Applicants propose to operate a desirable retail use in an appropriate retail/restaurant space. The proposed use will provide economic benefits to the neighborhood and add vitality. Furthermore, it will increase Stamford's tax base. Accordingly, the proposed use is in accordance with the public convenience and welfare.

## **SCHEDULE A PROPERTY DESCRIPTION**

All that certain piece, parcel or tract of land, with the buildings and improvements thereon, situated in the city of Stamford in the county of Fairfield and state of Connecticut, bounded and described as follows:

NORTHERLY:	29.83 feet by land now or formerly of Ida T. Falby;
NORTHEASTERLY:	56.29 feet and
EASTERLY:	31.70 feet and again
NORTHERLY:	32.05 feet, then again
EASTERLY:	180.92 feet all by the Noroton River;
SOUTHEASTERLY:	35.76 feet by land now or formerly of the State of Connecticut;
SOUTHERLY:	60 feet by East Main Street;
WESTERLY:	157.34 feet and again
SOUTHERLY:	39.57 feet all by land now or formerly of Gulf Oil Corporation;
WESTERLY:	150.06 feet by land now or formerly of Bertha Franchina.

Said premises being known and designated as Plot B as shown and delineated on a certain map entitled "Map Showing Subdivision of Property Owned by Philip T. Franchina, Stamford, Conn.", now on file in the office of the town clerk of said Stamford and numbered 6218, reference thereto being had.

**STATEMENT OF FINDINGS UNDER SECTION 19.C.2**

**1308 East Main Street**

Nautilus Botanicals EJV1 LLC (“Nautilus”) and 1308 East Main Street LLC (collectively, the “Applicants”) are proposing a Hybrid Cannabis Retailer at 1308 East Main Street, Stamford (the “Property”). The Special Permit request is detailed in the enclosed Project Description.

**A. Statement of Findings in Accordance with Section 19.C.2 of the Zoning Regulations**

In accordance with Section 19.C.2 of the Zoning Regulations, the Applicants submit that the following standards and conditions have been satisfied:

*Special Permits shall be granted by the reviewing board only upon a finding that the proposed use or structure or the proposed extension or alteration of an existing use or structure is in accord with the public convenience and welfare after taking into account, where appropriate:*

*1. The location and nature of the proposed site including its size and configuration, the proposed size, scale and arrangement of structures, drives and parking areas and the proximity of existing dwellings and other structures.*

Nautilus proposes to operate a 6,072± square foot Hybrid Cannabis Retailer on the Property. The Property is located in the C-N zone, which has been identified as a permitted location for cannabis retail use. The Property is an ideal location for a retail use, as it is an end lot bordering the Noroton River and located on a main arterial road. It also has ample parking for customers, currently containing 40 faintly-striped parking spaces. The Applicants will re-stripe the parking lot to provide a total of 21 zoning-compliant spaces, five more than the 16 spaces required per zoning. The building on the Property was constructed in around 1959 and has been used as a restaurant. The proposed use would simply substitute a new retail use for the current restaurant use, with all renovations within the existing footprint. The small portion of the rear of the existing structure that is below the Base Flood Elevation will be limited solely to use as storage and fitted with flood vents, increasing its resiliency. The modest proposed second-floor addition in the rear is lower than the ridgeline of the existing second-story roof in the front of the building, and thus will not materially alter the building’s visual impact. Moreover, the Property is adjacent to many other commercial uses – including commercial office buildings directly to the west and southwest. As noted, the Property is bordered by East Main Street to the south and the Noroton River to the east, and it has a wooded buffer area to the north. Accordingly, the proposed use is appropriate for the surrounding neighborhood and this project is in accord with the public convenience and welfare.

*2. The nature and intensity of the proposed use in relation to its site and the surrounding area. Operations in connection with special permit uses shall not be injurious to the*



*neighborhood, shall be in harmony with the general purpose and intent of these Regulations, and shall not be more objectionable to nearby properties by reason of noise, fumes, vibration, artificial lighting or other potential disturbances to the health, safety or peaceful enjoyment of property than the public necessity demands.*

The Property is in the C-N zone, which permits a variety of commercial uses. It has been used for commercial purposes since it was originally constructed in 1959. The proposed use is retail, which is consistent with the prior and current restaurant uses of the Property, as well as the current uses of the commercial office buildings to its immediate west and southwest. The proposed use poses no risk to nearby properties by reason of noise, fumes, vibration, artificial lighting or other potential disturbances to health, safety, or peaceful enjoyment of property. In fact, as a highly regulated industry, the Hybrid Cannabis Retailer offers significantly more assurances with regard to health, safety and peaceful enjoyment than many other uses permitted as-of-right on the Property. Details regarding strict operational policies and protocols are included in the attached narrative. Accordingly, the Applicants submit that the proposed use is appropriate for the neighborhood and will not be objectionable to nearby properties.

*3. The resulting traffic patterns, the adequacy of existing streets to accommodate the traffic associated with the proposed use, the adequacy of proposed off-street parking and loading, and the extent to which proposed driveways may cause a safety hazard, or traffic nuisance.*

Nautilus has engaged Langan to conduct a comprehensive traffic analysis. In connection with this study, Langan evaluated the two intersections near the Property along East Main Street. Langan determined that all individual movements at these intersections are expected to operate at acceptable levels of service during weekday A.M. and P.M. and Saturday midday peak hours, and that the individual movements are not expected to cause any decrease in Level of Service. Indeed, Langan concluded that there would be no noticeable impact on traffic patterns in the area versus a No-Build scenario. Ample parking will be provided onsite – the site currently has about 40 faintly-striped spaces. The Applicants will provide a total of 21 zoning-compliant parking spaces, more than the 16 required per zoning. Accordingly, the proposed development will not negatively impact traffic patterns or cause safety hazards.

*4. The nature of the surrounding area and the extent to which the proposed use or feature might impair its present and future development.*

The proposed use is in harmony with the prior and current use of the Property and surrounding areas. In addition, the proposed use is safe and secure, quiet, and has proven successful at the other recently approved locations as well as in other states. The Property is suitably distant from the other locations so as to provide a more convenient option for palliative and adult-use customers located in eastern Stamford. The Hybrid Cannabis Retailer will productively occupy the space and provide significant tax revenue (3% gross revenue) to the City of Stamford. It is a neighborhood commercial use in a neighborhood commercial zone. There is no reason to believe the use will impair present or future development.

5. *The Master Plan of the City of Stamford and all statements of the purpose and intent of these regulations.*

The Property is located in Master Plan Category 7 (Commercial Arterial). The purpose of this category is to provide for and protect business-oriented development (1) extending from the Downtown or (2) along major arterial routes. The proposed Hybrid Cannabis Retailer is a new business in the State and the proposed location is on East Main Street, a major arterial roadway. Moreover, the proposed use also forwards the City’s economic development initiatives. Luis Vega, Nautilus’ majority owner, is a Connecticut native and social equity applicant who has met the requisite residency and income requirements for obtaining a license. Mr. Vega is committed to contributing to Stamford’s already thriving business community by adding a new business that will contribute jobs and revenue.

The Applicants propose to operate a desirable retail use in an appropriate retail/restaurant space. The proposed use will provide economic benefits to the neighborhood and add vitality. Furthermore, it will increase Stamford’s tax base. Accordingly, the proposed use is in accordance with the public convenience and welfare.

**B. Statement of Findings in Accordance with the Definition of Hybrid Cannabis Retailer**

In accordance with the definition of a Hybrid Cannabis Retailer, the Applicants submit that the following standards and conditions have been satisfied:

*a. Hybrid Cannabis Retailers must possess a current license from the State of Connecticut Department of Consumer Protection. Failure to maintain proper licenses shall be deemed an immediate violation of the City of Stamford Zoning Regulations.*

Use of the Property as a Hybrid Cannabis Retailer is heavily regulated by the State and a license is required from the Connecticut Department of Consumer Protection (“DCP”) to operate. On November 21, 2022, Nautilus Botanicals, LLC (“Nautilus Botanicals”) was awarded a provisional Section 149 cannabis cultivation license (License No. ACCE.0000005) pursuant to Section 21a-420(o) of the Connecticut Responsible and Equitable Regulation of Adult-Use Cannabis Act (“RERACA”). This license entitles Nautilus Botanicals to form an equity joint venture for the purpose of opening a Hybrid Cannabis Retailer subject to approval by the City, Connecticut Social Equity Council, and final licensure from the DCP. Nautilus is a subsidiary of Nautilus Botanicals LLC and is a joint venture between Luis Vega and Merida Capital IV LP and its affiliates. Nautilus Botanicals will acquire and maintain all required licenses from DCP to operate a Hybrid Cannabis Retailer facility on the Property.

*b. No Adult-Use Cannabis Retailers shall be located within a 3,000 feet radius of any other Dispensary, or within 1,000 feet of public or non-public schools;*

There are currently two other Hybrid Cannabis Retailers in Stamford – Fine Fettle (12 Research Drive) and Curaleaf (814 East Main Street). Both of these businesses are located outside a 3,000 feet radius of the Property. The Property is not located within 1,000 feet of a public or non-public school.

*c. Signage for Hybrid Cannabis Retailers shall be the more restrictive of either (1) the requirements of the State of Connecticut relating to signage for Adult-Use Cannabis Retailers or (2) the sign regulations for the respective zoning district as prescribed in Section 13 of these regulations. In addition, the following limitations shall apply:*

- (1) There shall be no illumination of a Sign advertising adult-use cannabis products at any time;*
- (2) There shall be no signage that advertises adult use cannabis brand names or utilizes graphics related to marijuana or paraphernalia on the exterior of the Dispensary or the Building in which the Dispensary is located;*
- (3) There shall be no display of adult use cannabis or paraphernalia within the facility which is clearly visible from the exterior of the facility; and*
- (4) There shall be no signage on the exterior of the facility which advertises the price of its adult-use cannabis.*

The Applicants are happy to accept a condition of approval requiring all signage to conform to this requirement with final design subject to approval by Zoning Board staff.

*d. Parking shall be provided according to Section 12 of the Zoning Regulations, following the parking standard for Retail Store.*

Section 12 of the Zoning Regulations provides that parking for Retail Stores shall be provided at a rate of four (4) spaces per 1,000 square feet of Gross Floor Area. The total square footage of the building is 6,072± square feet. Of this space, 1,191± square feet will be used as retail, 2,689± square feet for office and 2,192± square feet will be used as storage. This results in a maximum of sixteen (16) parking spaces required; the site currently has forty (40) faintly-painted parking spaces on site, and the Applicants will restripe the parking lot to provide a total of twenty-one (21) zoning-compliant spaces, including a handicapped-accessible space in front of the building. Bike parking will be provided per zoning. This is more than sufficient for the proposed use.

THE APPLICANTS,  
NAUTILUS BOTANICALS EJV1 LLC and  
1308 EAST MAIN STREET LLC

By:           /s/ Leonard M. Braman            
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COASTAL RESOURCE EVALUATION  
for the  
RENOVATION and ADDITION TO EXISTING BUILDING

Prepared for:  
**1308 East Main Street**  
**Stamford, CT**



March 18, 2024

## INTRODUCTION

This report identifies the existing coastal resources on and adjacent to the property at 1308 East Main Street in Stamford, CT. It provides an evaluation of potential impacts to the coastal resources associated with the renovation of the existing building on the property in accordance with Chapter 444 Section 22a-90 through 22a-112 of the Connecticut General Statutes, known as the “Coastal Management Act”, and follows the guidelines provided in the Connecticut Coastal Management Manual prepared by the Connecticut Department of Environmental Protection (September 2000).

## EXISTING CONDITIONS

The property is 0.5 acres in size (21,680± sf) and is completely developed, containing an existing restaurant building and parking lot. The property is situated along the western bank of the Noroton River and is within its flood plain. The narrow riparian buffer is dominated by a mature red maple (*Acer rubrum*) and red oak (*Quercus rubra*) overstory with an understory dominated by Japanese knotweed (*Polygonum cuspidatum*) and Japanese honey suckle (*Lonicera japonica*) which provide shade to the river. The Noroton River flows south into Holly Pond. We measured the salinity of the river at high tide and confirmed the river to be freshwater.

## DESCRIPTION OF PROPOSED PROJECT

The southern end of the building consists of two stories with the top story accessible from the side walk. The property slopes down as you enter the property with a parking lot north of the building. The northern section of the building is a one story rectangular area with similar elevation to the parking lot. The contract purchaser of 1308 East Main Street proposes to renovate the two-story section providing retail space on the upper story and storage on the lower story. A second story addition will be added on top of the existing one-story section of the building. The area below the second story will be limited to storage throughout the building. There will be no change to the footprint of the building or the parking lot as part of this project.

The building use will be converted from restaurant to commercial retail/office. As the building is in the floodplain, flood vents will be installed on the first floor to allow stormwater to pass through the building during significant storm events.

The proposed site plan is subject to review and approval by the City of Stamford’s Zoning Board and Environmental Protection Board under Coastal Area Management regulations.

## DESCRIPTION OF COASTAL RESOURCES

Policies have been established by the State to protect the existing coastal resources. Coastal Resources on and adjacent to the site were identified from the Coastal Resources Norwalk South quadrangle map, prepared by the Coastal Area Management Program of the Connecticut Department of Environmental Protection, dated 1979. This information was then field verified and adjusted if necessary.

The property is not adjacent to coastal waters and will not impact coastal resources. The project requires a coastal site plan review as it is within 200 feet of coastal resources and involves a change in use. It is these conditions that bring this application in front of the Zoning Board and Environmental Protection Board.

### Applicable Coastal Resources

The coastal resources applicable to this project are discussed below.

- **Coastal “Flood” Hazard Areas**

The Coastal Hazard Area is identified by the portion of a property within the 100-year flood zone. For this property the flood zone is set at elevation 10 (NAVD) as depicted on Federal Flood Insurance Rate Map (FIRM) Number 09001C0517G, effective 7/8/2013. The AE-10 Flood Zone Line goes through the eastern third of the parking lot and bisects the building. The remainder of the property lies within Zone “X”.

- **Shorelands**

Shorelands are those areas of the property which lie above the 100-year flood elevation, in this case elevation 10. Shorelands are located in the western two thirds of the parking lot and the western portion of the building.

### **Applicable Coastal Uses**

Coastal Uses are those uses of general public access, addition or expansion of septic system/sewer or water lines, addition of shoreline erosion control structures, changes or improvements to stormwater management, addition of vegetated buffers or water dependent uses as defined in the Connecticut General Statutes.

### **CONSISTENCY OF COASTAL RESOURCE POLICIES:**

The project is limited to the interior renovation of the existing building and an addition on to the northern portion of the building with no change to footprint.

The following coastal resources are applicable to the proposed activities.

- **Coastal Flood Hazard Area**

The project is consistent with applicable coastal resource policies as all of the retail space will be at elevation 15 which is well above the 100 year flood elevation of 10. The lower level of the building, which is below elevation 10, will only be used as storage. Flood vents will be installed on the first floor to allow stormwater to flow under the building during high flows. No alterations to the shoreline are proposed and no changes to existing erosion/sedimentation patterns, water circulation patterns or fresh water/saltwater exchange patterns of the site will occur.

- **Shorelands**

The project is consistent with these applicable policies as it does not alter the water quality of the adjacent Noroton River or Holly Pond.

### **CONSISTENCY WITH COASTAL USE POLICIES**

The project is limited to the internal renovations and second story addition to the existing building. The project is consistent with applicable policies as there are no changes to drainage and the building will continue to utilize existing sewer and water services so no new uses apply to this project. The project does not propose any new flood and erosion control structures and the existing vegetated buffer will remain and not be impacted. The property is private and does not contain public access areas or water dependent uses.

### **Potential Adverse Impacts:**

The proposed renovation of the building is within the 200-foot regulated area of Holly Pond.

The proposed project does not incur any of the adverse impacts outlined in the [Connecticut Coastal Management Manual](#), as the project does not: degrade water quality; degrade circulation patterns;

degrade erosion or drainage patterns through the significant alteration of groundwater flow; degrade natural features of public vistas or view points; increase the hazard of coastal flooding through the alteration of shoreline bathymetry; degrade wildlife, finfish or shellfish habitat, or alter or degrade tidal wetlands, beaches, or rocky shorefronts.

As the project is limited to internal renovations and the construction of a second story addition with no soil disturbance, the potential for environmental impacts resulting from erosion and sedimentation is minimal. All construction materials will be stored in the existing parking lot, no material will be stored in the vegetated riparian area of the river. During and after construction, the surface stormwater runoff patterns will remain the same as they are now.

### **Conclusion:**

The above detailed assessment finds that the proposed site development is consistent with all applicable coastal policies as outlined in the Connecticut Coastal Management Manual. The project is limited to internal renovations and a second story addition within the existing building footprint and no soil disturbance. Therefore, no impacts to coastal resources are expected.

Respectively submitted



LANDTECH

Thomas Ryder, Certified Ecologist



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**To:** Zoning Board, Stamford

**From:** Christopher McLean, P.E.

**Date:** 19 March 2024

**Re:** Traffic Impact Assessment  
Proposed Cannabis Dispensary  
1308 East Main Street  
Stamford, Connecticut  
Langan Project No.: 140285101

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Langan has evaluated the anticipated traffic impacts of Nautilus Botanicals EJVI LLC's ("Nautilus") planned conversion of an existing  $\pm 4,300$  square-foot (SF) restaurant at 1308 East Main Street in Stamford, Connecticut into a cannabis dispensary. Nautilus intends to retrofit the existing restaurant into a cannabis dispensary with minor modification to the existing building. The dispensary is expected to open in late 2024 or early 2025. Our analysis indicated that the change in traffic generated by the proposed conversion will not have a noticeable impact on traffic operations in the area.

## PROJECT DESCRIPTION

The 0.5-acre project site is located at 1308 East Main Street in Stamford, CT. The site is bordered by woodland to the north, the Noroton River to the east, East Main Street (U.S. Route 1) to the south, and an office building (Chilton Trust Co.) to the west. The project site is currently occupied by a  $\pm 4,300$  SF restaurant, "The Boatyard at Smokey Joe's BBQ". Nautilus proposes to convert the existing restaurant to a retail cannabis dispensary. The site is accessed by one full-access driveway connection to East Main Street. Minor modification to the existing building is proposed as part of the change, including renovating a portion of the building for storage only. Approximately  $\pm 3,900$  SF will be permitted as the proposed dispensary.

## STUDY AREA

The study area for this evaluation was selected in consultation with City of Stamford staff. The following intersections were included in the study area:

- East Main Street (US Route 1) and Hamilton/Waterbury Ave
- East Main Street (US Route 1) and Weed Ave

# MEMO

Both intersections were counted during the weekday morning (6:30 to 9 AM) and evening (3:30 to 6:30 PM) commuter peak periods on Friday, February 23, 2024, and on Saturday, February 24, 2024, between 11 AM and 2 PM to coincide with the Saturday mid-day peak traffic period. The data collected reveals that the peak hours within the study area occur between 8:00 AM and 9:00 AM during the weekday morning, 3:30 PM and 4:30 PM during the weekday evening and 1:00 PM and 2:00 PM on Saturday. The existing peak hour traffic volumes are shown in **Figure 3** in the appendix.

## FUTURE CONDITIONS

The observed 2024 traffic volumes were adjusted to reflect projected volumes upon the project's anticipated completion date in 2025. This was done by adding a general background growth factor and specific traffic volumes from expected new projects in the area. The additional traffic volumes from both these sources were added to the 2024 existing volumes to generate the 2024 "No-Build" traffic volumes. The No-Build condition is defined as the future volumes in the study area without the planned conversion (assumes the restaurant remains in operation).

A background growth factor of 0.6% was selected based on rates used in other recent studies in the area. City of Stamford officials did not identify significant planned site-specific generators that may affect the study area traffic volumes. As such, the background growth factor was applied exclusively to generate the 2025 No-Build traffic volumes shown in **Figure 4**.

## TRIP GENERATION COMPARISON

The trip generation for the existing restaurant was compared to that of the proposed dispensary using trip generation data contained in the ITE *Trip Generation Manual*, 11<sup>th</sup> Edition<sup>1</sup>.

Land Use Code 932 – High-Turnover (Sit-Down) Restaurant was chosen to estimate the trips currently generated by the existing restaurant. This is compared to LUC 882 – Marijuana Dispensary to estimate the anticipated trips for the proposed dispensary. The existing building square footage ( $\pm 4,300$  SF) was used to calculate the trip generation for the existing and proposed land uses. The permitted proposed dispensary is planned to have less active (non-storage) building area than the existing restaurant, subject to final zoning and building department approval. Detailed ITE Trip Generation excerpts are included in the appendix. **Table 1** below shows the resulting net new trips of the redevelopment during the weekday AM, weekday PM, and Saturday mid-day peak-hour periods.

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<sup>1</sup> Trip Generation Manual, 11<sup>th</sup> Edition published by the Institution of Transportation Engineers (ITE).

TABLE 1 ANTICIPATED TRIP GENERATION - 1308 EAST MAIN STREET, STAMFORD										
USE	LAND USE CODE <sup>1</sup>	AM PEAK HOUR			PM PEAK HOUR			SAT PEAK HOUR		
		ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL	ENTER	EXIT	TOTAL
Existing Restaurant (4,300 SF)	932 <sup>2</sup>	0	0	0	24	15	39	24	24	48
Marijuana Dispensary (4,300 SF)	882 <sup>3</sup>	23	22	45	41	40	81	62	62	124
<b>Net Change</b>		<b>+23</b>	<b>+22</b>	<b>+45</b>	<b>+17</b>	<b>+25</b>	<b>+42</b>	<b>+38</b>	<b>+38</b>	<b>+76</b>

<sup>1</sup> Land Use Codes based on ITE Trip Generation Manual 11th Edition

<sup>2</sup> Volume based on ITE Trip Generation Manual 11th Edition: Land Use Code 932: High-Turnover (Sit-Down) Restaurant

<sup>3</sup> Volume based on ITE Trip Generation Manual 11th Edition: Land Use Code 882: Marijuana Dispensary

The resulting trip generation calculations indicate that the proposed redevelopment would result in a net increase of 45 morning peak hour trips (23 in, 22 out), 42 evening peak hour trips (17 in, 25 out) and 76 Saturday mid-day peak hour trips (38 in, 38 out).

### Trip Distribution and 2025 Build Conditions

Langan estimated trip distribution percentages for the anticipated traffic generated by the proposed development based on existing traffic patterns and available CTDOT data in the vicinity of the site. We estimate that approximately 60% of users will access the site via East Main Street from the west and the remaining 40% will access the site from the east based on this data. The estimated trip increase on the site was then assigned to the roadway. **Figure 5** in the appendix shows the estimated trip distribution percentages and **Figure 6** shows the trips assigned to the roadway network based on the anticipated trip generation numbers for the development.

The 2025 Build traffic volumes were developed by combining the 2025 No Build traffic volumes from **Figure 4** with the anticipated trip generation increase resulting from the proposed conversion shown in **Figure 6**. The 2025 Build conditions were then evaluated during the roadway peak-hour periods using the volumes shown in **Figure 7** in the appendix.

## CAPACITY ANALYSIS

The evaluation criteria used to analyze the study intersections is based on the *Highway Capacity Manual* (HCM) 7<sup>th</sup> Edition, published by the Transportation Research Board (TRB). SYNCHRO 12 capacity analysis software was used to facilitate computer calculation for the capacity analysis at the study intersections. **Tables 2, 3 and 4** below compare the Level-of-Service (LOS), Control Delay per Vehicle (sec/veh) and queue lengths for the 2024 Existing Conditions, 2025 No Build and Build Conditions at the study intersections and the existing site driveway.

As can be seen in **Tables 2, 3, and 4**, the 2025 Build Conditions will not result in a decline in level-of-service versus the 2025 No Build Conditions. Individual movements and lane groups may change slightly in delay and queue length; however, overall and movement levels-of-service at these signalized intersections remain unchanged with nominal impacts to intersection delays. Accordingly, traffic to and from the new facility will not have a measurable impact on traffic operations in the area according to the analysis results below.

# MEMO

TABLE 2 CAPACITY ANALYSIS SUMMARY - WEEKDAY A.M. PEAK-HOUR																		
INTERSECTION	CONTROL TYPE	LANE USE	STORAGE LENGTH (ft)	2024 EXISTING AM CONDITIONS					2025 NO BUILD AM CONDITIONS					2025 BUILD AM CONDITIONS				
				LOS	DELAY (sec)	V/C RATIO	QUEUES (ft)		LOS	DELAY (sec)	V/C RATIO	QUEUES (ft)		LOS	DELAY (sec)	V/C RATIO	QUEUES (ft)	
							50th%	95th%				50th%	95th%				50th%	95th%
East Main Street & Waterbury Avenue / Hamilton Avenue	ACTUATED-COORDINATED	Overall		B	14.8	0.69			B	14.7	0.69			B	14.6	0.7		
		EB-L	125'	A	3.4	0.12	12'	28'	A	3.4	0.12	12'	28'	A	3.5	0.13	13'	28'
		EB-TTR	275'	A	4.9	0.11	22'	51'	A	4.9	0.11	22'	51'	A	5	0.12	23'	54'
		WB-L	50'	A	2.5	0.01	2'	5'	A	2.5	0.01	1'	5'	A	2.5	0.01	2'	5'
		WB-TTR	135'	A	5.8	0.18	38'	40'	A	5.8	0.18	38'	41'	A	5.7	0.19	40'	41'
		NB-L	120'	D	51.4	0.27	27'	52'	D	51.4	0.27	27'	52'	D	51.1	0.27	27'	52'
		NB-TR	120'	C	31.3	0.16	14'	38'	C	31.3	0.16	14'	38'	C	31.1	0.15	14'	38'
		SB-LT	>500'	E	71.4	0.68	84'	125'	E	71.4	0.68	84'	125'	E	71.8	0.69	86'	127'
		SB-R	75'	B	12.7	0.37	0'	38'	B	12.7	0.37	0'	38'	B	12.6	0.37	0'	38'
East Main Street & Weed Avenue	ACTUATED-COORDINATED	Overall		A	9.3	0.51			A	9.2	0.51			A	9.6	0.51		
		EB-L	50'	A	3.3	0.05	9'	14'	A	3.3	0.05	9'	14'	A	3.3	0.05	9'	14'
		EB-TTR	135'	A	6.4	0.13	67'	51'	A	6.3	0.13	67'	51'	A	7.4	0.15	70'	52'
		WB-L	100'	A	2.1	0.09	8'	16'	A	2.1	0.09	8'	16'	A	2.2	0.1	8'	17'
		WB-TTR	180'	A	4.4	0.16	44'	58'	A	4.4	0.16	45'	58'	A	4.7	0.17	46'	61'
		NB-LT	200'	E	68.4	0.51	43'	69'	E	68.4	0.51	43'	69'	E	68.4	0.51	43'	69'
		NB-R	75'	B	16.7	0.39	0'	29'	B	16.7	0.39	0'	29'	B	16.6	0.41	0'	29'
		SB-LTR	50'	D	48.5	0.01	1'	8'	D	48.5	0.01	1'	8'	D	48.5	0.01	1'	8'
Site Driveway & East Main Street	UNSIGNALIZED	EB	50'	-	-	-	-	-	-	-	-	-	-	A	8.3	0.02	0'	0'
		WB	100'	-	-	-	-	-	-	-	-	-	-	A	0	0	0'	0'
		SB	75'	-	-	-	-	-	-	-	-	-	-	B	11.6	0.05	0'	3'

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**TABLE 3  
 CAPACITY ANALYSIS SUMMARY - WEEKDAY P.M. PEAK-HOUR**

INTERSECTION	CONTROL TYPE	LANE USE	STORAGE LENGTH (ft)	2024 EXISTING PM CONDITIONS				2025 NO BUILD PM CONDITIONS				2025 BUILD PM CONDITIONS						
				LOS	DELAY (sec)	V/C RATIO	QUEUES (ft)		LOS	DELAY (sec)	V/C RATIO	QUEUES (ft)		LOS	DELAY (sec)	V/C RATIO	QUEUES (ft)	
							50th%	95th%				50th%	95th%				50th%	95th%
East Main Street & Waterbury Avenue / Hamilton Avenue	ACTUATED-COORDINATED	Overall		<b>B</b>	<b>15.8</b>	<b>0.74</b>			<b>B</b>	<b>15.8</b>	<b>0.74</b>			<b>B</b>	<b>15.8</b>	<b>0.74</b>		
		EB-L	125'	A	4.3	0.11	14'	35'	A	4.3	0.11	14'	35'	A	4.3	0.11	14'	35'
		EB-TTR	275'	A	6.3	0.26	74'	162'	A	6.3	0.27	75'	163'	A	6.4	0.27	76'	166'
		WB-L	50'	A	6	0	1'	3'	A	6	0	1'	3'	A	5.6	0.01	2'	4'
		WB-TTR	135'	B	12	0.13	62'	101'	B	12.1	0.13	63'	102'	B	12	0.14	65'	105'
		NB-L	120'	D	46.6	0.22	23'	52'	D	46.5	0.22	23'	52'	D	46.3	0.22	23'	52'
		NB-TR	120'	C	25	0.1	9'	34'	C	24.9	0.1	9'	34'	C	24.8	0.1	9'	34'
		SB-LT	>500'	E	69.5	0.74	111'	173'	E	69.3	0.73	112'	173'	E	69.3	0.74	114'	175'
		SB-R	75'	B	11.4	0.24	0'	39'	B	11.4	0.24	0'	39'	B	11.3	0.23	0'	39'
East Main Street & Weed Avenue	ACTUATED-COORDINATED	Overall		<b>A</b>	<b>8</b>	<b>0.53</b>			<b>A</b>	<b>8</b>	<b>0.53</b>			<b>A</b>	<b>8</b>	<b>0.53</b>		
		EB-L	50'	A	2	0	0'	0'	A	2	0	0'	0'	A	2	0	0'	0'
		EB-TTR	135'	A	4.7	0.33	97'	113'	A	4.7	0.33	97'	114'	A	4.8	0.34	98'	115'
		WB-L	100'	A	2.6	0.14	7'	18'	A	2.6	0.14	7'	18'	A	2.7	0.15	8'	19'
		WB-TTR	180'	A	3.3	0.09	16'	42'	A	3.3	0.09	16'	42'	A	3.3	0.09	17'	44'
		NB-LT	200'	E	67.7	0.53	49'	89'	E	67.7	0.53	49'	89'	E	67.7	0.53	49'	89'
		NB-R	75'	B	15.7	0.45	0'	48'	B	15.7	0.45	0'	48'	B	15.7	0.46	0'	49'
		SB-LTR	50'	A	0.6	0.06	0'	0'	A	0.6	0.06	0'	0'	A	0.6	0.06	0'	0'
Site Driveway & East Main Street	UNSIGNALIZED	EB	50'	-	-	-	-	-	-	-	-	-	-	A	8	0.03	0'	0'
		WB	100'	-	-	-	-	-	-	-	-	-	-	A	0	0	0'	0'
		SB	75'	-	-	-	-	-	-	-	-	-	-	B	12.9	0.1	0'	8'

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**TABLE 4  
 CAPACITY ANALYSIS SUMMARY – SATURDAY MID-DAY PEAK-HOUR**

INTERSECTION	CONTROL TYPE	LANE USE	STORAGE LENGTH (ft)	2024 EXISTING SAT CONDITIONS					2025 NO BUILD SAT CONDITIONS					2025 BUILD SAT CONDITIONS				
				LOS	DELAY (sec)	V/C RATIO	QUEUES (ft)		LOS	DELAY (sec)	V/C RATIO	QUEUES (ft)		LOS	DELAY (sec)	V/C RATIO	QUEUES (ft)	
							50th%	95th%				50th%	95th%				50th%	95th%
East Main Street & Waterbury Avenue / Hamilton Avenue	ACTUATED-COORDINATED	Overall		<b>B</b>	<b>14.6</b>	<b>0.68</b>			<b>B</b>	<b>14.6</b>	<b>0.68</b>			<b>B</b>	<b>14.3</b>	<b>0.68</b>		
		EB-L	125'	A	3.5	0.1	11'	28'	A	3.5	0.1	11'	28'	A	3.5	0.1	11'	28'
		EB-TTR	275'	A	4.6	0.11	23'	58'	A	4.7	0.11	23'	58'	A	4.7	0.11	24'	61'
		WB-L	50'	A	3.6	0	1'	3'	A	3.6	0	1'	3'	A	4	0	1'	3'
		WB-TTR	135'	A	7.9	0.13	46'	101'	A	8	0.13	46'	101'	A	7.8	0.14	46'	104'
		NB-L	120'	D	40.6	0.07	7'	22'	D	40.5	0.07	7'	22'	D	40.5	0.07	7'	22'
		NB-TR	120'	C	30.2	0.08	8'	28'	C	30.2	0.08	8'	28'	C	30.2	0.08	8'	28'
		SB-LT	>500'	E	64.9	0.68	79'	130'	E	65	0.68	80'	131'	E	65	0.68	80'	131'
		SB-R	75'	A	9.4	0.24	0'	30'	A	9.4	0.24	0'	30'	A	9.4	0.24	0'	30'
East Main Street & Weed Avenue	ACTUATED-COORDINATED	Overall		<b>B</b>	<b>12.5</b>	<b>0.61</b>			<b>B</b>	<b>12.4</b>	<b>0.61</b>			<b>B</b>	<b>12.2</b>	<b>0.61</b>		
		EB-L	50'	A	0	0	0'	0'	A	0	0	0'	0'	A	0	0	0'	0'
		EB-TTR	135'	A	8.8	0.16	71'	52'	A	8.8	0.16	72'	52'	A	8.8	0.17	75'	53'
		WB-L	100'	A	2.9	0.12	11'	26'	A	2.9	0.12	11'	26'	A	3	0.12	11'	26'
		WB-TTR	180'	A	3.2	0.09	17'	33'	A	3.2	0.09	17'	33'	A	3.2	0.1	19'	36'
		NB-LT	200'	E	63.2	0.6	63'	109'	E	63.2	0.6	63'	109'	E	63.2	0.6	63'	109'
		NB-R	75'	B	13	0.3	0'	38'	B	13	0.3	0'	38'	B	13	0.3	0'	38'
		SB-LTR	50'	A	0	0.06	0'	0'	A	0	0	0'	0'	A	0	0	0'	0'
Site Driveway & East Main Street	UNSIGNALIZED	EB	50'	-	-	-	-	-	-	-	-	-	-	A	8.1	0.04	0'	3'
		WB	100'	-	-	-	-	-	-	-	-	-	-	A	0	0	0'	0'
		SB	75'	-	-	-	-	-	-	-	-	-	-	B	11.8	0.12	0'	10'



## SAFETY ANALYSIS

### Intersection Sight Distance

Langan evaluated the sight distances at the site driveway on East Main Street to determine if the available sight distances meet the minimum requirements established by the Connecticut Department of Transportation (CTDOT) Highway Design Manual. A CTDOT Traffic Monitoring Station, DARI-001, is located approximately 750-feet east of the site driveway on East Main Street, which has volume and speed data from 2023. Based on the available data, the 85<sup>th</sup> percentile speed of the roadway was calculated to be 45 MPH in the vicinity of the site driveway. A summary of the available and required sight distances at the site driveway can be seen below in **Table 5**.

<b>TABLE 5 INTERSECTION SIGHT DISTANCE SUMMARY</b>			
<b>LOCATION</b>	<b>Design Speed</b>	<b>Intersection Sight Distance</b>	
		<b>Passenger Car<sup>1</sup></b>	
		<b>Required</b>	<b>Provided</b>
East Main Street & Site Driveway Right Turn from Stop Left Turn from Stop	45 mph	500 ft 565 ft	550 ft >1,000 ft

<sup>1</sup> Passenger Car ISD, for turning movement from stop on minor street approach.

As shown, the intersection sight distances (ISDs) provided at the site driveway meet CTDOT's minimum requirements.

### Crash Analysis

Langan obtained the most recent three years (2021 through 2023) of accident data that occurred within a 100-foot radius of each study intersection from the UConn Crash Data Repository.

**Table 6** provides a summary of the accident data. A total of 11 accidents occurred over the 3-year period.

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TABLE 6 ACCIDENT DATA SUMMARY (2021 - 2023)									
INTERSECTION	NUMBER OF ACCIDENTS		SEVERITY			CONDITIONS			
	Total	Average Per Year	Property Damage Only	Personal Injury	Fatality	Clear (Dry)	Rain/Snow	Day	Night
East Main Street & Waterbury Avenue	6	2.00	5 (83%)	1 (17%)	0 (0%)	6 (100%)	0 (0%)	5 (83%)	1 (17%)
East Main Street & Weed Avenue	5	1.67	3 (60%)	2 (40%)	0 (0%)	5 (100%)	0 (0%)	4 (80%)	1 (20%)
<b>TOTAL</b>	<b>11</b>	<b>3.67</b>	<b>8 (73%)</b>	<b>3 (27%)</b>	<b>0 (0%)</b>	<b>11 (100%)</b>	<b>0 (0%)</b>	<b>9 (82%)</b>	<b>2 (18%)</b>

Source: UConn Crash Data Repository (2021 - 2023)

Accidents included angle collisions, rear-ends, head-on collisions, sideswipe (same direction), and fixed object/single vehicle crashes. Three (27%) of the reported accidents included injuries. No fatalities were reported. All accidents occurred during dry weather conditions and majority occurred during daylight hours (82%).

## SUMMARY AND CONCLUSIONS

This assessment investigates the potential traffic impacts generated by the proposed conversion of an existing restaurant to a cannabis dispensary at 1308 East Main Street in Stamford, CT on the surrounding area roadway network. Langan performed a capacity analysis at two key study intersections and the site driveway for the 2024 Existing, 2025 No Build and Build scenarios. Our evaluation indicates that the existing roadway infrastructure within the project vicinity has the capacity to accommodate the nominal increase in traffic at the site resulting from the conversion. Traffic to and from the new facility will not have a measurable impact on traffic operations in the area according to the analysis herein.

# APPENDIX



**NOTE:**  
 NEARMAP AERIAL IMAGE ACCESSED 03/29/2023

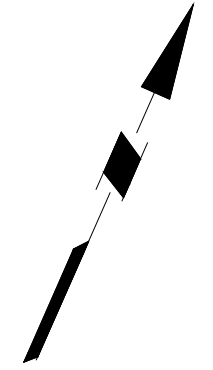
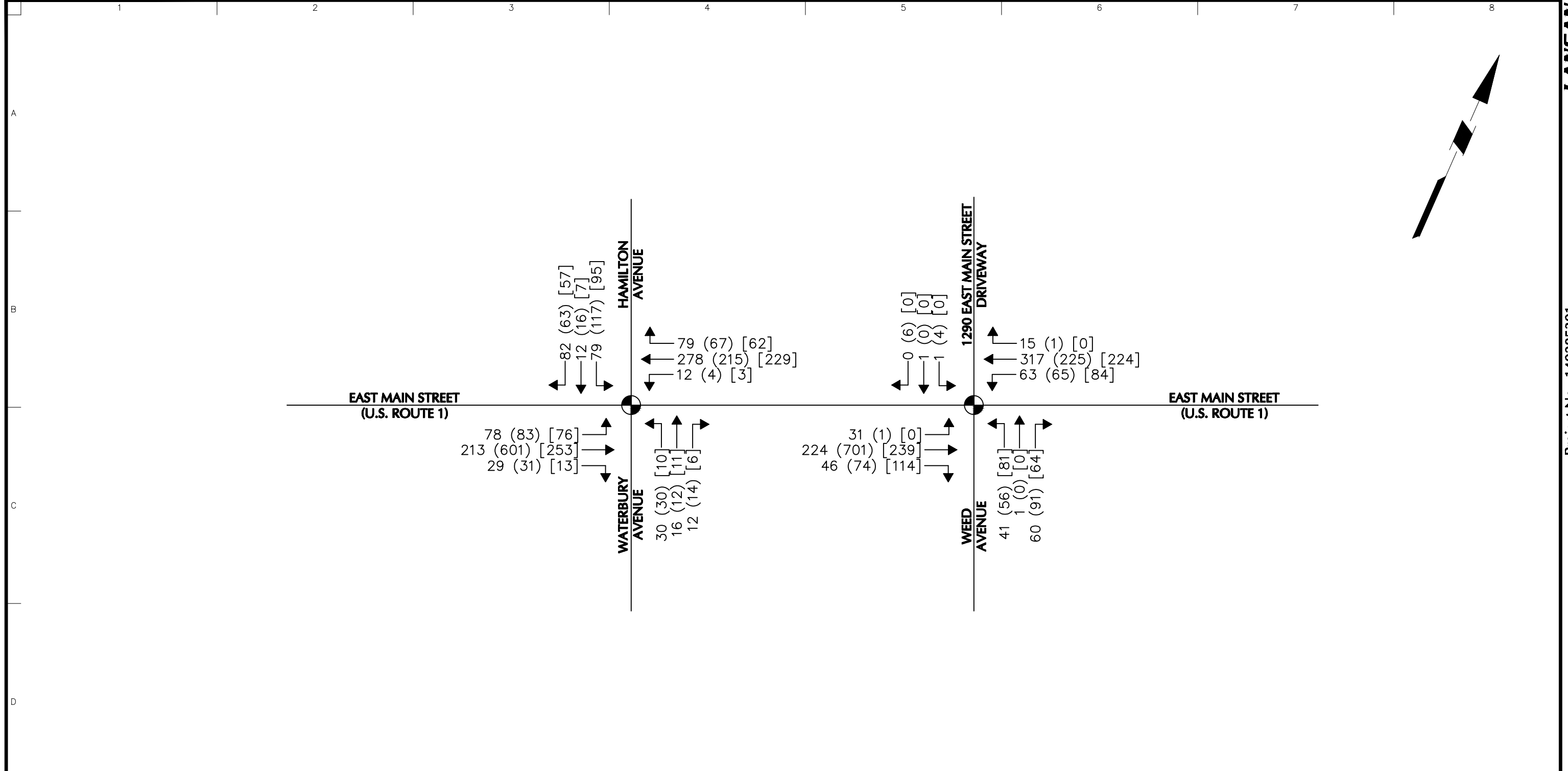
<p><b>LANGAN</b></p> <p>Langan CT, Inc.          555 Long Wharf Drive          New Haven, CT 06511</p> <p>T: 203.562.5771 F: 203.789.6142 www.langan.com</p>	Project	Drawing Title	Project No.	Drawing No.
	1308 EAST MAIN STREET CANNABIS	SITE LOCATION MAP	140285301	FIG. 1
	STAMFORD	CONNECTICUT	Date	
			02/27/2024	
			Drawn By	
			CWA	
			Checked By	
			CJM	





**NOTE:**  
 NEARMAP AERIAL IMAGE ACCESSED 03/29/2023

<p><b>LANGAN</b></p> <p>Langan CT, Inc.          555 Long Wharf Drive          New Haven, CT 06511</p> <p>T: 203.562.5771 F: 203.789.6142 www.langan.com</p>	Project	Drawing Title	Project No.	Drawing No.
	1308 EAST MAIN STREET CANNABIS	STUDY INTERSECTIONS	140285301	FIG. 2
	STAMFORD CONNECTICUT		Date	
			02/27/2024	
			Drawn By	
			CWA	
			Checked By	
			CJM	



**NOTES:**

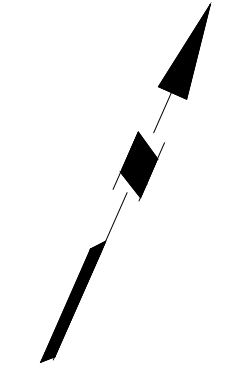
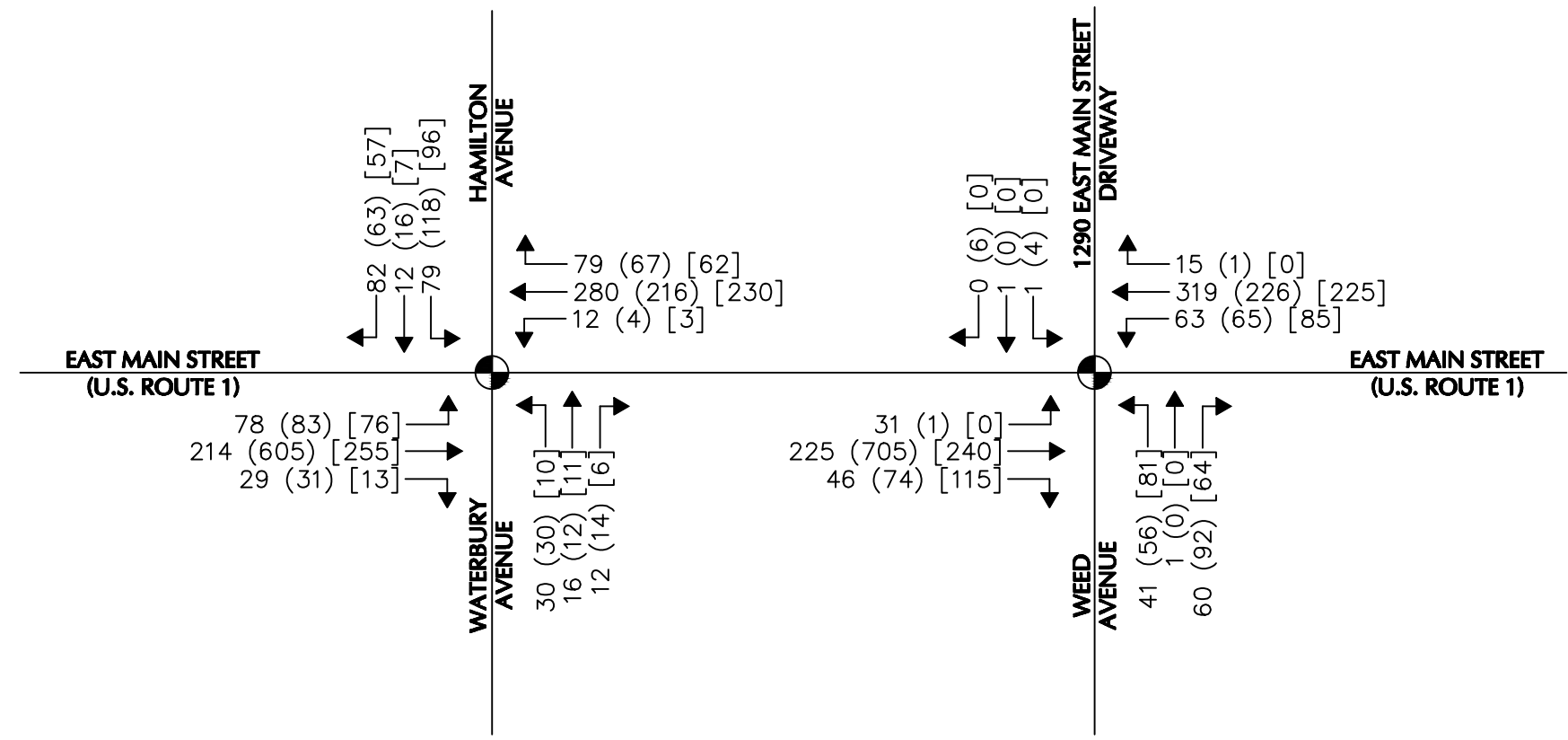
1. MORNING AND EVENING PEAK HOUR VOLUMES ARE BASED ON TRAFFIC VOLUMES OBSERVED FRIDAY FEBRUARY 23rd AND SATURDAY FEBRUARY 24th, 2023.
2. MORNING PEAK-HOUR OF ADJACENT ROADWAY: 8:00 A.M. - 9:00 A.M.
3. EVENING PEAK-HOUR OF ADJACENT ROADWAY: 3:30 P.M. - 4:30 P.M.
4. SATURDAY MID-DAY PEAK-HOUR OF ADJACENT ROADWAY: 1:00 P.M. - 2:00 P.M.

**LEGEND**

TRAFFIC SIGNAL	
PEAK-HOUR VOLUMES	AM (PM) [SAT]
DIRECTION OF TRAFFIC	

<p><b>LANGAN</b></p> <p>Langan CT, Inc. 555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142 www.langan.com</p>	Project	Drawing Title	Project No.	Drawing No.
	1308 EAST MAIN STREET CANNABIS	2024 EXISTING TRAFFIC VOLUMES	140285301	FIG. 3
	STAMFORD	CONNECTICUT	Date	Checked By
			02/21/2024	CJM
			Drawn By	Sheet 1 of 5
			CWA	

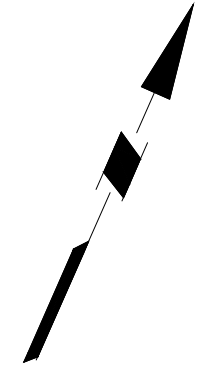
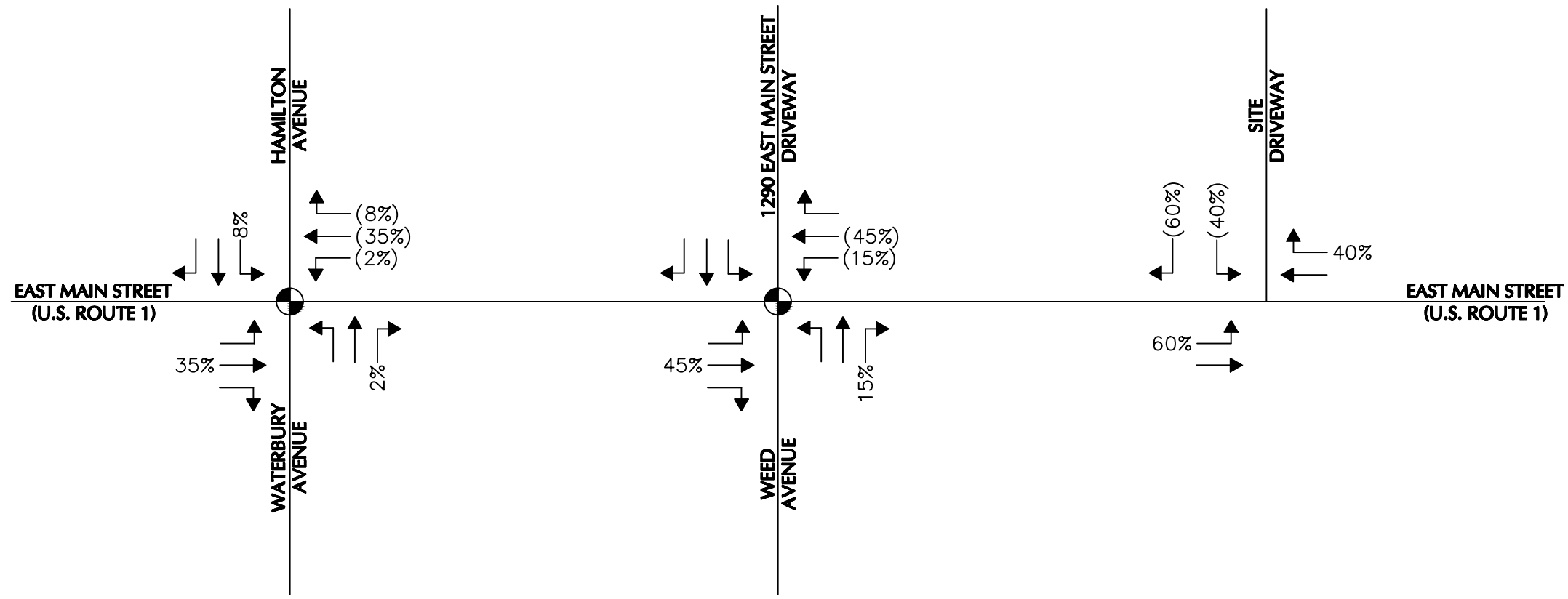




- NOTES:**
- MORNING AND EVENING PEAK HOUR VOLUMES ARE BASED ON A 0.6% GROWTH RATE APPLIED TO THE TRAFFIC VOLUMES SHOWN IN FIGURE 3 OF THIS REPORT.
  - MORNING PEAK-HOUR OF ADJACENT ROADWAY: 8:00 A.M. - 9:00 A.M.
  - EVENING PEAK-HOUR OF ADJACENT ROADWAY: 3:30 P.M. - 4:30 P.M.
  - SATURDAY MID-DAY PEAK-HOUR OF ADJACENT ROADWAY: 1:00 P.M. - 2:00 P.M.

LEGEND	
TRAFFIC SIGNAL	
PEAK-HOUR VOLUMES	AM (PM) [SAT]
DIRECTION OF TRAFFIC	

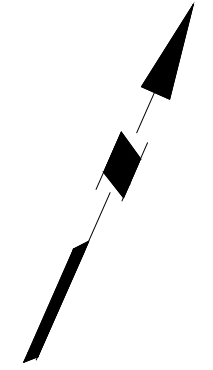
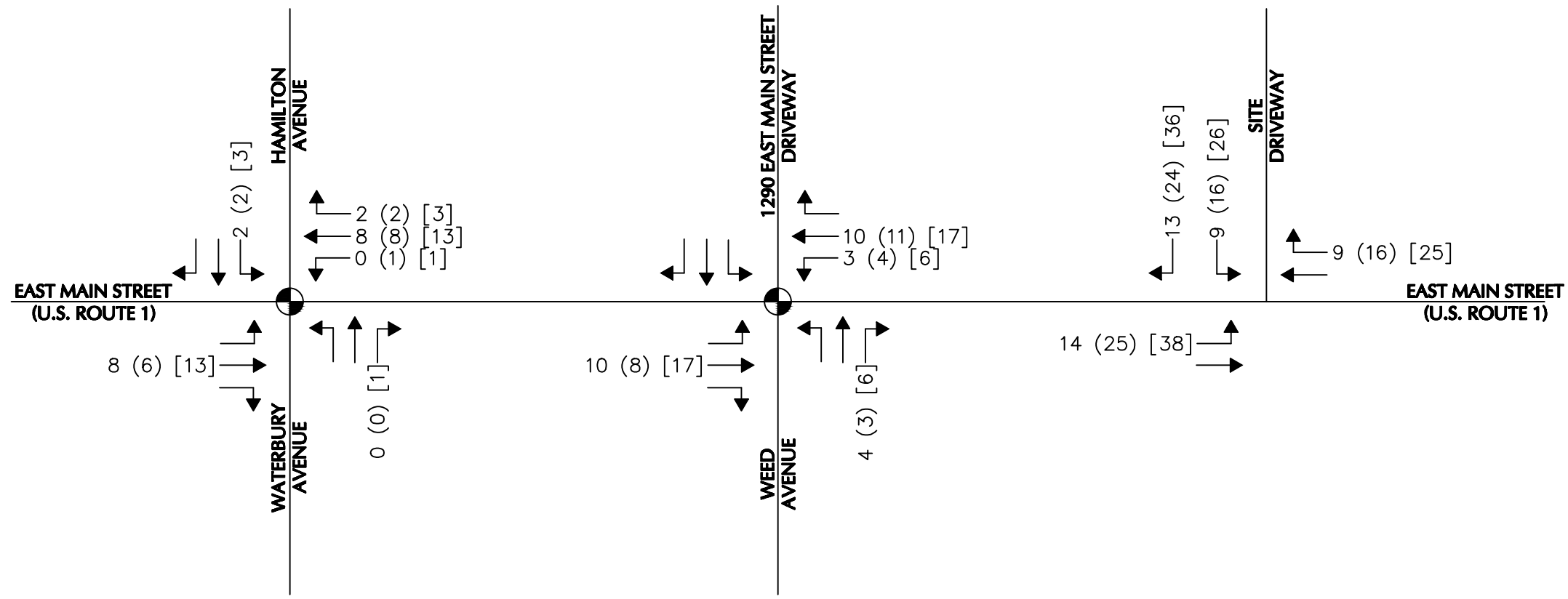
 Langan CT, Inc. 555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142 www.langan.com	Project	Drawing Title	Project No.	Drawing No.
	1308 EAST MAIN STREET CANNABIS	2025 BACKGROUND TRAFFIC VOLUMES	140285301	FIG. 4
	STAMFORD CONNECTICUT		Date	Sheet 2 of 5
			02/21/2024	
			Drawn By	
			CWA	
			Checked By	
			CJM	



- NOTES:**
1. MORNING AND EVENING PEAK HOUR TRIP DISTRIBUTION PERCENTAGES ARE BASED ON EXISTING TRAFFIC PATTERNS IN THE VICINITY OF THE PROJECT SITE.
  2. MORNING PEAK-HOUR OF ADJACENT ROADWAY: 8:00 A.M. - 9:00 A.M.
  3. EVENING PEAK-HOUR OF ADJACENT ROADWAY: 3:30 P.M. - 4:30 P.M.
  4. SATURDAY MID-DAY PEAK-HOUR OF ADJACENT ROADWAY: 1:00 P.M. - 2:00 P.M.

LEGEND	
TRAFFIC SIGNAL	
PEAK-HOUR VOLUMES	ENTER (EXIT)
DIRECTION OF TRAFFIC	

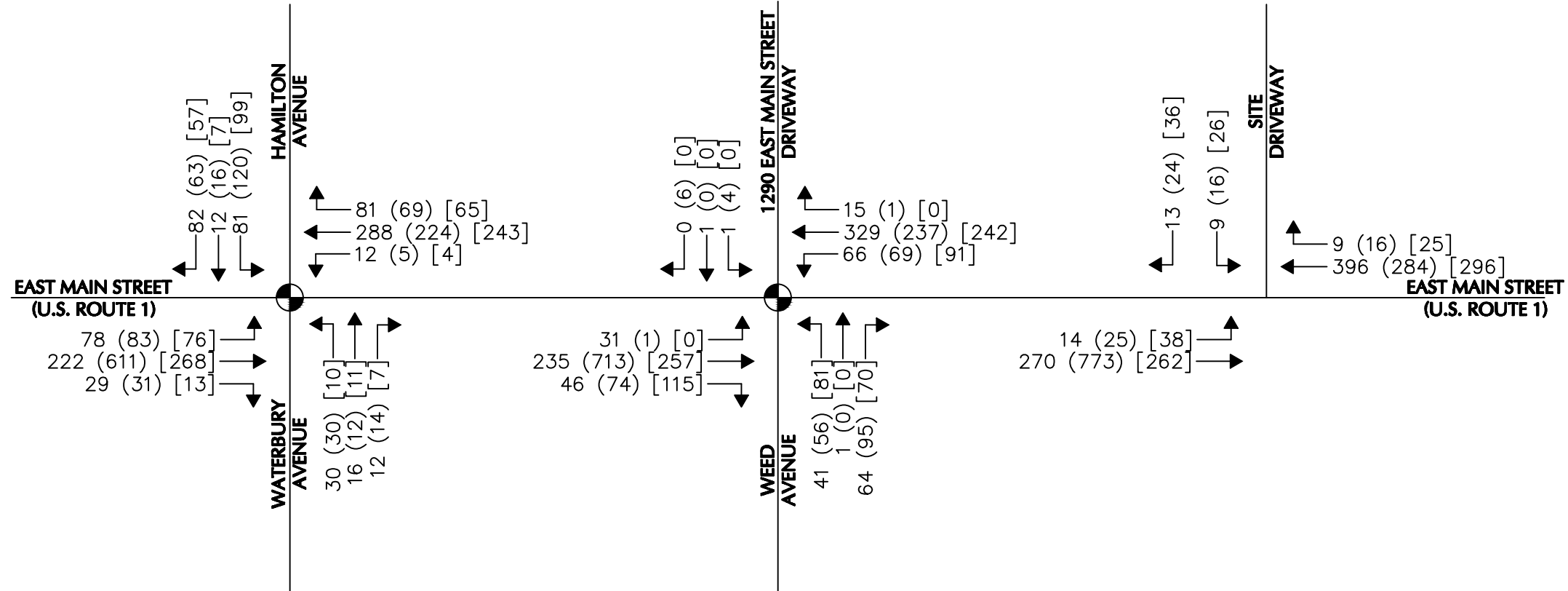
 Langan CT, Inc. 555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142 www.langan.com	Project	Drawing Title	Project No.	Drawing No.
	STAMFORD	CONNECTICUT	1308 EAST MAIN STREET CANNABIS	TRIP DISTRIBUTION
			Date	FIG. 5
			Drawn By	Sheet 3 of 5
			Checked By	
			CJM	



- NOTES:**
1. MORNING AND EVENING PEAK HOUR TRIPS ARE BASED ON THE TRIP GENERATION ESTIMATES FOR THE DEVELOPMENT APPLIED TO THE TRIP DISTRIBUTION PERCENTAGES FOUND IN FIGURE 5 OF THIS REPORT.
  2. MORNING PEAK-HOUR OF ADJACENT ROADWAY: 8:00 A.M. - 9:00 A.M.
  3. EVENING PEAK-HOUR OF ADJACENT ROADWAY: 3:30 P.M. - 4:30 P.M.
  4. SATURDAY MID-DAY PEAK-HOUR OF ADJACENT ROADWAY: 1:00 P.M. - 2:00 P.M.

LEGEND	
TRAFFIC SIGNAL	
PEAK-HOUR VOLUMES	AM (PM) [SAT]
DIRECTION OF TRAFFIC	

 Langan CT, Inc. 555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142 www.langan.com	Project	Drawing Title	Project No.	Drawing No.
	STAMFORD	CONNECTICUT	1308 EAST MAIN STREET CANNABIS TRIP ASSIGNMENT	140285301
			Date	Sheet 4 of 5
			Drawn By	
			Checked By	
			CJM	



NOTES:

1. MORNING AND EVENING PEAK HOUR VOLUMES ARE BASED ON THE COMBINATION OF TRAFFIC VOLUMES FROM FIGURES 4 AND 6 OF THIS REPORT.
2. MORNING PEAK-HOUR OF ADJACENT ROADWAY: 8:00 A.M. - 9:00 A.M.
3. EVENING PEAK-HOUR OF ADJACENT ROADWAY: 3:30 P.M. - 4:30 P.M.
4. SATURDAY MID-DAY PEAK-HOUR OF ADJACENT ROADWAY: 1:00 P.M. - 2:00 P.M.

LEGEND	
TRAFFIC SIGNAL	
PEAK-HOUR VOLUMES	AM (PM) [SAT]
DIRECTION OF TRAFFIC	

 Langan CT, Inc. 555 Long Wharf Drive New Haven, CT 06511 T: 203.562.5771 F: 203.789.6142 www.langan.com	Project <b>1308 EAST MAIN STREET CANNABIS</b>	Drawing Title <b>2025 BUILD TRAFFIC VOLUMES</b>	Project No. <b>140285301</b>	Drawing No. <b>FIG. 7</b>
	STAMFORD CONNECTICUT	Date <b>02/21/2024</b>	Drawn By <b>CWA</b>	Checked By <b>CJM</b>

# Land Use: 882

## Marijuana Dispensary

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### Description

A marijuana dispensary is a stand-alone facility where cannabis is sold to patients or retail consumers in a legal manner. Marijuana cultivation and processing facility (Land Use 190) is a related land use.

### Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 2010s in California, Colorado, Massachusetts, and Oregon.

### Source Numbers

867, 893, 919, 1041, 1059

# Marijuana Dispensary (882)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 6

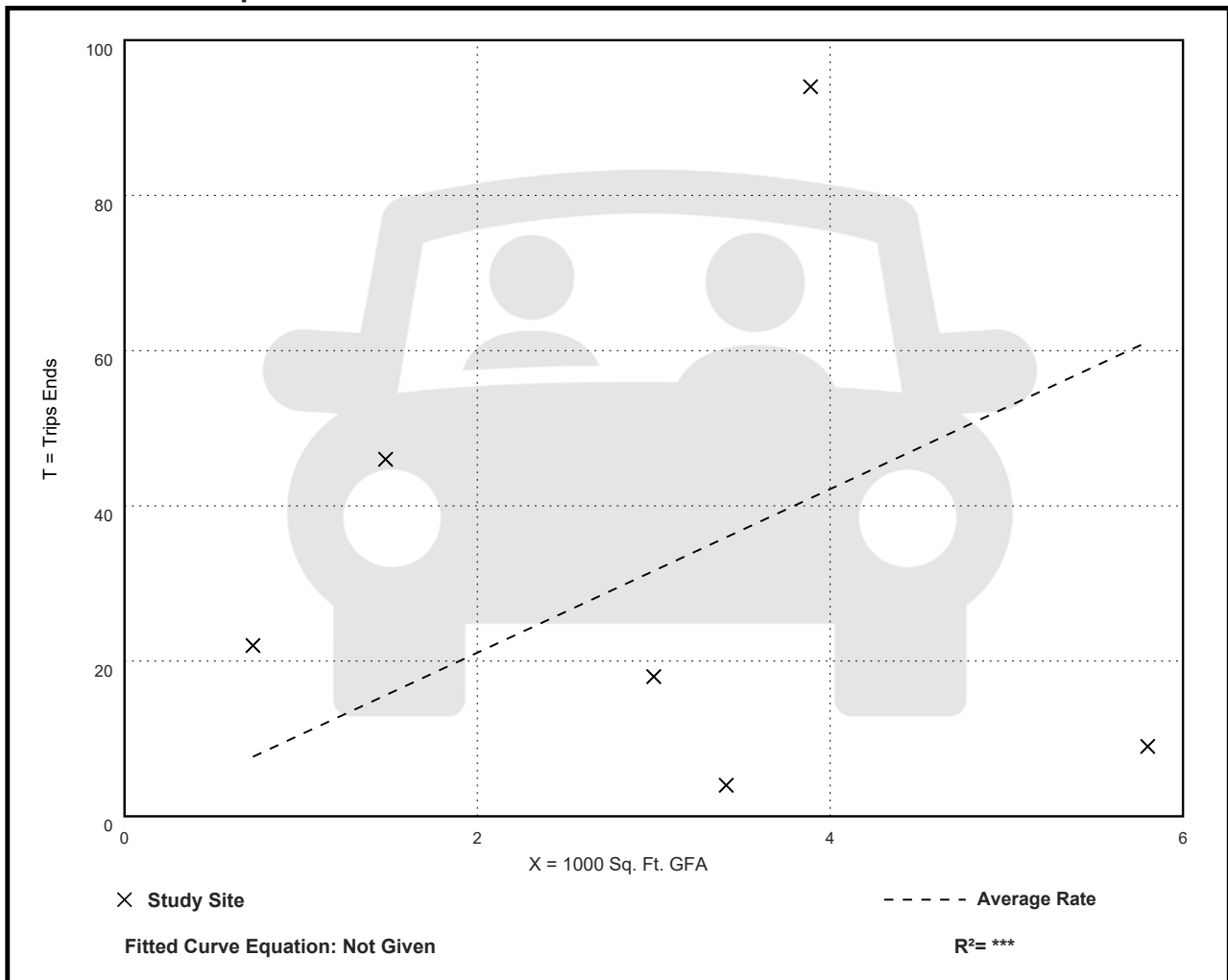
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 52% entering, 48% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
10.54	1.17 - 31.08	12.69

## Data Plot and Equation



# Marijuana Dispensary (882)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 16

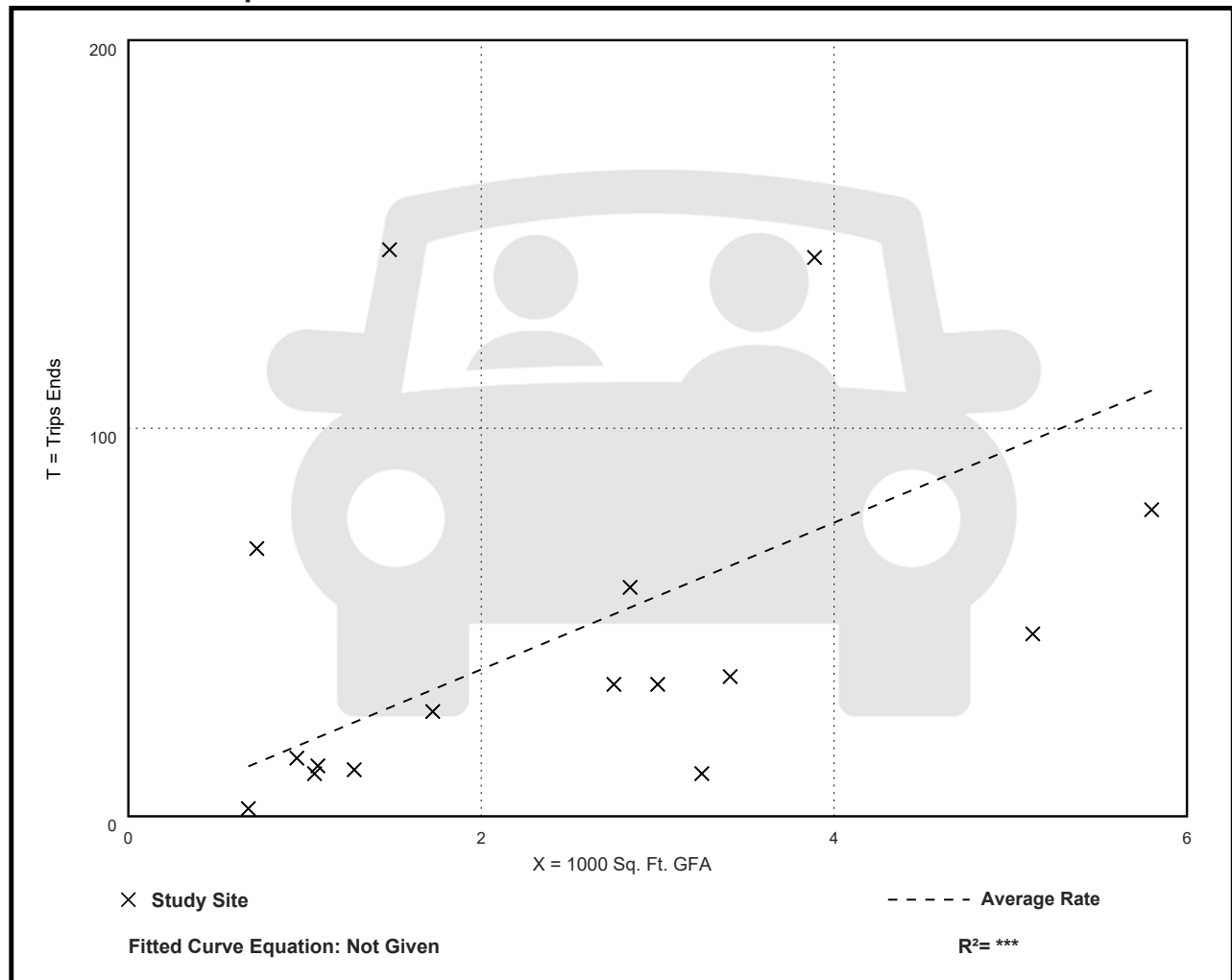
Avg. 1000 Sq. Ft. GFA: 2

Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
18.92	2.94 - 98.65	21.73

## Data Plot and Equation





# Marijuana Dispensary (882)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 5

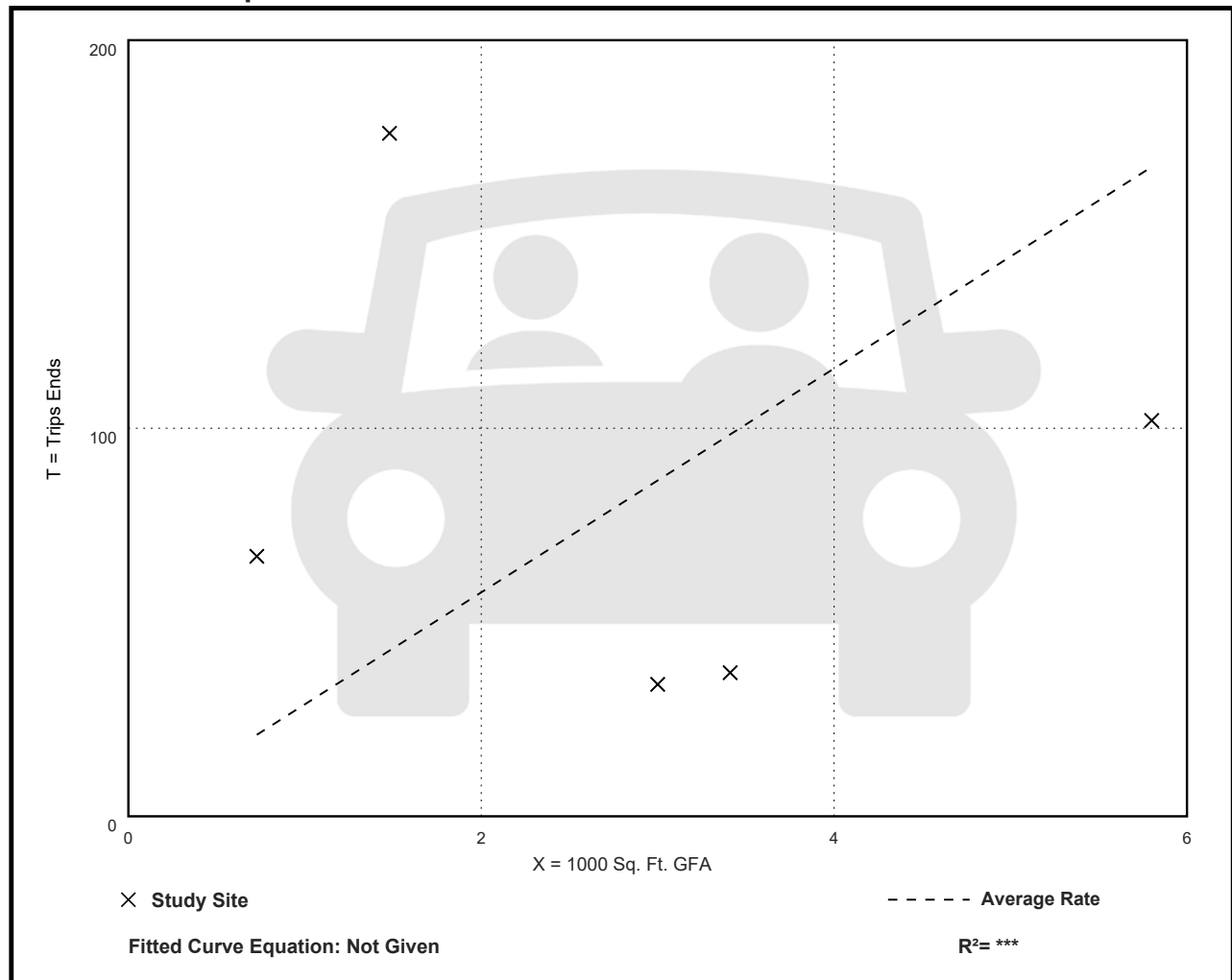
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 50% entering, 50% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
28.85	10.85 - 118.92	39.14

## Data Plot and Equation



# Land Use: 932

## High-Turnover (Sit-Down) Restaurant

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### Description

This land use consists of sit-down, full-service eating establishments with a typical duration of stay of 60 minutes or less. This type of restaurant is usually moderately priced, frequently belongs to a restaurant chain, and is commonly referred to as casual dining. Generally, these restaurants serve lunch and dinner; they may also be open for breakfast and are sometimes open 24 hours a day. These restaurants typically do not accept reservations. A patron commonly waits to be seated, is served by wait staff, orders from a menu, and pays after the meal.

Some facilities offer carry-out for a small proportion of its customers. Some facilities within this land use may also contain a bar area for serving food and alcoholic drinks.

Fast casual restaurant (Land Use 930), fine dining restaurant (Land Use 931), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window (Land Use 934) are related uses.

### Additional Data

***Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.***

If the restaurant has outdoor seating, its area is not included in the overall gross floor area. For a restaurant that has significant outdoor seating, the number of seats may be more reliable than GFA as an independent variable on which to establish a trip generation rate.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Georgia, Indiana, Kentucky, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Vermont, and Wisconsin.

### Source Numbers

126, 269, 275, 280, 300, 301, 305, 338, 340, 341, 358, 384, 424, 432, 437, 438, 444, 507, 555, 577, 589, 617, 618, 728, 868, 884, 885, 903, 927, 939, 944, 961, 962, 977, 1048

# High-Turnover (Sit-Down) Restaurant (932)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 37

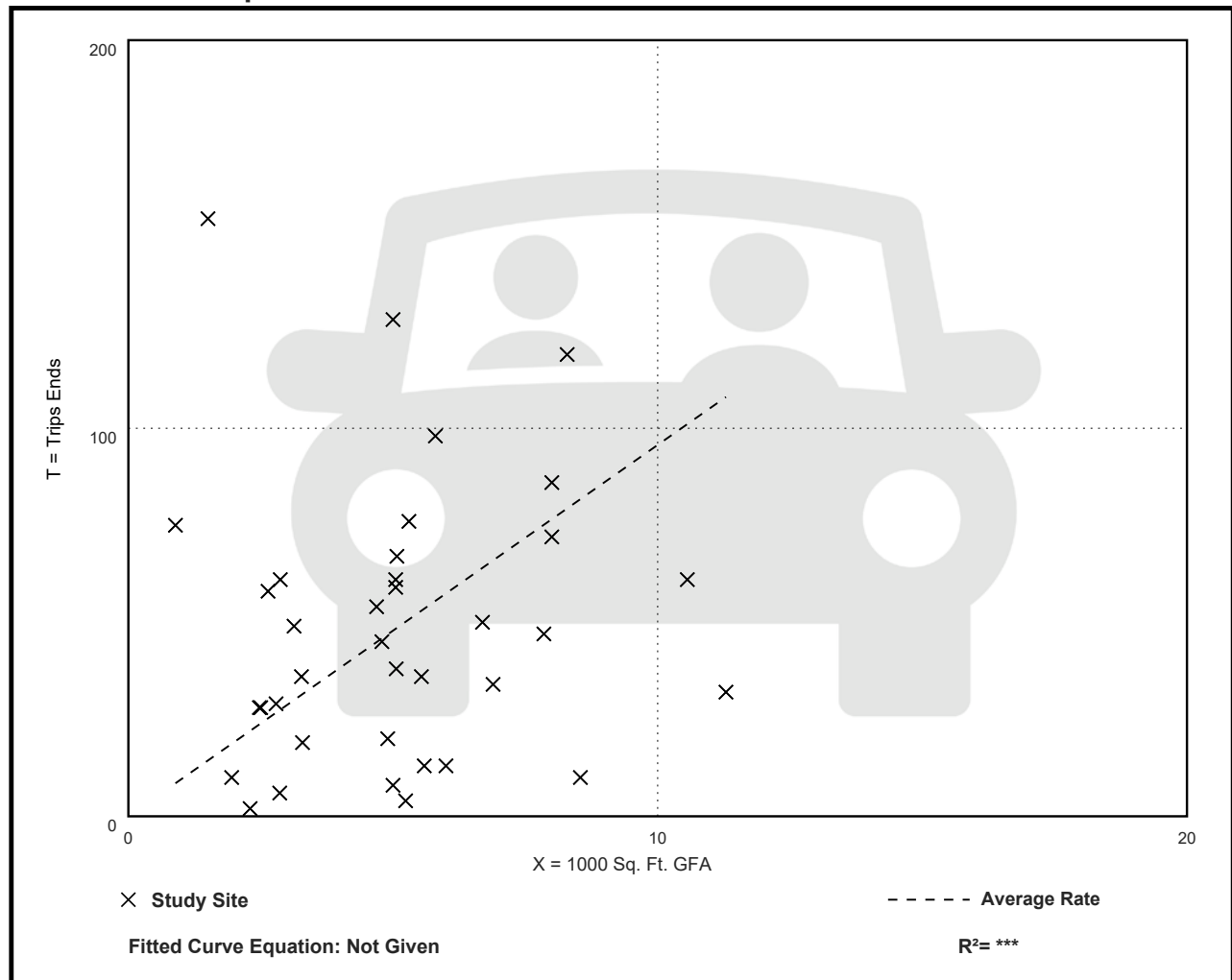
Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 55% entering, 45% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.57	0.76 - 102.39	11.61

## Data Plot and Equation



# High-Turnover (Sit-Down) Restaurant (932)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 104

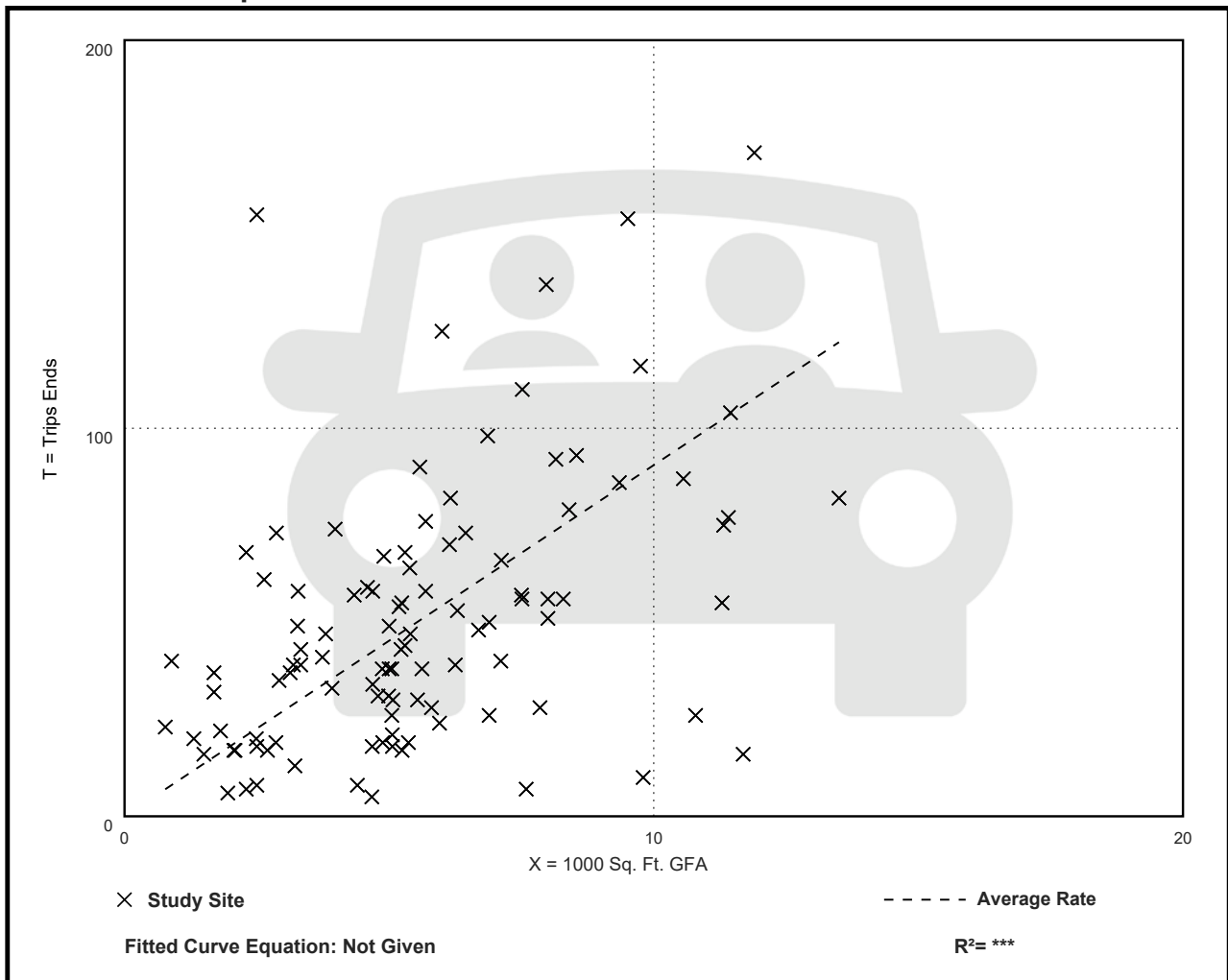
Avg. 1000 Sq. Ft. GFA: 6

Directional Distribution: 61% entering, 39% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.05	0.92 - 62.00	6.18

## Data Plot and Equation



# High-Turnover (Sit-Down) Restaurant (932)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Saturday, Peak Hour of Generator

Setting/Location: General Urban/Suburban

Number of Studies: 22

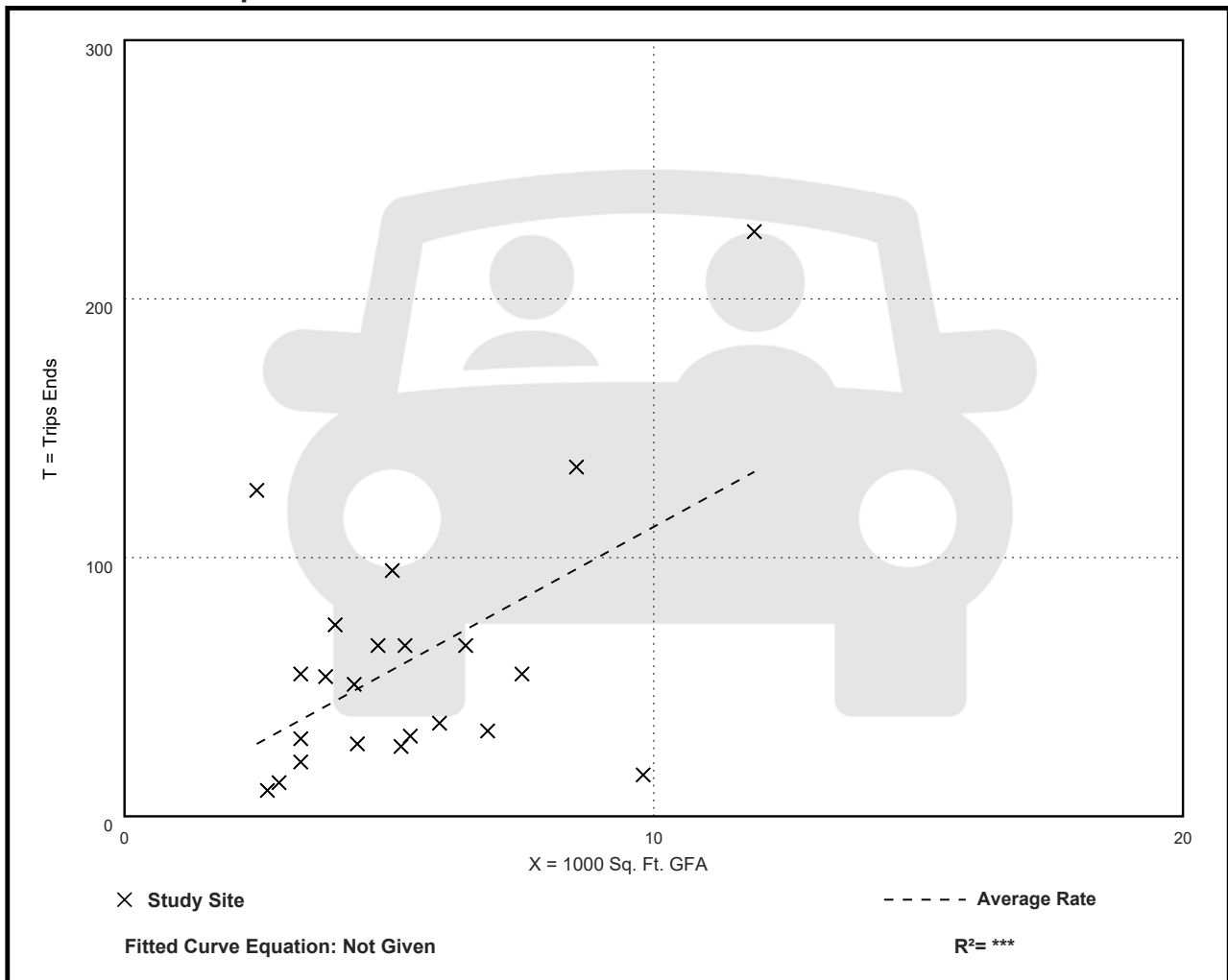
Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 51% entering, 49% exiting

## Vehicle Trip Generation per 1000 Sq. Ft. GFA





















Average Rate	Range of Rates	Standard Deviation
11.19	1.63 - 50.40	8.30

## Data Plot and Equation



# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Existing AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	213	29	12	278	79	30	16	12	79	12	82
Future Volume (vph)	78	213	29	12	278	79	30	16	12	79	12	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	50		0	0		0	0		75
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.967			0.936				0.850
Flt Protected	0.950			0.950			0.950				0.959	
Satd. Flow (prot)	1736	3344	0	1805	3396	0	1752	1741	0	0	1806	1509
Flt Permitted	0.476			0.572			0.619				0.730	
Satd. Flow (perm)	870	3344	0	1087	3396	0	1142	1741	0	0	1375	1509
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		19						15				100
Link Speed (mph)		30			30			30				30
Link Distance (ft)		404			244			271				300
Travel Time (s)		9.2			5.5			6.2				6.8
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	6%	6%	0%	3%	2%	3%	0%	5%	1%	0%	7%
Adj. Flow (vph)	95	260	35	15	339	96	37	20	15	96	15	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	295	0	15	435	0	37	35	0	0	111	100
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4				8
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.1	24.5		9.0	24.5		24.6	24.6		12.6	12.6	12.6
Total Split (s)	18.0	70.0		18.0	70.0		32.0	32.0		32.0	32.0	32.0
Total Split (%)	15.0%	58.3%		15.0%	58.3%		26.7%	26.7%		26.7%	26.7%	26.7%
Maximum Green (s)	13.9	63.5		14.0	63.5		26.4	26.4		26.4	26.4	26.4
Yellow Time (s)	3.1	4.1		3.0	4.1		3.3	3.3		3.3	3.3	3.3
All-Red Time (s)	1.0	2.4		1.0	2.4		2.3	2.3		2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.1	6.5		4.0	6.5		5.6	5.6		5.6	5.6	5.6
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street

## Lanes, Volumes, Timings

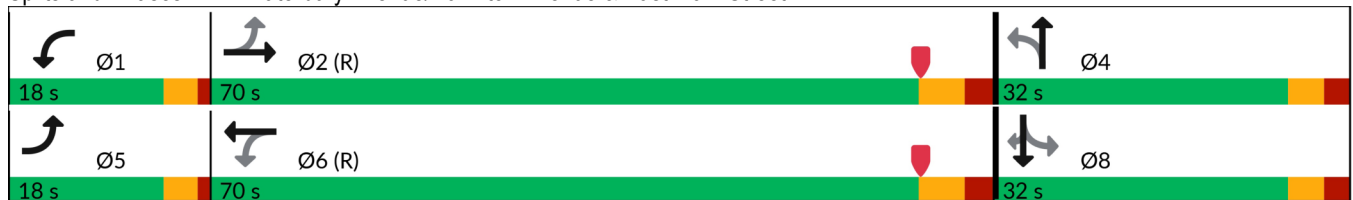
Existing AM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0				
Flash Dont Walk (s)		11.0			11.0		12.0	12.0				
Pedestrian Calls (#/hr)		2			1		2	2				
Act Effect Green (s)	95.4	90.2		91.2	83.7		14.1	14.1			14.1	14.1
Actuated g/C Ratio	0.80	0.75		0.76	0.70		0.12	0.12			0.12	0.12
v/c Ratio	0.12	0.11		0.01	0.18		0.27	0.16			0.68	0.37
Control Delay (s/veh)	3.4	4.9		2.5	5.5		51.4	31.3			71.4	12.7
Queue Delay	0.0	0.0		0.0	0.3		0.0	0.0			0.0	0.0
Total Delay (s/veh)	3.4	4.9		2.5	5.8		51.4	31.3			71.4	12.7
LOS	A	A		A	A		D	C			E	B
Approach Delay (s/veh)		4.6			5.8			41.7			43.6	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	12	22		2	38		27	14			84	0
Queue Length 95th (ft)	28	51		5	40		52	38			125	38
Internal Link Dist (ft)		324			164			191			220	
Turn Bay Length (ft)	125			50								75
Base Capacity (vph)	797	2517		956	2368		251	394			302	409
Starvation Cap Reductn	0	0		0	1337		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.12	0.12		0.02	0.42		0.15	0.09			0.37	0.24

### Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 19 (16%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay (s/veh): 14.8  
 Intersection LOS: B  
 Intersection Capacity Utilization 42.0%  
 ICU Level of Service A  
 Analysis Period (min) 15




















### Splits and Phases: 1: Waterbury Avenue/Hamilton Avenue & East Main Street
















## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Existing AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	224	46	63	317	15	41	1	60	1	1	0
Future Volume (vph)	31	224	46	63	317	15	41	1	60	1	1	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	100		0	0		75	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.975			0.993				0.850			
Flt Protected	0.950			0.950				0.953			0.976	
Satd. Flow (prot)	1805	3363	0	1787	3485	0	0	1776	1599	0	1854	0
Flt Permitted	0.495			0.534				0.729			0.854	
Satd. Flow (perm)	940	3363	0	1005	3485	0	0	1358	1599	0	1623	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			6				80			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			147			233			145	
Travel Time (s)		5.5			3.3			5.3			3.3	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles (%)	0%	5%	3%	1%	3%	0%	2%	0%	1%	0%	0%	0%
Adj. Flow (vph)	41	299	61	84	423	20	55	1	80	1	1	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	360	0	84	443	0	0	56	80	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases	2			6			4		4	4		
Detector Phase	5	2		1	6		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	9.0	34.6		9.0	34.6		25.7	25.7	25.7	25.7	25.7	
Total Split (s)	17.0	70.0		17.0	70.0		33.0	33.0	33.0	33.0	33.0	
Total Split (%)	14.2%	58.3%		14.2%	58.3%		27.5%	27.5%	27.5%	27.5%	27.5%	
Maximum Green (s)	13.0	63.4		13.0	63.4		27.3	27.3	27.3	27.3	27.3	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.7	3.7	3.7	3.7	3.7	
All-Red Time (s)	1.0	2.6		1.0	2.6		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.7	5.7		5.7	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Existing AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		21.0			21.0		13.0	13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
Act Effect Green (s)	99.6	94.1		100.4	94.5			9.7	9.7		9.7	
Actuated g/C Ratio	0.83	0.78		0.84	0.79			0.08	0.08		0.08	
v/c Ratio	0.05	0.13		0.09	0.16			0.51	0.39		0.01	
Control Delay (s/veh)	3.3	6.1		2.1	4.4			68.4	16.7		48.5	
Queue Delay	0.0	0.3		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	3.3	6.4		2.1	4.4			68.4	16.7		48.5	
LOS	A	A		A	A			E	B		D	
Approach Delay (s/veh)		6.1			4.1			38.0			48.5	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	9	67		8	44			43	0		1	
Queue Length 95th (ft)	14	51		16	58			69	29		8	
Internal Link Dist (ft)		164			67			153			65	
Turn Bay Length (ft)	50			100					75			
Base Capacity (vph)	901	2644		948	2746			308	425		369	
Starvation Cap Reductn	0	1677		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	0.05	0.37		0.09	0.16			0.18	0.19		0.01	

### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 25 (21%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay (s/veh): 9.3

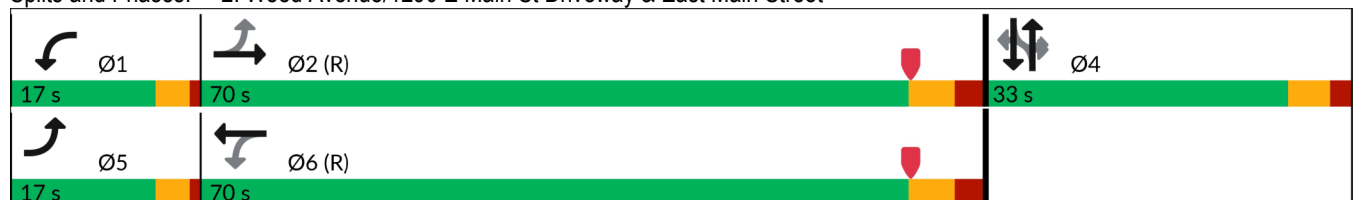
Intersection LOS: A

Intersection Capacity Utilization 39.2%

ICU Level of Service A





















Analysis Period (min) 15

Splits and Phases: 2: Weed Avenue/1290 E Main St Driveway & East Main Street



# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Existing PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	601	31	4	215	67	30	12	14	117	16	63
Future Volume (vph)	83	601	31	4	215	67	30	12	14	117	16	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	50		0	0		0	0		75
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.965			0.917				0.850
Flt Protected	0.950			0.950			0.950				0.958	
Satd. Flow (prot)	1787	3518	0	1805	3431	0	1805	1727	0	0	1816	1583
Flt Permitted	0.534			0.385			0.526				0.731	
Satd. Flow (perm)	1005	3518	0	732	3431	0	999	1727	0	0	1386	1583
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5						16				70
Link Speed (mph)		30			30			30				30
Link Distance (ft)		404			244			271				300
Travel Time (s)		9.2			5.5			6.2				6.8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	2%	0%	0%	2%	0%	0%	2%	0%	0%	2%	2%
Adj. Flow (vph)	92	668	34	4	239	74	33	13	16	130	18	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	702	0	4	313	0	33	29	0	0	148	70
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4				8
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.1	24.5		9.0	24.5		24.6	24.6		12.6	12.6	12.6
Total Split (s)	19.0	56.0		19.0	56.0		45.0	45.0		45.0	45.0	45.0
Total Split (%)	15.8%	46.7%		15.8%	46.7%		37.5%	37.5%		37.5%	37.5%	37.5%
Maximum Green (s)	14.9	49.5		15.0	49.5		39.4	39.4		39.4	39.4	39.4
Yellow Time (s)	3.1	4.1		3.0	4.1		3.3	3.3		3.3	3.3	3.3
All-Red Time (s)	1.0	2.4		1.0	2.4		2.3	2.3		2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.1	6.5		4.0	6.5		5.6	5.6		5.6	5.6	5.6
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

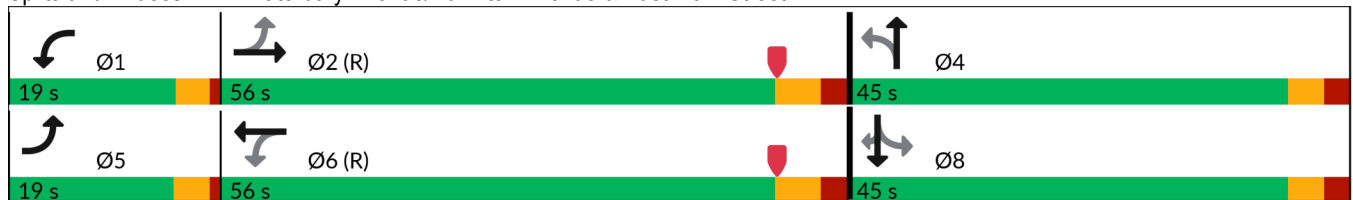
Existing PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0				
Flash Dont Walk (s)		11.0			11.0		12.0	12.0				
Pedestrian Calls (#/hr)		2			1		2	2				
Act Effect Green (s)	92.7	88.7		87.8	80.3		17.4	17.4			17.4	17.4
Actuated g/C Ratio	0.77	0.74		0.73	0.67		0.15	0.15			0.15	0.15
v/c Ratio	0.11	0.26		0.00	0.13		0.22	0.10			0.74	0.24
Control Delay (s/veh)	4.3	6.3		6.0	11.6		46.6	25.0			69.5	11.4
Queue Delay	0.0	0.0		0.0	0.4		0.0	0.0			0.0	0.0
Total Delay (s/veh)	4.3	6.3		6.0	12.0		46.6	25.0			69.5	11.4
LOS	A	A		A	B		D	C			E	B
Approach Delay (s/veh)		6.1			12.0			36.5			50.9	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	14	74		1	62		23	9			111	0
Queue Length 95th (ft)	35	162		3	101		52	34			173	39
Internal Link Dist (ft)		324			164			191			220	
Turn Bay Length (ft)	125			50								75
Base Capacity (vph)	875	2601		701	2295		328	577			455	566
Starvation Cap Reductn	0	0		0	1517		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.11	0.27		0.01	0.40		0.10	0.05			0.33	0.12

## Intersection Summary





















Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 38 (32%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.74  
 Intersection Signal Delay (s/veh): 15.8      Intersection LOS: B  
 Intersection Capacity Utilization 49.2%      ICU Level of Service A  
 Analysis Period (min) 15

## Splits and Phases: 1: Waterbury Avenue/Hamilton Avenue & East Main Street



## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Existing PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	701	74	65	225	1	56	0	91	4	0	6
Future Volume (vph)	1	701	74	65	225	1	56	0	91	4	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	100		0	0		75	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.999				0.850		0.921	
Flt Protected	0.950			0.950				0.950			0.980	
Satd. Flow (prot)	1805	3528	0	1805	3536	0	0	1805	1599	0	1715	0
Flt Permitted	0.591			0.292				0.750			0.868	
Satd. Flow (perm)	1123	3528	0	555	3536	0	0	1425	1599	0	1519	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14							105		69	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			147			233			145	
Travel Time (s)		5.5			3.3			5.3			3.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	1%	0%	0%	2%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	806	85	75	259	1	64	0	105	5	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	891	0	75	260	0	0	64	105	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases	2			6			4		4	4		
Detector Phase	5	2		1	6		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	9.0	34.6		9.0	34.6		25.7	25.7	25.7	25.7	25.7	
Total Split (s)	16.0	71.0		16.0	71.0		33.0	33.0	33.0	33.0	33.0	
Total Split (%)	13.3%	59.2%		13.3%	59.2%		27.5%	27.5%	27.5%	27.5%	27.5%	
Maximum Green (s)	12.0	64.4		12.0	64.4		27.3	27.3	27.3	27.3	27.3	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.7	3.7	3.7	3.7	3.7	
All-Red Time (s)	1.0	2.6		1.0	2.6		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.7	5.7		5.7	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

2: Weed Avenue/1290 E Main St Driveway & East Main Street  
Lanes, Volumes, Timings

Existing PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		21.0			21.0		13.0	13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
Act Effect Green (s)	96.4	89.8		99.6	95.7			10.2	10.2		10.2	
Actuated g/C Ratio	0.80	0.75		0.83	0.80			0.09	0.09		0.09	
v/c Ratio	0.00	0.33		0.14	0.09			0.53	0.45		0.06	
Control Delay (s/veh)	2.0	4.4		2.6	3.3			67.7	15.7		0.6	
Queue Delay	0.0	0.3		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	2.0	4.7		2.6	3.3			67.7	15.7		0.6	
LOS	A	A		A	A			E	B		A	
Approach Delay (s/veh)		4.8			3.2			35.4			0.6	
Approach LOS		A			A			D			A	
Queue Length 50th (ft)	0	97		7	16			49	0		0	
Queue Length 95th (ft)	m0	113		18	42			89	48		0	
Internal Link Dist (ft)		164			67			153			65	
Turn Bay Length (ft)	50			100					75			
Base Capacity (vph)	1004	2644		588	2820			324	444		398	
Starvation Cap Reductn	0	1021		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	0.00	0.55		0.13	0.09			0.20	0.24		0.03	

Intersection Summary





















Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 44 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.53  
 Intersection Signal Delay (s/veh): 8.0      Intersection LOS: A  
 Intersection Capacity Utilization 48.4%      ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Weed Avenue/1290 E Main St Driveway & East Main Street



# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Existing SAT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	253	13	3	229	62	10	11	6	95	7	57
Future Volume (vph)	76	253	13	3	229	62	10	11	6	95	7	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	50		0	0		0	0		75
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.968			0.945				0.850
Flt Protected	0.950			0.950			0.950				0.956	
Satd. Flow (prot)	1805	3542	0	1805	3460	0	1805	1751	0	0	1800	1615
Flt Permitted	0.527			0.569			0.634				0.727	
Satd. Flow (perm)	1001	3542	0	1081	3460	0	1205	1751	0	0	1369	1615
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		7						7				75
Link Speed (mph)		30			30			30				30
Link Distance (ft)		404			244			271				300
Travel Time (s)		9.2			5.5			6.2				6.8
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	3%	0%	1%	1%	0%	4%	0%	1%	0%	0%
Adj. Flow (vph)	85	284	15	3	257	70	11	12	7	107	8	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	299	0	3	327	0	11	19	0	0	115	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4				8
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.1	24.5		9.0	24.5		24.6	24.6		12.6	12.6	12.6
Total Split (s)	19.0	59.0		19.0	59.0		32.0	32.0		32.0	32.0	32.0
Total Split (%)	17.3%	53.6%		17.3%	53.6%		29.1%	29.1%		29.1%	29.1%	29.1%
Maximum Green (s)	14.9	52.5		15.0	52.5		26.4	26.4		26.4	26.4	26.4
Yellow Time (s)	3.1	4.1		3.0	4.1		3.3	3.3		3.3	3.3	3.3
All-Red Time (s)	1.0	2.4		1.0	2.4		2.3	2.3		2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.1	6.5		4.0	6.5		5.6	5.6		5.6	5.6	5.6
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Existing SAT

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0				
Flash Dont Walk (s)		11.0			11.0		12.0	12.0				
Pedestrian Calls (#/hr)		2			1		2	2				
Act Effect Green (s)	86.3	82.5		82.7	76.2		13.6	13.6			13.6	13.6
Actuated g/C Ratio	0.78	0.75		0.75	0.69		0.12	0.12			0.12	0.12
v/c Ratio	0.10	0.11		0.00	0.13		0.07	0.08			0.68	0.24
Control Delay (s/veh)	3.5	4.6		3.6	7.6		40.6	30.2			64.9	9.4
Queue Delay	0.0	0.0		0.0	0.3		0.0	0.0			0.0	0.0
Total Delay (s/veh)	3.5	4.6		3.6	7.9		40.6	30.2			64.9	9.4
LOS	A	A		A	A		D	C			E	A
Approach Delay (s/veh)		4.4			8.0			34.1			45.1	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	11	23		1	46		7	8			79	0
Queue Length 95th (ft)	28	58		m3	101		22	28			130	30
Internal Link Dist (ft)		324			164			191			220	
Turn Bay Length (ft)	125			50								75
Base Capacity (vph)	897	2657		951	2396		289	425			328	444
Starvation Cap Reductn	0	0		0	1536		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.09	0.11		0.00	0.38		0.04	0.04			0.35	0.14

## Intersection Summary

Area Type: Other  
 Cycle Length: 110  
 Actuated Cycle Length: 110  
 Offset: 31 (28%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.68  
 Intersection Signal Delay (s/veh): 14.6      Intersection LOS: B  
 Intersection Capacity Utilization 42.5%      ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.




















## Splits and Phases: 1: Waterbury Avenue/Hamilton Avenue & East Main Street





## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Existing SAT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	239	114	84	224	0	81	0	64	0	0	0
Future Volume (vph)	0	239	114	84	224	0	81	0	64	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	100		0	0		75	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.951							0.850			
Flt Protected				0.950				0.950				
Satd. Flow (prot)	1900	3410	0	1787	3539	0	0	1787	1599	0	1900	0
Flt Permitted				0.490				0.757				
Satd. Flow (perm)	1900	3410	0	922	3539	0	0	1424	1599	0	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		97							75			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			147			233			145	
Travel Time (s)		5.5			3.3			5.3			3.3	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	1%	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%
Adj. Flow (vph)	0	272	130	95	255	0	92	0	73	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	402	0	95	255	0	0	92	73	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases	5	2		1	6			4				4
Permitted Phases	2			6			4		4	4		
Detector Phase	5	2		1	6		4	4	4	4		4
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0	7.0	7.0		7.0
Minimum Split (s)	9.0	34.6		9.0	34.6		25.7	25.7	25.7	25.7		25.7
Total Split (s)	19.0	58.0		19.0	58.0		33.0	33.0	33.0	33.0		33.0
Total Split (%)	17.3%	52.7%		17.3%	52.7%		30.0%	30.0%	30.0%	30.0%		30.0%
Maximum Green (s)	15.0	51.4		15.0	51.4		27.3	27.3	27.3	27.3		27.3
Yellow Time (s)	3.0	4.0		3.0	4.0		3.7	3.7	3.7	3.7		3.7
All-Red Time (s)	1.0	2.6		1.0	2.6		2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0			0.0
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.7	5.7			5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0		2.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None		None

2: Weed Avenue/1290 E Main St Driveway & East Main Street  
Lanes, Volumes, Timings

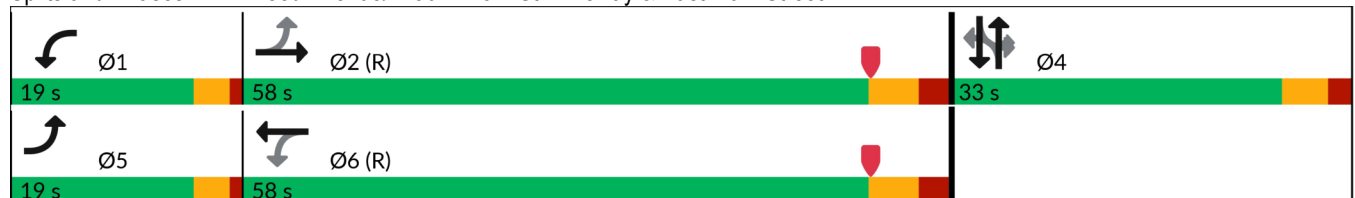
Existing SAT

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		21.0			21.0		13.0	13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
Act Effect Green (s)		76.2		88.6	86.0			11.7	11.7			
Actuated g/C Ratio		0.69		0.81	0.78			0.11	0.11			
v/c Ratio		0.16		0.12	0.09			0.60	0.30			
Control Delay (s/veh)		8.4		2.9	3.2			63.2	13.0			
Queue Delay		0.4		0.0	0.0			0.0	0.0			
Total Delay (s/veh)		8.8		2.9	3.2			63.2	13.0			
LOS		A		A	A			E	B			
Approach Delay (s/veh)		8.8			3.2			41.0				
Approach LOS		A			A			D				
Queue Length 50th (ft)		71		11	17			63	0			
Queue Length 95th (ft)		52		26	33			109	38			
Internal Link Dist (ft)		164			67			153				65
Turn Bay Length (ft)				100					75			
Base Capacity (vph)		2391		860	2767			353	453			
Starvation Cap Reductn		1488		0	0			0	0			
Spillback Cap Reductn		0		0	0			0	0			
Storage Cap Reductn		0		0	0			0	0			
Reduced v/c Ratio		0.45		0.11	0.09			0.26	0.16			

Intersection Summary





















Area Type: Other  
 Cycle Length: 110  
 Actuated Cycle Length: 110  
 Offset: 37 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.61  
 Intersection Signal Delay (s/veh): 12.5      Intersection LOS: B  
 Intersection Capacity Utilization 36.6%      ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 2: Weed Avenue/1290 E Main St Driveway & East Main Street



# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Background AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	214	29	12	280	79	30	16	12	79	12	82
Future Volume (vph)	78	214	29	12	280	79	30	16	12	79	12	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	50		0	0		0	0		75
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.967			0.936				0.850
Flt Protected	0.950			0.950			0.950				0.959	
Satd. Flow (prot)	1736	3344	0	1805	3396	0	1752	1741	0	0	1806	1509
Flt Permitted	0.475			0.571			0.619				0.730	
Satd. Flow (perm)	868	3344	0	1085	3396	0	1142	1741	0	0	1375	1509
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		18						15				100
Link Speed (mph)		30			30			30				30
Link Distance (ft)		404			244			271				300
Travel Time (s)		9.2			5.5			6.2				6.8
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	6%	6%	0%	3%	2%	3%	0%	5%	1%	0%	7%
Adj. Flow (vph)	95	261	35	15	341	96	37	20	15	96	15	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	296	0	15	437	0	37	35	0	0	111	100
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4				8
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.1	24.5		9.0	24.5		24.6	24.6		12.6	12.6	12.6
Total Split (s)	18.0	70.0		18.0	70.0		32.0	32.0		32.0	32.0	32.0
Total Split (%)	15.0%	58.3%		15.0%	58.3%		26.7%	26.7%		26.7%	26.7%	26.7%
Maximum Green (s)	13.9	63.5		14.0	63.5		26.4	26.4		26.4	26.4	26.4
Yellow Time (s)	3.1	4.1		3.0	4.1		3.3	3.3		3.3	3.3	3.3
All-Red Time (s)	1.0	2.4		1.0	2.4		2.3	2.3		2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.1	6.5		4.0	6.5		5.6	5.6		5.6	5.6	5.6
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

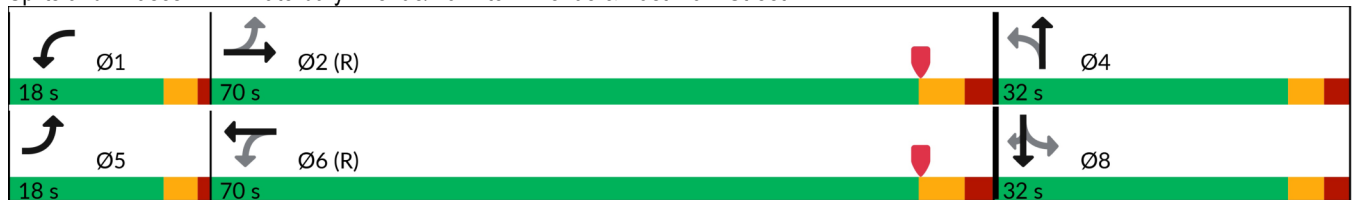
Background AM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0				
Flash Dont Walk (s)		11.0			11.0		12.0	12.0				
Pedestrian Calls (#/hr)		2			1		2	2				
Act Effct Green (s)	95.4	90.2		91.2	83.7		14.1	14.1			14.1	14.1
Actuated g/C Ratio	0.80	0.75		0.76	0.70		0.12	0.12			0.12	0.12
v/c Ratio	0.12	0.11		0.01	0.18		0.27	0.16			0.68	0.37
Control Delay (s/veh)	3.4	4.9		2.5	5.5		51.4	31.3			71.4	12.7
Queue Delay	0.0	0.0		0.0	0.3		0.0	0.0			0.0	0.0
Total Delay (s/veh)	3.4	4.9		2.5	5.8		51.4	31.3			71.4	12.7
LOS	A	A		A	A		D	C			E	B
Approach Delay (s/veh)		4.6			5.8			41.7			43.6	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	12	22		1	38		27	14			84	0
Queue Length 95th (ft)	28	51		5	41		52	38			125	38
Internal Link Dist (ft)		324			164			191			220	
Turn Bay Length (ft)	125			50								75
Base Capacity (vph)	796	2517		954	2368		251	394			302	409
Starvation Cap Reductn	0	0		0	1333		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.12	0.12		0.02	0.42		0.15	0.09			0.37	0.24

## Intersection Summary





















Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 19 (16%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay (s/veh): 14.7      Intersection LOS: B  
 Intersection Capacity Utilization 42.0%      ICU Level of Service A  
 Analysis Period (min) 15

## Splits and Phases: 1: Waterbury Avenue/Hamilton Avenue & East Main Street



## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Background AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	225	46	63	319	15	41	1	60	1	1	0
Future Volume (vph)	31	225	46	63	319	15	41	1	60	1	1	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	100		0	0		75	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.975			0.993				0.850			
Flt Protected	0.950			0.950				0.953			0.976	
Satd. Flow (prot)	1805	3363	0	1787	3485	0	0	1776	1599	0	1854	0
Flt Permitted	0.494			0.534				0.729			0.854	
Satd. Flow (perm)	939	3363	0	1005	3485	0	0	1358	1599	0	1623	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		30			6				80			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			147			233			145	
Travel Time (s)		5.5			3.3			5.3			3.3	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles (%)	0%	5%	3%	1%	3%	0%	2%	0%	1%	0%	0%	0%
Adj. Flow (vph)	41	300	61	84	425	20	55	1	80	1	1	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	361	0	84	445	0	0	56	80	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases	2			6			4		4	4		
Detector Phase	5	2		1	6		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	9.0	34.6		9.0	34.6		25.7	25.7	25.7	25.7	25.7	
Total Split (s)	17.0	70.0		17.0	70.0		33.0	33.0	33.0	33.0	33.0	
Total Split (%)	14.2%	58.3%		14.2%	58.3%		27.5%	27.5%	27.5%	27.5%	27.5%	
Maximum Green (s)	13.0	63.4		13.0	63.4		27.3	27.3	27.3	27.3	27.3	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.7	3.7	3.7	3.7	3.7	
All-Red Time (s)	1.0	2.6		1.0	2.6		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.7	5.7		5.7	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

2: Weed Avenue/1290 E Main St Driveway & East Main Street  
Lanes, Volumes, Timings

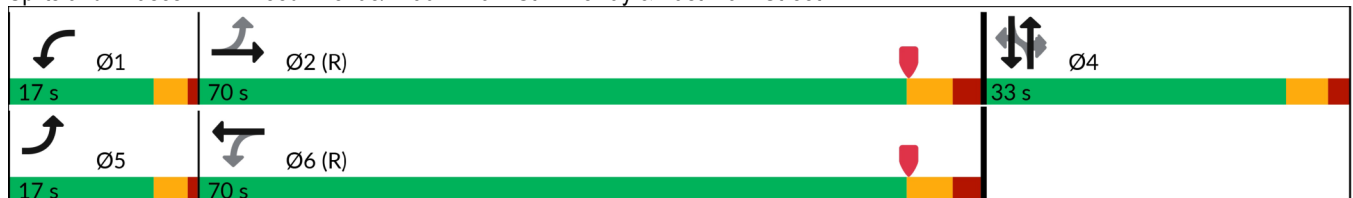
Background AM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		21.0			21.0		13.0	13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
Act Effect Green (s)	99.6	94.1		100.4	94.5			9.7	9.7		9.7	
Actuated g/C Ratio	0.83	0.78		0.84	0.79			0.08	0.08		0.08	
v/c Ratio	0.05	0.13		0.09	0.16			0.51	0.39		0.01	
Control Delay (s/veh)	3.3	6.0		2.1	4.4			68.4	16.7		48.5	
Queue Delay	0.0	0.2		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	3.3	6.3		2.1	4.4			68.4	16.7		48.5	
LOS	A	A		A	A			E	B		D	
Approach Delay (s/veh)		6.1			4.1			38.0			48.5	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	9	67		8	45			43	0		1	
Queue Length 95th (ft)	14	51		16	58			69	29		8	
Internal Link Dist (ft)		164			67			153			65	
Turn Bay Length (ft)	50			100					75			
Base Capacity (vph)	900	2644		948	2746			308	425		369	
Starvation Cap Reductn	0	1676		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	0.05	0.37		0.09	0.16			0.18	0.19		0.01	

Intersection Summary





















Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 25 (21%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.51  
 Intersection Signal Delay (s/veh): 9.2      Intersection LOS: A  
 Intersection Capacity Utilization 39.2%      ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 2: Weed Avenue/1290 E Main St Driveway & East Main Street



# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Background PM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	605	31	4	216	67	30	12	14	118	16	63
Future Volume (vph)	83	605	31	4	216	67	30	12	14	118	16	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	50		0	0		0	0		75
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.965			0.917				0.850
Flt Protected	0.950			0.950			0.950				0.958	
Satd. Flow (prot)	1787	3518	0	1805	3431	0	1805	1727	0	0	1816	1583
Flt Permitted	0.534			0.383			0.524				0.731	
Satd. Flow (perm)	1005	3518	0	728	3431	0	996	1727	0	0	1386	1583
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5						16				70
Link Speed (mph)		30			30			30				30
Link Distance (ft)		404			244			271				300
Travel Time (s)		9.2			5.5			6.2				6.8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	2%	0%	0%	2%	0%	0%	2%	0%	0%	2%	2%
Adj. Flow (vph)	92	672	34	4	240	74	33	13	16	131	18	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	706	0	4	314	0	33	29	0	0	149	70
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4				8
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.1	24.5		9.0	24.5		24.6	24.6		12.6	12.6	12.6
Total Split (s)	19.0	56.0		19.0	56.0		45.0	45.0		45.0	45.0	45.0
Total Split (%)	15.8%	46.7%		15.8%	46.7%		37.5%	37.5%		37.5%	37.5%	37.5%
Maximum Green (s)	14.9	49.5		15.0	49.5		39.4	39.4		39.4	39.4	39.4
Yellow Time (s)	3.1	4.1		3.0	4.1		3.3	3.3		3.3	3.3	3.3
All-Red Time (s)	1.0	2.4		1.0	2.4		2.3	2.3		2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.1	6.5		4.0	6.5		5.6	5.6		5.6	5.6	5.6
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None



# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Background PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0				
Flash Dont Walk (s)		11.0			11.0		12.0	12.0				
Pedestrian Calls (#/hr)		2			1		2	2				
Act Effect Green (s)	92.6	88.6		87.7	80.2		17.5	17.5			17.5	17.5
Actuated g/C Ratio	0.77	0.74		0.73	0.67		0.15	0.15			0.15	0.15
v/c Ratio	0.11	0.27		0.00	0.13		0.22	0.10			0.73	0.24
Control Delay (s/veh)	4.3	6.3		6.0	11.7		46.5	24.9			69.3	11.4
Queue Delay	0.0	0.0		0.0	0.4		0.0	0.0			0.0	0.0
Total Delay (s/veh)	4.3	6.3		6.0	12.1		46.5	24.9			69.3	11.4
LOS	A	A		A	B		D	C			E	B
Approach Delay (s/veh)		6.1			12.1			36.4			50.9	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	14	75		1	63		23	9			112	0
Queue Length 95th (ft)	35	163		3	102		52	34			173	39
Internal Link Dist (ft)		324			164			191			220	
Turn Bay Length (ft)	125			50								75
Base Capacity (vph)	874	2598		698	2292		327	577			455	566
Starvation Cap Reductn	0	0		0	1512		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.11	0.27		0.01	0.40		0.10	0.05			0.33	0.12

## Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 38 (32%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay (s/veh): 15.8

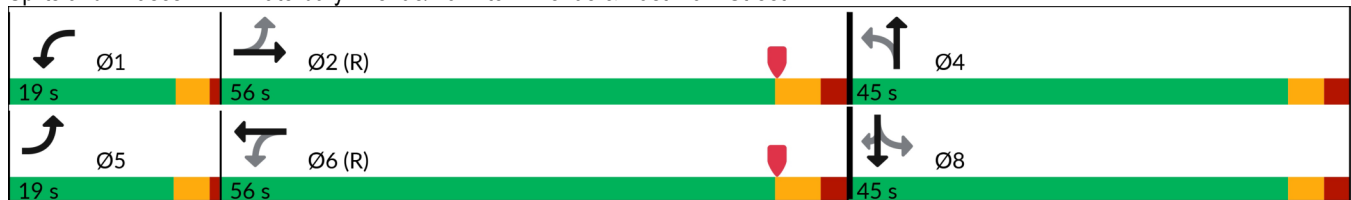
Intersection LOS: B

Intersection Capacity Utilization 49.3%

ICU Level of Service A

Analysis Period (min) 15

## Splits and Phases: 1: Waterbury Avenue/Hamilton Avenue & East Main Street



## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Background PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	705	74	65	226	1	56	0	92	4	0	6
Future Volume (vph)	1	705	74	65	226	1	56	0	92	4	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	100		0	0		75	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.999				0.850		0.921	
Flt Protected	0.950			0.950				0.950			0.980	
Satd. Flow (prot)	1805	3528	0	1805	3536	0	0	1805	1599	0	1715	0
Flt Permitted	0.591			0.291				0.750			0.868	
Satd. Flow (perm)	1123	3528	0	553	3536	0	0	1425	1599	0	1519	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14							106		69	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			147			233			145	
Travel Time (s)		5.5			3.3			5.3			3.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	1%	0%	0%	2%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	810	85	75	260	1	64	0	106	5	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	895	0	75	261	0	0	64	106	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases	2			6			4		4	4		
Detector Phase	5	2		1	6		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	9.0	34.6		9.0	34.6		25.7	25.7	25.7	25.7	25.7	
Total Split (s)	16.0	71.0		16.0	71.0		33.0	33.0	33.0	33.0	33.0	
Total Split (%)	13.3%	59.2%		13.3%	59.2%		27.5%	27.5%	27.5%	27.5%	27.5%	
Maximum Green (s)	12.0	64.4		12.0	64.4		27.3	27.3	27.3	27.3	27.3	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.7	3.7	3.7	3.7	3.7	
All-Red Time (s)	1.0	2.6		1.0	2.6		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.7	5.7		5.7	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

2: Weed Avenue/1290 E Main St Driveway & East Main Street  
Lanes, Volumes, Timings

Background PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		21.0			21.0		13.0	13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
Act Effct Green (s)	96.4	89.8		99.6	95.7			10.2	10.2		10.2	
Actuated g/C Ratio	0.80	0.75		0.83	0.80			0.09	0.09		0.09	
v/c Ratio	0.00	0.33		0.14	0.09			0.53	0.45		0.06	
Control Delay (s/veh)	2.0	4.4		2.6	3.3			67.7	15.7		0.6	
Queue Delay	0.0	0.2		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	2.0	4.7		2.6	3.3			67.7	15.7		0.6	
LOS	A	A		A	A			E	B		A	
Approach Delay (s/veh)		4.8			3.2			35.3			0.6	
Approach LOS		A			A			D			A	
Queue Length 50th (ft)	0	97		7	16			49	0		0	
Queue Length 95th (ft)	m0	114		18	42			89	48		0	
Internal Link Dist (ft)		164			67			153			65	
Turn Bay Length (ft)	50			100					75			
Base Capacity (vph)	1004	2644		586	2820			324	445		398	
Starvation Cap Reductn	0	1014		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	0.00	0.55		0.13	0.09			0.20	0.24		0.03	

Intersection Summary





















Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 44 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.53  
 Intersection Signal Delay (s/veh): 8.0      Intersection LOS: A  
 Intersection Capacity Utilization 48.5%      ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Weed Avenue/1290 E Main St Driveway & East Main Street



# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Background SAT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	255	13	3	230	62	10	11	6	96	7	57
Future Volume (vph)	76	255	13	3	230	62	10	11	6	96	7	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	50		0	0		0	0		75
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.968			0.945				0.850
Flt Protected	0.950			0.950			0.950				0.956	
Satd. Flow (prot)	1805	3546	0	1805	3460	0	1805	1751	0	0	1800	1615
Flt Permitted	0.526			0.568			0.631				0.727	
Satd. Flow (perm)	999	3546	0	1079	3460	0	1199	1751	0	0	1369	1615
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		7						7				75
Link Speed (mph)		30			30			30				30
Link Distance (ft)		404			244			271				300
Travel Time (s)		9.2			5.5			6.2				6.8
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	3%	0%	1%	1%	0%	4%	0%	1%	0%	0%
Adj. Flow (vph)	85	287	15	3	258	70	11	12	7	108	8	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	302	0	3	328	0	11	19	0	0	116	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4				8
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.1	24.5		9.0	24.5		24.6	24.6		12.6	12.6	12.6
Total Split (s)	19.0	59.0		19.0	59.0		32.0	32.0		32.0	32.0	32.0
Total Split (%)	17.3%	53.6%		17.3%	53.6%		29.1%	29.1%		29.1%	29.1%	29.1%
Maximum Green (s)	14.9	52.5		15.0	52.5		26.4	26.4		26.4	26.4	26.4
Yellow Time (s)	3.1	4.1		3.0	4.1		3.3	3.3		3.3	3.3	3.3
All-Red Time (s)	1.0	2.4		1.0	2.4		2.3	2.3		2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.1	6.5		4.0	6.5		5.6	5.6		5.6	5.6	5.6
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

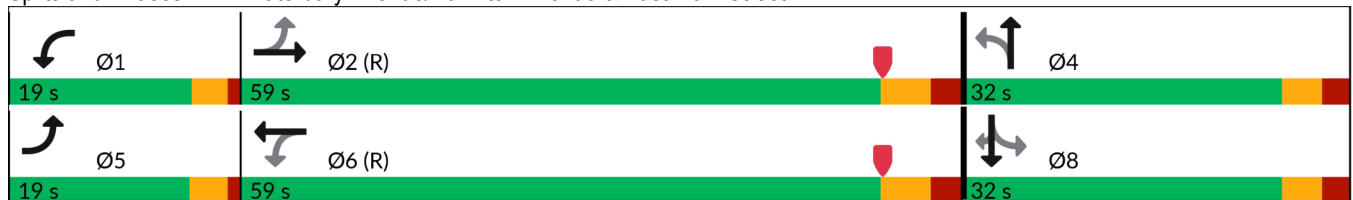
Background SAT

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0				
Flash Dont Walk (s)		11.0			11.0		12.0	12.0				
Pedestrian Calls (#/hr)		2			1		2	2				
Act Effect Green (s)	86.2	82.4		82.6	76.1		13.7	13.7			13.7	13.7
Actuated g/C Ratio	0.78	0.75		0.75	0.69		0.12	0.12			0.12	0.12
v/c Ratio	0.10	0.11		0.00	0.13		0.07	0.08			0.68	0.24
Control Delay (s/veh)	3.5	4.7		3.6	7.6		40.5	30.2			65.0	9.4
Queue Delay	0.0	0.0		0.0	0.3		0.0	0.0			0.0	0.0
Total Delay (s/veh)	3.5	4.7		3.6	8.0		40.5	30.2			65.0	9.4
LOS	A	A		A	A		D	C			E	A
Approach Delay (s/veh)		4.5			8.0			34.0			45.3	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	11	23		1	46		7	8			80	0
Queue Length 95th (ft)	28	58		m3	101		22	28			131	30
Internal Link Dist (ft)		324			164			191			220	
Turn Bay Length (ft)	125			50								75
Base Capacity (vph)	895	2657		949	2393		287	425			328	444
Starvation Cap Reductn	0	0		0	1532		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.09	0.11		0.00	0.38		0.04	0.04			0.35	0.14

## Intersection Summary

Area Type: Other  
 Cycle Length: 110  
 Actuated Cycle Length: 110  
 Offset: 31 (28%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.68  
 Intersection Signal Delay (s/veh): 14.6      Intersection LOS: B  
 Intersection Capacity Utilization 42.6%      ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

## Splits and Phases: 1: Waterbury Avenue/Hamilton Avenue & East Main Street



## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Background SAT

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	240	115	85	225	0	81	0	64	0	0	0
Future Volume (vph)	0	240	115	85	225	0	81	0	64	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	100		0	0		75	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.951							0.850			
Flt Protected				0.950				0.950				
Satd. Flow (prot)	1900	3410	0	1787	3539	0	0	1787	1599	0	1900	0
Flt Permitted				0.489				0.757				
Satd. Flow (perm)	1900	3410	0	920	3539	0	0	1424	1599	0	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		98							75			
Link Speed (mph)		30			30			30				30
Link Distance (ft)		244			147			233				145
Travel Time (s)		5.5			3.3			5.3				3.3
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	1%	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%
Adj. Flow (vph)	0	273	131	97	256	0	92	0	73	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	404	0	97	256	0	0	92	73	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases	5	2		1	6			4				4
Permitted Phases	2			6			4		4	4		
Detector Phase	5	2		1	6		4	4	4	4		4
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0	7.0	7.0		7.0
Minimum Split (s)	9.0	34.6		9.0	34.6		25.7	25.7	25.7	25.7		25.7
Total Split (s)	19.0	58.0		19.0	58.0		33.0	33.0	33.0	33.0		33.0
Total Split (%)	17.3%	52.7%		17.3%	52.7%		30.0%	30.0%	30.0%	30.0%		30.0%
Maximum Green (s)	15.0	51.4		15.0	51.4		27.3	27.3	27.3	27.3		27.3
Yellow Time (s)	3.0	4.0		3.0	4.0		3.7	3.7	3.7	3.7		3.7
All-Red Time (s)	1.0	2.6		1.0	2.6		2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0			0.0
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.7	5.7			5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0		2.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None		None

## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Background SAT

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		21.0			21.0		13.0	13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
Act Effect Green (s)		76.2		88.6	86.0			11.7	11.7			
Actuated g/C Ratio		0.69		0.81	0.78			0.11	0.11			
v/c Ratio		0.16		0.12	0.09			0.60	0.30			
Control Delay (s/veh)		8.4		2.9	3.2			63.2	13.0			
Queue Delay		0.4		0.0	0.0			0.0	0.0			
Total Delay (s/veh)		8.8		2.9	3.2			63.2	13.0			
LOS		A		A	A			E	B			
Approach Delay (s/veh)		8.9			3.2			41.0				
Approach LOS		A			A			D				
Queue Length 50th (ft)		72		11	17			63	0			
Queue Length 95th (ft)		52		26	33			109	38			
Internal Link Dist (ft)		164			67			153				65
Turn Bay Length (ft)				100					75			
Base Capacity (vph)		2391		859	2767			353	453			
Starvation Cap Reductn		1481		0	0			0	0			
Spillback Cap Reductn		0		0	0			0	0			
Storage Cap Reductn		0		0	0			0	0			
Reduced v/c Ratio		0.44		0.11	0.09			0.26	0.16			

### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 37 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay (s/veh): 12.4

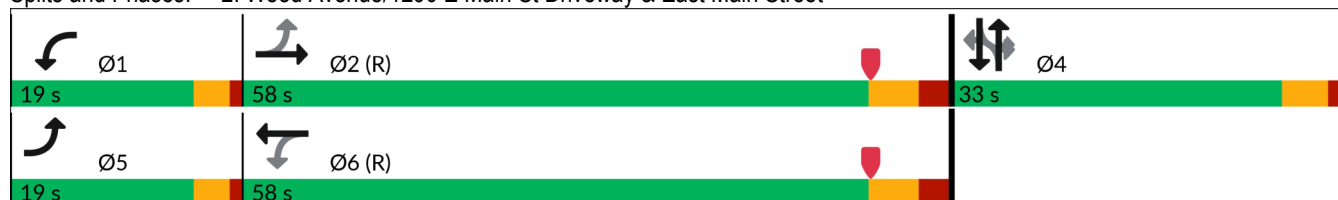
Intersection LOS: B

Intersection Capacity Utilization 36.6%

ICU Level of Service A

Analysis Period (min) 15





















Splits and Phases: 2: Weed Avenue/1290 E Main St Driveway & East Main Street





# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Build AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	222	29	12	288	81	30	16	12	81	12	82
Future Volume (vph)	78	222	29	12	288	81	30	16	12	81	12	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	50		0	0		0	0		75
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.983			0.967			0.936				0.850
Flt Protected	0.950			0.950			0.950				0.958	
Satd. Flow (prot)	1736	3348	0	1805	3396	0	1752	1741	0	0	1805	1509
Flt Permitted	0.469			0.565			0.610				0.729	
Satd. Flow (perm)	857	3348	0	1074	3396	0	1125	1741	0	0	1373	1509
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		18						15				100
Link Speed (mph)		30			30			30				30
Link Distance (ft)		404			244			271				300
Travel Time (s)		9.2			5.5			6.2				6.8
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	4%	6%	6%	0%	3%	2%	3%	0%	5%	1%	0%	7%
Adj. Flow (vph)	95	271	35	15	351	99	37	20	15	99	15	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	95	306	0	15	450	0	37	35	0	0	114	100
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4				8
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.1	24.5		9.0	24.5		24.6	24.6		12.6	12.6	12.6
Total Split (s)	18.0	70.0		18.0	70.0		32.0	32.0		32.0	32.0	32.0
Total Split (%)	15.0%	58.3%		15.0%	58.3%		26.7%	26.7%		26.7%	26.7%	26.7%
Maximum Green (s)	13.9	63.5		14.0	63.5		26.4	26.4		26.4	26.4	26.4
Yellow Time (s)	3.1	4.1		3.0	4.1		3.3	3.3		3.3	3.3	3.3
All-Red Time (s)	1.0	2.4		1.0	2.4		2.3	2.3		2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.1	6.5		4.0	6.5		5.6	5.6		5.6	5.6	5.6
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

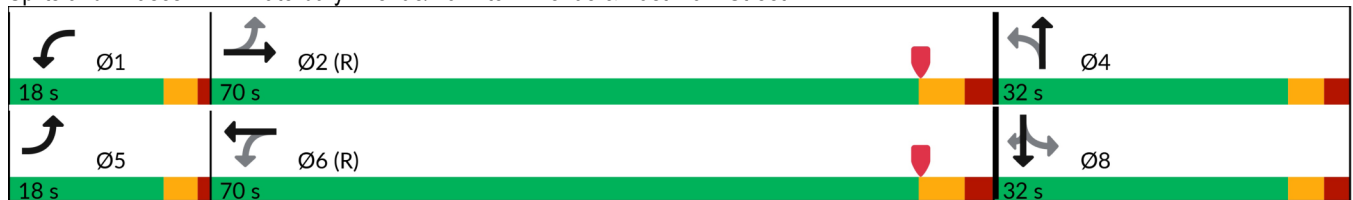
Build AM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0				
Flash Dont Walk (s)		11.0			11.0		12.0	12.0				
Pedestrian Calls (#/hr)		2			1		2	2				
Act Effect Green (s)	95.2	90.0		91.0	83.5		14.3	14.3			14.3	14.3
Actuated g/C Ratio	0.79	0.75		0.76	0.70		0.12	0.12			0.12	0.12
v/c Ratio	0.13	0.12		0.01	0.19		0.27	0.15			0.69	0.37
Control Delay (s/veh)	3.5	5.0		2.5	5.3		51.1	31.1			71.8	12.6
Queue Delay	0.0	0.0		0.0	0.3		0.0	0.0			0.0	0.0
Total Delay (s/veh)	3.5	5.0		2.5	5.7		51.1	31.1			71.8	12.6
LOS	A	A		A	A		D	C			E	B
Approach Delay (s/veh)		4.7			5.6			41.4			44.2	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	13	23		2	39		27	14			86	0
Queue Length 95th (ft)	28	53		5	41		52	38			127	38
Internal Link Dist (ft)		324			164			191			220	
Turn Bay Length (ft)	125			50								75
Base Capacity (vph)	787	2514		945	2361		247	394			302	409
Starvation Cap Reductn	0	0		0	1309		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.12	0.12		0.02	0.43		0.15	0.09			0.38	0.24

## Intersection Summary





















Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 19 (16%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.70  
 Intersection Signal Delay (s/veh): 14.7      Intersection LOS: B  
 Intersection Capacity Utilization 42.1%      ICU Level of Service A  
 Analysis Period (min) 15

## Splits and Phases: 1: Waterbury Avenue/Hamilton Avenue & East Main Street















## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Build AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	235	46	66	329	15	41	1	64	1	1	0
Future Volume (vph)	31	235	46	66	329	15	41	1	64	1	1	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	100		0	0		75	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.976			0.993				0.850			
Flt Protected	0.950			0.950				0.953			0.976	
Satd. Flow (prot)	1805	3366	0	1787	3485	0	0	1776	1599	0	1854	0
Flt Permitted	0.488			0.521				0.729			0.872	
Satd. Flow (perm)	927	3366	0	980	3485	0	0	1358	1599	0	1657	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29			6				85			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			147			233			145	
Travel Time (s)		5.5			3.3			5.3			3.3	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles (%)	0%	5%	3%	1%	3%	0%	2%	0%	1%	0%	0%	0%
Adj. Flow (vph)	41	313	61	88	439	20	55	1	85	1	1	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	374	0	88	459	0	0	56	85	0	2	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases	2			6			4		4	4		
Detector Phase	5	2		1	6		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	9.0	34.6		9.0	34.6		25.7	25.7	25.7	25.7	25.7	
Total Split (s)	17.0	70.0		17.0	70.0		33.0	33.0	33.0	33.0	33.0	
Total Split (%)	14.2%	58.3%		14.2%	58.3%		27.5%	27.5%	27.5%	27.5%	27.5%	
Maximum Green (s)	13.0	63.4		13.0	63.4		27.3	27.3	27.3	27.3	27.3	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.7	3.7	3.7	3.7	3.7	
All-Red Time (s)	1.0	2.6		1.0	2.6		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.7	5.7		5.7	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

2: Weed Avenue/1290 E Main St Driveway & East Main Street  
Lanes, Volumes, Timings

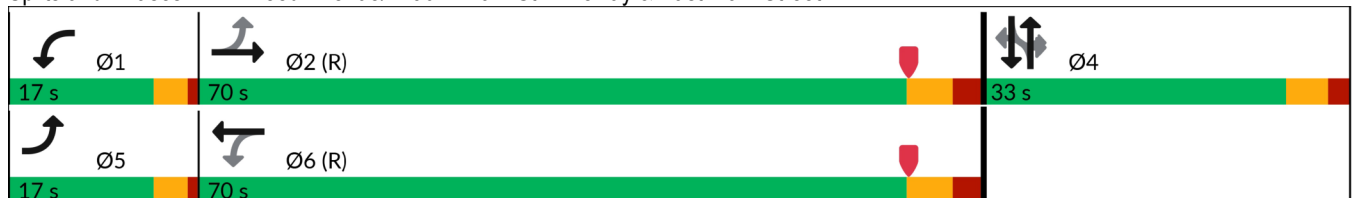
Build AM

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		21.0			21.0		13.0	13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
Act Effect Green (s)	96.2	88.4		97.9	90.7			9.7	9.7		9.7	
Actuated g/C Ratio	0.80	0.74		0.82	0.76			0.08	0.08		0.08	
v/c Ratio	0.05	0.15		0.10	0.17			0.51	0.41		0.01	
Control Delay (s/veh)	3.3	6.9		2.2	4.7			68.4	16.6		48.5	
Queue Delay	0.0	0.4		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	3.3	7.4		2.2	4.7			68.4	16.6		48.5	
LOS	A	A		A	A			E	B		D	
Approach Delay (s/veh)		7.0			4.3			37.2			48.5	
Approach LOS		A			A			D			D	
Queue Length 50th (ft)	9	70		8	46			43	0		1	
Queue Length 95th (ft)	14	52		17	61			69	29		8	
Internal Link Dist (ft)		164			67			153			65	
Turn Bay Length (ft)	50			100					75			
Base Capacity (vph)	872	2487		909	2634			308	429		376	
Starvation Cap Reductn	0	1659		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	0.05	0.45		0.10	0.17			0.18	0.20		0.01	

Intersection Summary

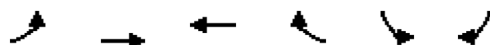
Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 25 (21%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.51  
 Intersection Signal Delay (s/veh): 9.6      Intersection LOS: A  
 Intersection Capacity Utilization 39.2%      ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 2: Weed Avenue/1290 E Main St Driveway & East Main Street



### 3: East Main Street Lanes, Volumes, Timings

Build AM



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	
Traffic Volume (vph)	14	270	396	9	9	13
Future Volume (vph)	14	270	396	9	9	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Fr <sub>t</sub>			0.997		0.921	
Fl <sub>t</sub> Protected		0.998			0.980	
Satd. Flow (prot)	0	3532	3529	0	1681	0
Fl <sub>t</sub> Permitted		0.998			0.980	
Satd. Flow (perm)	0	3532	3529	0	1681	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		147	356		118	
Travel Time (s)		3.3	8.1		6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	293	430	10	10	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	308	440	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

#### Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	27.9%
Analysis Period (min)	15
	ICU Level of Service A

3: East Main Street  
 HCM 7th TWSC

Build AM

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑	
Traffic Vol, veh/h	14	270	396	9	9	13
Future Vol, veh/h	14	270	396	9	9	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	293	430	10	10	14

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	440	0	-	0	613 220
Stage 1	-	-	-	-	435 -
Stage 2	-	-	-	-	177 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	1116	-	-	-	425 784
Stage 1	-	-	-	-	620 -
Stage 2	-	-	-	-	836 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1116	-	-	-	418 784
Mov Cap-2 Maneuver	-	-	-	-	418 -
Stage 1	-	-	-	-	611 -
Stage 2	-	-	-	-	836 -

Approach	EB	WB	SB
HCM Control Delay, s/v	0.51	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	177	-	-	-	577
HCM Lane V/C Ratio	0.014	-	-	-	0.041
HCM Control Delay (s/veh)	8.3	0.1	-	-	11.5
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Build PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	611	31	5	224	69	30	12	14	120	16	63
Future Volume (vph)	83	611	31	5	224	69	30	12	14	120	16	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	50		0	0		0	0		75
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.965			0.917				0.850
Flt Protected	0.950			0.950			0.950				0.958	
Satd. Flow (prot)	1787	3518	0	1805	3431	0	1805	1727	0	0	1816	1583
Flt Permitted	0.528			0.381			0.520				0.731	
Satd. Flow (perm)	993	3518	0	724	3431	0	988	1727	0	0	1386	1583
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5						16				70
Link Speed (mph)		30			30			30				30
Link Distance (ft)		404			244			271				300
Travel Time (s)		9.2			5.5			6.2				6.8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	1%	2%	0%	0%	2%	0%	0%	2%	0%	0%	2%	2%
Adj. Flow (vph)	92	679	34	6	249	77	33	13	16	133	18	70
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	713	0	6	326	0	33	29	0	0	151	70
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4				8
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.1	24.5		9.0	24.5		24.6	24.6		12.6	12.6	12.6
Total Split (s)	19.0	56.0		19.0	56.0		45.0	45.0		45.0	45.0	45.0
Total Split (%)	15.8%	46.7%		15.8%	46.7%		37.5%	37.5%		37.5%	37.5%	37.5%
Maximum Green (s)	14.9	49.5		15.0	49.5		39.4	39.4		39.4	39.4	39.4
Yellow Time (s)	3.1	4.1		3.0	4.1		3.3	3.3		3.3	3.3	3.3
All-Red Time (s)	1.0	2.4		1.0	2.4		2.3	2.3		2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.1	6.5		4.0	6.5		5.6	5.6		5.6	5.6	5.6
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

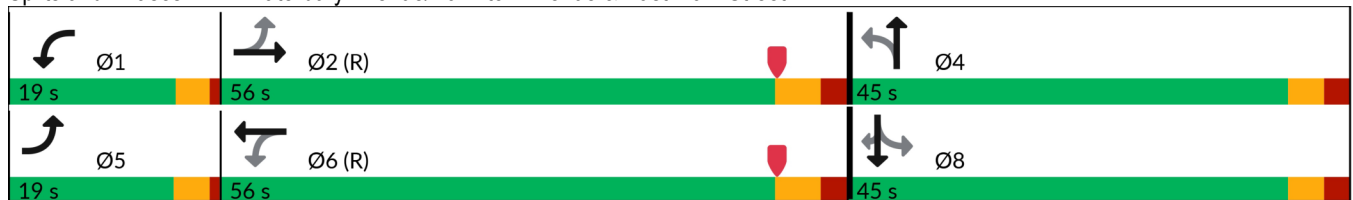
Build PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0				
Flash Dont Walk (s)		11.0			11.0		12.0	12.0				
Pedestrian Calls (#/hr)		2			1		2	2				
Act Effect Green (s)	92.4	88.4		87.5	80.0		17.7	17.7			17.7	17.7
Actuated g/C Ratio	0.77	0.74		0.73	0.67		0.15	0.15			0.15	0.15
v/c Ratio	0.11	0.27		0.01	0.14		0.22	0.10			0.74	0.23
Control Delay (s/veh)	4.3	6.4		5.6	11.5		46.3	24.8			69.3	11.3
Queue Delay	0.0	0.0		0.0	0.4		0.0	0.0			0.0	0.0
Total Delay (s/veh)	4.3	6.4		5.6	12.0		46.3	24.8			69.3	11.3
LOS	A	A		A	B		D	C			E	B
Approach Delay (s/veh)		6.2			11.9			36.3			51.0	
Approach LOS		A			B			D			D	
Queue Length 50th (ft)	14	76		2	64		23	9			114	0
Queue Length 95th (ft)	35	166		4	105		52	34			175	39
Internal Link Dist (ft)		324			164			191			220	
Turn Bay Length (ft)	125			50								75
Base Capacity (vph)	865	2594		694	2287		324	577			455	566
Starvation Cap Reductn	0	0		0	1491		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.11	0.27		0.01	0.41		0.10	0.05			0.33	0.12

## Intersection Summary

Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 38 (32%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.74  
 Intersection Signal Delay (s/veh): 15.8      Intersection LOS: B  
 Intersection Capacity Utilization 49.6%      ICU Level of Service A  
 Analysis Period (min) 15

## Splits and Phases: 1: Waterbury Avenue/Hamilton Avenue & East Main Street





## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Build PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	713	74	69	237	1	56	0	95	4	0	6
Future Volume (vph)	1	713	74	69	237	1	56	0	95	4	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	100		0	0		75	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.986			0.999				0.850		0.921	
Flt Protected	0.950			0.950				0.950			0.980	
Satd. Flow (prot)	1805	3527	0	1805	3536	0	0	1805	1599	0	1715	0
Flt Permitted	0.584			0.287				0.750			0.868	
Satd. Flow (perm)	1110	3527	0	545	3536	0	0	1425	1599	0	1519	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14							109		69	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			147			233			145	
Travel Time (s)		5.5			3.3			5.3			3.3	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles (%)	0%	1%	0%	0%	2%	0%	0%	0%	1%	0%	0%	0%
Adj. Flow (vph)	1	820	85	79	272	1	64	0	109	5	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	905	0	79	273	0	0	64	109	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases	2			6			4		4	4		
Detector Phase	5	2		1	6		4	4	4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	9.0	34.6		9.0	34.6		25.7	25.7	25.7	25.7	25.7	
Total Split (s)	16.0	71.0		16.0	71.0		33.0	33.0	33.0	33.0	33.0	
Total Split (%)	13.3%	59.2%		13.3%	59.2%		27.5%	27.5%	27.5%	27.5%	27.5%	
Maximum Green (s)	12.0	64.4		12.0	64.4		27.3	27.3	27.3	27.3	27.3	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.7	3.7	3.7	3.7	3.7	
All-Red Time (s)	1.0	2.6		1.0	2.6		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.7	5.7		5.7	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Recall Mode	None	C-Min		None	C-Min		None	None	None	None	None	

2: Weed Avenue/1290 E Main St Driveway & East Main Street  
Lanes, Volumes, Timings

Build PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		21.0			21.0		13.0	13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
Act Effect Green (s)	96.4	89.8		99.7	95.7			10.2	10.2		10.2	
Actuated g/C Ratio	0.80	0.75		0.83	0.80			0.09	0.09		0.09	
v/c Ratio	0.00	0.34		0.15	0.09			0.53	0.46		0.06	
Control Delay (s/veh)	2.0	4.5		2.6	3.3			67.7	15.7		0.6	
Queue Delay	0.0	0.2		0.0	0.0			0.0	0.0		0.0	
Total Delay (s/veh)	2.0	4.8		2.6	3.3			67.7	15.7		0.6	
LOS	A	A		A	A			E	B		A	
Approach Delay (s/veh)		4.8			3.2			35.0			0.6	
Approach LOS		A			A			C			A	
Queue Length 50th (ft)	0	98		8	17			49	0		0	
Queue Length 95th (ft)	m0	115		19	44			89	49		0	
Internal Link Dist (ft)		164			67			153			65	
Turn Bay Length (ft)	50			100					75			
Base Capacity (vph)	995	2641		580	2820			324	447		398	
Starvation Cap Reductn	0	997		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	0.00	0.55		0.14	0.10			0.20	0.24		0.03	

Intersection Summary

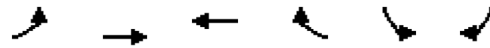
Area Type: Other  
 Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 44 (37%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.53  
 Intersection Signal Delay (s/veh): 8.0      Intersection LOS: A  
 Intersection Capacity Utilization 48.8%      ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Weed Avenue/1290 E Main St Driveway & East Main Street



### 3: East Main Street Lanes, Volumes, Timings

Build PM



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘	
Traffic Volume (vph)	25	773	284	16	16	24
Future Volume (vph)	25	773	284	16	16	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.992		0.918	
Flt Protected		0.998			0.981	
Satd. Flow (prot)	0	3532	3511	0	1678	0
Flt Permitted		0.998			0.981	
Satd. Flow (perm)	0	3532	3511	0	1678	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		147	356		118	
Travel Time (s)		3.3	8.1		6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	840	309	17	17	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	867	326	0	43	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

#### Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	43.8%
Analysis Period (min)	15
	ICU Level of Service A

3: East Main Street  
HCM 7th TWSC

Build PM

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	25	773	284	16	16	24
Future Vol, veh/h	25	773	284	16	16	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	840	309	17	17	26





















Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	326	0	-	0	792 163
Stage 1	-	-	-	-	317 -
Stage 2	-	-	-	-	474 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	1230	-	-	-	326 853
Stage 1	-	-	-	-	711 -
Stage 2	-	-	-	-	592 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1230	-	-	-	317 853
Mov Cap-2 Maneuver	-	-	-	-	317 -
Stage 1	-	-	-	-	690 -
Stage 2	-	-	-	-	592 -

Approach	EB	WB	SB
HCM Control Delay, s/v	0.46	0	12.74
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	113	-	-	-	509
HCM Lane V/C Ratio	0.022	-	-	-	0.085
HCM Control Delay (s/veh)	8	0.2	-	-	12.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Build SAT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	268	13	3	243	65	10	11	7	99	7	57
Future Volume (vph)	76	268	13	3	243	65	10	11	7	99	7	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	125		0	50		0	0		0	0		75
Storage Lanes	1		0	1		0	1		0	0		1
Taper Length (ft)	75			50			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.968			0.940				0.850
Flt Protected	0.950			0.950			0.950				0.955	
Satd. Flow (prot)	1805	3546	0	1805	3460	0	1805	1744	0	0	1798	1615
Flt Permitted	0.517			0.560			0.622				0.726	
Satd. Flow (perm)	982	3546	0	1064	3460	0	1182	1744	0	0	1367	1615
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		6						8				75
Link Speed (mph)		30			30			30				30
Link Distance (ft)		404			244			271				300
Travel Time (s)		9.2			5.5			6.2				6.8
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	1%	3%	0%	1%	1%	0%	4%	0%	1%	0%	0%
Adj. Flow (vph)	85	301	15	3	273	73	11	12	8	111	8	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	316	0	3	346	0	11	20	0	0	119	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	Perm
Protected Phases	5	2		1	6			4				8
Permitted Phases	2			6			4			8		8
Detector Phase	5	2		1	6		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0		7.0	7.0	7.0
Minimum Split (s)	9.1	24.5		9.0	24.5		24.6	24.6		12.6	12.6	12.6
Total Split (s)	19.0	59.0		19.0	59.0		32.0	32.0		32.0	32.0	32.0
Total Split (%)	17.3%	53.6%		17.3%	53.6%		29.1%	29.1%		29.1%	29.1%	29.1%
Maximum Green (s)	14.9	52.5		15.0	52.5		26.4	26.4		26.4	26.4	26.4
Yellow Time (s)	3.1	4.1		3.0	4.1		3.3	3.3		3.3	3.3	3.3
All-Red Time (s)	1.0	2.4		1.0	2.4		2.3	2.3		2.3	2.3	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.1	6.5		4.0	6.5		5.6	5.6		5.6	5.6	5.6
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Min		None	C-Min		None	None		None	None	None

# 1: Waterbury Avenue/Hamilton Avenue & East Main Street Lanes, Volumes, Timings

Build SAT

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0				
Flash Dont Walk (s)		11.0			11.0		12.0	12.0				
Pedestrian Calls (#/hr)		2			1		2	2				
Act Effect Green (s)	86.0	82.1		82.3	75.8		14.0	14.0			14.0	14.0
Actuated g/C Ratio	0.78	0.75		0.75	0.69		0.13	0.13			0.13	0.13
v/c Ratio	0.10	0.11		0.00	0.14		0.07	0.08			0.68	0.23
Control Delay (s/veh)	3.6	4.8		4.0	7.7		40.2	29.0			64.9	9.3
Queue Delay	0.0	0.0		0.0	0.3		0.0	0.0			0.0	0.0
Total Delay (s/veh)	3.6	4.8		4.0	8.0		40.2	29.0			64.9	9.3
LOS	A	A		A	A		D	C			E	A
Approach Delay (s/veh)		4.6			8.0			33.0			45.5	
Approach LOS		A			A			C			D	
Queue Length 50th (ft)	11	25		1	47		7	8			82	0
Queue Length 95th (ft)	28	62		m3	104		22	28			134	29
Internal Link Dist (ft)		324			164			191			220	
Turn Bay Length (ft)	125			50								75
Base Capacity (vph)	882	2649		936	2385		283	424			328	444
Starvation Cap Reductn	0	0		0	1498		0	0			0	0
Spillback Cap Reductn	0	0		0	0		0	0			0	0
Storage Cap Reductn	0	0		0	0		0	0			0	0
Reduced v/c Ratio	0.10	0.12		0.00	0.39		0.04	0.05			0.36	0.14

## Intersection Summary




















Area Type: Other  
 Cycle Length: 110  
 Actuated Cycle Length: 110  
 Offset: 31 (28%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay (s/veh): 14.5      Intersection LOS: B  
 Intersection Capacity Utilization 42.7%      ICU Level of Service A  
 Analysis Period (min) 15  
 m Volume for 95th percentile queue is metered by upstream signal.

## Splits and Phases: 1: Waterbury Avenue/Hamilton Avenue & East Main Street



## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Build SAT

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	257	115	91	242	0	81	0	64	0	0	0
Future Volume (vph)	0	257	115	91	242	0	81	0	64	0	0	0
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	50		0	100		0	0		75	0		0
Storage Lanes	1		0	1		0	0		1	0		0
Taper Length (ft)	50			75			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954							0.850			
Flt Protected				0.950				0.950				
Satd. Flow (prot)	1900	3420	0	1787	3539	0	0	1787	1599	0	1900	0
Flt Permitted				0.480				0.757				
Satd. Flow (perm)	1900	3420	0	903	3539	0	0	1424	1599	0	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		87							75			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			147			233			145	
Travel Time (s)		5.5			3.3			5.3			3.3	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	1%	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%
Adj. Flow (vph)	0	292	131	103	275	0	92	0	73	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	423	0	103	275	0	0	92	73	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway 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
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases	5	2		1	6			4				4
Permitted Phases	2			6			4		4	4		
Detector Phase	5	2		1	6		4	4	4	4		4
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		7.0	7.0	7.0	7.0		7.0
Minimum Split (s)	9.0	34.6		9.0	34.6		25.7	25.7	25.7	25.7		25.7
Total Split (s)	19.0	58.0		19.0	58.0		33.0	33.0	33.0	33.0		33.0
Total Split (%)	17.3%	52.7%		17.3%	52.7%		30.0%	30.0%	30.0%	30.0%		30.0%
Maximum Green (s)	15.0	51.4		15.0	51.4		27.3	27.3	27.3	27.3		27.3
Yellow Time (s)	3.0	4.0		3.0	4.0		3.7	3.7	3.7	3.7		3.7
All-Red Time (s)	1.0	2.6		1.0	2.6		2.0	2.0	2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0			0.0
Total Lost Time (s)	4.0	6.6		4.0	6.6			5.7	5.7			5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0		2.0
Recall Mode	None	C-Min		None	C-Min		None	None	None	None		None

## 2: Weed Avenue/1290 E Main St Driveway & East Main Street Lanes, Volumes, Timings

Build SAT

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		7.0			7.0		7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		21.0			21.0		13.0	13.0	13.0	13.0	13.0	
Pedestrian Calls (#/hr)		0			0		0	0	0	0	0	
Act Effect Green (s)		76.1		88.6	86.0			11.7	11.7			
Actuated g/C Ratio		0.69		0.81	0.78			0.11	0.11			
v/c Ratio		0.17		0.13	0.09			0.60	0.30			
Control Delay (s/veh)		8.5		3.0	3.2			63.2	13.0			
Queue Delay		0.4		0.0	0.0			0.0	0.0			
Total Delay (s/veh)		8.9		3.0	3.2			63.2	13.0			
LOS		A		A	A			E	B			
Approach Delay (s/veh)		9.0			3.2			41.0				
Approach LOS		A			A			D				
Queue Length 50th (ft)		76		12	19			63	0			
Queue Length 95th (ft)		54		28	36			109	38			
Internal Link Dist (ft)		164			67			153				65
Turn Bay Length (ft)				100					75			
Base Capacity (vph)		2392		848	2767			353	453			
Starvation Cap Reductn		1463		0	0			0	0			
Spillback Cap Reductn		0		0	0			0	0			
Storage Cap Reductn		0		0	0			0	0			
Reduced v/c Ratio		0.46		0.12	0.10			0.26	0.16			

### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 37 (34%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay (s/veh): 12.2

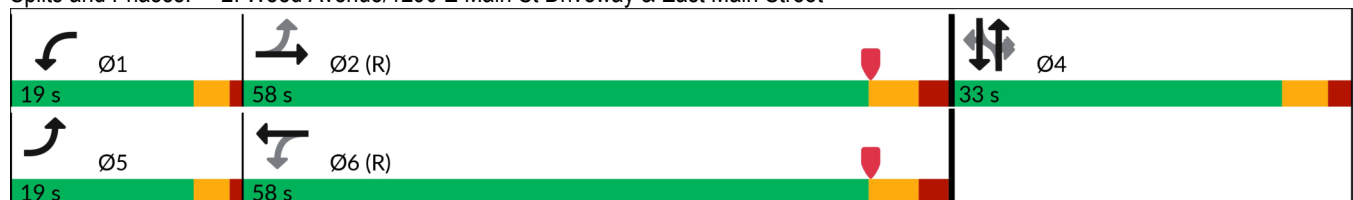
Intersection LOS: B

Intersection Capacity Utilization 37.0%

ICU Level of Service A

Analysis Period (min) 15

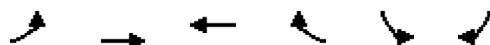
Splits and Phases: 2: Weed Avenue/1290 E Main St Driveway & East Main Street





### 3: East Main Street & Site Driveway Lanes, Volumes, Timings

Build SAT



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↘↘	
Traffic Volume (vph)	38	262	296	25	26	36
Future Volume (vph)	38	262	296	25	26	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.988		0.921	
Flt Protected		0.994			0.980	
Satd. Flow (prot)	0	3518	3497	0	1681	0
Flt Permitted		0.994			0.980	
Satd. Flow (perm)	0	3518	3497	0	1681	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		147	356		118	
Travel Time (s)		3.3	8.1		6.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	285	322	27	28	39
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	326	349	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		0	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

#### Intersection Summary

Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	31.0%
Analysis Period (min)	15
	ICU Level of Service A

### 3: East Main Street & Site Driveway HCM 7th TWSC

Build SAT

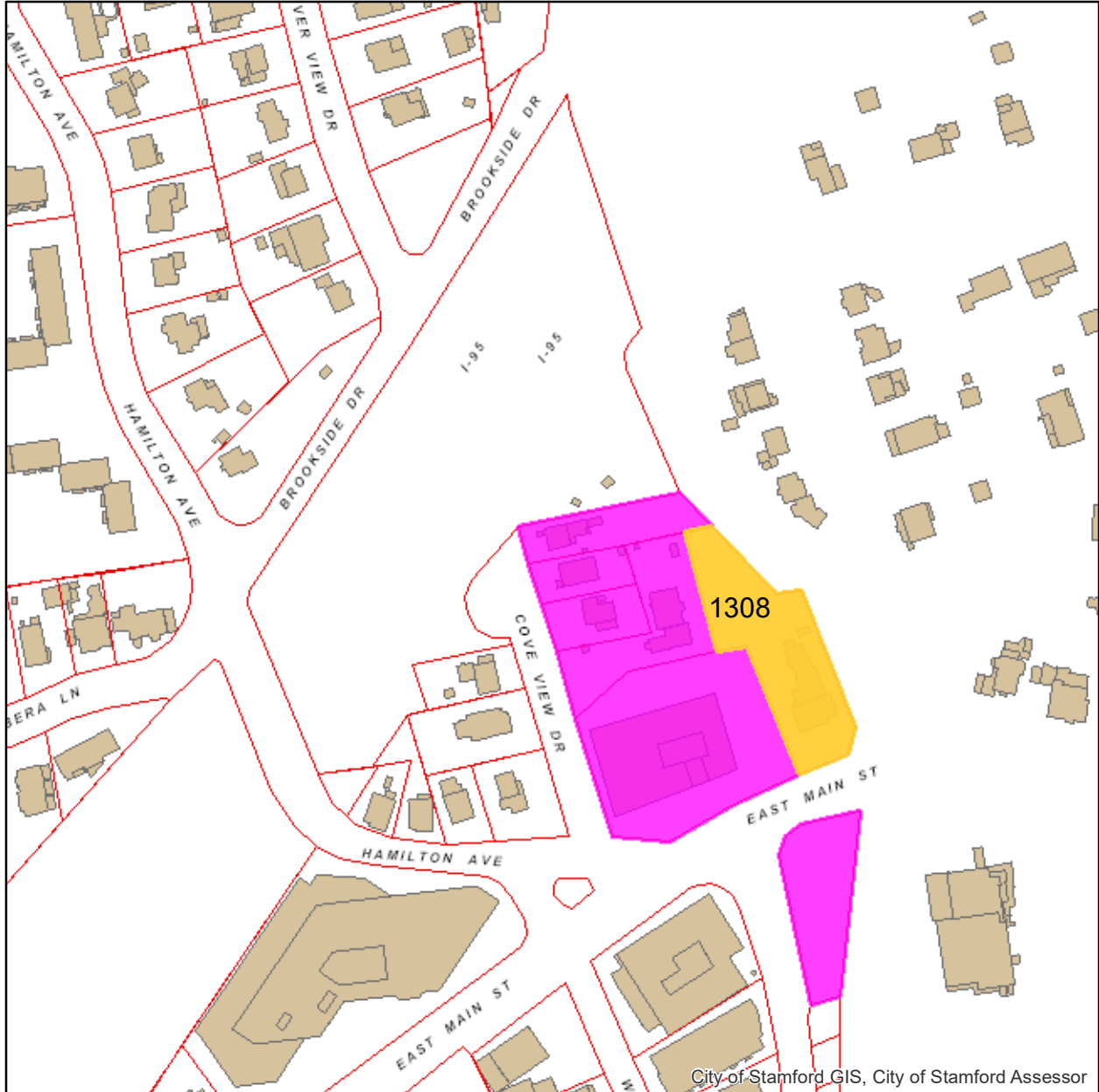
Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	38	262	296	25	26	36
Future Vol, veh/h	38	262	296	25	26	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	285	322	27	28	39

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	349	0	0	560	174
Stage 1	-	-	-	335	-
Stage 2	-	-	-	225	-
Critical Hdwy	4.14	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	3.52	3.32
Pot Cap-1 Maneuver	1207	-	-	458	839
Stage 1	-	-	-	696	-
Stage 2	-	-	-	791	-
Platoon blocked, %		-	-		
Mov Cap-1 Maneuver	1207	-	-	441	839
Mov Cap-2 Maneuver	-	-	-	441	-
Stage 1	-	-	-	670	-
Stage 2	-	-	-	791	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.23	0	11.65
HCM LOS			B

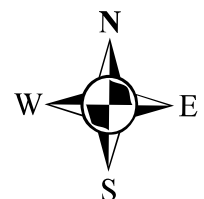
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	456	-	-	-	609
HCM Lane V/C Ratio	0.034	-	-	-	0.111
HCM Control Delay (s/veh)	8.1	0.2	-	-	11.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

# 1308 EAST MAIN STREET 100 FT



Stamford Assessor's Office

Mapping Division





## **AUTHORIZATION**

To Whom It May Concern:

Please be advised that Wofsey, Rosen, Kveskin & Kuriansky, LLP is authorized to represent Nautilus Botanicals EJV1 LLC in the enclosed applications for a hybrid medical and adult-use cannabis retail facility to be located at 1308 East Main Street, Stamford, CT, before officials of the City of Stamford, including but not limited to meetings and hearings of the Planning and Zoning Boards. A fax or copy of this Authorization shall be valid as an original.

**Nautilus Botanicals EJV1 LLC**

A handwritten signature in black ink, appearing to read "Luis Vega".

Luis Vega, Managing Member

Dated: March 13, 2024

## AUTHORIZATION

To Whom It May Concern:

Please be advised that Wofsey, Rosen, Kweskin & Kuriansky, LLP is authorized to represent 1308 East Main Street LLC in the enclosed applications for a hybrid medical and adult-use cannabis retail facility to be located at 1308 East Main Street, Stamford, CT, before officials of the City of Stamford, including but not limited to meetings and hearings of the Planning and Zoning Boards. A fax or copy of this Authorization shall be valid as an original.

**1308 East Main Street LLC**



Joseph Gencarelli, Managing Member

Dated: 3/18/2024

**Zoning Data Chart**

3/25/2024

Project Name - Natuulus Botanicals EJV1 LLC - 1308 East Main Street

Application number - 224-16

Address - 1308 East Main Street

Zoning District(s) - If multiple Zoning Districts, provide requirement and compliance for each portion of site under the different district - C-N

Zoning Section		Current Required/ Permitted (C-N)	Proposed Permitted (C-N)	Existing Conditions	Proposed Conditions	Notes (Indicate compliance or Zoning Section for Special Permit if applicable)
App. B (III)	Lot Size	Min. 5,000 sf.	N/A	21,680 sf.	21,680 sf.	Compliant
	Gross Floor Area	N/A	N/A	4,305 sf.	6,072 sf.	Compliant
	Zoning Floor Area					
	Residential	N/A	N/A			
	Commercial	N/A	N/A	4,305 sf.	4,305 sf.	Compliant
	Community Facility	N/A	N/A			
	Industrial	N/A	N/A			
	<b>Total</b>	N/A	N/A			
	<b>F.A.R. (Non-Residential)</b>	0.3	0.3	0.19 (4,305 sf.)	.28 (6,072 sf.)	Compliant
	Non-Residential					
	Commercial					
	Community Facility					
	Industrial					
	<b>Total</b>	N/A	N/A			
	Number of units	N/A	N/A			
	Below Market Rate Units (#, %, and AMI level)	N/A	N/A			
	Number of seats/ beds / employees if applicable	N/A	N/A			
	Density (Units/Acre)	N/A	N/A			
	Street Frontage	50 ft.	50 ft.	60 ft.	60 ft.	Compliant
	Building Coverage (Area and %)	30%	30%	15% (3,290 sf.)	15% (3,290 sf.)	Compliant
	Lot coverage (Area and %)	N/A	N/A			
	Building Height (Feet)	25 ft.	25 ft.	<25 ft.	<25 ft.	Compliant
	Number of floors (Stories)	2 Stories	2 Stories	2 Stories	2 Stories	Compliant
	Active ground floor (sq.ft. and %) if applicable	N/A	N/A			
	Yards					
	Front yard (Streetline)	Min. 15 ft. Street Line, 40 ft. Street Center	Min 15 ft. Street Line, 40 ft. Street Center	22.5 ft.	22.5 ft.	Compliant
	Rear yard	Min. 20 ft.	Min. 20 ft.	183 ft.	183 ft.	Compliant
	Side yard	Min. One Side 6 ft., Both Sides 12 ft.	Min . One Side 6 ft., Both Sides 12 ft.	0 ft. one side pre-existing lawful nonconforming; >12 ft. both sides	0 ft. one side pre-existing lawful nonconforming; >12 ft. both sides	Lawful nonconforming/ compliant
	Light & Air	N/A	N/A			

Zoning Section		Current Required/ Permitted (C-N)	Proposed Permitted (C-N)	Existing Conditions	Proposed Conditions	Notes (Indicate compliance or Zoning Section for Special Permit if applicable)
	<b>Parking</b>					
12.D.14 (Retail Store)	Residential parking					
	Commercial parking	15	15	~40 painted spaces	16 spaces required* / 21 spaces provided	Compliant
	Community Facility parking					
	Industrial parking					
	Public open space parking					
	Bike parking	N/A	N/A			
	# of levels of parking garage (if applicable)					
	Square footage of parking area	N/A	N/A	>18,000 sf.	>18,000 sf.	Compliant
12.C.1	Parking setback	10 ft. from street line; 5 ft. from lot lines / 0 ft. pre- existing lawful nonconforming from all lot lines; 5 ft. from buildings / 0 ft. lawful nonconforming from building	10 ft. from street line; 5 ft. from lot lines / 0 ft. pre- existing lawful nonconforming from all lot lines; 5 ft. from buildings / 0 ft. lawful nonconforming from building	>75 ft. from street line; 0 ft. pre- existing lawful nonconforming all lot lines	75 ft. from street line (except 1 handicapped space near street line); 0 ft. pre- existing lawful nonconforming east lot line; > 20 ft. west lot line	Pre-existing lawful nonconforming / compliant if handicapped space within street line setback approved
	<b>Usable Open Space (Area and % )</b>					
		N/A	N/A			
	Active (If separate)					
	Passive (If separate)					
12.K; Tree Manual	<b>Sidewalk &amp; Street Trees</b>	Sidewalk 10 ft. from Curb Line, 6 ft. wide, 6 in. high. Tree Requirement per Manual	Sidewalk 10 ft. from Curb Line, 6 ft. wide, 6 in. high. Tree Requirement per Manual	Requesting exemption per 12.K.4(5) for existing sidewalk in good condition	Requesting exemption per 12.K.4(5) for existing sidewalk in good condition	Compliant if exemption
	Existing Trees	1 sm. tree/20 ft. of frontage; 1 med.-lg. tree/30 ft. of frontage	1 sm. tree/20 ft. of frontage; 1 med.-lg. tree/30 ft. of frontage	0	Per 12.K.6.c, required # of street trees or payment of fee in lieu	Compliant or payment of fee in lieu
	Proposed					
	Total					
12.L	<b>EV Charging &amp; Reserved Spaces</b>	N/A	N/A	N/A	N/A	N/A
13.F	<b>Signage</b>	Sign on Front of Building Cannot exceed 2 sq. ft in size; Additional Ground Sign cannot exceed 16 sq. ft. in area and 10 ft. in height	Sign on Front of Building Cannot exceed 2 sq. ft in size; Additional Ground Sign cannot exceed 16 sq. ft. in area and 10 ft. in height	Existing Sign to be repurposed to comply with Zoning Regulations	Proposed Sign on Building to be 16 in. by 18 in.; Proposed repurposed ground sign to be 4 ft. by 4 ft. and 5 ft. high	Compliant

\* Retail SF = 1,191 sf. @ 4/1,000 = 5 spaces  
Office SF = 2,689 sf. @ 3/1,000 = 9 spaces  
Storage SF = 2,192 sf. @ 1/2,000 = 2 spaces

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TOTAL Required Parking Spaces = 16 spaces



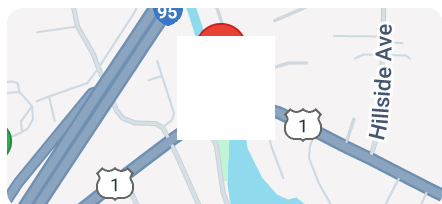
Google Maps 1308 E Main St

Stamford, Connecticut  
Google Street View  
Jul 2023 See more dates



Facing Property Looking North

Image capture: Jul 2023 © 2024 Google



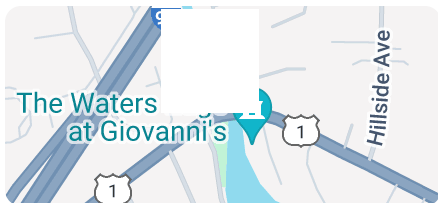


Google Maps Stamford, Connecticut



Google Street View  
Jul 2023

Image capture: Jul 2023 © 2024 Google







1308 E Main St

Stamford, Connecticut

Google Street View

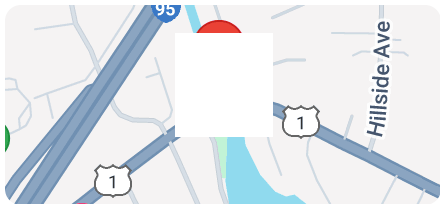
Jul 2023 See more dates



Google

From Property Looking South

Image capture: Jul 2023 © 2024 Google







SMOKEY

BAR

Looking South from Property





Looking East from Property





CHILTON TRUST

308  
BOAT YARD  
& GRILL

OPEN

Looking West Across River





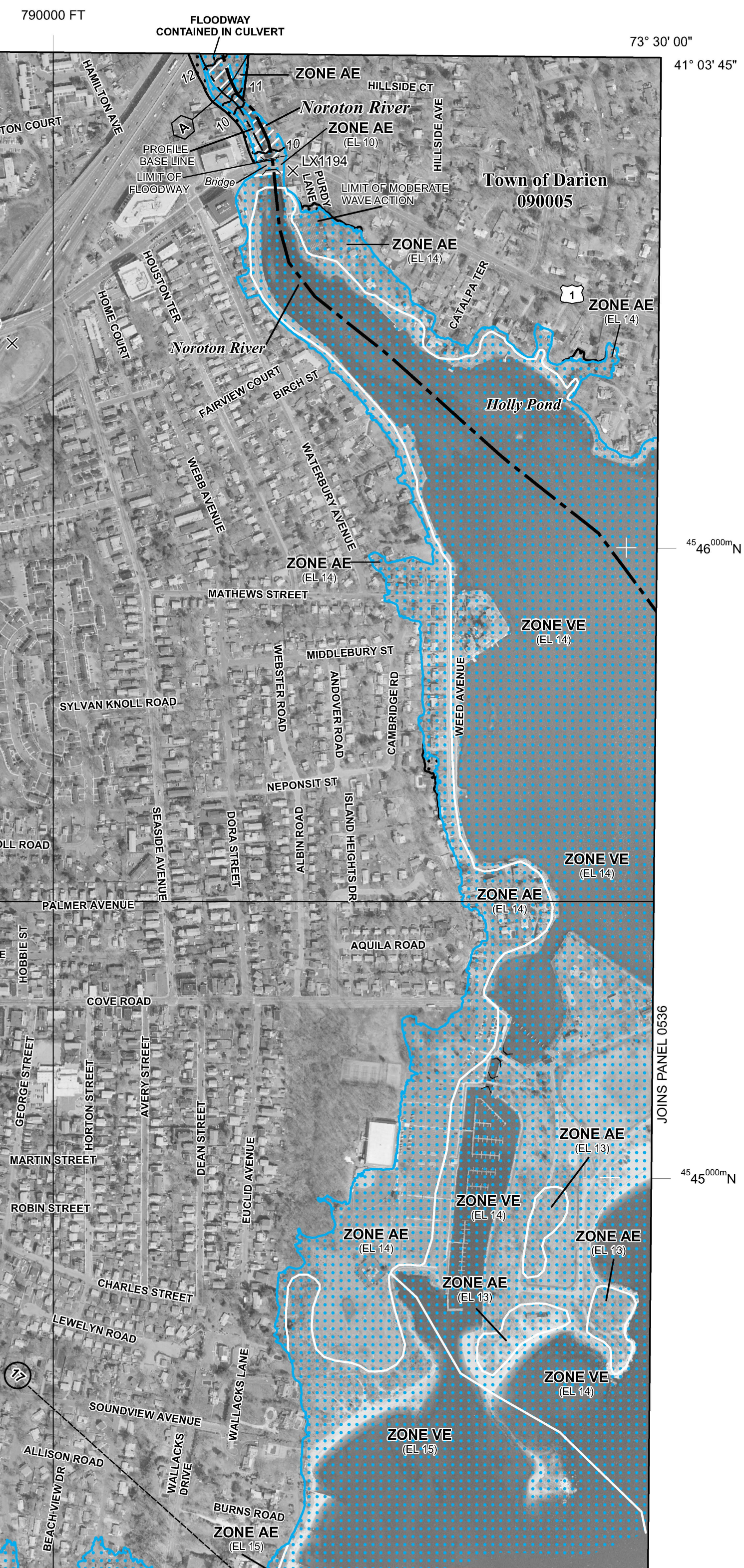
Looking West from Property





Rear of Building





# LEGEND

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**  
 The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A** No Base Flood Elevations determined.
- ZONE AE** Base Flood Elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**

**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

**OTHER AREAS**

**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.  
**ZONE D** Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**

**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% Annual Chance Floodplain Boundary
- 0.2% Annual Chance Floodplain Boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary

- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
- Limit of Moderate Wave Action
- Limit of Moderate Wave Action coincident with Zone Break

- 513 Base Flood Elevation line and value; elevation in feet\*
- (EL 987) Base Flood Elevation value where uniform within zone; elevation in feet\*

\*Referenced to the North American Vertical Datum of 1988

- A-A Cross section line
- 23-23 Transect line
- Culvert
- Bridge
- 45° 02' 08", 93° 02' 12" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
- 3100000 FT 5000-foot grid: Connecticut State Plane Feet Zone (FIPS Zone 0600), Lambert Conformal Conic projection
- 4889000m N 1000-meter Universal Transverse Mercator grid values, zone 18N
- DX5510 X Bench mark (see explanation in Notes to Users section of this FIRM panel)

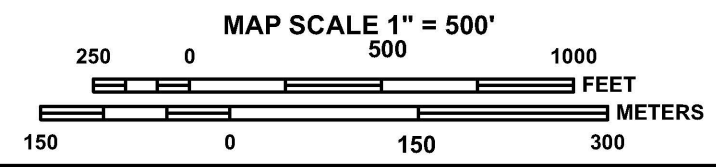
**MAP REPOSITORIES**  
 Refer to Map Repositories list on Map Index

**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
 June 18, 2010

**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**  
 July 8, 2013 - to change Base Flood Elevations and Special Flood Hazard Areas, to change zone designations, to update the effects of wave action, to update corporate limits, to add roads and road names, to incorporate previously issued Letters of Map Revision and to modify Coastal Barrier Resources System units.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

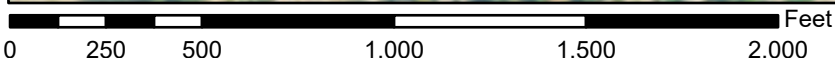
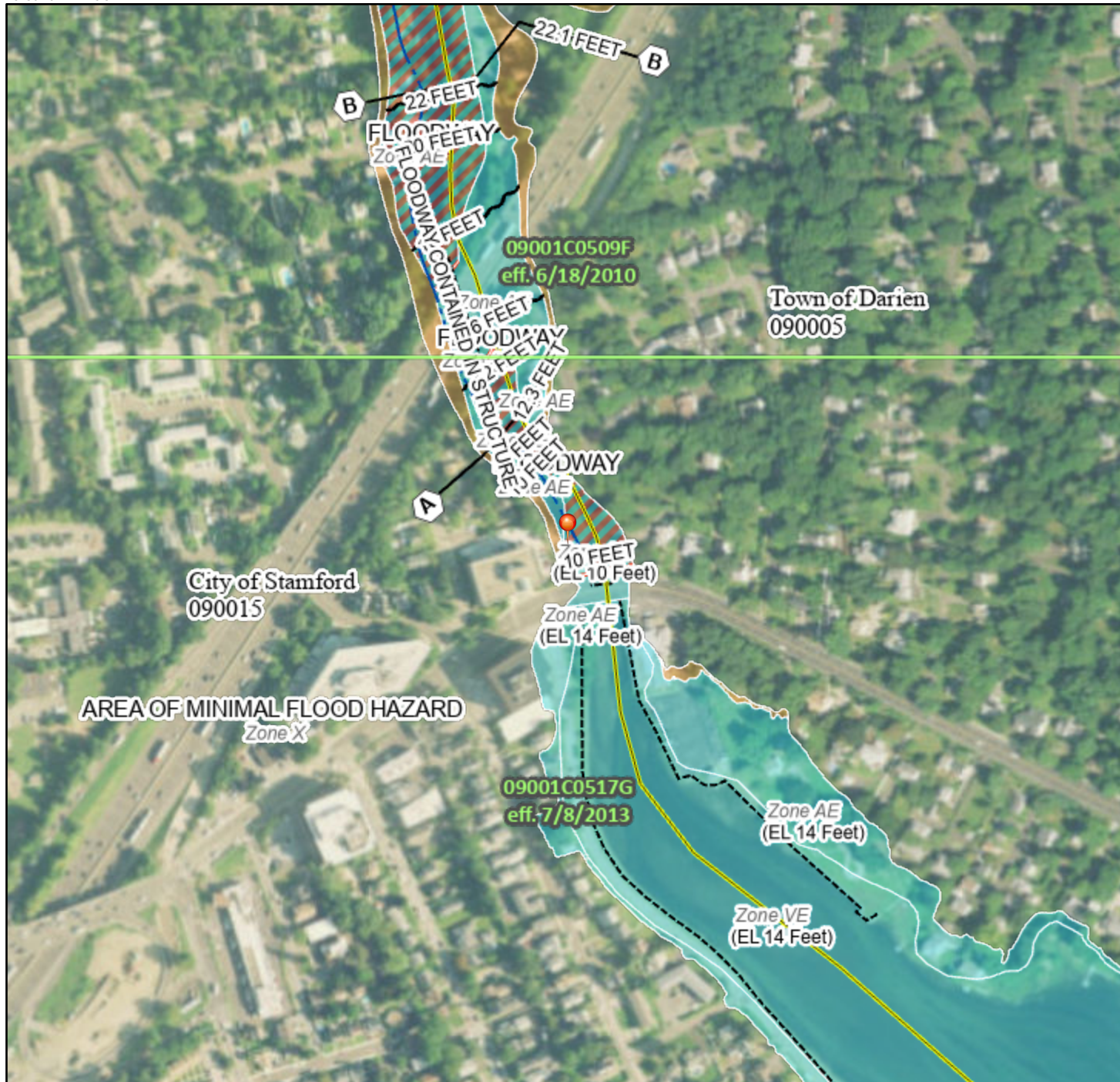




# National Flood Hazard Layer FIRMMette



73°30'46"W 41°3'54"N



1:6,000

73°30'9"W 41°3'27"N

Basemap Imagery Source: USGS National Map 2023

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/12/2024 at 12:56 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

DETAIL DIAGRAM  
MODEL 1540-520  
FLOOD VENT INSULATED

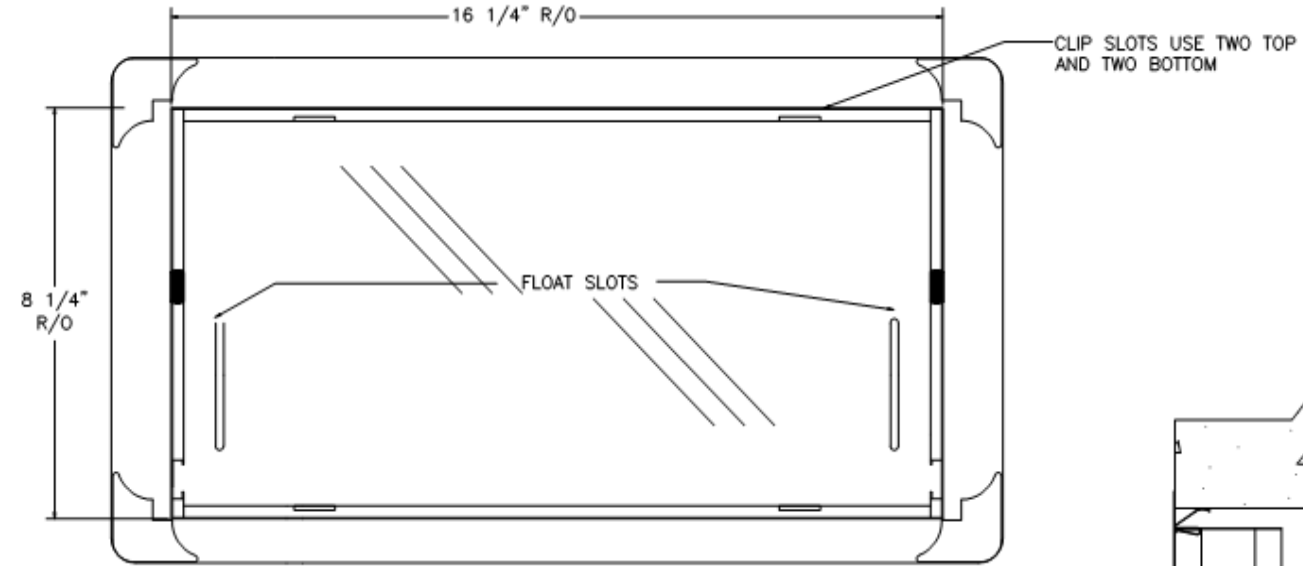


FIGURE 1  
FRONT VIEW

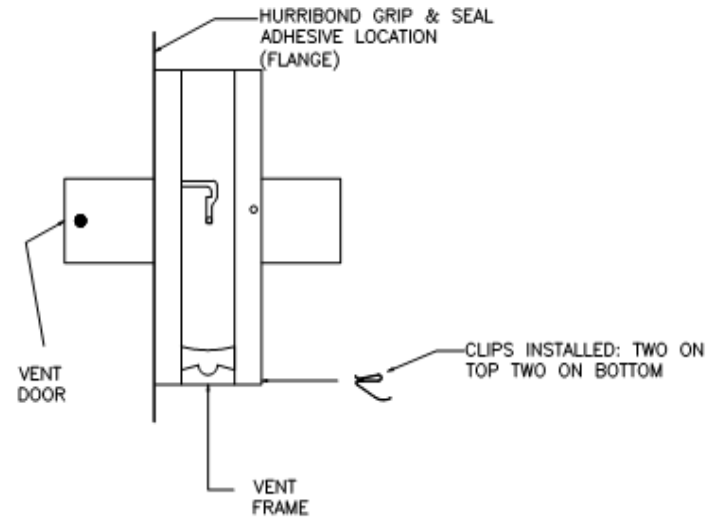


FIGURE 2  
SIDE VIEW

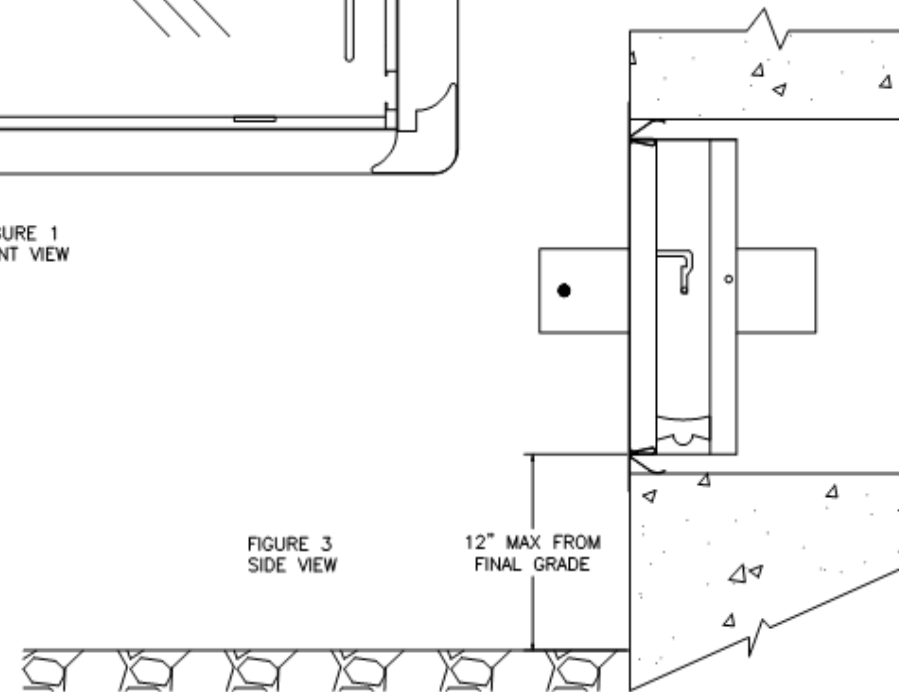




FIGURE 3  
SIDE VIEW

 <b>SMART VENT®</b> 877-441-8368 WWW.SMARTVENT.COM		SMART VENT FOUNDATION FLOOD VENTS 430 ANDBRO DR., UNIT 1 PITMAN NJ 08071	
		FLOOD VENT INSULATED MODEL 1540-520	
SIZE A	DWG NO. 1540-520	REV B	
DATE: 6-21-16		SHEET 1 OF 2	

1 FLOOD VENT  
SK-2.0 Scale: 3" = 1'-0"

FLOOD VENT	
NAUTILUS BOTANICALS EJV1 LLC	SK A-2.0
1308 EAST MAIN STREET, STAMFORD, CT	DATE: 3/20/24



C-N ZONE BUILDING SETBACK REQUIREMENTS

- Front Street Line Setback..... 15'
- Center Line Of Street Setback..... 40'
- Rear Yard Setback..... 20'
- Side Yard Setback..... 6' w/ Total of..... 12'
- Max. Building Coverage.....30% Of Lot Area

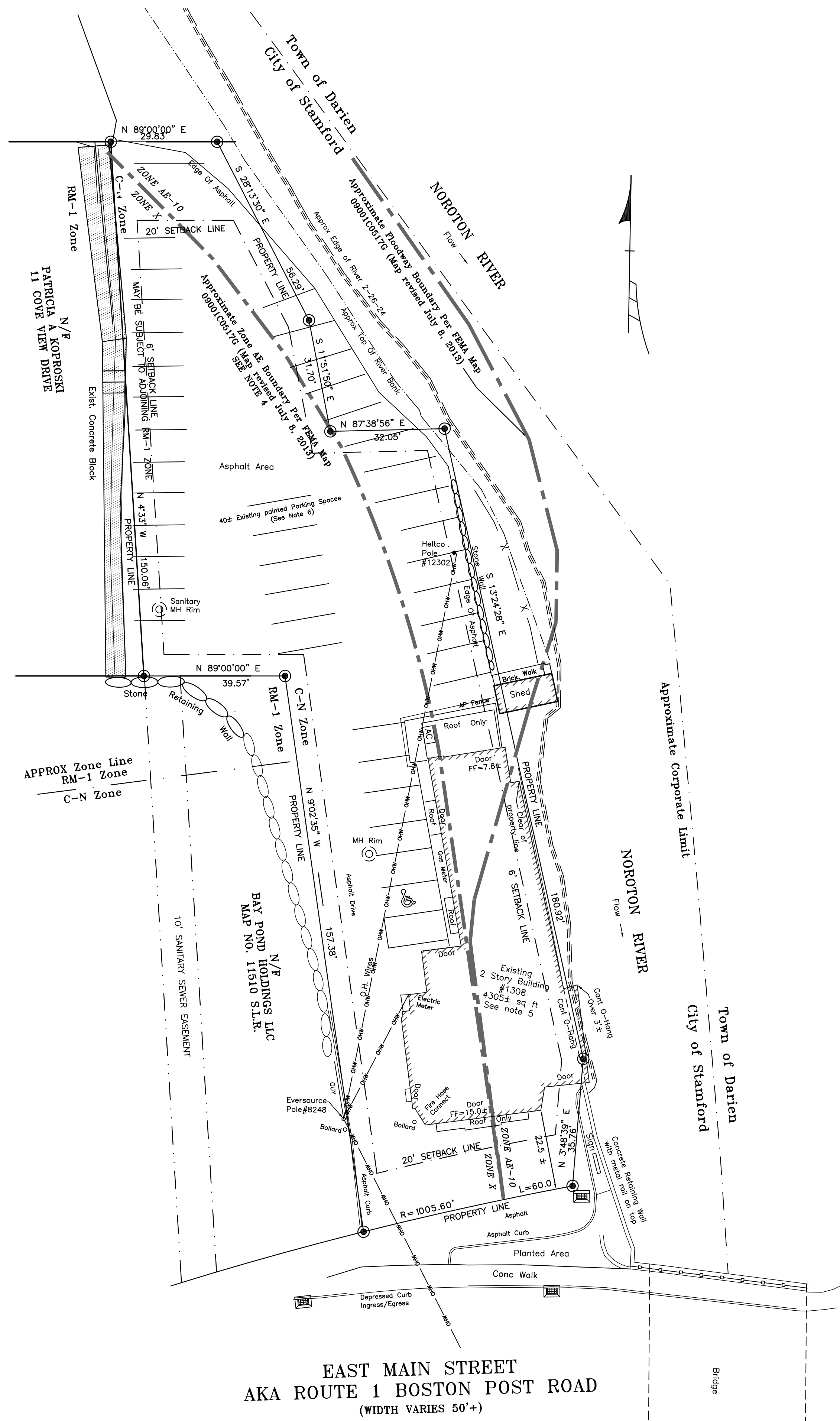
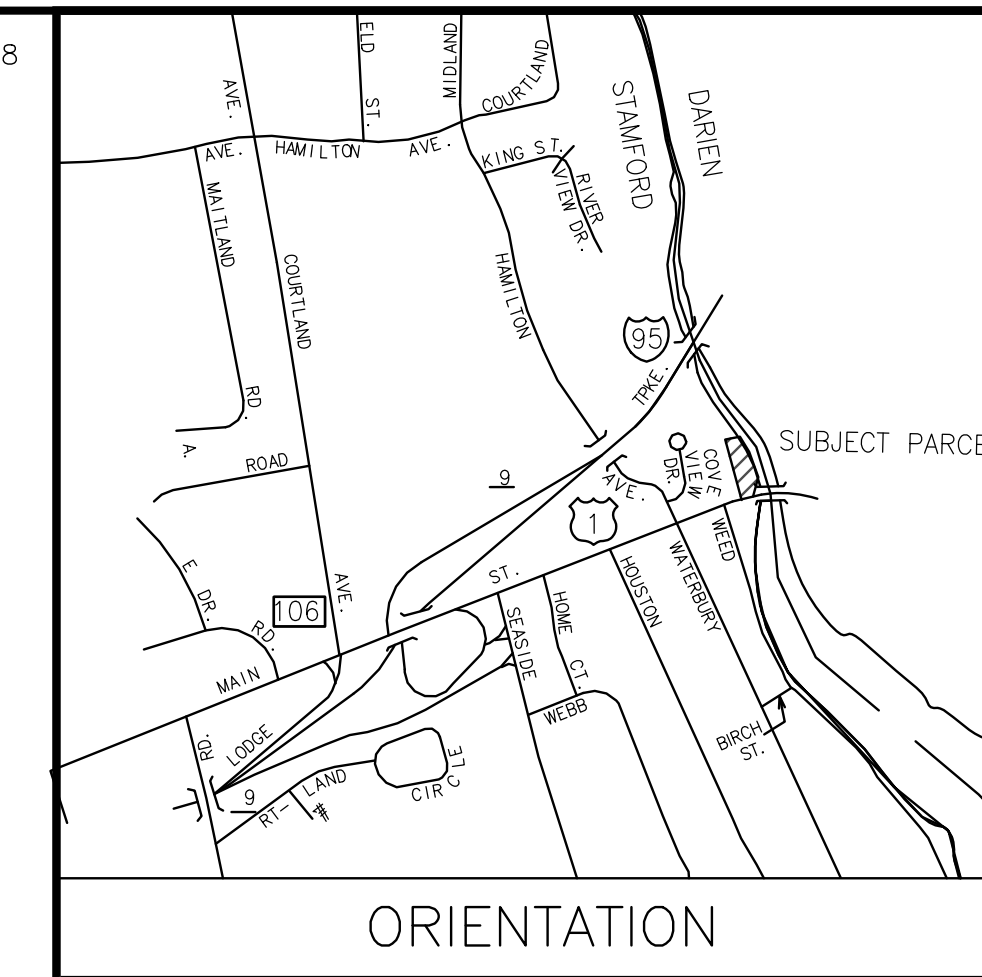
Zoning Information Is Subject To The Review And Approval By The Appropriate Governing Authority

Property Lines Not Staked By Contractual Agreement  
Soil Types Not Delineated By Contractual Agreement

SIZE AND LOCATION OF PROPOSED DEVELOPMENT PROVIDED BY OTHERS.  
IT IS SUBJECT TO THE REVIEW AND APPROVAL BY THE APPROPRIATE GOVERNING AUTHORITIES

LEGEND

Existing	
Stone Wall	— X —
Concrete Wall	— X —
Fence	— X —
Catch Basin (In Curb)	⊗
Catch Basin (Flush)	⊗
Gas Box	⊗
Gas Meter	⊗
Electric Meter	⊗
Water Box	⊗
Monitoring Well	⊗
Manhole	⊗
Yard Drain	⊗
Light Pole	⊗
Sign	⊗
Clean Out	⊗
Metal Cover	⊗



**PLOT PLAN**  
PREPARED FOR  
**Nautilus Botanicals EJv1 LLC**  
1308 EAST MAIN STREET  
STAMFORD, CONNECTICUT



- Notes:
- Underground utility, structure and facility locations depicted and noted hereon have been compiled, in part, from record mapping supplied by the respective utility companies or governmental agencies, from parol testimony and from other sources. These locations must be considered as approximate in nature. Additionally, other such features may exist on the site, the existence of which are unknown to Edward J. Frattaroli, Inc. The size, location and existence of all such features must be field determined and verified by the appropriate authorities prior to construction.
  - The contractor shall notify all public utility companies by calling Call-Before-You-Dig at 1-800-922-4455 at least 72 hours prior to crossing their lines.
  - Property is Subject to Title verification, utility easements or Private Agreements if any, in addition to those Depicted, Noted and or referenced on this Map. Reference is hereby made to all notes on Recorded Documents hereon referenced that pertain to this parcel.
  - Elevations on NAVD-88 Datum based on information Provided by the City of Stamford & the State of Connecticut. For Flood information Refer to FEMA Map 09001C0517G (Map revised July 8, 2013) for additional FEMA Flood Information. Approximate 100 Flood Elevation 10'± According to the City of Stamford tax assessment the gross floor area of the existing building is 4,305 SQ FT.
  - There are 40± Existing painted Parking Spaces many of them delineated faintly as depicted on this survey

This survey and map has been prepared in accordance with Section 20-300b-1 thru 20-300b-20 of the Regulation of Connecticut State Agencies—Minimum Standards for Surveys and Maps in the State of Connecticut as endorsed by the Connecticut Association of Land Surveyors, Inc. It is a "ZONING LOCATION SURVEY" based on a "DEPENDENT RESURVEY" conforming to horizontal Accuracy Class "A-2" and intended to be used for Compliance and Noncompliance with Existing Requirements.

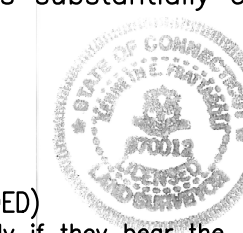
To my knowledge and belief this plan is substantially correct as noted hereon.

**EAST MAIN STREET**  
**AKA ROUTE 1 BOSTON POST ROAD**  
(WIDTH VARIES 50'+)

Refer To:  
Volume 11088 Page 341 S.L.R.  
PLOT "B" MAP NO. 6218 S.L.R.

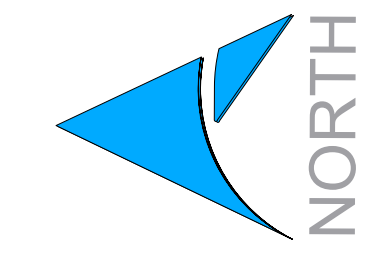
Total Area = 19,785 sq ft (Fig.)  
Existing Building & Shed Cover 17.7% of Lot Area

Scale 1" = 20'



BY: *Edward J. Frattaroli*  
**FOR: EDWARD J. FRATTAROLI, INC.**  
Land Surveyors • Consultants • Land Planners  
STAMFORD, CONNECTICUT FEBRUARY 27, 2024

REVISED MARCH 14, 2024 (SETBACK & GFA ADDED)  
This Document and Copies Thereof are Valid only if they bear the signature and embossed seal of the designated licensed professional. Unauthorized alterations render any declaration hereon null and void.



Town of Darien  
City of Stamford

Approximate Corporate Limit

NOROTON RIVER  
Flow →

NOROTON RIVER  
Flow →

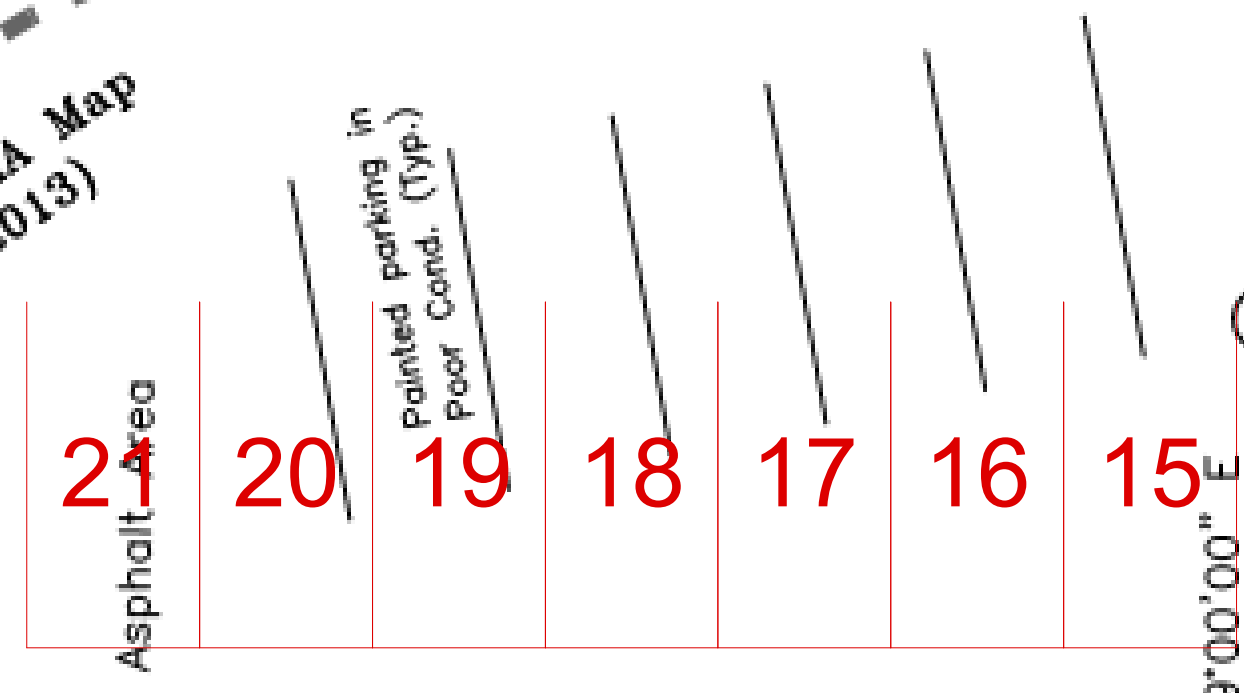
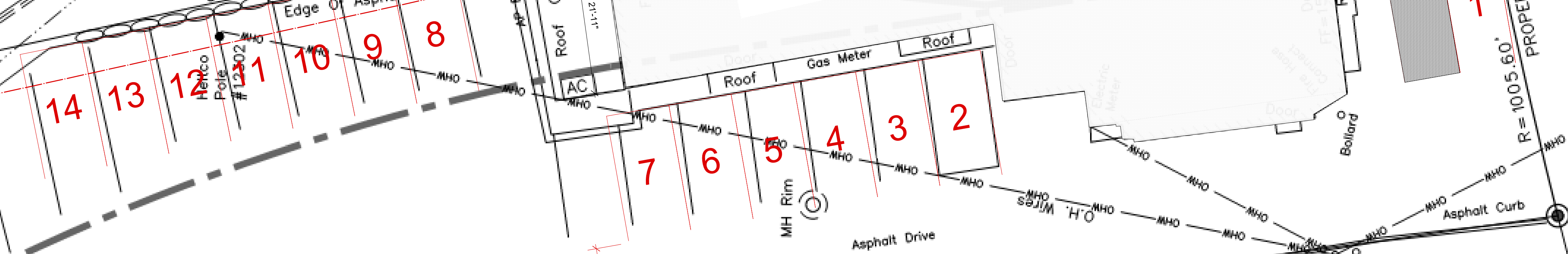
Approximate Floodway Boundary Per FEMA Map 09001C0517G (Map revised July 8, 2013)

Approximate Zone AE Boundary Per FEMA Map 09001C0517G (Map revised July 8, 2013)

NAUTILUS BOTANICALS  
EJV1 LLC

N/F  
BAY POND HOLDINGS LLC  
MAP NO. 11510 S.L.R.

N/F  
PATRICIA A KOPROSKI  
11 COVE VIEW DRIVE



**KEY**

EXISTING BUILDING

---

**TOTAL AREA by FLOOR**

LOWER FLOOR = 3,119sf  
UPPER FLOOR = 2,953sf  
6,072sf

---

**TOTAL AREA by USE**

TOTAL RETAIL SF = 1,191sf  
TOTAL OFFICE SF = 2,689sf  
TOTAL STORAGE SF = 2,192sf  
6,072sf

---

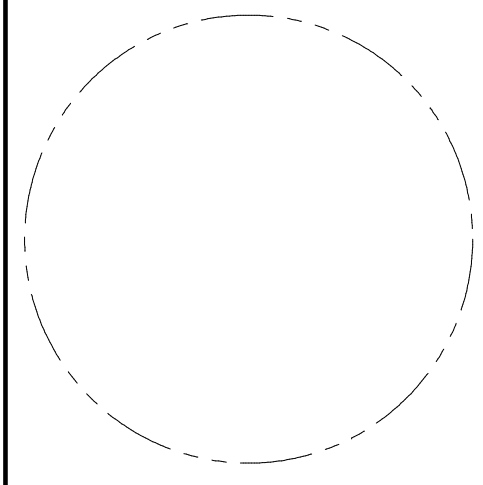
**PARKING BY USE**

RETAIL SF = 1,191sf @ 4/1,000 = 5 spaces  
OFFICE SF = 2,689sf @ 3/1,000 = 9 spaces  
STORAGE SF = 2,192sf @ 1/2,000 = 2 spaces  
16 Spaces Required  
21 Spaces Provided

ARCHITECT:  
LARC ARCHITECTS  
14 COLTON STREET  
STAMFORD, CT 06320  
PHONE: 203.351.1007  
FAX: 203.351.1007  
SHELDON@LARCARCHITECTS.COM  
HILARY@LARCARCHITECTS.COM

**NAUTILUS BOTANICALS  
EJV1 LLC**  
1308 EAST MAIN STREET,  
STAMFORD, CT

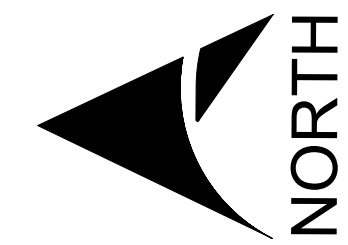
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DD:	
CD:	
BID:	
PERMIT:	
CONTRACT:	
CONST:	
REVISION:	



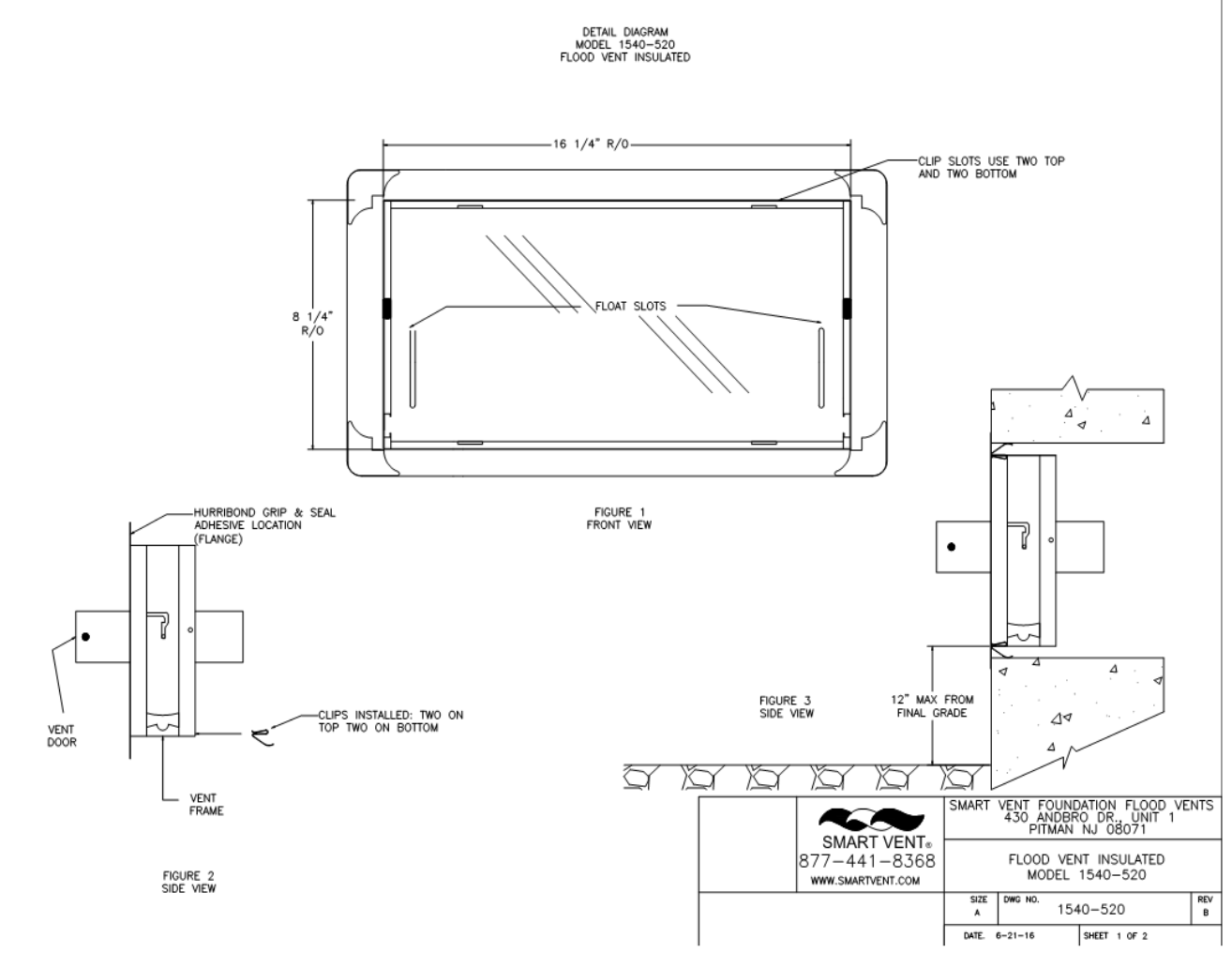
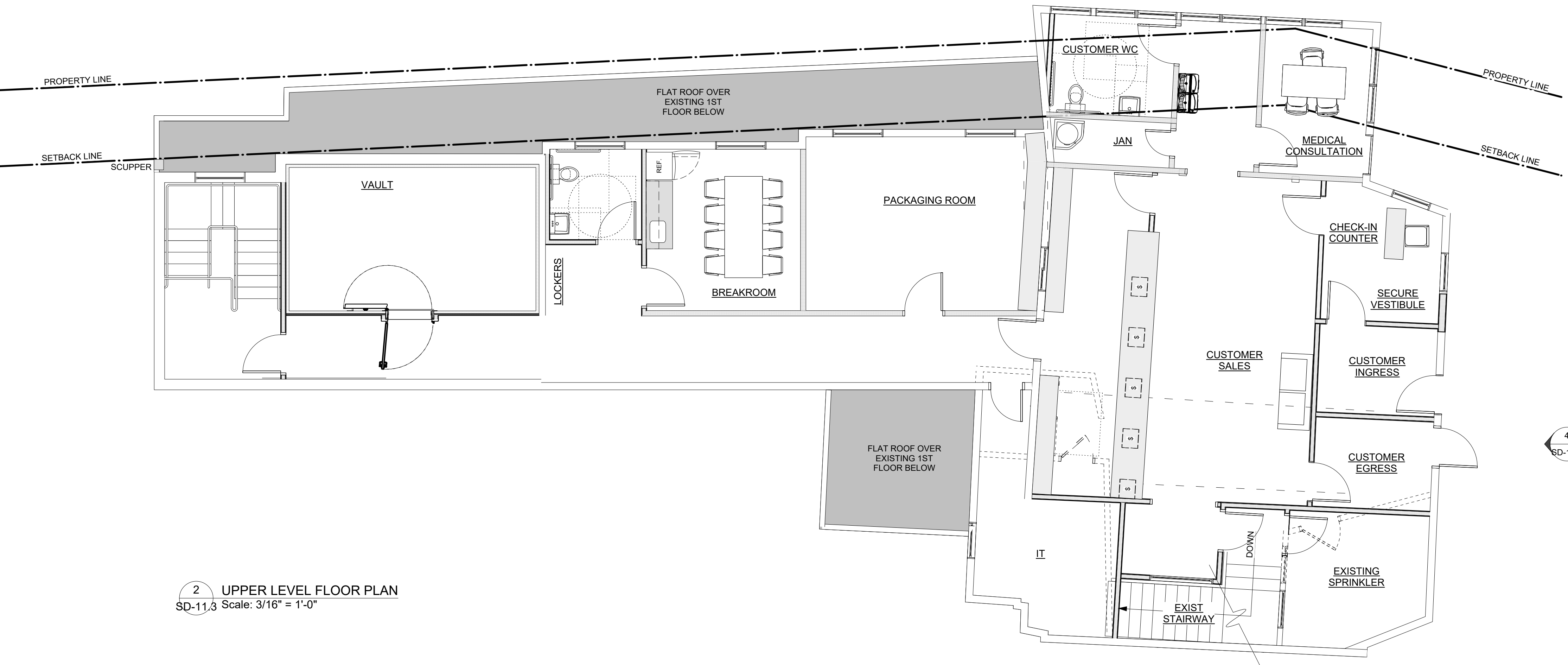
**SITE PLAN**

**SD-11.3**



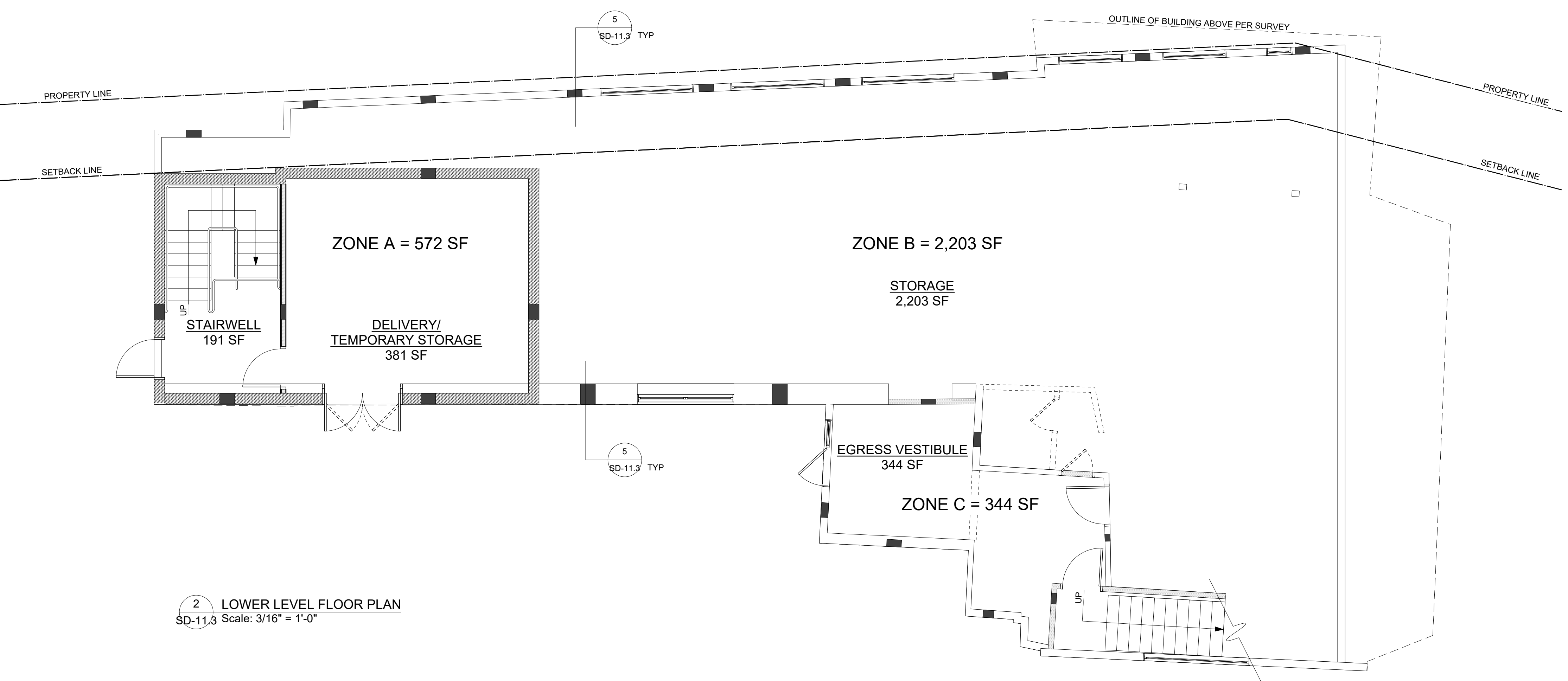


TOTAL AREA BY FLOOR	
LOWER FLOOR =	3,119sf
UPPER FLOOR =	2,953sf
6,072sf	
TOTAL AREA BY USE	
TOTAL RETAIL SF =	1,191sf
TOTAL OFFICE SF =	2,689sf
TOTAL STORAGE SF =	2,192sf
6,072sf	
PARKING BY USE	
RETAIL SF =	1,191sf @ 4/1,000 = 5 spaces
OFFICE SF =	2,689sf @ 3/1,000 = 9 spaces
STORAGE SF =	2,192sf @ 1/2,000 = 2 spaces
16 Spaces Required	
21 Spaces Provided	
FLOOD VENT AREAS	
ZONE A SF =	572 sf @ 1 vent/ 200sf = 3 vents
ZONE B SF =	2,203 sf @ 1 vent/ 200sf = 11 vents
ZONE C SF =	344 sf @ 1 vent/ 200sf = 2 vents
3,119 sf @ 1 vent/ 200sf = 16 vents	
17 Vents Provided on Perimeter	
23 Vents Provided including Equalization Vents	



2 UPPER LEVEL FLOOR PLAN  
SD-11.3 Scale: 3/16" = 1'-0"

5 FLOOD VENT DETAIL  
SD-11.3 Scale: 3/16" = 1'-0"



4 FRONT ELEVATION  
SD-11.3 Scale: 3/16" = 1'-0"



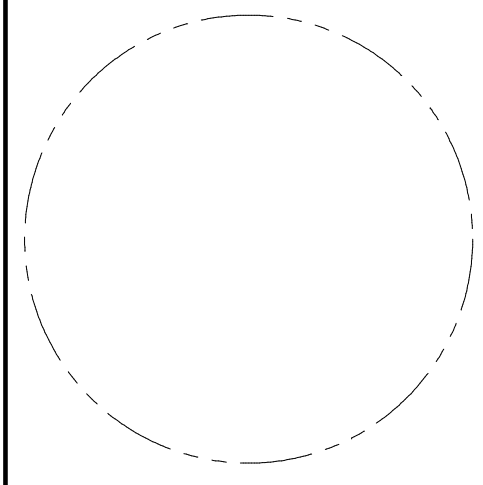
3 FRONT CORNER ELEVATION  
SD-11.3 Scale: 3/16" = 1'-0"

2 LOWER LEVEL FLOOR PLAN  
SD-11.3 Scale: 3/16" = 1'-0"

ARCHITECT:  
LARC ARCHITECTS  
14 COLTON STREET  
STAMFORD, CT 06322  
PHONE: 203.351.1407  
FAX: 203.351.1407  
SHELDON@LARCARCHITECTS.COM  
HILARY@LARCARCHITECTS.COM

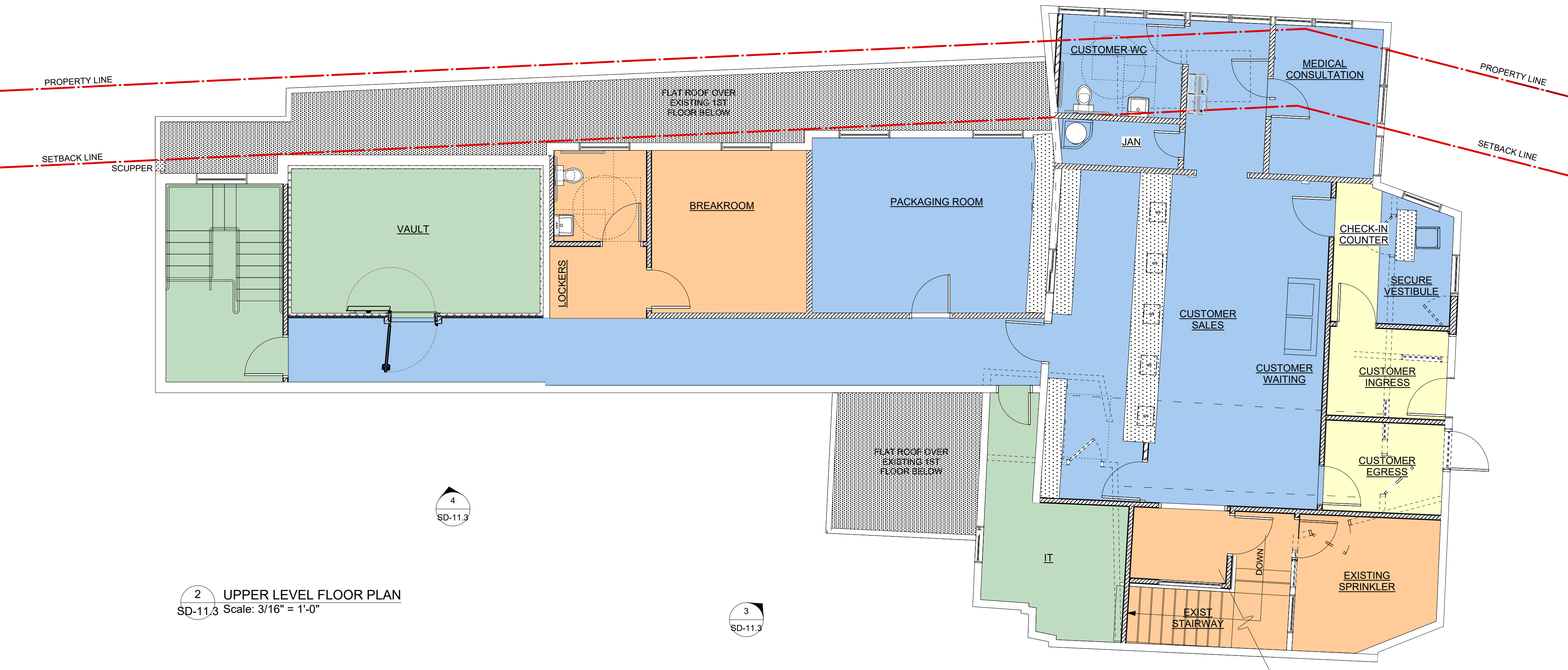
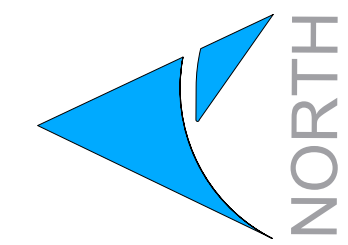
NAUTILUS BOTANICALS  
EJV1 LLC  
1308 EAST MAIN STREET,  
STAMFORD, CT

SD:	3/19/24
DD:	
CD:	
BID:	
PERMIT:	
CONTRACT:	
CONST:	
REVISION	



LAYOUT PLAN





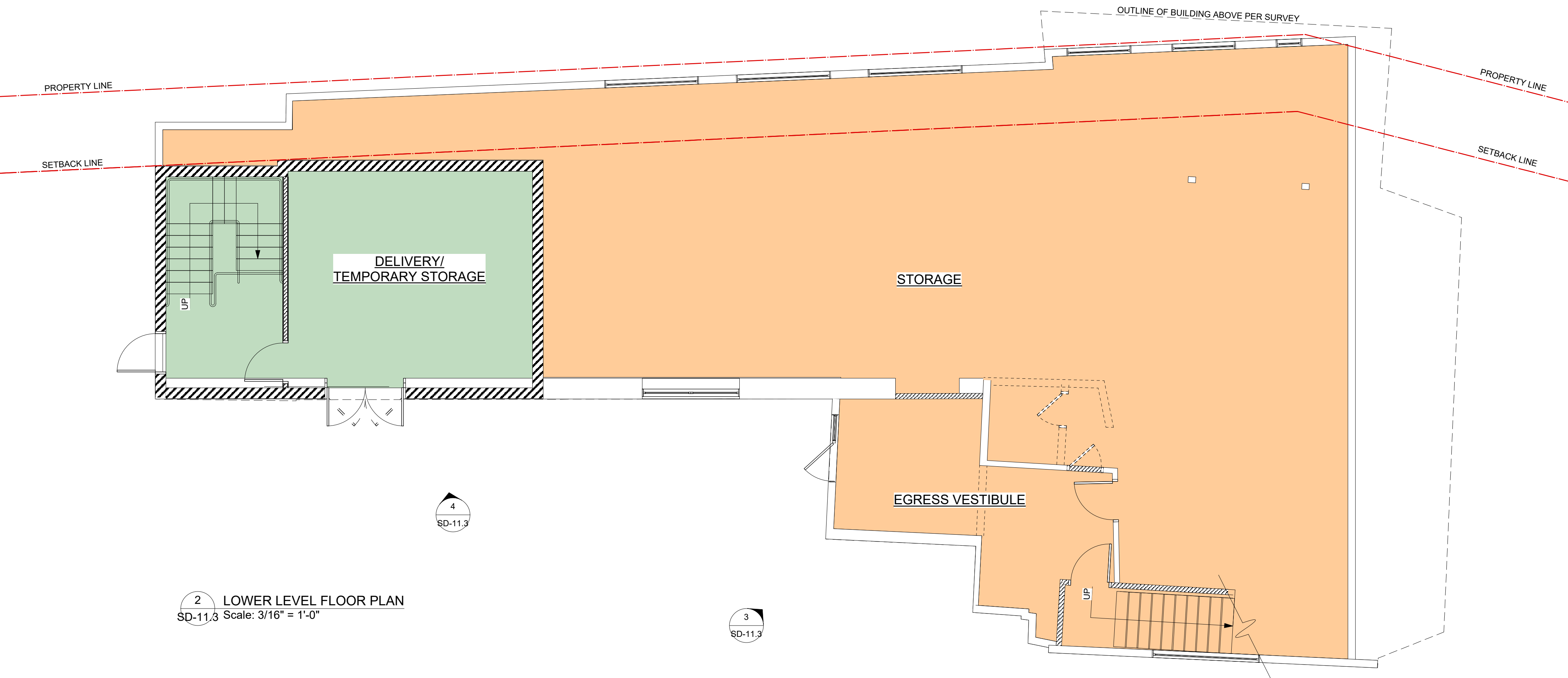
KEY

- PUBLIC AREA
- OPERATIONS
- LIMITED ACCESS
- RESTRICTED ACCESS

TOTAL AREA by FLOOR  
 LOWER FLOOR = 3,119sf  
 UPPER FLOOR = 2,953sf  
 6,072sf

TOTAL AREA by USE  
 TOTAL RETAIL SF = 1,191sf  
 TOTAL OFFICE SF = 2,689sf  
 TOTAL STORAGE SF = 2,192sf  
 6,072sf

PARKING BY USE  
 RETAIL SF = 1,191sf @ 4/1,000 = 5 spaces  
 OFFICE SF = 2,689sf @ 3/1,000 = 9 spaces  
 STORAGE SF = 2,192sf @ 1/2,000 = 2 spaces  
 16 Spaces Required  
 21 Spaces Provided



4 REAR ELEVATION  
SD-11.3 Scale: 3/16" = 1'-0"

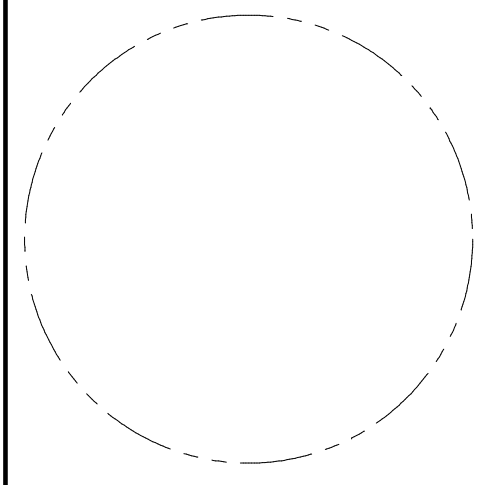


3 SIDE ELEVATION  
SD-11.3 Scale: 3/16" = 1'-0"

ARCHITECT:  
LARC ARCHITECTS  
14 COLTON STREET  
MIDDLETOWN, CT 06032  
PH: (860) 341-1007  
SHELDON@LARCARCHITECTS.COM  
HILARY@LARCARCHITECTS.COM

NAUTILUS BOTANICALS  
EJV1 LLC  
1308 EAST MAIN STREET,  
STAMFORD, CT

SD:	3/19/24
DD:	
CD:	
BID:	
PERMIT:	
CONTRACT:	
CONST:	
REVISION	



LAYOUT PLAN



**COMPANY NAME:** Nautilus Botanicals EJ1 LLC

**PROJECT NAME:** Stamford

**ADDRESS:** 1308 East Main Street, Stamford CT

**VERTICAL:** Cannabis

**MONITORING TYPE:** LVM

**PROJECT ID-V:** XXXXX-v1

**ACCOUNT EXEC.:** M.WARNCKE

**SOLUTIONS ENGR.:** M.MARASCO

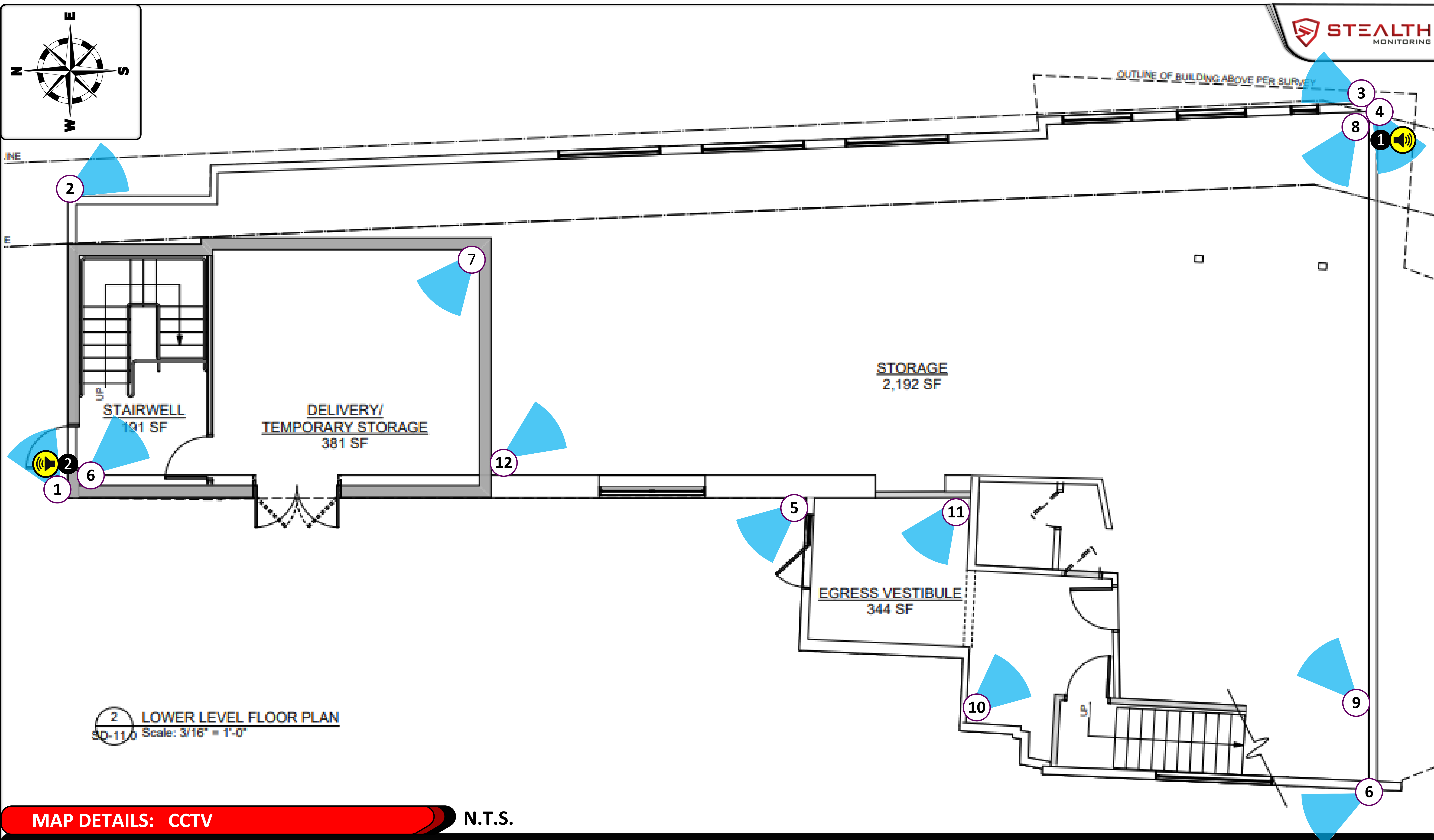
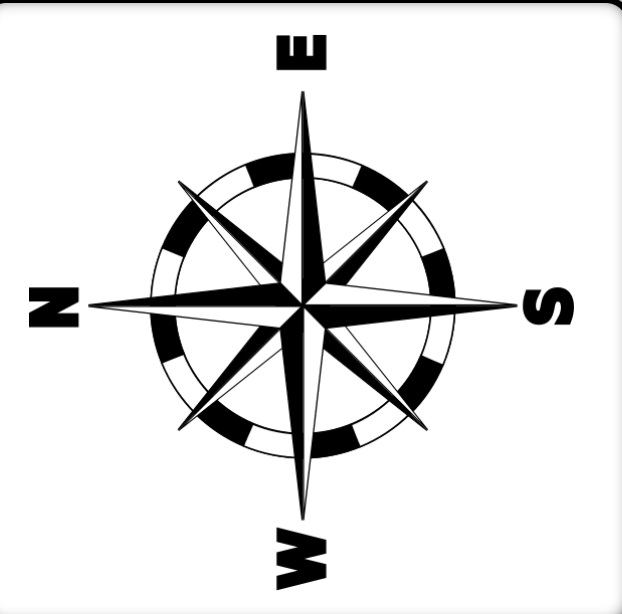


**MAP LEGENDS**

**HARDWARE LIST**

**DESIGN NOTES**

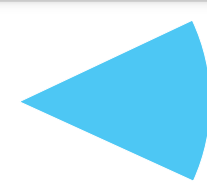
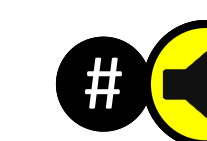


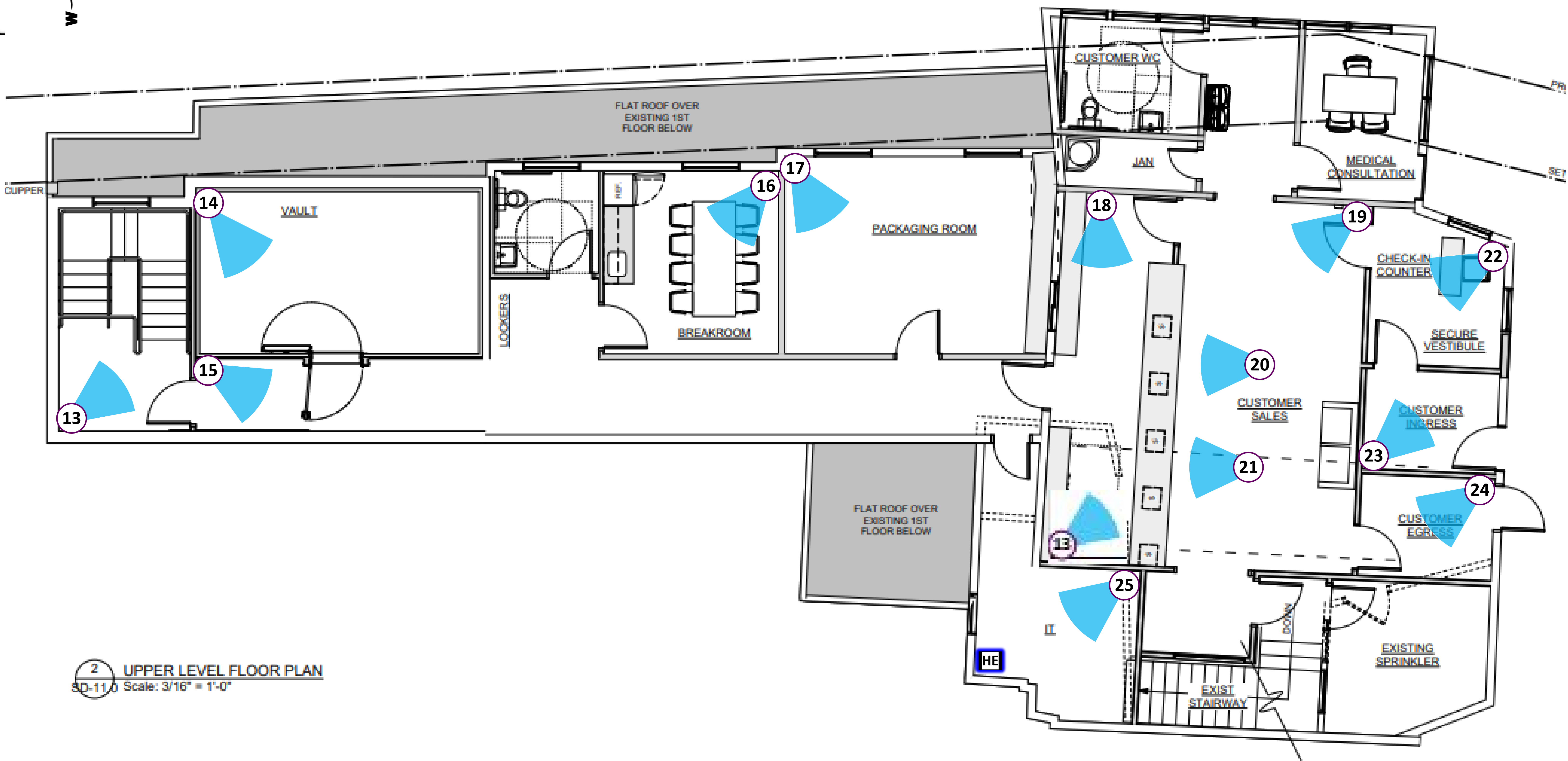
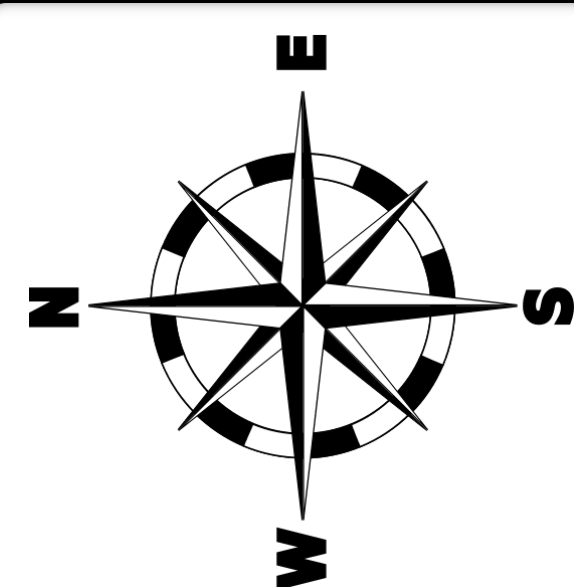


2 LOWER LEVEL FLOOR PLAN  
SD-11.0 Scale: 3/16" = 1'-0"

**MAP DETAILS: CCTV** N.T.S.

**SITE NAME/PROJECT NAME - GENERAL SECURITY DEVICE MAP** PROJECT ID-V: 1.0

	MONITORED CAMERA	12	#	NVR - 1 CAMERA	12
	EXTERIOR SPEAKER	2			



**2** UPPER LEVEL FLOOR PLAN  
SD-11.0 Scale: 3/16" = 1'-0"

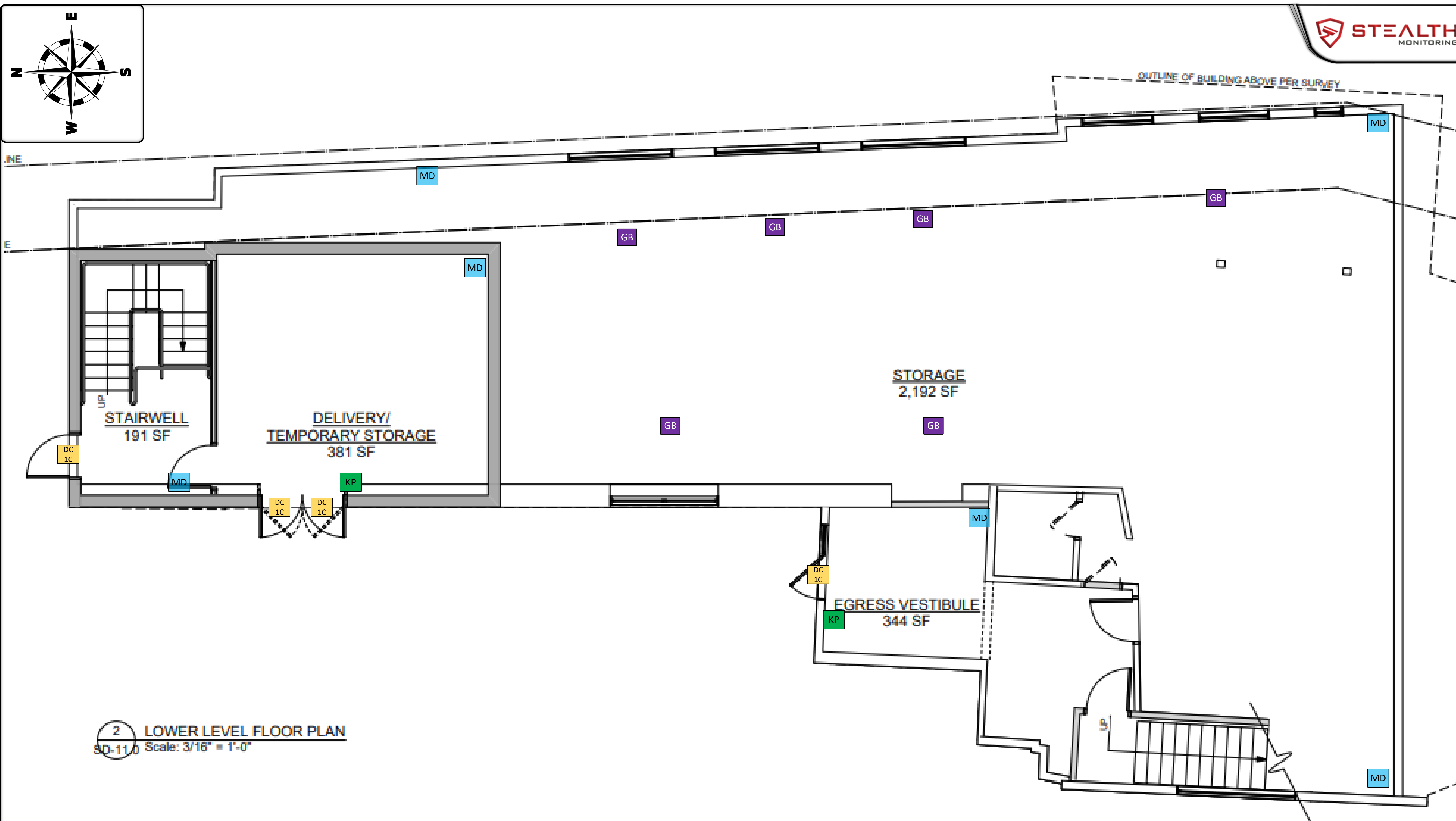
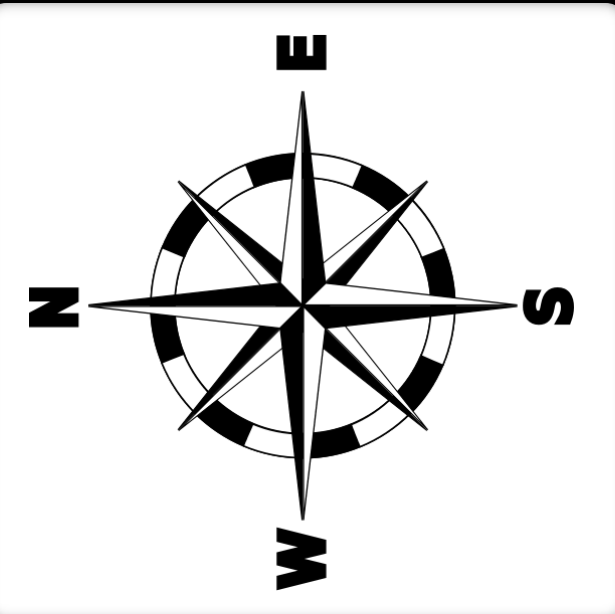
**MAP DETAILS: CCTV**

N.T.S.

**SITE NAME/PROJECT NAME - GENERAL SECURITY DEVICE MAP**

PROJECT ID-V: 1.0

	MONITORED CAMERA	13	#	NVR - 1 CAMERA	13
	EXTERIOR SPEAKER				



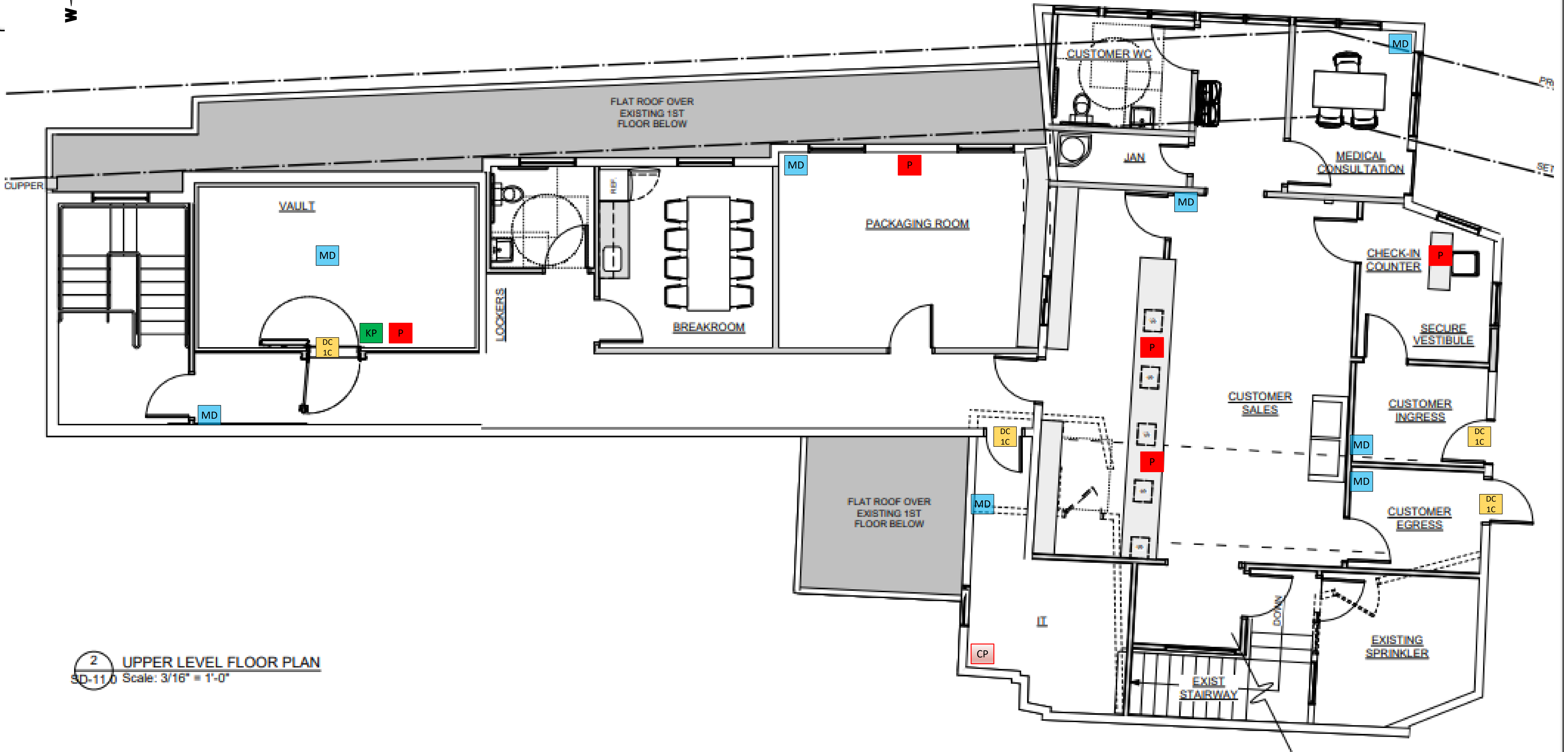
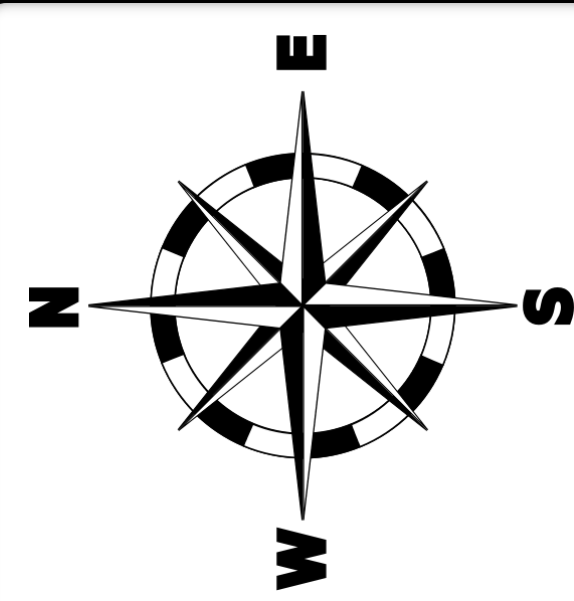
2 LOWER LEVEL FLOOR PLAN  
SD-11.0 Scale: 3/16" = 1'-0"

**MAP DETAILS: INTRUSION** N.T.S.

**SITE NAME/PROJECT NAME - GENERAL SECURITY DEVICE MAP**

**PROJECT ID-V: 1.0**

<b>CP</b>	CONTROL PANEL/EXPANDERS		<b>DC 1C</b>	DOOR CONTACT	4	<b>P</b>	PANIC	
<b>KP</b>	KEY PAD	1	<b>MD</b>	MOTION DETECTOR	6	<b>GB</b>	GLAS BREAK	6



2 UPPER LEVEL FLOOR PLAN  
SD-11.0 Scale: 3/16" = 1'-0"

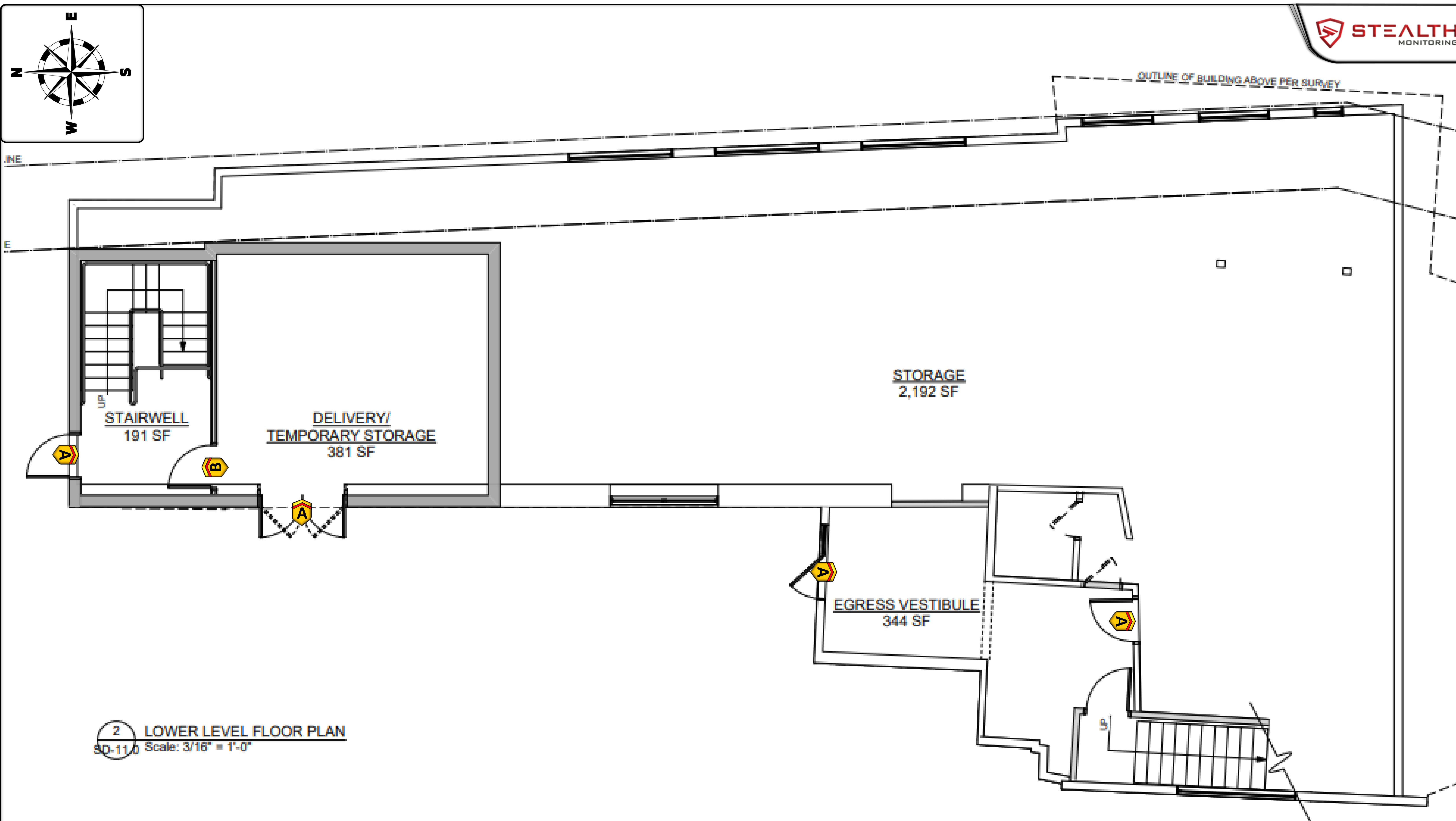
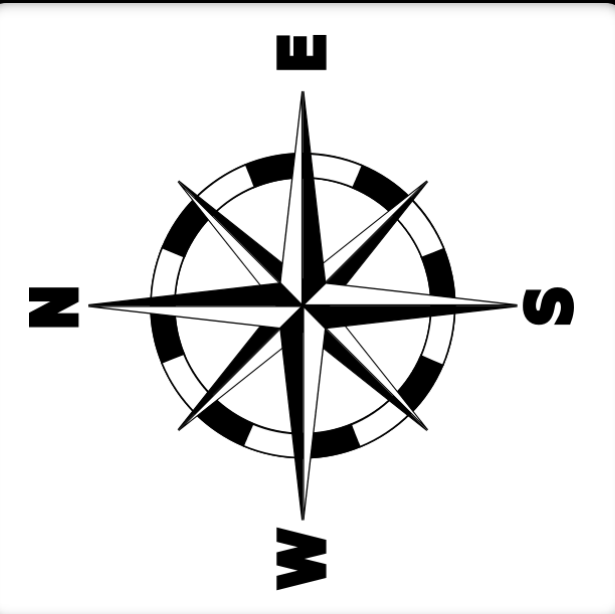
**MAP DETAILS: INTRUSION**

N.T.S.

**SITE NAME/PROJECT NAME - GENERAL SECURITY DEVICE MAP**

**PROJECT ID-V: 1.0**

<b>CP</b>	CONTROL PANEL/EXPANDERS	1	<b>DC 1C</b>	DOOR CONTACT	4	<b>P</b>	PANIC	5
<b>KP</b>	KEY PAD	1	<b>MD</b>	MOTION DETECTOR	8	<b>GB</b>	GLAS BREAK	






2 LOWER LEVEL FLOOR PLAN  
SD-11.0 Scale: 3/16" = 1'-0"

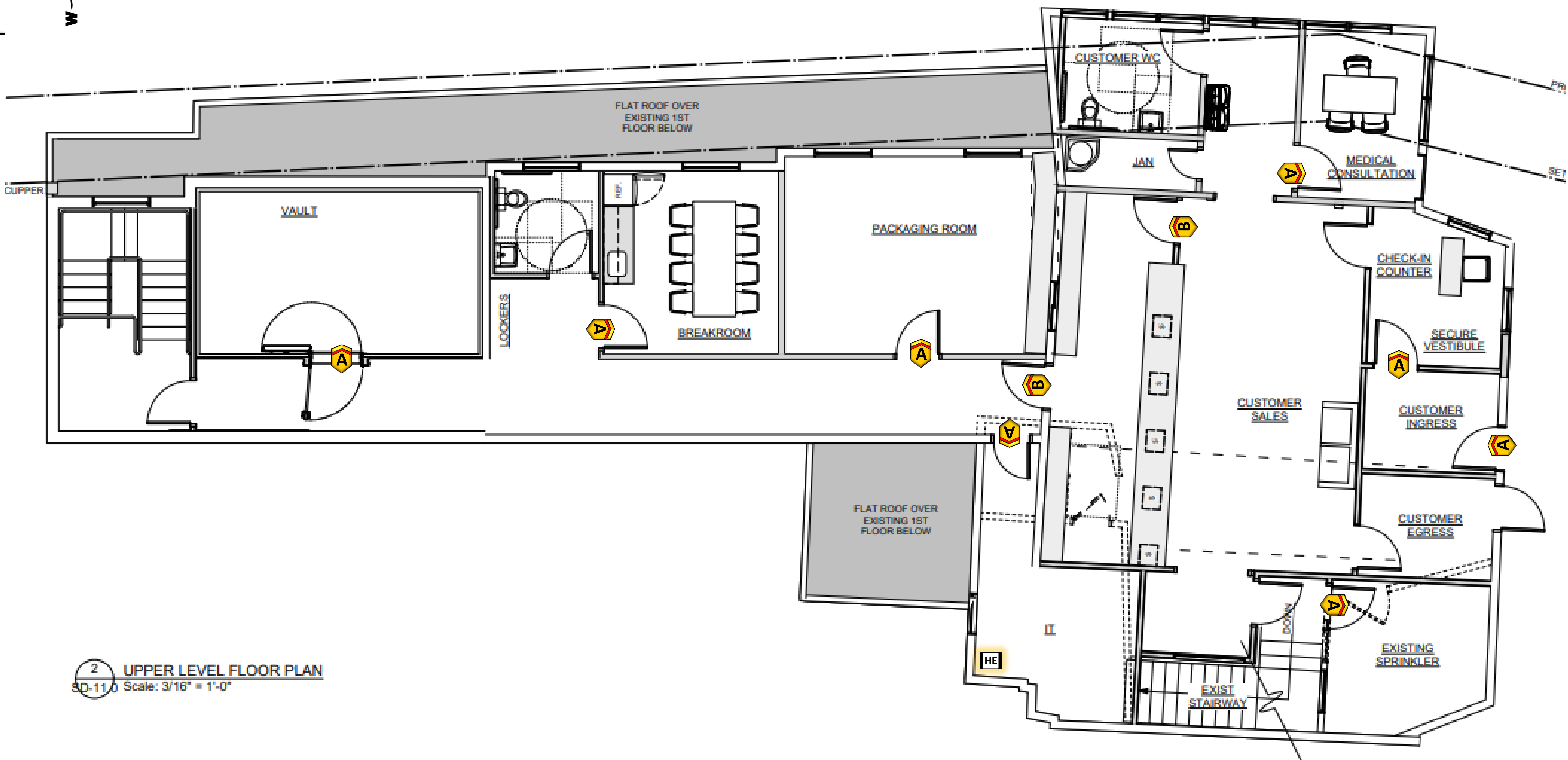
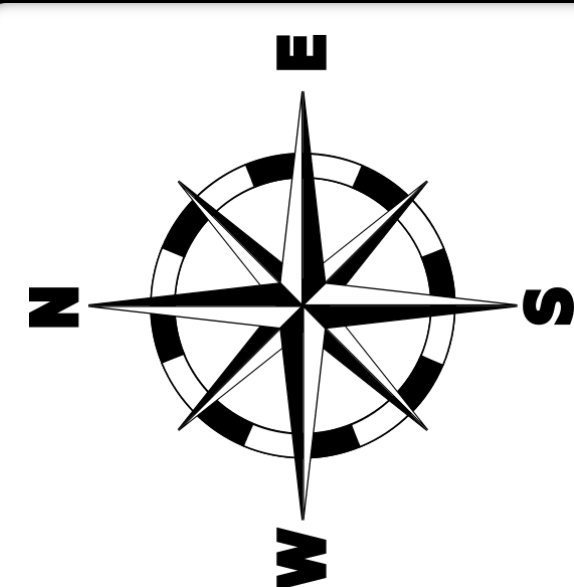
**MAP DETAILS: ACCESS CONTROL** N.T.S.

**SITE NAME/PROJECT NAME - GENERAL SECURITY DEVICE MAP**

**PROJECT ID-V: 1.0**

 HEAD END	1		
 ACCESS CONTROL DOOR	4	 ACCESS CONTROL DOOR - IN/OUT READER	1





2 UPPER LEVEL FLOOR PLAN  
SD-11.0 Scale: 3/16" = 1'-0"

**MAP DETAILS: ACCESS CONTROL** N.T.S.

SITE NAME/PROJECT NAME - GENERAL SECURITY DEVICE MAP

PROJECT ID-V: 1.0

<b>HE</b>	HEAD END	1
<b>A</b>	ACCESS CONTROL DOOR	8
<b>B</b>	ACCESS CONTROL DOOR - IN/OUT READER	2