CARMODY
TORRANCE | SANDAK | HENNESSEY LLP

William J. Hennessey
Partner
Direct: 203.425.4200
Fax: 203.325.8608
WHennessey@carmodylaw.com

1055 Washington Blvd.
4th Floor
Stamford, CT 06901

December 23, 2022

VIA ELECTRONIC & HAND DELIVERY

Ms. Vineeta Mathur
Principal Planner, Land Use Bureau
City of Stamford
888 Washington Boulevard
Stamford, Connecticut 06901
VMathur@StamfordCT.gov

RE: 50 Barry Place

Dear Ms. Mathur,

On behalf of Wings Manager, LLC ("Wings") and Continental Family Holdings, LLC (together, the "Applicants"), please find the attached application materials submitted in connection with the partial redevelopment of 50 Barry Place (the "Property"). The Property currently is owned by Continental Family Holdings, LLC. The Applicants simultaneously have filed an application with the Planning Board to subdivide the Property into two parcels ("Proposed Parcel A" and "Proposed Parcel B"). Our firm represents Wings, the contract purchaser of Proposed Parcel B, a 2.60-acre portion of the Property. In total, the Property is 11.77 acres. It is located in the General Industrial District (M-G) and Master Plan Category 13 (General Industrial).

The Applicants propose to build a 35,500± sf structure on Proposed Parcel B that will house an indoor ice rink. Wings, plans to operate youth ice hockey and youth figure skating clinics, educational programs, leagues, and tournaments at the venue. To facilitate this proposal, the Applicants request from the Zoning Board (1) site plan approval and (2) special permit approval of a large scale development.

In connection with the attached application, enclosed please find:

- Letters of Authority from the Applicants;
- Application fees in the amount of $1,940, representing the application filing and public hearing fees;
- Twenty-one (21) copies of the following application forms and associated schedules:
  - Application for Site Plan Approval; and
  - Application for Special Permit Approval.

- Fourteen (14) full size copies and seven (7) half size copies of the following plans:
  - Architectural Plans prepared by Rogers McCagg, dated December 15, 2022, with the plan titles listed on Schedule A;
  - Civil Plans prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, with the plan titles listed on Schedule A;
  - Zoning Location Survey prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, entitled "Zoning Location Survey";
  - Average Grade Worksheet prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, entitled "Proposed Grade Plane Plan;"
  - Subdivision Map Prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, entitled "Preliminary Subdivision Map;" and
  - Landscape Site Plan prepared by Environmental Land Solutions, LLC, dated December 14, 2022, with the plan titles listed on Schedule A.

- Twenty-one (21) copies of the following application materials and reports:
  - The First Submission of the City of Stamford Sustainability Scorecard for the enclosed Application;
  - Drainage Study Prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, entitled "Engineering Summary Report;" and
  - Traffic Impact Study prepared by SLR, dated November 18, 2022, and entitled, "Traffic Impact Study."

Please note that, given the Property's location on the border of the Town of Greenwich, this application must be referred to Greenwich's Town Clerk's office. I have included an extra copy of this application and the required Certificate of Mailing for this purpose. As always, thank you for your time and attention regarding this matter. Please contact me should you have any questions.

Sincerely,

William J. Hennessey, Jr.

Enclosures.

cc: Development Team
R. Blessing

City of Stamford
Zoning Board · Land Use Bureau
Government Center · 888 Washington Boulevard · Stamford, CT 06904-2152
Phone: 203.977.4719 · Fax: 203.977.4100

APPLICATION FOR SPECIAL PERMIT

Complete, notorize, 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): Continental Family Holdings, LLC & Wings Manager, LLC

APPLICANT ADDRESS: c/o Agent: William J. Hennessey, Carmody Torrance Sandak & Hennessey LLP, 1055 Washington Blvd., 4th Fl., Stamford, CT 06901

APPLICANT PHONE #: c/o Agent: William J. Hennessey, Carmody Torrance Sandak & Hennessey LLP, (203) 425-4200

IS APPLICANT AN OWNER OF PROPERTY IN THE CITY OF STAMFORD? Yes

LOCATION OF PROPERTY IN STAMFORD OWNED BY APPLICANT (S): 50 Barry Place

ADDRESS OF SUBJECT PROPERTY: 50 Barry Place

PRESENT ZONING DISTRICT: M-G

TITLE OF SITE PLANS & ARCHITECTURAL PLANS: See Schedule A

REQUESTED SPECIAL PERMIT: (Attach written statement describing request)

Approval of a Large Scale Development - See Schedules B and C

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

See Schedule D

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

NAME & ADDRESS	LOCATION

See Schedule E

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 *(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? Yes (If yes, then complete the Stamford Sustainability Scorecard per Section 15.F).

City of Stamford
Zoning Board · Land Use Bureau
Government Center · 888 Washington Boulevard · Stamford, CT 06904-2152
Phone: 203.977.4719 · Fax: 203.977.4100

DATED AT STAMFORD, CONNECTICUT, THIS 23rd DAY OF December 20 22

SIGNED: William J Hennessy, Jr

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 December 23rd 20 22
COUNTY OF FAIRFIELD

Personally appeared William J Hennessy, Jr., signer of the foregoing application, who made oath to the truth of the contents thereof, before me.

Daniel Chapple

~~Notary Public~~ Commissioner of the Superior Court

FOR OFFICE USE ONLY

APPL. #: _____ Received in the office of the Zoning Board: *Date:* _____

By: _____

Revised 09/02/2020

City of Stamford
Zoning Board · Land Use Bureau
Government Center · 888 Washington Boulevard · Stamford, CT 06904-2152
Phone: 203.977.4719 · Fax: 203.977.4100

APPLICATION FOR APPROVAL OF SITE & ARCHITECTURAL PLANS AND / OR REQUESTED USES

Complete, notorize, and forward **thirteen (13) hard copies and one (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 Public Hearing 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 –WITHOUT GDP

Site Plans 20,000 sq. ft. or less of building area application fee –without GDP	**$460.00**
Site Plans more than 20,000 sq. ft. of building area-application Fee –without GDP	**$460.00 + $30 per 1,000 sq. ft. or portion thereof in excess of 20,000 sq. ft.**

Fee Schedule –WITH GDP

Site Plans 20,000 sq. ft. or less of building area application fee –with GDP.	**$260.00**
Site Plans more than 20,000 sq. ft. of building area-application Fee –with GDP.	**$260.00 + $10 per 1,000 sq. ft. or portion thereof in excess of 20,000 sq. ft.**

APPLICANT NAME (S): Continental Family Holdings, LLC & Wings Manager, LLC

APPLICANT ADDRESS: c/o Agent: William J. Hennessey, Carmody Torrance Sandak & Hennessey LLP, 1055 Washington Blvd., 4th Fl., Stamford, CT 06901

APPLICANT PHONE #: c/o Agent: William J. Hennessey, Carmody Torrance Sandak & Hennessey LLP, (203) 425-4200

IS APPLICANT AN OWNER OF PROPERTY IN THE CITY OF STAMFORD? Yes

LOCATION OF PROPERTY IN STAMFORD OWNED BY APPLICANT (S): 50 Barry Place

ADDRESS OF SUBJECT PROPERTY: 50 Barry Place

PRESENT ZONING DISTRICT: M-G

TITLE OF SITE PLANS & ARCHITECTURAL PLANS: See Schedule A

REQUESTED USE: "Ice Skating Rink - Indoor" (Appendix A - Table II #121) consistent with allowed uses in the M-G Zone

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

See Schedule D

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

NAME & ADDRESS **LOCATION**

See Schedule E

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 *(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? Yes *(If yes, then complete the Stamford Sustainability Scorecard per Section 15.F).*

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Phone: 203.977.4719 · Fax: 203.977.4100

DATED AT STAMFORD, CONNECTICUT, THIS 23rd DAY OF December 20 22

SIGNED: William Hennessy III

NOTE: The 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 the application, this must be done in writing, and be received by the Zoning Board at least three (3) working days prior to public hearing in order to provide sufficient time to publicize the withdrawal. Applications withdrawn less than three (3) days prior to a schedule hearing date will not be rescheduled within 90 days.

STATE OF CONNECTICUT
ss STAMFORD December 23rd 20 22
COUNTY OF FAIRFIELD

Personally appeared William T Hennessy III, signer of the foregoing application, who made oath to the truth of the contents thereof, before me.

Daniel Chapple

~~Notary Public~~ - Commissioner of the Superior Court

FOR OFFICE USE ONLY

APPL. #: _____ Received in the office of the Zoning Board: *Date:* _____

By: _____

Revised 9/02/20

December 22, 2022

Vineeta Mathur
Senior Planner
City of Stamford
888 Washington Blvd.
Stamford, CT 06901

Re: Wings Manager, LLC
Land Use Applications
50 Barry Place (the "Property")

Dear Ms. Mathur:

Wings Manager, LLC is the contract purchaser of a 2.60-acre portion of the above-captioned Property, for which a subdivision application will be filed. Please consider this letter as written confirmation that the undersigned has authorized the attorneys of Carmody Torrance Sandak & Hennessey, LLP, with offices located at 1055 Washington Boulevard, Stamford, Connecticut 06901, to file the enclosed land use applications with the City of Stamford on its behalf in connection with the Property. Thank you for your acknowledgement of said authority.

Sincerely,

Wings Manager, LLC

By: Benoit Morin, Managing Member
Duly Authorized

December 22, 2022

Vineeta Mathur
Senior Planner
City of Stamford
888 Washington Blvd.
Stamford, CT 06901

Re: Continental Family Holdings, LLC
Land Use Applications
50 Barry Place (the "Property")

Dear Ms. Mathur:

Continental Family Holdings, LLC is the owner of the above-captioned Property. Please consider this letter as written confirmation that the undersigned has authorized the attorneys of Carmody Torrance Sandak & Hennessey, LLP, with offices located at 1055 Washington Boulevard, Stamford, Connecticut 06901, to file the enclosed land use applications with the City of Stamford on its behalf in connection with the Property. Thank you for your acknowledgement of said authority.

Sincerely,

Continental Family Holdings, LLC

By: Lee Rizzuto
Duly Authorized
{S7474568}

Schedule A
List of Plans

- Architectural Plans prepared by Rogers McCagg Architects, dated December 15, 2022, entitled:
  - "G1.0 – Cover;"
  - "A1.0 – Proposed Ground Floor Plan;"
  - "A1.1 – Proposed Second Floor & Roof Plan;"
  - "A2.0 – Proposed Elevations;" and
  - "A3.0 – 3D Views."

- Site Development Plans Prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, entitled:
  - "Cover Sheet;"
  - "Improvement Location Survey;"
  - "C-1.0 – Existing Conditions Plan;"
  - "C-2.0 – Demolition Plan;"
  - "C-3.1 – Site Grading Plan;"
  - "C-3.2 – Site Grading Plan;"
  - "C-4.1 – Storm Drainage and Utility Plan;"
  - "C-4.2 – Storm Drainage and Utility Plan;"
  - "C-5.0 – Sedimentation and Erosion Control Plan;"
  - "C-6.1 – Notes and Details;"
  - "C-6.2 – Details;" and
  - "C-7.0 – Low-Impact Development Plan."

- Zoning Location Survey Prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, entitled "Zoning Location Survey;"

- Average Grade Worksheet prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, entitled "Proposed Grade Plane Plan;"

- Subdivision Map Prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, entitled "Preliminary Subdivision Map;"

- Landscape Plan Prepared by Environmental Land Solutions, LLC, dated December 14, 2022, entitled:
  - "LP.1 – Landscape Plan;" and
  - "LP.2 – Landscape Plan."

- Drainage Study Prepared by D'Andrea Surveying & Engineering, P.C., dated December 15, 2022, entitled "Engineering Summary Report;" and

- Traffic Impact Study Prepared by SLR, dated November 18, 2022, entitled "Traffic Impact Study – 23-50 Barry Place – Ice Rink."

Schedule B
Project Narrative

Wings Manager, LLC (f/k/a Wings Real Estate Holdings, LLC,[1] hereinafter "Wings") and Continental Family Holdings, LLC (collectively, the "Applicants") request site plan and special permit approvals to facilitate the development of a structure at 50 Barry Place (the "Property") that will house an indoor ice skating rink. Additionally, the Applicants are simultaneously seeking approval from the Planning Board to subdivide the Property into two lots, "Proposed Parcel A" and "Proposed Parcel B." These parcels are depicted on the enclosed map entitled "Preliminary Subdivision Map."

I. The Applicants

Continental Family Holdings, LLC is the current owner of the Property and Wings is the contract purchaser of Proposed Parcel B. Wings seeks to develop an indoor ice skating rink on Proposed Parcel B, which will host a variety of ice hockey and figure skating events.

II. The Property & Existing Uses

The Property is 11.77 acres and located within the General Industrial (M-G) zone. If subdivision approval is granted, Proposed Parcel A will be 9.17 acres and Proposed Parcel B will be 2.60 acres. The Property is generally bounded by Innis Arden Golf Club to the south and west, the Metro-North railroad to the north, and St. Clement's Church and residential properties in the R-6 zone and industrial properties in the M-G zone to the east. The Property is improved with three buildings, paved parking lots, landscaping, and stormwater management systems. The building on Proposed Parcel A was used by Conair Corporation until 2020. When it was occupied, there were approximately 150 to 200 people who worked in the building. Two warehouse buildings sit on Proposed Parcel B. When Conair occupied the main building, it used one of the warehouse buildings for storage. A small sliver of the western border of the Property contains wetlands. The proposed development will take place on the opposite side of the Property and will not disturb the wetlands or the upland review area.

III. Description of Proposed Development

The Applicants propose to build a 35,500± sf structure on Proposed Parcel B that will house an indoor ice skating rink. Wings plans to operate youth ice hockey and youth figure skating clinics, educational programs, leagues, and tournaments at the venue that will serve Stamford and the surrounding community. The venue will have seating areas for spectators and teams, locker rooms, office space, a pro shop, and a lounge. The total seating capacity of the spectator area will be 240, with two sections that can each accommodate up to 120 people. All mechanical and chilling equipment will be located within the building. The structure will be constructed with high-quality materials, including medal siding and a standing seam metal roof.

[1]The enclosed plans state that they were prepared for Wings Real Estate Holdings, LLC. The entity name, however, recently was changed to Wings Manager, LLC.

An 87-space parking lot will be constructed to serve the building. The lot will contain covered bicycle racks, electric vehicle charging stations, and sidewalks in satisfaction of Stamford's mobility regulations. A stormwater management system will be added and reinforced modular concrete block retaining walls will be constructed on the outer edges of the parking lot where needed. Additionally, the lot will be landscaped with a variety of plants and shade trees.

The proposal will entail the demolition of the two existing buildings on Proposed Parcel B. In connection with the proposed subdivision of the property, a 24' wide bituminous concrete driveway with accompanying sidewalks will be constructed with 40.51' of frontage on Barry Place. Portions of the existing building on Proposed Parcel A will be removed to accommodate the driveway, but this parcel will otherwise remain undisturbed by the proposed project.

IV. Requested Approvals[2]

To facilitate this proposal, the Applicants request the following approvals:

(1) Final Site Plan Approval ("FSP") pursuant to §§ 4.B.8.b. and 19.D. of the Zoning Regulations to develop the proposed building, parking lot, and right-of-way on the Property.

(2) Special Permit Approval of a Large Scale Development pursuant to § 19.E. of the Zoning Regulations to permit the construction of a non-residential structure having a gross floor area of 20,000 sf or more.

V. Conformity of Site Plan with Stamford Master Plan and M-G Goals

The M-G zone accommodates a wide variety of commercial, industrial, and institutional uses. The M-G zone is designed to separate such uses from residential and other incompatible uses to minimize the potential negative impacts.[3] Indoor ice skating rinks are permitted as of right in the M-G zone. Further, this zone tends to contain buildings similar in scale to the structure proposed by the Applicants. Because of the Property's location in the M-G zone, the proposed building will have minimal disturbance on residential properties and, in fact, cannot be seen by any residential buildings.

VI. Conclusion

The proposed development seeks to bring an indoor ice skating venue to Stamford in an area that is well-suited for such a use.

[2]As stated above, the Applicants are also seeking subdivision approval from the Planning Board.
[3]See Zoning Regulations § 4.B.8.a. and Master Plan, p. 45.

Schedule C
Statement of Findings

The Applicants submit the proposal is consistent with the Site Plan standards (§ 19.D.4.) and Special Permit standards (§ 19.C.2.) of the Zoning Regulations as follows:

a. Site Plan Standards

In reviewing site plans the Zoning Board shall take into consideration the purpose of these Regulations, including the purpose of the applicable zoning district and the goals and policies of the Stamford Master Plan, the public health, safety and general welfare and convenience of the general public and the maintenance of property values. In its review the Board may modify a site plan or condition an approval to the extent necessary to conform the site plan to the following standards and objectives:

(1) Safe, adequate and convenient vehicular traffic circulation, operation, parking and loading, and pedestrian circulation, both within and without the site.

(a) The number, locations and dimensions of all vehicular and pedestrian access drives and walkways, parking spaces, drop-off and loading areas, and provisions for handicapped access shall conform to the standards of Section 12 of these Regulations, to the adopted design criteria and engineering practices of the Dept. of Traffic and Parking, and all other applicable standards. Such areas shall be constructed of suitable hard surface materials and maintained in good condition.

The number, locations, and dimensions of all vehicular and pedestrian access drivers and walkways, parking spaces, drop-off and loading areas, and handicapped access conform to the standards of the M-G Zone and applicable provisions of Section 12 of the Zoning Regulations. The enclosed Zoning Location Survey provides parking details for the development.

The Applicants will comply with the bicycle parking requirements in § 12.J. of the Zoning Regulations. The Zoning Regulations require that five (5) electrical vehicle spaces be provided on the property, but the Applicants will provide 10 spaces in compliance with Public Act 22-25, which requires that electric vehicle charging infrastructure be provided in at least 10 percent of parking spaces.[4]

(b) The number of vehicle access drives shall be minimized and shall be located and designed to provide safe and convenient turning movements and safe sightline as determined in accordance with the Geometric Highway Design Standards of the Conn. Dept. of Transportation.

Vehicles will enter and exit the property through Barry Place. At all points where a two-way flow of traffic is anticipated, the driveway is the required width of 24 feet.

[4]Although only nine (9) electric vehicle spaces are required for this project pursuant to P.A. 22-25, 10 will be provided, as each electric vehicle charger is designed to service two spaces.

The access drive has been designed to provide safe and convenient access to Proposed Parcel B.

(c) Area streets and traffic controls shall be determined to have adequate capacity to service the site without causing undue congestion or hazardous conditions.

The surrounding streets can adequately accommodate the traffic associated with the proposed use. For a more complete discussion of the traffic impact, please see the enclosed Traffic Impact Study prepared by SLR.

(2) The protection of environmental quality, landscaping of open space and harmony with existing development. The Board shall take into consideration the following features and standards:

(a) The location, height, design and materials of walls, fences, hedges and plantings shall be appropriate to the vicinity and shall suitably screen parking, loading, garbage collection facilities, outside storage areas, accessway drives, utility installations and other such features; such landscaping shall be appropriate to the general character of the vicinity and consider the proximity and nature of abutting uses and the level of use of adjoining public streets and walkways.

The proposed location, height, design and materials of walls, fences, hedges and plantings are appropriate for the Property and the surrounding area. They also sufficiently screen parking, loading spaces, garbage collection facilities, accessway drives, and utility installations. For a more detailed landscape plan, please see the enclosed Landscape Plan prepared by Environmental Land Solutions, LLC.

(b) All open space areas, exclusive of undisturbed natural areas, shall be suitably landscaped to the satisfaction of the Board. Site landscaping shall be performed at a minimum dollar value equivalent to one shade tree of 2.5 inch caliper for every two hundred (200) square feet of landscaped area. In multi-family developments, open space shall be designed to provide functional outdoor living and play areas meeting the needs of intended residents.

The Applicant proposes maintaining appropriate onsite landscaping, as detailed on the enclosed Landscape Plan prepared by Environmental Law Solutions, LLC. Roughly 10 percent of the Property is subject to a conservation easement, which will remain undeveloped.

(c) Soil erosion, sediment and the release of excessive dust shall be controlled through implementation of suitable short term and long term controls in accordance with the standards and procedures of Section 15-B.

Enclosed is a comprehensive Sedimentation and Erosion Control Plan, prepared by D'Andrea Surveying & Engineering, P.C., which ensures the standards and procedures of § 15.B. of the Zoning Regulations are satisfied.

(d) Site development shall seek to preserve existing specimen trees, historic structures and other significant natural features of the site. Accordingly, the premature demolition and site clearance of prospective development sites is specifically discouraged and may be taken into consideration in subsequent site plan reviews.

Roughly 10 percent of the property (1.1789 acres) will be subject to a conservation easement. This area will remain untouched. There are no historic buildings on the site. As detailed in the attached Landscape Plan, the number of new trees that will be planted far exceeds the number of existing trees that will be removed.

(e) Artificial lighting, and site generated noise, odors, particles and other disturbances shall be controlled to avoid interference with the use and enjoyment of neighboring properties. The location, height, design and arrangement of outside lighting shall be consistent with safety such as to avoid glare on any other lot and to avoid hazards to traffic on any street.

The site is not proximate to any residential uses. All artificial lighting and site generated noise and other disturbances shall be controlled and will not interfere with the use and enjoyment of the neighboring properties. The location, height, design, and arrangement of outside lighting shall be consistent with safety so as to avoid glare on any other lot and to avoid traffic hazards on Barry Place and Melrose Avenue.

(f) Available public utilities shall be adequate in capacity to safely service the requirements of the site. Surface water drainage facilities shall be adequate to safely drain the site while minimizing the risk of downstream flooding and erosion. Where infrastructure capacity is judged not to be adequate the Board may accept a binding agreement to perform suitable improvements.

Enclosed please find an Engineering Summary Report prepared by D'Andrea Surveying & Engineering, P.C., which indicates that the proposed improvements to the property will provide water quality treatment measures that will both mitigate stormwater runoff from the site and reduce runoff volumes and peak flow rates as compared to existing conditions. Further, the improvements will not adversely impact adjacent or downstream properties or City-owned drainage facilities.

(g) Adequate provision shall be made for emergency vehicle access, fire lanes, and safe fire flows, upon the recommendation of the Fire Marshall and the public water utility.

Emergency and first responders will be able to access the Property safely and conveniently.

(h) The arrangement, location, apparent bulk, architectural features, materials, texture and color of proposed buildings and structures shall establish an architectural character and overall site design compatible with the scale and general character of the vicinity.

The proposed structure will be completely compatible with the architectural character of the surrounding area.

(i) Building setbacks and the configuration of open space shall be appropriate to the existing structures on adjoining properties and established patterns of use of side and rear yard areas, and to the existing physical conditions of the site.

The proposed development and site landscaping comply with the standards of the M-G Zone.

(j) No use shall be permitted that will cause or result in:
-dissemination of dust, smoke, observable gas or fumes, odor, noise or vibration beyond the immediate site of the building in which such use is conducted, or
-unusual hazard of fire or explosion or other physical hazard to any adjacent buildings, or
-harmful discharge of liquid materials, or
-unusual traffic hazard or congestion due to the type of vehicles required in the use or due to the manner in which traffic enters or leaves the site of the use.

No nuisance or hazardous conditions are anticipated.

(k) All buildings and grounds and other structures shall be maintained in good repair and in safe, clean and sanitary condition. All landscaping required pursuant to an approved site plan shall be installed to the satisfaction of the Director of Parks and Recreation and shall thereafter be maintained in accordance with an agreement to be made part of the application of record, which agreement shall be enforced by the Zoning Enforcement Officer, upon advice of the Director.

The Applicants are amenable to a condition of approval requiring the execution of a Landscape Maintenance Agreement and a Drainage Maintenance Agreement prior to the issuance of a Certificate of Occupancy.

b. Special Permit Standards

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.

The proposed development is appropriate for the Property. The proposed size, scale, and arrangement of the building is consistent with the building on Proposed Parcel A and with the surrounding area.

(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 proposed use of the property will not be injurious to the surrounding neighborhood. The proposed use as an indoor ice rink is less intense than other uses permitted in the M-G zone. The activities on the Property will not cause disturbances to nearby properties in a manner that is objectionable. The purpose of the M-G is to separate the most intense industrial uses from susceptible uses to minimize potential negative impact, so the proposed use will be adequately shielded from less intense uses.

(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.

As detailed in the attached Traffic Impact Study from SLR, the proposal will not result in adverse traffic conditions and no traffic mitigation is necessary. The increase in traffic caused by the proposed development can be accommodated by the surrounding roadway system. There will be an adequate amount of off-street parking and loading. The proposed driveways will not cause a safety hazard or traffic nuisance.

(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 development will not impair the present and future development of the surrounding area.

(5) the Master Plan of the City of Stamford and all statements of the purpose and intent of these regulations.

The M-G zone is designed to separate industrial and institutional uses from residential and other incompatible uses to minimize potential negative impacts. Thus, the Property will be shielded from less intense uses in accordance with the intent of the Master Plan and the Stamford Zoning Regulations. Furthermore, the proposed use as an indoor ice skating rink is fully permitted in the M-G zone and the scale and design of the building is in compliance with the zoning regulations and is in harmony with the surrounding neighborhood, which contains other industrial and institutional properties.

Schedule D
Property Description

ALL THAT CERTAIN PIECE OR PARCEL OF LAND WITH ALL BUIDLINGS AND IMPROVEMENTS THEREON, SITUATED IN THE CITY OF STAMFORD, COUNTY OF FAIRFIELD AND STATE OF CONNECTICUT AND SHOWN ON A MAP TITLED "ALTA/ACSM LAND TITLE SURVEY STAMFORD SURVEY PROJECT 23 BARRY PLACE, STAMFORD, CT SCALE 1"=50', MADE BY CONNECTICUT CONSULTING ENGINEERS, LLC (WILLIAM F. ORSINE, REGISTERED LAND SURVEYOR NO 10045) AND DATED JULY 20, 2012 LAST REVISED TO DECEMBER 17, 2012, ON FILE OR TO BE FILED IN THE STAMFORD LAND RECORDS, TO WHICH MAP REFERENCE IS MADE, BEING MORE PARTICULARLY DESCRIBED AS:

BEGINNING AT A POINT IN THE WESTERLY STREETLINE OF BARRY PLACE AS SHOWN ON SAID MAP, SAID POINT BEING MARKED BY A CONCRETE MONUMENT AND LABELED AS THE POINT OF BEGINNING.

THENCE S-07°-40'-00"-W ALONG THE WESTERLY STREETLINE OF BARRY PLACE AS SHOWN ON SAID MAP A DISTANCE OF 350.50 FEET TO A POINT MARKED BY A CONCRETE MONUMENT;

THENCE S-07° -40-00"-W ALONG THE WESTERLY STREETLINE OF BARRY PLACE AS SHOWN ON SAID MAP A DISTANCE OF 151.67 FEET TO A POINT;

THENCE N-88°-55-'00"-W ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 22.20 FEET TO A POINT;

THENCE N-15°-48'-18"-E ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 155.78 FEET TO A POINT MARKED BY A CONCRETE MONUMENT;

THENCE N-76°-54'-00"-W ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 188.00 FEET TO A POINT MARKED BY AN IRON PIN;

THENCE N-81°-14-00"-W ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 47.20 FEET TO A POINT MARKED BY A DRILL HOLE;

THENCE N-69°-49'-00"-W ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 105.80 FEET TO A POINT MARKED BY A DRILL HOLE;

THENCE N-76°-48'-00"-W ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 80.80 FEET TO A POINT MARKED BY A DRILL HOLE;

THENCE N-74°-34’-00”-W ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 355.00 FEET TO A POINT MARKED BY A DRILL HOLE;

THENCE N-80°-03’-00”-W ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 141.87 FEET TO A POINT MARKED BY AN IRON PIPE;

THENCE N-00°-02’-30”-W ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 381.53 FEET TO A POINT;

THENCE S-83°-17’-30”-W ALONG LAND NOW OR FORMERLY OF INNIS ARDEN GOLF CLUB INC. AS SHOWN ON SAID MAP A DISTANCE OF 85.67 FEET TO A POINT;

THENCE EASTERLY ALONG LAND NOW OR FORMERLY THE PENN CENTRAL RAILROAD, AS SHOWN ON SAID MAP, BY A CURVE TO THE LEFT, SAID CURVE HAVING A RADIUS OF 3919.83 FEET AND A CENTRAL ANGLE OF 14°-21’-46” A DISTANCE OF 982.60 FEET TO A POINT MARKED BY AN IRON PIPE;

THENCE S-32°-23’-30”-E ALONG LAND NOW OR FORMERLY OF NORMAL F. LEVY, ET AL. AS SHOWN ON SAID MAP A DISTANCE OF 132.97 FEET TO A POINT;

THENCE S-14°-48’-00”-E ALONG LAND NOW OR FORMERLY OF NORMAL F. LEVY, ET AL. AS SHOWN ON SAID MAP A DISTANCE OF 93.43 FEET TO A POINT;

THENCE WESTERLY ALONG LAND NOW OR FORMERLY MURRAY A. GOLDBLUM, ET AL., AS SHOWN ON SAID MAP, BY A CURVE TO THE RIGHT, SAID CURVE HAVING A RADIUS OF 1728.00 FEET AND A CENTRAL ANGLE OF 02°-52’-17” A DISTANCE OF 86.60 FEET TO A POINT;

THENCE S-09°-20’-07”-E ALONG LAND NOW OR FORMERLY OF MURRAY A. GOLDBLUM, ET AL. AS SHOWN ON SAID MAP A DISTANCE OF 63.18 FEET TO A POINT;

THENCE S-80°-18’-00”-W ALONG LAND NOW OR FORMERLY OF MURRAY A. GOLDBLUM, ET AL. AS SHOWN ON SAID MAP A DISTANCE OF 102.77 FEET TO A POINT;

THENCE S-84°-30’-00”-W ALONG LAND NOW OR FORMERLY OF MURRAY A. GOLDBLUM, ET AL. AS SHOWN ON SAID MAP A DISTANCE OF 135.00 FEET TO A POINT;

THENCE S-83°-22’-00”-W ALONG LAND NOW OR FORMERLY OF MURRAY A. GOLDBLUM, ET AL. AS SHOWN ON SAID MAP A DISTANCE OF 80.00 FEET TO A POINT;

THENCE S-07°-00’-30”-W ALONG LAND NOW OR FORMERLY OF MURRAY A. GOLDBLUM, ET AL. AS SHOWN ON SAID MAP A DISTANCE OF 187.31 FEET TO A POINT MARKED BY A CONCRETE MONUMENT;

THENCE S-73°-15’-00”-E ALONG LAND NOW OR FORMERLY OF MURRAY A. GOLDBLUM, ET AL. AS SHOWN ON SAID MAP A DISTANCE OF 459.25 FEET TO THE POINT AND PLACE OF BEGINNING.

END OF PROPERTY DESCRIPTION

Schedule E
List of Property Owners

Name & Address	**Location**
Continental Family Holdings, LLC 50 Barry Place Stamford, CT 06902	50 Barry Place
Wings Manager, LLC (Contract Purchaser) 41 Owenoke Way Riverside, CT 06878	50 Barry Place

Schedule F
M-G Zone Zoning Data Chart
50 Barry Place, Stamford, CT

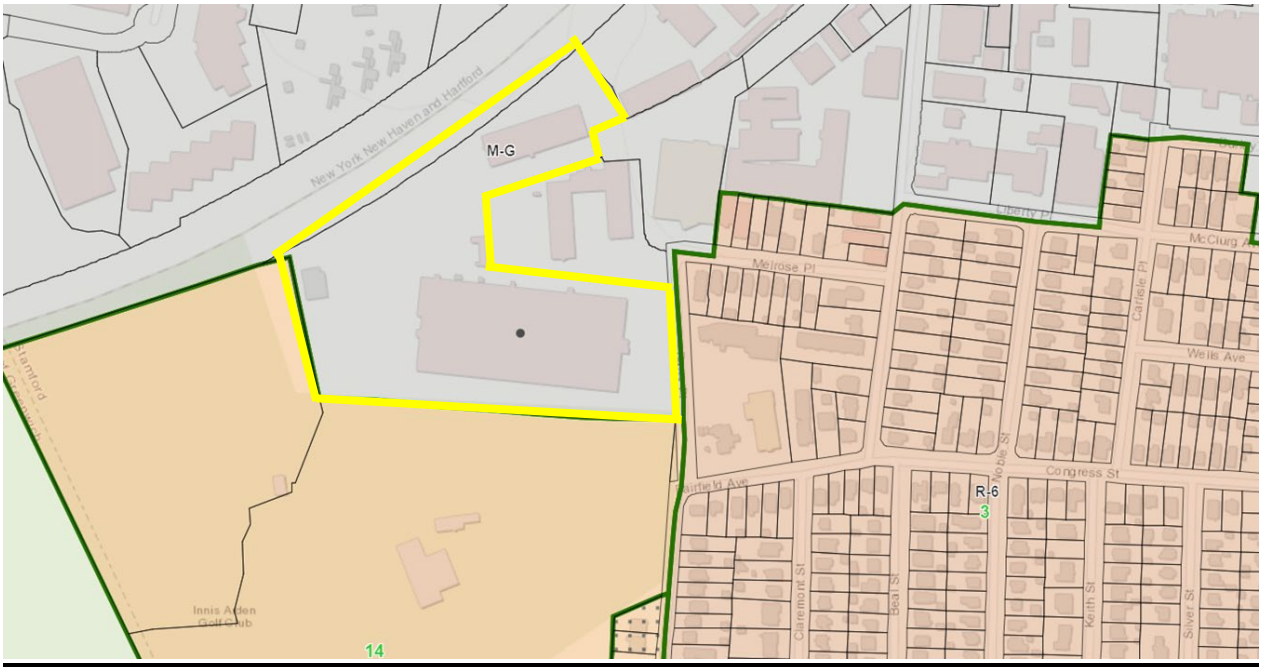
Without Subdivision

	Standard/Required	Existing	Proposed	Notes
Min. Lot Area	4,000 sf	512,845 sf (11.77 acres)	512,845 sf (11.77 acres)	Complies
Min. Lot Frontage	40’	350.50’	350.50’	Complies
FAR	1.0	0.37	0.39	Complies
Building Height	4 stories / 50’	2 stories	2 stories/ 28’ 4 ¾”	Complies
Building Coverage (Interior Lot)	80%	29.5%	31.7%	Complies
Min. Front Yard	10’ to street line 35’ to street center	105.9’ (main building)	105.9’ (main building)	Complies
Min. Side Yard	None required, but if provided, must be at least 4’	0’ (water pump building)	4.5’ (ice skating rink)	Complies
Min. Rear Yard	15’	262.6’ (main building)	15.5’ (ice skating rink)	Complies

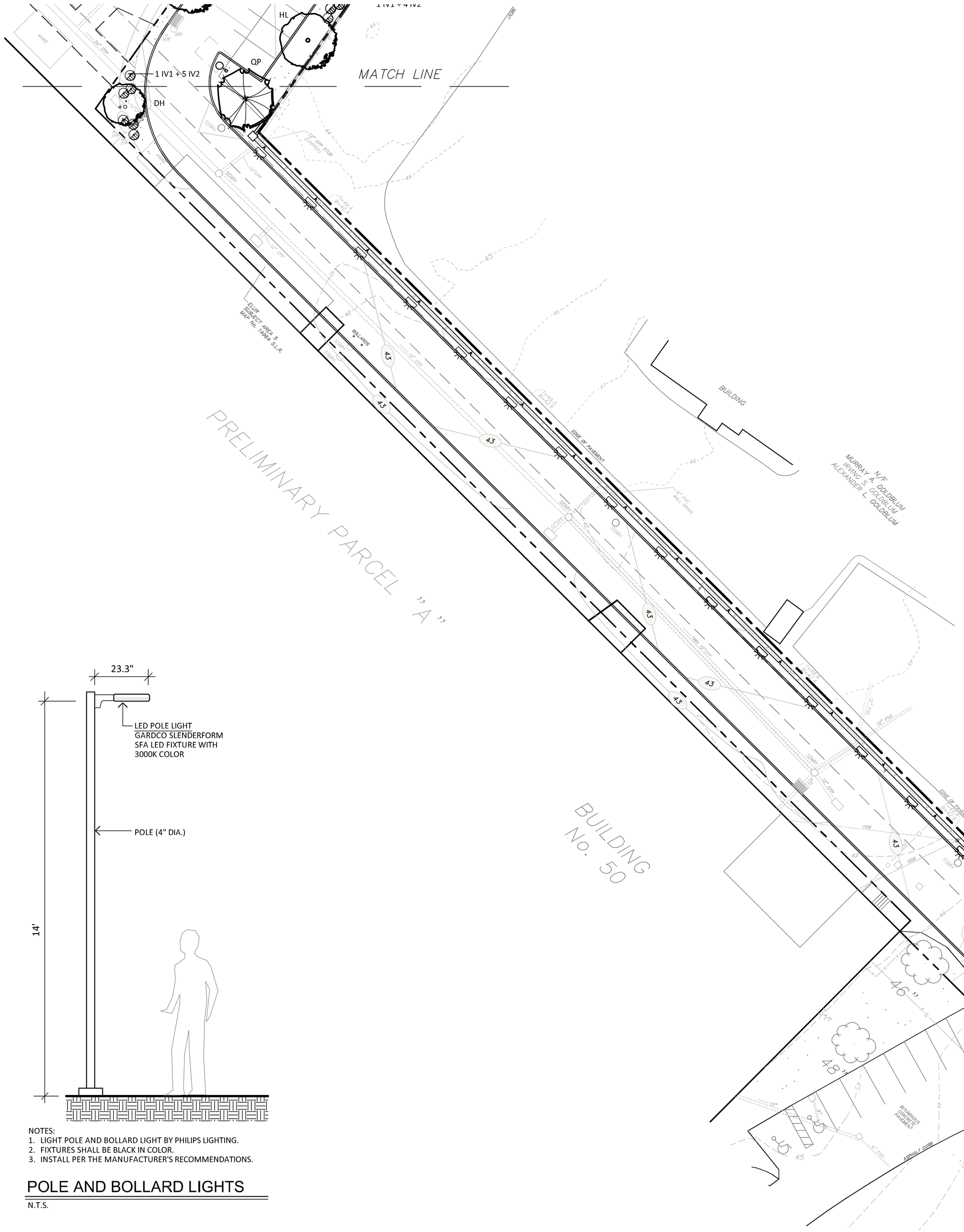
With Subdivision

	Standard/Required	Proposed Parcel A	Proposed Parcel B	Notes
Min. Lot Area	4,000 sf	399,510 sf (9.1715 acres)	113,335 sf (2.6018 acres)	Complies
Min. Lot Frontage	40’	309.99’	40.51’	Complies
FAR	1.0	0.41	0.31	Complies
Building Height	4 stories / 50’	2 stories	2 stories / 28’ 4 ¾”	Complies
Building Coverage (Interior Lot)	80%	31.8%	31.5%	Complies
Min. Front Yard (to Street Line)	10’	105.9’	N/A	Complies
Min. Side Yard	None required, but if provided, must be at least 4’	4.8’	4.5’	Complies
Min. Rear Yard	15’	262.6’	15.5’	Complies

Schedule F
Existing Zoning Map and Aerial Photo of Property



N
SELLECK STREET
BETTS AVENUE
DURAN STREET
BONNER STREET
AMELIA PLACE
METRO NORTH
FAIRFIELD AVENUE
MELROSE PLACE
BARRY PLACE
FAIRFIELD AVENUE
W 031 2820
375 FAIRFIELD AVENUE
003-5131
375 FAIRFIELD AVENUE ASSOC
W 057 2920
445 FAIRFIELD AVENUE
003-5031
GOLDBLUM IRVING S
N 010 5640
MELROSE PLACE
003-1507
BARRY PLACE LLC
N 0112 5640
1 BARRY PLACE
003-1504
GSP3 LLC
W 002 0464
50 BARRY PLACE
003-1399
CONAIR CORPORATION
1 INCH = 200 FEET
SCALE
200 0 200
IN FEET
ROCCO V. D'ANDREA, INC.
• LAND PLANNERS
• ENGINEERS
• SURVEYORS
P.O. BOX 549
RIVERSIDE, CT 06878
6 NEIL LANE
TEL. 637-1779



LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- NEW / EX. LAWN AREA
- EX. DECIDUOUS / EVERGREEN TREE TO REMAIN
- EX. TREE TO BE REMOVED
- NEW DECIDUOUS SHADE TREE
- NEW DECIDUOUS SMALL TREE
- NEW EVERGREEN TREE
- NEW SHRUB
- NEW LIGHT POLE
- NEW WALL MOUNTED LIGHT

LANDSCAPE LIGHTING NOTES:

1. SITE LIGHTING INFORMATION AND LIGHTING PLANS PREPARED BY ENVIRONMENTAL LAND SOLUTIONS, LLC ARE DESIGNED FOR GENERAL LANDSCAPE AESTHETIC PURPOSES ONLY. LIGHTING INFORMATION SHOWN ON THIS PLAN SHALL NOT BE USED FOR SECURITY OR SAFETY PURPOSES.
2. LOCATION AND TYPE OF LIGHT FIXTURES ARE TYPICAL AND MAY VARY BASED ON ACTUAL FIELD CONDITIONS, SITE AND ARCHITECTURAL PLAN REVISIONS, USE OF EXISTING LIGHTING (IF ANY), NEW BUILDING MOUNTED LIGHTING, AESTHETICS, AND CONSULTATIONS WITH LIGHTING CONSULTANT AND/OR MANUFACTURER.
3. THIS PLAN ASSUMES THAT THE BUILDING WILL HAVE WALL MOUNTED FIXTURES (BY OTHERS) TO LIGHT EXTERIOR DOORS.
4. INSTALL LIGHT FIXTURES AS RECOMMENDED BY THE MANUFACTURER.
5. LIGHT POLES LOCATED WITHIN LANDSCAPE AND PEDESTRIAN AREAS SHALL BE ON A BASE FLUSH WITH GRADE LOCATED A MINIMUM OF 3' FROM THE EDGE OF VEHICLE PAVEMENT IF FEASIBLE.

NOTES:
1. LIGHT POLE AND BOLLARD LIGHT BY PHILIPS LIGHTING.
2. FIXTURES SHALL BE BLACK IN COLOR.
3. INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS.

POLE AND BOLLARD LIGHTS

N.T.S.

GRAPHIC SCALE
0' 10' 20' 40'

PROJECT NORTH

REVISIONS:

DRAWING TITLE: LANDSCAPE PLAN

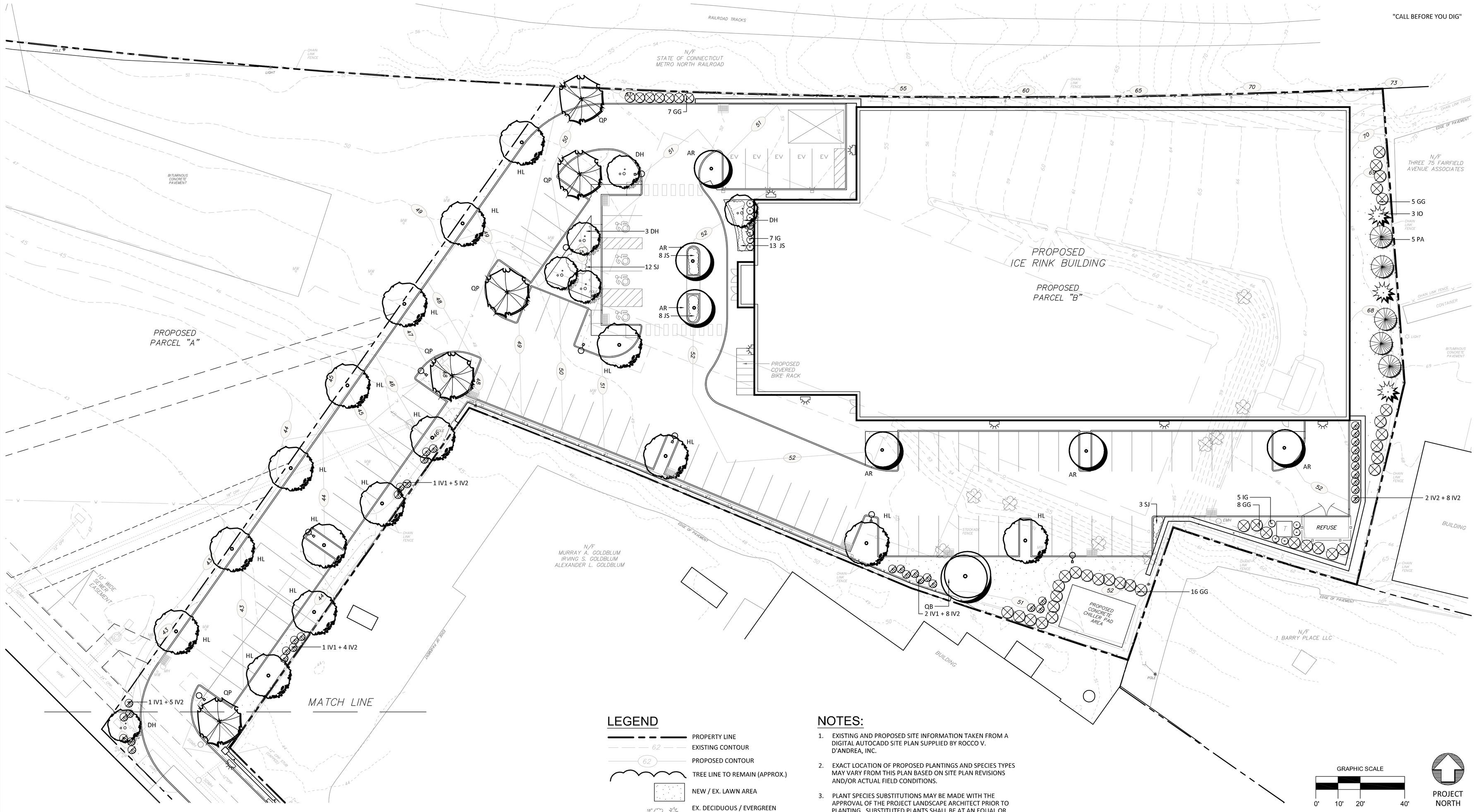
PROJECT:
23 BARRY PLACE
STAMFORD, CONNECTICUT

ENVIRONMENTAL LAND SOLUTIONS, LLC
Landscape Architecture and Environmental Planning
8 KNIGHT STREET, SUITE 203
NORWALK, CONNECTICUT 06851
Tel: (203) 855-7879 Fax: (203) 855-7836
info@elsllc.net www.elsllc.net

SEAL:

DATE: 12.14.22
SCALE: 1"=20'
DRAWING NO.: LP.2

"CALL BEFORE YOU DIG"



LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- TREE LINE TO REMAIN (APPROX.)
- NEW / EX. LAWN AREA
- EX. DECIDUOUS / EVERGREEN TREE TO REMAIN
- EX. TREE TO BE REMOVED
- NEW DECIDUOUS SHADE TREE
- NEW DECIDUOUS SMALL TREE
- NEW EVERGREEN TREE
- NEW SHRUB
- NEW LIGHT POLE
- NEW WALL MOUNTED LIGHT

NOTES:

1. EXISTING AND PROPOSED SITE INFORMATION TAKEN FROM A DIGITAL AUTOCADD SITE PLAN SUPPLIED BY ROCCO V. D'ANDREA, INC.
2. EXACT LOCATION OF PROPOSED PLANTINGS AND SPECIES TYPES MAY VARY FROM THIS PLAN BASED ON SITE PLAN REVISIONS AND/OR ACTUAL FIELD CONDITIONS.
3. PLANT SPECIES SUBSTITUTIONS MAY BE MADE WITH THE APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT PRIOR TO PLANTING. SUBSTITUTED PLANTS SHALL BE AT AN EQUAL OR GREATER SIZE AS NOTED USING A SIMILAR TYPE PLANT.
4. PLANTING METHODS SHALL BE IN ACCORDANCE WITH THE "AMERICAN STANDARDS FOR NURSERY STOCK", LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
5. THIS PLAN FOR PLANTING PURPOSES ONLY. SEE PLANS BY OTHERS FOR ADDITIONAL INFORMATION.
6. SPRAY NEW PLANTINGS IMMEDIATELY AFTER INSTALLATION WITH A WHITE-TAILED DEER REPELLENT AND CONTINUE AS NEEDED TO MAINTAIN PLANTS FREE OF SIGNIFICANT DEER BROWSING.
7. SEED LAWN AREAS WITH A HIGH QUALITY FESCUE AND BLUEGRASS SEED MIXTURE. APPLY SOIL AMENDMENTS AND SEED AREAS AT THE METHODS AND RATE RECOMMENDED BY THE MANUFACTURER.

GRAPHIC SCALE
0' 10' 20' 40'

PROJECT NORTH

PLANT LIST

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS	PLANTING HT.	MATURE HT.
5	AR	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG MAPLE	2-2 1/2" CAL.	B&B	COLUMNAR TREE	12-14' HT.	35-40' HT.
6	DH	BETULA NIGRA 'DURA HEAT'	DURA HEAT BIRCH	8-9' HT.	B&B	MULITSTEM TREE	8-9' HT.	20-28' HT.
15	HL	GLEDITSIA TRIACANTHOS 'SHADEMASTER'	SHADEMASTER HONEY LOCUST	2 1/2-3" CAL.	B&B	SHADE TREE	12-14' HT.	45-50' HT.
1	QB	QUERCUS BICOLOR	SWAMP WHITE OAK	2-2 1/2" CAL.	B&B	SHADE TREE	12-14' HT.	50-60' HT.
5	QP	QUERCUS PALUSTRIS 'PACIFIC BRILLIANCE'	PIN OAK	2-2 1/2" CAL.	B&B	SHADE TREE	12-14' HT.	50-60' HT.
3	IO	ILEX OPACA	AMERICAN HOLLY	5-6' HT.	B&B	EVERGREEN, NATIVE	5-6' HT.	25-30' HT.
5	PA	PICEA ABIES	NORWAY SPRUCE	7-8' HT.	B&B	EVERGREEN	7-8' HT.	60-70' HT.
36	GG	THUJA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	5-6' HT.	B&B	EVERGREEN	5-6' HT.	30-35' HT.
15	SJ	HYPERICUM FRONDOSUM 'SUNBURST'	SUNBURST ST. JOHNSWORT	18-24" HT.	CONT.	YELLOW FLOWERS		
12	IG	ILEX GLABRA 'SHAMROCK'	COMPACT INKBERRY	2-3' HT.	CONT.	EVERGREEN		
7	IV1	ILEX VERTICILLATA 'SOUTHERN GENTLEMAN'	SOUTHERN GENTLEMAN HOLLY	2-3' HT.	CONT.	NATIVE, MALE		
30	IV2	ILEX VERTICILLATA 'WINTER RED'	WINTER RED WINTERBERRY	2-3' HT.	CONT.	RED BERRIES, NATIVE		
29	JS	JUNIPERUS CHINENSIS VAR. 'SARGENTII'	SARGENT JUNIPER	2-3' SPR.	CONT.	EVERGREEN		

REVISIONS:

DRAWING TITLE: LANDSCAPE PLAN

PROJECT:
23 BARRY PLACE
STAMFORD, CONNECTICUT

ENVIRONMENTAL LAND SOLUTIONS, LLC
Landscape Architecture and Environmental Planning
8 KNIGHT STREET, SUITE 203
NORWALK, CONNECTICUT 06851
Tel: (203) 855-7879 Fax: (203) 855-7836
info@elsllc.net www.elsllc.net

SEAL:

DATE: 12.14.22
SCALE: 1"=20'
DRAWING NO.: LP.1

SITE PLAN REVIEW SET

"WINGS ARENA"

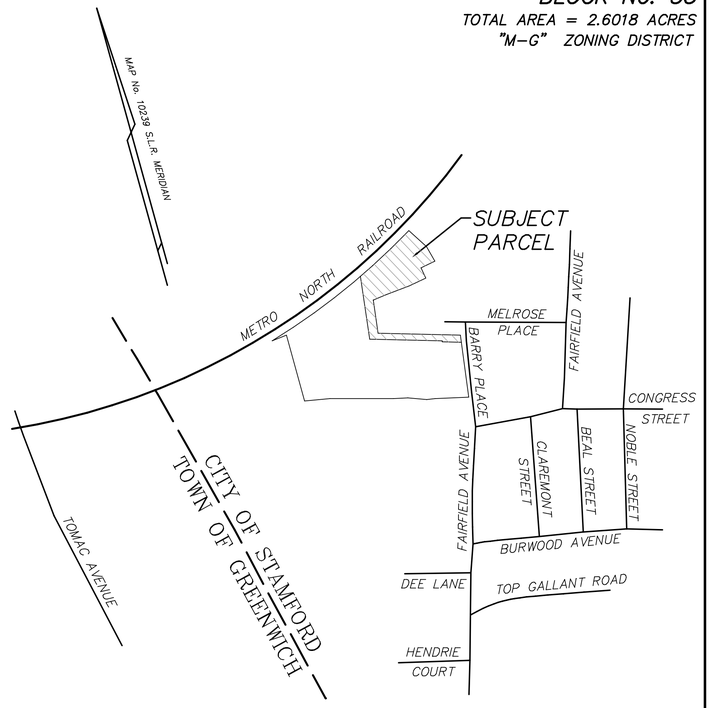
LOCATION

50 BARRY PLACE
STAMFORD, CONNECTICUT

PREPARED FOR

WINGS REAL ESTATE HOLDINGS, LLC

BLOCK No. 35
TOTAL AREA = 2.6018 ACRES
"M-G" ZONING DISTRICT



LOCATION MAP – 1"=400'±

SHEET INDEX

SHEET	TITLE	REVISION	DATE
	IMPROVEMENT LOCATION SURVEY		12-15-22
C-1.0	TOPOGRAPHIC SURVEY – "EXISTING CONDITIONS"	0	12-15-22
C-2.0	DEMOLITION PLAN	0	12-15-22
C-3.1	SITE GRADING PLAN	0	12-15-22
C-3.2	SITE GRADING PLAN	0	12-15-22
C-4.1	STORM DRAINAGE AND UTILITY PLAN	0	12-15-22
C-4.2	STORM DRAINAGE AND UTILITY PLAN	0	12-15-22
C-5.0	SEDIMENTATION AND EROSION CONTROL PLAN	0	12-15-22
C-6.1	NOTES AND DETAILS	0	12-15-22
C-6.2	DETAILS	0	12-15-22
C-7.0	LOW-IMPACT DEVELOPMENT PLAN	0	12-15-22

ENGINEERING PLANS PREPARED BY

D'ANDREA SURVEYING & ENGINEERING, P.C.
DEREK E. DAUNAIS, CT. PE No. 22861

12-15-22
DATE

ONLY COPIES OF THIS SET, BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S / SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

REV.	DATE	DESCRIPTION
0	12-15-22	ZONING SUBMISSION

D'ANDREA SURVEYING & ENGINEERING, P.C.
· LAND PLANNERS
· ENGINEERS
· SURVEYORS
P.O. BOX 549 RIVERSIDE, CT 06878
6 NEIL LANE TEL. 637-1779

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
	COVER SHEET

BARFIELD_22HQ_COVER_00_RevD.DWG (ARP)

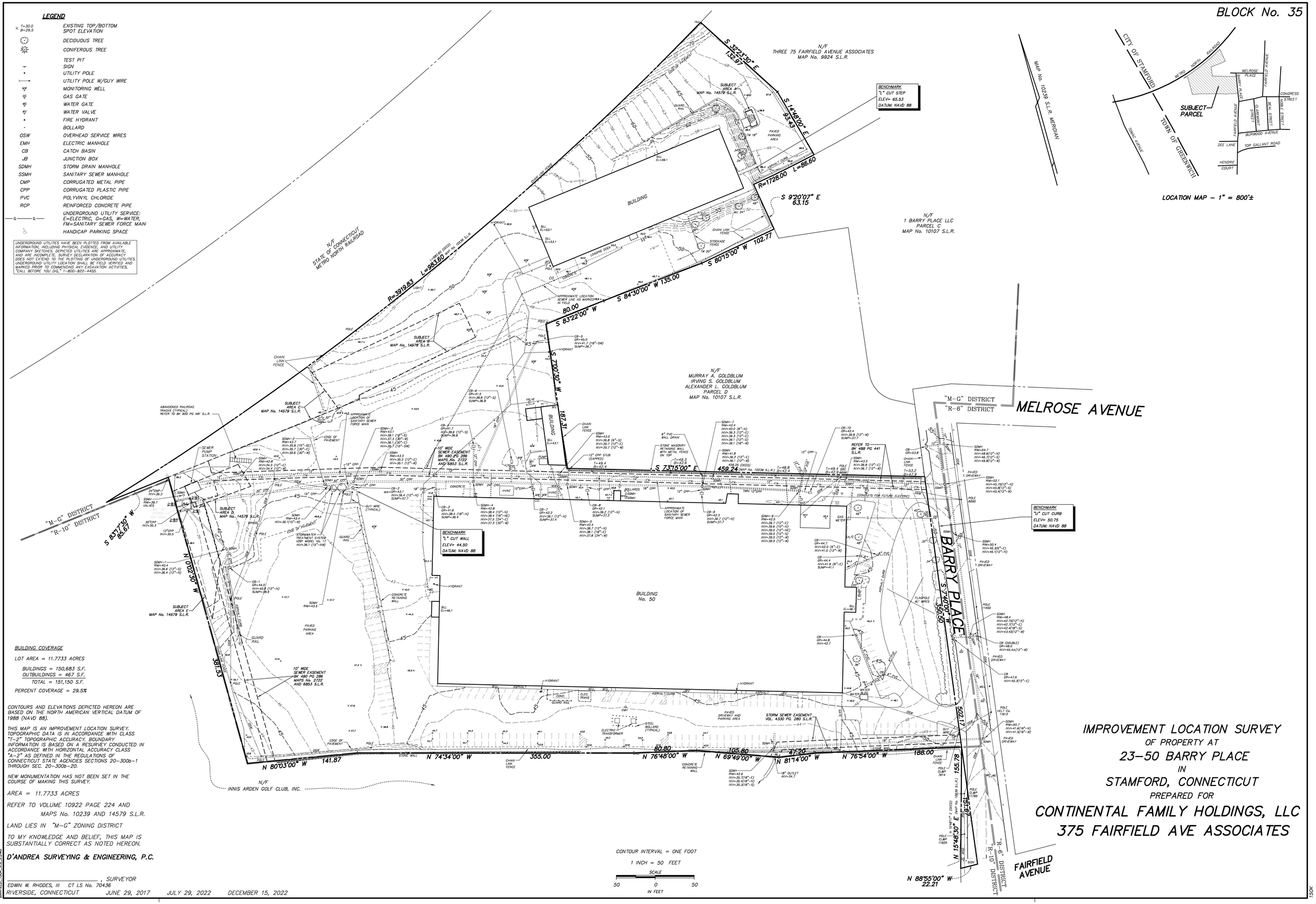
22HQ

BLOCK No. 35

LEGEND

T=30.0 B=29.5	EXISTING TOP/BOTTOM SPOT ELEVATION
	DECIDUOUS TREE
	CONIFEROUS TREE
	TEST PIT
	SIGN
	UTILITY POLE
	UTILITY POLE W/GUY WIRE
MW	MONITORING WELL
GG	GAS GATE
WG	WATER GATE
WV	WATER VALVE
	FIRE HYDRANT
	BOLLARD
OSW	OVERHEAD SERVICE WIRES
EMH	ELECTRIC MANHOLE
CB	CATCH BASIN
JB	JUNCTION BOX
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
G G	UNDERGROUND UTILITY SERVICE: E=ELECTRIC, G=GAS, W=WATER, FM=SANITARY SEWER FORCE MAIN
	HANDICAP PARKING SPACE

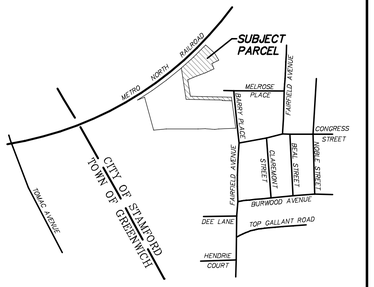
UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION, INCLUDING PHYSICAL EVIDENCE, AND UTILITY COMPANY SKETCHES. DEPICTED UTILITIES ARE APPROXIMATE, AND ARE INCOMPLETE. SURVEY DECLARATION OF ACCURACY DOES NOT EXTEND TO THE PLOTTING OF UNDERGROUND UTILITIES. UNDERGROUND UTILITY LOCATION SHALL BE FIELD VERIFIED AND MARKED PRIOR TO COMMENCING ANY EXCAVATION ACTIVITIES. "CALL BEFORE YOU DIG," 1-800-922-4455.


N/F STATE OF CONNECTICUT METRO NORTH RAILROAD
N/F THREE 75 FAIRFIELD AVENUE ASSOCIATES MAP No. 9924 S.L.R.
N/F 1 BARRY PLACE LLC PARCEL C MAP No. 10107 S.L.R.
N/F MURRAY A. GOLDBLUM IRVING S. GOLDBLUM ALEXANDER L. GOLDBLUM PARCEL D MAP No. 10107 S.L.R.
N/F INNIS ARDEN GOLF CLUB, INC.
SUBJECT AREA A MAP No. 14579 S.L.R.
SUBJECT AREA B MAP No. 14579 S.L.R.
SUBJECT AREA C MAP No. 14579 S.L.R.
SUBJECT AREA D MAP No. 14579 S.L.R.
SUBJECT AREA E MAP No. 14579 S.L.R.
BUILDING
BUILDING No. 50
BENCHMARK "L" CUT STEP ELEV= 65.53 DATUM: NAVD 88
BENCHMARK "L" CUT WALL ELEV= 44.50 DATUM: NAVD 88
BENCHMARK "U" CUT CURB ELEV= 50.75 DATUM: NAVD 88
S 32°23'30" E 132.97
S 14°48'00" E 83.43
R=1728.00 L=86.60
S 9°20'07" E 63.15
S 80°15'00" W 102.77
S 84°30'00" W 135.00
S 83°22'00" W 80.00
S 7°00'30" W 187.31
S 73°15'00" E 459.24
S 83°17'30" W 85.67
N 0°02'30" W 381.53
N 80°03'00" W 141.87
S 74°40'00" W 552.50
N 15°48'30" E 155.78
N 88°55'00" W 22.21
R=3919.83 L=983.60
N 74°34'00" W 355.00
N 76°48'00" W 80.80
N 69°49'00" W 105.60
N 81°14'00" W 47.20
N 76°54'00" W 188.00
MAP No. 10239 S.L.R. MERIDIAN
CITY OF STAMFORD
TOWN OF GREENWICH
METRO NORTH RAILROAD
MELROSE PLACE
FAIRFIELD AVENUE
CONGRESS STREET
SUBJECT PARCEL
TOMAC AVENUE
BURWOOD AVENUE
DEE LANE
TOP GALLANT ROAD
HENDRIE COURT
MELROSE AVENUE
BARRY PLACE
"M-G" DISTRICT
"R-6" DISTRICT
"R-10" DISTRICT
"M-G" DISTRICT
"R-10" DISTRICT
CHAIN LINK FENCE
GUARD RAIL
STOCKADE FENCE
LOADING DOCK
ASPHALT CURB
EDGE OF PAVEMENT
PAVED PARKING AREA
PAVED DRIVEWAY
CONCRETE RETAINING WALL
STONE WALL
STONE MASONRY RETAINING WALL WITH METAL FENCE ON TOP
6" PVC WALL DRAIN
10' WIDE SEWER EASEMENT BK 490 PG 286 MAPS No. 2722 AND 6853 S.L.R.
STORM SEWER EASEMENT VOL. 4330 PG. 280 S.L.R.
ABANDONED RAILROAD TRACKS (TYPICAL) REFER TO BK 900 PG 491 S.L.R.
REFER TO BK 488 PG 441 S.L.R.
APPROXIMATE LOCATION OF SANITARY SEWER FORCE MAIN
APPROXIMATE LOCATION SEWER LINE AS MARKED IN FIELD
"STORMWATER TREATMENT SYSTEM VORTSENTRY MODEL No. 17 VORI-36.1 (15"-HW)"
SEWER PUMP STATION
HYDRANT
UTILITY POLE
GAS METER
A/C
FLAGPOLE W/ WIRES
ELEC. TRANS.
STEEL BOLLARD (TYPICAL)
ELECTRIC TRANSFORMER
CONCRETE RETAINING WALL
CONCRETE
HVAC
PAVED DRIVEWAY AND PARKING AREA
(CONDUITS FOR FUTURE ELECTRIC)
CB-1 GR=44.0 INV=40.8 (12"-N) SUMP=38.9
CB-2 GR=43.1 INV=38.4 (12"-N) SUMP=37.7
CB-3 GR=41.6 INV=36.4 (18"-N) SUMP=36.4
CB-4 GR=42.8 INV=36.4 (12"-N) INV=36.4 (18"-NE) INV=37.5 (24"-E) INV=37.3 (30"-W)
CB-5 GR=43.0 INV=41.7 (18"-SW) SUMP=36.7
CB-6 GR=43.1 INV=38.2 (12"-N) SUMP=37.2
CB-7 GR=42.9 INV=39.1 (12"-N) SUMP=37.4
CB-8 GR=43.1 INV=38.2 (12"-N) SUMP=37.2
CB-9 GR=43.3 INV=39.7 (12"-N) SUMP=37.7
CB-10 GR=42.4 INV=39.8 (12"-W) SUMP=37.7
CB GR=53.8
CB GR=44.7 INV=42.0 (6"-E) INV=41.0 (12"-W)
CB GR=44.4 INV=41.9 (6"-E) SUMP=41.1
CB GR=44.8 INV=42.7
CB (DOUBLE) GR=48.0 INV=45.4±(12"-W)
CB GR=47.9 INV=45.3(12"-E)
SDMH-1 RIM=40.4 INV=36.6 (12"-S) INV=36.4 (12"-N)
SDMH-2 RIM=43.7 INV=35.7 (30"-E) INV=35.6 (30"-W)
SDMH-3 RIM=43.1 INV=39.1 (18"-S) INV=37.3 (30"-W) INV=36.1 (30"-E) INV=39.7 (15"-SW)
SDMH-4 RIM=42.8 INV=34.5 (15"-E) INV=34.4 (12"-W)
SDMH-5 RIM=42.4 INV=36.7 (12"-N) INV=38.1 (18"-E) INV=37.8 (24"-W)
SDMH-6 RIM=42.5 INV=39.7 (12"-E) INV=39.6 (10"-N) INV=39.5 (15"-NE) INV=39.5 (15"-S) INV=39.5 (12"-W) INV=39.5 (12"-W)
SDMH-7 RIM=43.4 INV=40.0 (6"-N) INV=39.3 (12"-E) INV=39.1 (12"-S) INV=39.1 (18"-W)
SDMH-8 RIM=41.8 INV=36.3 (12"-E) INV=36.1 (12"-W) INV=36.0 (12"-S)
SDMH RIM=43.3 INV=36.8 (12"-E) INV=36.7 (12"-W)
SDMH RIM=54.7 INV=48.9(12"-N) INV=48.7(12"-S) INV=48.6(12"-W)
SDMH RIM=52.1 INV=45.79(12"-N) INV=45.6(12"-S) INV=45.4(12"-W)
SDMH RIM=50.4 INV=46.36(6"-E) INV=46.1(12"-N)
SDMH RIM=48.4 INV=42.78(12"-N) INV=42.7(12"-E) INV=42.4(18"-S) INV=43.40(12"-W)
SDMH RIM=50.7 INV=41.6(18"-N) INV=41.5(18"-W)
SDMH RIM=43.5
SDMH RIM=43.4 INV=36.1(15"-W)
SDMH RIM=42.8 INV=34.5 (15"-E) INV=34.4 (12"-W)
SDMH RIM=43.3 INV=35.2 (12"-E) INV=35.1 (12"-W)
SDMH RIM=43.0 INV=36.8 (6"-S) INV=35.7 (12"-E) INV=35.7 (12"-W)
SDMH INV=35.7(18"-E) INV=35.4(18"-N) INV=35.3(18"-S)
SDMH RIM=43.9 INV=35.7(18"-E) INV=35.4(18"-N) INV=35.3(18"-S)
18" OUTLET INV=34.7
POLE 6685
POLE 7455
POLE HELT Co. 11612
POLE CL&P 7614
POLE CL&P 11785
POLE CL&P 11925
TEST PIT T=49.4 (B=42.9 6496)
TEST PIT T=49.4 (B=42.9 6496)
TEST PIT T=55.5 (B=47.5 6497)
TEST PIT T=49.4 (B=45.4 6498)
TEST PIT T=48.8 (B=42.4 6499)
TEST PIT T=49.3 (B=43.3 6500)
TEST PIT T=49.3 (B=43.3 6501)
TEST PIT T=49.3 (B=43.3 6502)
TEST PIT T=49.3 (B=43.3 6503)
TEST PIT T=49.3 (B=43.3 6504)
TEST PIT T=49.3 (B=43.3 6505)
TEST PIT T=49.3 (B=43.3 6506)
TEST PIT T=49.3 (B=43.3

BLOCK No. 35

TOTAL AREA = 2.6018 ACRES

"M-G" ZONING DISTRICT



LOCATION MAP - 1"=800'±

MAP No. 10239 S.L.R. MERIDIAN

NOTES:

1. Boundary information was taken from a survey entitled "Preliminary Subdivision Map of Property at 23 & 50 Barry Place in Stamford, Connecticut," Prepared for Continental Family Holdings, LLC," dated December 15, 2022, as prepared by D'Andrea Surveying & Engineering, P.C.
2. Existing features, and topography were taken from a survey entitled "Improvement Location Survey of Property at 23-50 Barry Place in Stamford, Connecticut, Prepared for Continental Family Holdings, LLC 375 Fairfield Ave Associates," revised December 15, 2022, as prepared by D'Andrea Surveying & Engineering, P.C.
3. The subject parcel does not lie within a Flood Hazard Zone as depicted on FIRM Community Panel 09001C0516D, published by FEMA, effective date July 8, 2013.
4. Elevations shown are based on the North American Vertical Datum of 1988 (NAVD 88.) The contractor shall coordinate the transfer of a control benchmark into the working area, after site preparation is complete, by a licensed surveyor.
5. The information given on this plan in respect to the location of subsurface structures and utilities indicates only that the structures and utilities exist and no responsibility is assumed by the engineer for the accuracy of the locations shown. Utility information is not guaranteed complete or accurate.
6. In accordance with Connecticut Public Act 87-71 and Connecticut General Statutes Sections 16-345 through 16-359, the owner or the contractor shall be required to verify the depth and location of all utilities prior to commencing construction, and shall contact "Call Before You Dig, Inc." at 1-800-922-4455, 48 hours prior to commencing construction for mark out of underground utilities.
7. This site is served by the City of Stamford sanitary sewer system.

LEGEND

---30---	EXISTING CONTOUR
- - -30- - -	EXISTING OFF-SITE CONTOUR (TAKEN FROM CITY GIS)
× 30.0	EXISTING SPOT ELEVATION
× T=30.0 B=29.5	EXISTING TOP/BOTTOM SPOT ELEVATION
	DECIDUOUS TREE
	SIGN
	UTILITY POLE
	HYDRANT
GG	GAS GATE
WG	WATER GATE
WV	WATER VALVE
MW	MONITORING WELL
CO	CLEANOUT
OSW	OVERHEAD SERVICE WIRES
CB	CATCH BASIN
MH	MANHOLE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
YD	YARD DRAIN
CPP	CORRUGATED PLASTIC PIPE
PVC	POLYVINYL CHLORIDE
—G—G—	UNDERGROUND UTILITY SERVICE: C=CABLE, E=ELECTRIC, G=GAS, W=WATER, FM=FORCE MAIN
	PROPERTY LINE

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION, INCLUDING PHYSICAL EVIDENCE, AND UTILITY COMPANY SKETCHES. DEPICTED UTILITIES ARE APPROXIMATE, AND MAY BE INCOMPLETE. UNDERGROUND UTILITY LOCATION SHALL BE FIELD VERIFIED AND MARKED PRIOR TO COMMENCING ANY EXCAVATION ACTIVITIES, "CALL BEFORE YOU DIG," 1-800-922-4455.

CONTOUR INTERVAL = ONE FOOT

1 INCH = 30 FEET

SCALE

30 0 30

IN FEET

D'ANDREA SURVEYING & ENGINEERING, P.C.

• LAND PLANNERS
• ENGINEERS
• SURVEYORS

P.O. BOX 549 RIVERSIDE, CT 06878

6 NEIL LANE TEL. 637-1779

REV.	DATE	DESCRIPTION
0	12-15-22	ZONING SUBMISSION

DEREK E. DAUNAIS, CT PE No. 22861

12-15-22

ENGINEER

ONLY COPIES OF THIS MAP, BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C-1.0	EXISTING CONDITIONS PLAN

BENCHMARK: "U" CUT CURB ELEV= 50.75 DATUM: NAVD 88

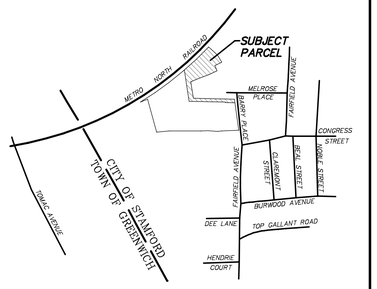
BARFIELD_22HQ_EC_00_ReXG.DWG (XID)

22HQ

BLOCK No. 35

TOTAL AREA = 2.6018 ACRES

"M-G" ZONING DISTRICT



LOCATION MAP – 1"=800'±

MAP No. 10239 S.L.R. MERIDIAN

DEMOLITION NOTES:

1. This purpose of this plan is for demolition purposes only and shall not be used for other aspects of construction.
2. Elevations shown are based on the North American Vertical Datum of 1988 (NAVD 88). The contractor shall coordinate the transfer of a control benchmark into the working area, after site preparation is complete, by a licensed surveyor.
3. The information given on these plans in respect to the location of subsurface structures and utilities indicates only that the structures and utilities exist and no responsibility is assumed by the surveyor or engineer for the accuracy of the locations shown. Utility information is not guaranteed to be complete or accurate.
4. In accordance with Connecticut Public Act 87-71 and Connecticut General Statutes Sections 16-345 through 16-359, the owner or the contractor shall be required to verify the depth and location of all utilities prior to commencing construction, and shall contact "Call Before You Dig, Inc." at 1-800-922-4455, 48 hours prior to commencing construction for mark out of underground utilities.
5. This site is served by the City of Stamford sanitary sewer system.
6. This site is served by the Aquarion Water Company, natural gas, and underground electric and telecom services.
7. All existing utilities shall be disconnected and either removed or abandoned in accordance with each respective utility company's regulations.
8. Refer to Sheets C-3.1 and C-3.2 for a depiction of the proposed development.
9. Refer to Sheet C-5.0 for a depiction of proposed sedimentation and erosion control measures, sedimentation and erosion control notes and details, and construction staging notes.
10. All existing on-site structures, paved surfaces, and miscellaneous features, designated to be removed within the project area, shall be removed in accordance with City of Stamford and State of Connecticut standards and specifications. Demolition debris shall be legally disposed of off-site.
11. All existing catch basins within the project area shall be temporarily protected with silt sacks.

LEGEND

——30——	EXISTING CONTOUR
- - -30- - -	EXISTING OFF-SITE CONTOUR (TAKEN FROM CITY GIS)
× 30.0	EXISTING SPOT ELEVATION
× T=30.0 B=29.5	EXISTING TOP/BOTTOM SPOT ELEVATION
	DECIDUOUS TREE
	EXISTING TREE TO BE REMOVED
	TREE PROTECTION
	SIGN
	UTILITY POLE
	HYDRANT
GG	GAS GATE
WG	WATER GATE
WV	WATER VALVE
MW	MONITORING WELL
CO	CLEANOUT
OSW	OVERHEAD SERVICE WIRES
CB	CATCH BASIN
MH	MANHOLE
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
YD	YARD DRAIN
CPP	CORRUGATED PLASTIC PIPE
PVC	POLYVINYL CHLORIDE
—G——G—	UNDERGROUND UTILITY SERVICE: C=CABLE, E=ELECTRIC, G=GAS, W=WATER, FM=FORCE MAIN
	PROPERTY LINE

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION, INCLUDING PHYSICAL EVIDENCE, AND UTILITY COMPANY SKETCHES. DEPICTED UTILITIES ARE APPROXIMATE, AND MAY BE INCOMPLETE. UNDERGROUND UTILITY LOCATION SHALL BE FIELD VERIFIED AND MARKED PRIOR TO COMMENCING ANY EXCAVATION ACTIVITIES, "CALL BEFORE YOU DIG," 1-800-922-4455.

CONTOUR INTERVAL = ONE FOOT

1 INCH = 30 FEET

SCALE

30 0 30

IN FEET

D'ANDREA SURVEYING & ENGINEERING, P.C.

· LAND PLANNERS
· ENGINEERS
· SURVEYORS

P.O. BOX 549 RIVERSIDE, CT 06878

6 NEIL LANE TEL. 637-1779

REV.	DATE	DESCRIPTION
0	12-15-22	ZONING SUBMISSION

DEREK E. DAUNAIS, CT PE No. 22861

12-15-22

ENGINEER

ONLY COPIES OF THIS MAP, BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C-2.0	DEMOLITION PLAN

BENCHMARK: "J" CUT CURB ELEV= 30.75 DATUM: NAVD 88

BARFIELD_22HG_DEMO_00_Rv0.DWG (ARP)

22HG

GENERAL NOTES:

1. Boundary information was taken from a survey entitled "Preliminary Subdivision Map of Property at 23 & 50 Barry Place in Stamford, Connecticut, Prepared for Continental Family Holdings, LLC," dated December 15, 2022, as prepared by D'Andrea Surveying & Engineering, P.C.
2. Existing features, and topography were taken from a survey entitled Improvement Location Survey of Property at 23–50 Barry Place in Stamford, Connecticut, Prepared for Continental Family Holdings, LLC," revised December 15, 2022, as prepared by D'Andrea Surveying & Engineering, P.C.
3. The subject parcel does not lie within a Flood Hazard Zone as depicted on FIRM Community Panel 09001C0516G, published by FEMA, effective date July 8, 2013.
4. Elevations shown are based on the North American Vertical Datum of 1988 (NAVD 88.) The contractor shall coordinate the transfer of a control benchmark into the working area, after site preparation is complete, by a licensed surveyor.
5. The information given on this plan in respect to the location of subsurface structures and utilities indicates only that the structures and utilities exist and no responsibility is assumed by the engineer for the accuracy of the locations shown. Utility information is not guaranteed complete or accurate.
6. In accordance with Connecticut Public Act 87–71 and Connecticut General Statutes Sections 16–345 through 16–359, the owner or the contractor shall be required to verify the depth and location of all utilities prior to commencing construction, and shall contact "Call Before You Dig, Inc." at 1–800–922–4455, 48 hours prior to commencing construction for mark out of underground utilities.
7. This site is served by the City of Stamford sanitary sewer system.
8. This site is served by the Aquarion Water Company, natural gas, and underground electric and telecom services.
9. The contractor shall be responsible for securing all required permits from the City of Stamford for completion of the project.
10. All construction shall comply with applicable sections of the State of Connecticut, Local, and International Building Codes, and those criteria shall take precedent over these plans. Refer to Sheets C–6.1 and C–6.2 for construction notes and details.
11. Upon completion of construction and prior to the issuance of a Certificate of Occupancy, an "As–Built" map and certification letter shall be prepared by a professional engineer and land surveyor and submitted to the Engineering Bureau for review and approval for the purpose of confirming that construction was completed substantially in compliance with the approved plans as amended from time to time.
12. Roof drains from the proposed building shall be tied into the new storm drainage system, as depicted on the plan. Final locations of the roof drain downspouts shall be coordinated between the architect, the project engineer, and the contractor.
13. All existing buildings, driveways, and miscellaneous debris shall be removed from the site and disposed of legally. Refer to Sheet C–1.0 for general demolition notes.
14. Refer to Sheets C–4.1 and C–4.2 for a depiction and description of all proposed storm drainage, sanitary sewer, and utility installations and connections.
15. Refer to Sheets C–5.0 for sedimentation and erosion control notes and details and general construction staging notes.
16. Refer to Sheet C–6.1 for City of Stamford Standard Notes.
17. The proposed building shall be designed by an architect in order to conform with current applicable zoning setback criteria and regulations, and a building permit shall be obtained prior to commencing construction.
18. Refer to Architectural Plans as prepared by Rogers McCogg Architects and Interior Designs, PC.
19. Refer to Landscape Architectural plans as prepared by Environmental Land Solutions, LLC for final design of proposed landscaping, fencing, and exterior site lighting.
20. All utility relocations and installations shall be coordinated with each respective utility company prior to construction. Coordinate all utility installation and connection specifications with each respective utility company.
21. A "Street Opening Permit" must be obtained prior to any construction activity in the City of Stamford right–of–way. All construction within the right–of–way shall be coordinated with the City of Stamford Engineering Bureau.
22. The Contractor shall be responsible for coordinating and maintaining traffic flow on adjoining roadways throughout the project.
23. The contractor shall be responsible for delegating the structural design of the reinforced modular block walls to the manufacturer of the wall system. The design and as–built certification of the wall system must be prepared, signed, and sealed by a professional engineer licensed in the State of Connecticut. Retaining wall shop drawings shall be to the project engineer for review prior to construction.
24. Refer to Sheet C–6.2 for soil boring and test pit data.

BLOCK No. 35

TOTAL AREA = 2.6018 ACRES

"M–G" ZONING DISTRICT

MAP No. 10239 S.L.R. MERIDIAN

TOWN OF GREENWICH / CITY OF STAMFORD

TOMAC AVENUE

METRO NORTH RAILROAD

SUBJECT PARCEL

HELENDALE TERRACE

TRAFFIC PLACE

FAIRFIELD AVENUE

ABERDEEN STREET

BEAL STREET

COMPASS STREET

TEE TERRACE

HEDGEROW COURT

BURROUGH AVENUE

TOP GALLANT ROAD

LOCATION MAP – 1"=800'±

RAILROAD TRACKS

N/F STATE OF CONNECTICUT METRO NORTH RAILROAD

CONSTRUCT REINFORCED MODULAR BLOCK RETAINING WALL (T.O.W. EL. VARIES) (SEE NOTE 25.)

EXISTING CHAIN LINK FENCE TO BE REMOVED AND REPLACED WITH NEW 6' HIGH CHAIN LINK SECURITY FENCE ALONG PROPERTY LINE (SEE NOTE 18.) (COORDINATE INSTALLATION AND HEIGHT REQUIREMENTS WITH METRO–NORTH)

CONSTRUCT CONCRETE PEDESTRIAN ACCESS RAMP WITH DEPRESSED CONCRETE CURB

LIMIT OF CONCRETE CURB

EXISTING PROPERTY LINE

SAWCUT PAVEMENT/ LIMIT OF EXISTING PAVEMENT REMOVAL

INSTALL ASPHALT CURB (TYP.)

INSTALL HANDICAP PARKING SIGN (TYP.)

PROPOSED STORMWATER RETENTION SYSTEM

CONSTRUCT PEDESTRIAN ACCESS RAMP

INSTALL CONCRETE CURB (TYP.)

INSTALL VAN ACCESSIBLE HANDICAP PARKING SIGN (TYP.)

CONSTRUCT CONCRETE SIDEWALK

STRIPE 12–INCH WIDE WHITE STOP BAR

INSTALL "STOP" SIGN

CONSTRUCT CONCRETE PEDESTRIAN ACCESS RAMP WITH DEPRESSED CONCRETE CURB

PROPOSED PROPERTY LINE (SEE NOTE 1.)

STRIPE 12–INCH WIDE WHITE STOP BAR

CONSTRUCT CONCRETE PEDESTRIAN ACCESS RAMP WITH DEPRESSED CONCRETE CURB

STRIPE CROSSWALK

PROPOSED 10' WIDE SANITARY SEWER EASEMENT "SS–1"

SAWCUT PAVEMENT/ LIMIT OF EXISTING PAVEMENT REMOVAL

INSTALL ASPHALT CURB (TYP.)

PROPOSED 10' WIDE STORM DRAINAGE EASEMENT "SD–1"

EXISTING HYDRANT (TO BE REMOVED)

EXISTING POLE (TO BE REMOVED)

PROPOSED STORMWATER RETENTION SYSTEM

CONSTRUCT CONCRETE PEDESTRIAN ACCESS RAMP WITH DEPRESSED CONCRETE CURB

CONSTRUCT REINFORCED MODULAR BLOCK RETAINING WALL ALONG PROPERTY LINE (T.O.W. EL. VARIES) (SEE NOTE 25.)

INSTALL WOODEN GUIDERAIL

INSTALL ASPHALT CURB (TYP.)

N/F MURRAY A. GOLDBLUM IRVING S. GOLDBLUM ALEXANDER L. GOLDBLUM

EXISTING CHAIN LINK FENCE TO BE REMOVED AND REPLACED WITH NEW 6' HIGH CHAIN LINK SECURITY FENCE ALONG TOP SIDE OF RETAINING WALL (SEE NOTE 18.)

CONSTRUCT BITUMINOUS CONCRETE DRIVEWAY AND PARKING SURFACE

CONSTRUCT BITUMINOUS CONCRETE DRIVEWAY AND PARKING SURFACE

PROPOSED STORMWATER RETENTION SYSTEM

EXISTING PROPERTY LINE

INSTALL ASPHALT CURB (TYP.)

EXISTING CHAIN LINK FENCE TO BE REMOVED AND REPLACED WITH NEW 6' HIGH CHAIN LINK SECURITY FENCE ALONG PROPERTY LINE (SEE NOTE 18.)

CONSTRUCT BITUMINOUS CONCRETE SIDEWALK (4' WIDE)

EXISTING BUILDING (TO BE REMOVED)

EXISTING BUILDING (TO BE REMOVED)

ELUR SUBJECT AREA 6 MAP No. 14964 S.L.R.

ELUR SUBJECT AREA 3 MAP No. 14964 S.L.R.

PROPOSED PARCEL "A"

PROPOSED LOADING SPACE (15'x25')

INSTALL CONCRETE CURB (TYP.)

CONSTRUCT CONCRETE SIDEWALK

STRIPE CROSSWALK

LIMIT OF FLUSH CONCRETE CURB

STRIPE 2 HANDICAP PARKING SPACES (2% MAX. SLOPE WITHIN HANDICAP PARKING AREA) (TYP.)

INSTALL FLUSH CONCRETE CURB

STRIPE 2 VAN ACCESSIBLE HANDICAP PARKING SPACES (2% MAX. SLOPE WITHIN HANDICAP PARKING AREA) (TYP.)

PROPOSED ICE RINK BUILDING 35,500 S.F.± F.F. EL.=52.5±

EXISTING BUILDING (TO BE REMOVED)

PROPOSED COVERED BIKE RACKS

PROPOSED CONCRETE HARDSCAPE AREA

INSTALL FLUSH CONCRETE CURB

PROPOSED PARCEL "B" AREA = 2.6018 ACRES

STRIPE (10) ELECTRIC VEHICLE PARKING SPACES

PROPOSED ELECTRIC VEHICLE CHARGING STATION WITH PROTECTIVE BOLLARDS (TYP.)

INSTALL ELECTRIC VEHICLE PARKING SIGNAGE (TYP.)

CONSTRUCT CONCRETE SIDEWALK

INSTALL CONCRETE CURB (TYP.)

LIMIT OF FLUSH CONCRETE CURB

INSTALL ASPHALT CURB (TYP.)

PROPOSED CONCRETE CHILLER PAD AREA

EXISTING BITUMINOUS CONCRETE PAVEMENT TO BE REMOVED

EXISTING CHAIN LINK FENCE TO BE REMOVED AND REPLACED WITH NEW 6' HIGH CHAIN LINK SECURITY FENCE ALONG PROPERTY LINE (SEE NOTE 18.)

N/F THREE 75 FAIRFIELD AVENUE ASSOCIATES

EXISTING PROPERTY LINE

INSTALL CONCRETE CURB

CONSTRUCT REINFORCED MODULAR BLOCK RETAINING WALL (T.O.W. EL. VARIES) (SEE NOTE 25.)

LIMIT OF CONCRETE CURB

BUILDING

REFUSE

PROPOSED EMH

PROPOSED TRANSFORMER

PROPOSED REFUSE ENCLOSURE ON CONCRETE PAD (SEE NOTE 18.)

LIMIT OF ASPHALT CURB

N/F 1 BARRY PLACE LLC

EXISTING PROPERTY LINE

EXISTING CHAIN LINK FENCE TO BE REMOVED AND REPLACED WITH NEW 6' HIGH CHAIN LINK SECURITY FENCE ALONG PROPERTY LINE (SEE NOTE 18.)

L.O. SUBJECT AREA A MAP No. 14964 S.L.R.

ELUR SUBJECT AREA 2 MAP No. 14964 S.L.R.

BENCHMARK

"L" CUT STEP

ELEV= 65.53

DATUM: NAVD 88

MATCHLINE A–A (SEE SHEET C–3.2) MATCHLINE A–A

LEGEND

30	EXISTING CONTOUR	SIGN	YARD DRAIN
30	EXISTING OFF–SITE CONTOUR (TAKEN FROM CITY GIS)	UTILITY POLE	CORRUGATED PLASTIC PIPE
30.0	EXISTING SPOT ELEVATION	HYDRANT	POLYVINYL CHLORIDE
T=30.0 B=29.5	EXISTING TOP/BOTTOM SPOT ELEVATION	GAS GATE	ELECTRIC VEHICLE
30	PROPOSED CONTOUR	WATER GATE	AS ORDERED BY ENGINEER
30.0	PROPOSED SPOT ELEVATION	WATER VALVE	VERIFY IN FIELD
T=30.0 B=29.5	PROPOSED TOP/BOTTOM SPOT ELEVATION	MONITORING WELL	TOP OF WALL
	DECIDUOUS TREE	CLEANOUT	UNDERGROUND UTILITY SERVICE: C=CABLE, E=ELECTRIC, G=GAS, W=WATER, FM=FORCE MAIN
	TREE TO BE REMOVED	OVERHEAD SERVICE WIRES	PROPERTY LINE
		CATCH BASIN	TEST PIT/BORING LOCATION
		MANHOLE	PROPOSED PARKING SPACE
		STORM DRAIN MANHOLE	
		SANITARY SEWER MANHOLE	

CONTOUR INTERVAL = ONE FOOT

1 INCH = 20 FEET

SCALE 20 0 20 IN FEET

D'ANDREA SURVEYING & ENGINEERING, P.C.
· LAND PLANNERS
· ENGINEERS
· SURVEYORS
P.O. BOX 549 RIVERSIDE, CT 06878
6 NEIL LANE TEL. 637–1779

REV.	DATE	DESCRIPTION
0	12–15–22	ZONING SUBMISSION

DEREK E. DAUNAIS, CT PE No. 22861

12–15–22

ENGINEER

ONLY COPIES OF THIS MAP, BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C–3.1	SITE GRADING PLAN

BARFIELD_22HQ_SDP_00_ReDWG (2D2) (SHEET: C–3.1)

22HQ

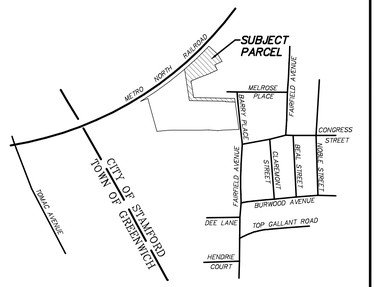
NOTES:

1. Refer to Sheet C–3.1 for General Notes.
2. Elevations shown are based on the North American Vertical Datum of 1988 (NAVD 88.) The contractor shall coordinate the transfer of a control benchmark into the working area, after site preparation is complete, by a licensed surveyor.
3. The information given on this plan in respect to the location of subsurface structures and utilities indicates only that the structures and utilities exist and no responsibility is assumed by the engineer for the accuracy of the locations shown. Utility information is not guaranteed complete or accurate.
4. In accordance with Connecticut Public Act 87–71 and Connecticut General Statutes Sections 16–345 through 16–359, the owner or the contractor shall be required to verify the depth and location of all utilities prior to commencing construction, and shall contact "Call Before You Dig, Inc." at 1–800–922–4455, 48 hours prior to commencing construction for mark out of underground utilities.
5. A "Street Opening Permit" must be obtained prior to any construction activity in the City of Stamford right–of–way. All construction within the right–of–way shall be coordinated with the City of Stamford Engineering Bureau.
6. The Contractor shall be responsible for coordinating and maintaining traffic flow on adjoining roadways throughout the project.

BLOCK No. 35

TOTAL AREA = 2.6018 ACRES

"M–G" ZONING DISTRICT



LOCATION MAP – 1"=800'±

"M–G" DISTRICT

"R–6" DISTRICT

MELROSE AVENUE

BARRY PLACE

N/F MURRAY A. GOLDBLUM IRVING S. GOLDBLUM ALEXANDER L. GOLDBLUM

BUILDING

PROPOSED PARCEL "A"

BUILDING No. 50

MATCHLINE A–A

SEE SHEET C–3.1

SAWCUT PAVEMENT/ LIMIT OF EXISTING PAVEMENT REMOVAL

INSTALL ASPHALT CURB (TYP.)

EXISTING PROPERTY LINE

EXISTING CHAIN LINK FENCE TO BE REMOVED AND REPLACED WITH 6' HIGH CHAIN LINK FENCE ALONG PROPERTY LINE (SEE NOTE 1&)

CONSTRUCT BITUMINOUS CONCRETE SIDEWALK (4' WIDE)

EXISTING BUILDING TO BE REMOVED

PROPOSED 15' WIDE STORM DRAINAGE EASEMENT "SD–1"

CONSTRUCT CONCRETE BITUMINOUS AND PARKING SURFACE

10' WIDE SEWER EASEMENT

PROPOSED SEWER SYSTEM

ADJUST SSMH RIM TO FINISH GRADE. SWEEP NEW CURB AROUND MH COVER.

EXISTING CB TO BE REMOVED

EXISTING HVAC TO BE REMOVED

ADJUST SDMH RIM TO FINISH GRADE

EXISTING CB TO REMAIN

PORTION OF EXISTING BUILDING AND STEPS TO BE REMOVED

EXISTING SSMH TO BE REMOVED

REMOVE EXISTING PAVEMENT AND CONSTRUCT NEW 24' WIDE BITUMINOUS CONCRETE DRIVEWAY

CONSTRUCT BITUMINOUS CONCRETE SIDEWALK (4' WIDE)

PROPOSED PROPERTY LINE (SEE GENERAL NOTE 1.)

PORTION OF EXISTING BUILDING TO BE REMOVED

EXISTING UTILITY POLE AND OVERHEAD SERVICE WIRES TO BE REMOVED. RETAINING WALL GAP TO BE FILLED IN WITH STONE MASONRY TO MATCH EXISTING RETAINING WALL STYLE AND COLOR.

EXISTING PROPERTY LINE

EXISTING RETAINING WALL TO REMAIN

EXISTING CB TO BE REMOVED

EXISTING STEPS TO BE REMOVED

INSTALL ASPHALT CURB

ADJUST SSMH RIM TO FINISH GRADE. SWEEP NEW CURB AROUND MH COVER.

CONSTRUCT CONCRETE PEDESTRIAN ACCESS RAMP AND CURB

LIMIT OF NEW ASPHALT CURB AND SIDEWALK

INSTALL ASPHALT CURB

INSTALL "STOP" SIGN

LIMIT OF NEW ASPHALT CURB

LIMIT OF NEW CONCRETE CURB CONSTRUCTION. MATCH EXISTING ELEVATIONS.

REMOVE SECTION OF EXISTING CURB AND INSTALL NEW 6" REVEAL CONCRETE CURB

SAWCUT PAVEMENT 18" FROM EXISTING CURB FACE FOR PAVEMENT RESTORATION

REMOVE EXISTING DEPRESSED CONCRETE CURB AND INSTALL NEW DEPRESSED CONCRETE CURB ALONG DRIVEWAY ENTRANCE WITH 1–1/2" REVEAL

STRIPE 12–INCH WIDE WHITE STOP BAR

REMOVE SECTION OF EXISTING CURB AND INSTALL NEW 6" REVEAL CONCRETE CURB

LIMIT OF NEW CONCRETE CURB CONSTRUCTION. MATCH EXISTING ELEVATIONS.

BENCHMARK
"U" CUT CURB
ELEV= 50.75
DATUM: NAVD 88

LEGEND

30	EXISTING CONTOUR	SIGN	YARD DRAIN
30	EXISTING OFF–SITE CONTOUR (TAKEN FROM CITY GIS)	UTILITY POLE	CORRUGATED PLASTIC PIPE
× 30.0	EXISTING SPOT ELEVATION	HYDRANT	POLYVINYL CHLORIDE
T=30.0 B=29.5	EXISTING TOP/BOTTOM SPOT ELEVATION	GAS GATE	ELECTRIC VEHICLE
30	PROPOSED CONTOUR	WATER GATE	AS ORDERED BY ENGINEER
× 30.0	PROPOSED SPOT ELEVATION	WATER VALVE	VERIFY IN FIELD
T=30.0 B=29.5	PROPOSED TOP/BOTTOM SPOT ELEVATION	MONITORING WELL	TOP OF WALL
	DECIDUOUS TREE	CLEANOUT	UNDERGROUND UTILITY SERVICE: C=CABLE, E=ELECTRIC, G=GAS, W=WATER, FM=FORCE MAIN
	TREE TO BE REMOVED	OVERHEAD SERVICE WIRES	PROPERTY LINE
		CATCH BASIN	TEST PIT/BORING LOCATION
		MANHOLE	PROPOSED PARKING SPACE
		STORM DRAIN MANHOLE	
		SANITARY SEWER MANHOLE	

CONTOUR INTERVAL = ONE FOOT

1 INCH = 20 FEET

SCALE

20 0 20

IN FEET

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REV.	DATE	DESCRIPTION
0	12–15–22	ZONING SUBMISSION

DEREK E. DAUNAIS, CT PE No. 22861

12–15–22

ENGINEER

ONLY COPIES OF THIS MAP, BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C–3.2	SITE GRADING PLAN

BARFIELD_22x0_SGP_00_ReviLWG (DD) (SHEET: C–3.2)

22x0

STORM DRAIN AND UTILITY NOTES:

1. *The purpose of this plan is only to depict the layout of the proposed storm drainage, sanitary sewer, and utilities; water, gas, electric, telephone, and cable. This plan shall not be used for the construction of any other aspect of this project.*
2. *Elevations shown are based on the North American Vertical Datum of 1988 (NAVD 88). The contractor shall coordinate the transfer of a control benchmark into the working area, after site preparation is complete, by a licensed surveyor.*
3. *The information given on these plans in respect to the location of subsurface structures and utilities indicates only that the structures and utilities exist and no responsibility is assumed by the surveyor or engineer for the accuracy of the locations shown. Utility information is not guaranteed to be complete or accurate.*
4. *In accordance with Connecticut Public Act 87-71 and Connecticut General Statutes Sections 16-345 through 16-359, the owner or the contractor shall be required to verify the depth and location of all utilities prior to commencing construction, and shall contact "Call Before You Dig, Inc." at 1-800-922-4455, 48 hours prior to commencing construction for mark out of underground utilities.*
5. *This site is served by the City of Stamford sanitary sewer system.*
6. *This site is served by the Aquarion Water Company, natural gas, and underground electric, and telecom services.*
7. *The contractor shall be responsible for securing all required permits from the City of Stamford for completion of the project.*
8. *All construction shall comply with applicable sections of the State of Connecticut, Local, and International Building Codes, and those criteria shall take precedent over these plans. Refer to Sheets C-6.1 and C-6.2 for construction notes and details.*
9. *All utility relocations and installations shall be coordinated with each respective utility company prior to construction. Coordinate all utility installation and connection specifications with each respective utility company.*
10. *Roof drains from the proposed building shall be tied into the new storm drainage system, as depicted on the plan. Final locations of the roof drain downspouts shall be coordinated between the architect, the project engineer, and the contractor.*
11. *The locations and elevations of the proposed storm drainage system depicted hereon may be modified with the approval of the project engineer to meet field conditions.*
12. *The contractor shall excavate test pits where indicated hereon or wherever design conflicts may occur prior to the installation of any portion of either the proposed sanitary sewer or storm drainage systems. The contractor shall notify the project engineer of the test pit schedule. Design conflicts if any, shall be brought to the immediate attention of the project engineer.*
13. *New storm drain pipes greater than 8-inches in diameter shall not have bends. New storm drain pipes of diameter 8-inches or less shall not have bends that exceed 45-degrees.*
14. *Depicted locations of the proposed gas service, water service, and underground utilities; electric, telephone, and cable are approximate for approval purposes only. Final locations shall be coordinated between each respective utility company and the owner.*
15. *The contractor shall coordinate the final location and installation of all proposed electric transformers, and other necessary utility splice boxes with each respective utility company.*
16. *A Drainage Maintenance Agreement shall be provided to the City of Stamford prior to obtaining a final Certificate of Occupancy.*
17. *Coordinate utility service connections to building with MEP plans.*
18. *Refer to Sheet C-6.2 for soil boring and test pit data.*
19. *Prior to installation of any infiltration system, deep test pits shall be performed in the presence of the Project Engineer to certify that no restrictive layer, such as mottling, has been found and that the system will be installed a minimum of one foot above any restrictive layer. The Design Engineer shall also perform a hydraulic conductivity infiltration test in accordance with the City Stormwater Drainage Manual. Deep test pit and infiltration test results shall be submitted to the City Engineering Bureau for their records.*

DRAINAGE MAINTENANCE SCHEDULE

1. Catch Basins & Drainage Inlets:

a. Catch basins and drainage inlets shall be completely cleaned of accumulated debris and sediments at the completion of construction.
b. For the first year, catch basins and drainage inlets shall be inspected on a quarterly basis.
c. Any accumulated debris within the catch basins/inlets shall be removed and any repairs as required.
d. From the second year onward, visual inspections shall occur twice per year, once in the spring and once in the fall, after fall cleanup of leaves has occurred.
e. Accumulated debris within the catch basins/inlets shall be removed and repairs made as required.
f. Accumulated sediments shall be removed at which time they are within 12 inches of the invert of the outlet pipe.
g. Any additional maintenance required per the manufacturer's specifications shall also be completed.

2. Storm Drainage Piping and Manholes/Junction Boxes:

a. All storm drainage piping shall be completely flushed of debris and accumulated sediment at the completion of construction.
b. Manholes/Junction Boxes shall be inspected and repaired on an annual basis.
c. Unless system performance indicates degradation of piping, comprehensive video inspection of storm drainage piping shall occur once every ten years.
d. Any additional maintenance required per the manufacturer's specifications shall also be completed.

3. Drywells and Infiltration Systems:

a. All drywells/infiltrators shall be completely cleaned of accumulated debris and sediments upon the completion of construction.
b. For the first year, the drywells/infiltrators shall be inspected on a quarterly basis.
c. Any accumulated debris within the drywells/infiltrators shall be removed and any repairs made to the units as required.
d. From the second year onward, visual inspection shall occur twice per year, once in the spring and once in the fall, after fall cleanup of leaves has occurred.
e. Accumulated debris within the units shall be removed and repairs made as required.
f. Any additional maintenance required per the manufacturer's specifications shall also be completed.

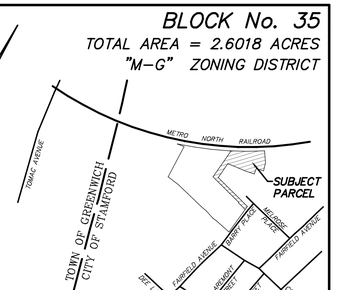
4. Roof Gutters – Remove accumulated debris and inspect for damage. Any damage should be repaired as required.

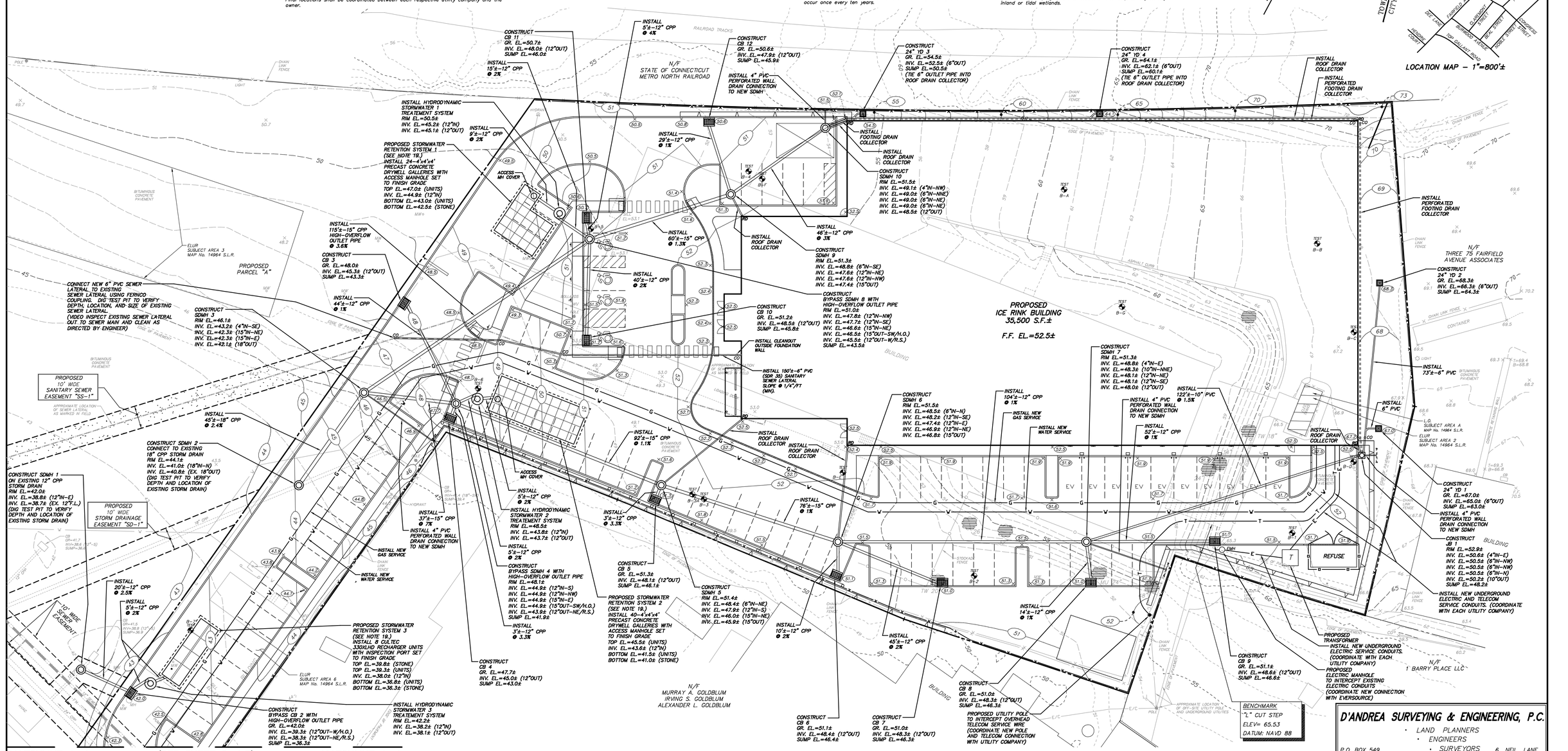
Disposal of Debris and Sediment – All debris and sediment removed from the stormwater structures and bioretention/biofiltration basins shall be disposed of legally. There shall be no dumping of silt or debris into or in proximity to any inland or tidal wetlands.

BLOCK No. 35

TOTAL AREA = 2.6018 ACRES

"M-G" ZONING DISTRICT





MATCHLINE A–A (SEE SHEET C-4.2) MATCHLINE A–A

LEGEND

30	EXISTING CONTOUR	SIGN	JB JUNCTION BOX
30	EXISTING OFF-SITE CONTOUR (TAKEN FROM CITY GIS)	UTILITY POLE	YD YARD DRAIN
× 30.0	EXISTING SPOT ELEVATION	HYDRANT	CPP CORRUGATED PLASTIC PIPE
× T=30.0 B=29.5	EXISTING TOP/BOTTOM SPOT ELEVATION	GAS GATE	PVC POLYVINYL CHLORIDE
30	PROPOSED CONTOUR	WATER GATE	EV ELECTRIC VEHICLE
× 30.0	PROPOSED SPOT ELEVATION	WATER VALVE	A.O.B.E. AS ORDERED BY ENGINEER
	DECIDUOUS TREE	MONITORING WELL	V.I.F. VERIFY IN FIELD
	TREE TO BE REMOVED	CLEANOUT	T.O.W. TOP OF WALL
		OVERHEAD SERVICE WIRES	UNDERGROUND UTILITY SERVICE: C=CABLE, E=ELECTRIC, G=GAS, W=WATER, FM=FORCE MAIN
		CATCH BASIN	
		MANHOLE	PROPERTY LINE
		STORM DRAIN MANHOLE	TEST TEST BORING
		SANITARY SEWER MANHOLE	

CONTOUR INTERVAL = ONE FOOT

1 INCH = 20 FEET

SCALE 20 0 20 IN FEET

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REV.	DATE	DESCRIPTION
0	12-15-22	ZONING SUBMISSION

DEREK E. DAUNAIS, CT PE No. 22861 — 12-15-22 — ENGINEER

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PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C-4.1	STORM DRAINAGE AND UTILITY PLAN

BARFIELD_22HD_SDMP_00_Rev0.DWG (DED) (SHEET: C-4.1)

22HD

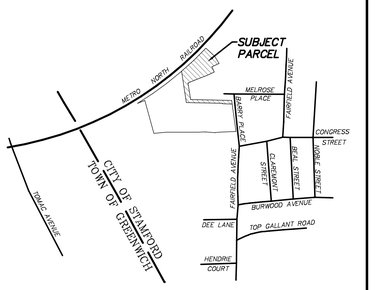
NOTES:

1. Refer to Sheet C-4.1 for Storm Drain and Utility Notes.
2. Elevations shown are based on the North American Vertical Datum of 1988 (NAVD 88.) The contractor shall coordinate the transfer of a control benchmark into the working area, after site preparation is complete, by a licensed surveyor.
3. The information given on this plan in respect to the location of subsurface structures and utilities indicates only that the structures and utilities exist and no responsibility is assumed by the engineer for the accuracy of the locations shown. Utility information is not guaranteed complete or accurate.
4. In accordance with Connecticut Public Act 87-71 and Connecticut General Statutes Sections 16-345 through 16-359, the owner or the contractor shall be required to verify the depth and location of all utilities prior to commencing construction, and shall contact "Call Before You Dig, Inc." at 1-800-922-4455, 48 hours prior to commencing construction for mark out of underground utilities.
5. A "Street Opening Permit" must be obtained prior to any construction activity in the City of Stamford right-of-way. All construction within the right-of-way shall be coordinated with the City of Stamford Engineering Bureau.
6. The Contractor shall be responsible for coordinating and maintaining traffic flow on adjoining roadways throughout the project.

BLOCK No. 35

TOTAL AREA = 2.6018 ACRES

"M-G" ZONING DISTRICT



LOCATION MAP - 1"=800'±

"M-G" DISTRICT
"R-6" DISTRICT

MELROSE AVENUE

BARRY PLACE

MATCHLINE A-A

MATCHLINE A-A

(SEE SHEET C-4.1)

INSTALL 40'±-18" CPP @ 2.4%

CONSTRUCT SDMH 2 CONNECT TO EXISTING 78" CPP STORM DRAIN RIM EL.=44.0± INV. EL.=40.8± (18"W) INV. EL.=40.6± (18"E) INV. TO BE VERIFIED (DIG TEST PIT TO VERIFY DEPTH AND LOCATION OF EXISTING STORM DRAIN)

INSTALL NEW GAS SERVICE

INSTALL NEW WATER SERVICE

CONSTRUCT CB 4 GR. EL.=47.7± SUMP EL.=43.0± (12"OUT)

PROPOSED STORMWATER RETENTION SYSTEM 3 (SEE NOTE 8 ON SHEET C-4.1) CONSISTING OF 84 LF. OF 96" DIA. CMP WITH INSPECTION PORT SET WITH FINISH GRADE (STONE) TOP EL.=39.8± (UNITS) INV. EL.=39.0± (12"IN) BOTTOM EL.=38.0± (UNITS) BOTTOM EL.=36.5± (STONE)

INSTALL HYDRODYNAMIC STORMWATER TREATMENT SYSTEM 1 RIM EL.=42.2± INV. EL.=38.2± (12"IN) INV. EL.=38.1± (12"OUT)

PROPOSED 10' WIDE STORM DRAINAGE EASEMENT

INSTALL 10'±-12" CPP @ 1.5%

INSTALL 5'±-12" CPP @ 2%

CONSTRUCT CB 2 WITH BUBBLER AND OUTLET PIPE. GR. EL.=42.0± INV. EL.=38.3± (12"OUT-W.O.) SUMP EL.=36.3±

10' WIDE SEWER EASEMENT

EXISTING SSMH TO REMAIN. RAISE COVER TO FINISH GRADE. RIM EL.=42.5± (EX.) RIM EL.=43.1± (PR.)

EXISTING 12" SEWER MAIN AND SEWER FORCE MAIN TO REMAIN

EXISTING 18" CPP STORM DRAIN TO REMAIN

EXISTING SDMH TO REMAIN. RAISE COVER TO FINISH GRADE. RIM EL.=42.4± (EX.) RIM EL.=42.5± (PR.)

EXISTING SSMH TO REMAIN. RAISE COVER TO FINISH GRADE. RIM EL.=41.8± (EX.) RIM EL.=43.0± (PR.)

EXISTING 12" SEWER MAIN AND SEWER FORCE MAIN TO REMAIN

EXISTING TWIN 12" CPP STORM DRAINS TO REMAIN

EXISTING SDMH TO REMAIN

EXISTING CB TO BE REMOVED. REMOVE OR CAP AND ABANDON EXISTING OUTLET PIPE.

10' WIDE SEWER EASEMENT

SAWCUT PAVEMENT LIMIT AND ASPHALT PATCH ACROSS ENTIRE WIDTH OF STREET IN ACCORDANCE WITH CITY OF STAMFORD CONSTRUCTION SPECIFICATIONS. WIDTH OF PATCH SHALL INCLUDE ALL NEW UTILITY TRENCHES.

PROPOSED WATER SERVICE CONNECTION. COORDINATE WITH WATER COMPANY.

DIG TEST PITS TO VERIFY DEPTH AND LOCATION OF EXISTING GAS AND WATER MAIN

BENCHMARK
"U" CUT CURB
ELEV= 50.75
DATUM: NAVD 88

EXISTING SDMH TO REMAIN. RAISE COVER TO FINISH GRADE. RIM EL.=42.4± (EX.) RIM EL.=42.7± (PR.)

EXISTING CB TO REMAIN

ELUR SUBJECT AREA 5 MAP No. 14964 S.L.R.

EXISTING CB TO REMAIN

EXISTING 12" STORM DRAIN TO REMAIN

CONSTRUCT CB 1 GR. EL.=42.3± INV. EL.=39.6± (EX. 12"OUT) (V.I.F.) SUMP EL.=37.6± (DIG TEST PIT TO VERIFY DEPTH AND LOCATION OF EXISTING STORM DRAIN)

INSTALL NEW GAS SERVICE

INSTALL NEW WATER SERVICE

PROPOSED GAS SERVICE CONNECTION. COORDINATE WITH GAS COMPANY.

PROPOSED PARCEL "A"

BUILDING No. 50

BUILDING

N/F MURRAY A. GOLDBLUM IRVING S. GOLDBLUM ALEXANDER L. GOLDBLUM

LEGEND

30	EXISTING CONTOUR	SIGN	JB JUNCTION BOX
30	EXISTING OFF-SITE CONTOUR (TAKEN FROM CITY GIS)	UTILITY POLE	YD YARD DRAIN
× 30.0	EXISTING SPOT ELEVATION	HYDRANT	CPP CORRUGATED PLASTIC PIPE
× T=30.0 B=29.5	EXISTING TOP/BOTTOM SPOT ELEVATION	GAS GATE	PVC POLYVINYL CHLORIDE
30	PROPOSED CONTOUR	WATER GATE	EV ELECTRIC VEHICLE
× 30.0	PROPOSED SPOT ELEVATION	WATER VALVE	A.O.B.E. AS ORDERED BY ENGINEER
	DECIDUOUS TREE	MONITORING WELL	V.I.F. VERIFY IN FIELD
	TREE TO BE REMOVED	CLEANOUT	T.O.W. TOP OF WALL
		OVERHEAD SERVICE WIRES	UNDERGROUND UTILITY SERVICE: C=CABLE, E=ELECTRIC, G=GAS, W=WATER, FM=FORCE MAIN
		CATCH BASIN	
		MANHOLE	
		STORM DRAIN MANHOLE	PROPERTY LINE
		SANITARY SEWER MANHOLE	TEST TEST BORING

CONTOUR INTERVAL = ONE FOOT

1 INCH = 20 FEET

SCALE 20 0 20 IN FEET

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REV.	DATE	DESCRIPTION
0	12-15-22	ZONING SUBMISSION

DEREK E. DAUNAIS, CT PE No. 22861 — 12-15-22 ENGINEER

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PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C-4.2	STORM DRAINAGE AND UTILITY PLAN

BARFIELD_22HQ_SDMUP_00_RevB.DWG (RED) (SHEET- C-4.2)

22HQ

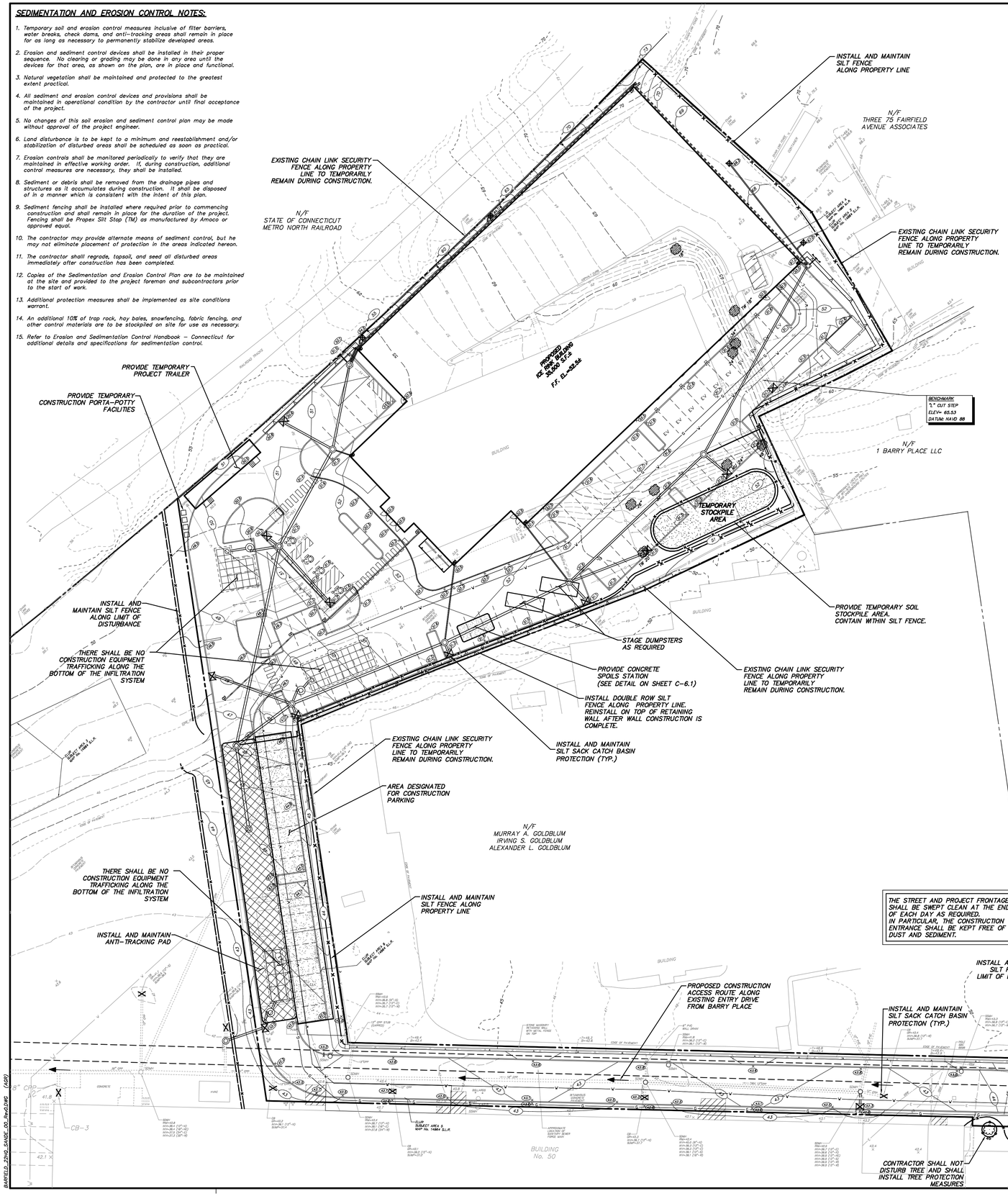
BLOCK No. 35

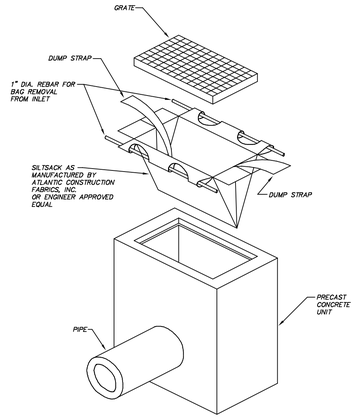
TOTAL AREA = 2.6018 ACRES

"M-G" ZONING DISTRICT

SEDIMENTATION AND EROSION CONTROL NOTES:

1. Temporary soil and erosion control measures inclusive of filter barriers, water breaks, check dams, and anti-tracking areas shall remain in place for as long as necessary to permanently stabilize developed areas.
2. Erosion and sediment control devices shall be installed in their proper sequence. No clearing or grading may be done in any area until the devices for that area, as shown on the plan, are in place and functional.
3. Natural vegetation shall be maintained and protected to the greatest extent practical.
4. All sediment and erosion control devices and provisions shall be maintained in operational condition by the contractor until final acceptance of the project.
5. No changes of this soil erosion and sediment control plan may be made without approval of the project engineer.
6. Land disturbance is to be kept to a minimum and reestablishment and/or stabilization of disturbed areas shall be scheduled as soon as practical.
7. Erosion controls shall be monitored periodically to verify that they are maintained in effective working order. If, during construction, additional control measures are necessary, they shall be installed.
8. Sediment or debris shall be removed from the drainage pipes and structures as it accumulates during construction. It shall be disposed of in a manner which is consistent with the intent of this plan.
9. Sediment fencing shall be installed where required prior to commencing construction and shall remain in place for the duration of the project. Fencing shall be Propex Silt Stop (TM) as manufactured by Amoco or approved equal.
10. The contractor may provide alternate means of sediment control, but he may not eliminate placement of protection in the areas indicated hereon.
11. The contractor shall regrade, topsoil, and seed all disturbed areas immediately after construction has been completed.
12. Copies of the Sedimentation and Erosion Control Plan are to be maintained at the site and provided to the project foreman and subcontractors prior to the start of work.
13. Additional protection measures shall be implemented as site conditions warrant.
14. An additional 10% of trap rock, hay bales, snowfencing, fabric fencing, and other control materials are to be stockpiled on site for use as necessary.
15. Refer to Erosion and Sedimentation Control Handbook – Connecticut for additional details and specifications for sedimentation control.

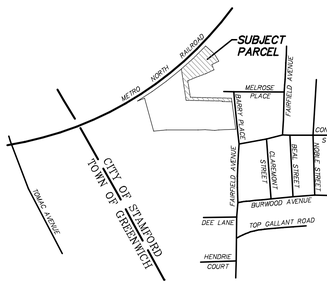




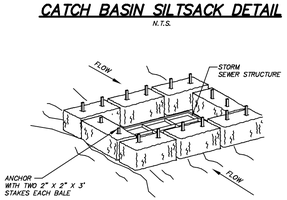
CATCH BASIN SILTSACK DETAIL

N.T.S.

MAP No. 10239 S.P.R. MERIDIAN



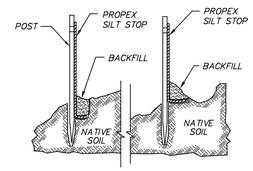
LOCATION MAP – 1"=800'±



HAY BALE INSTALLATION AT CATCH BASINS

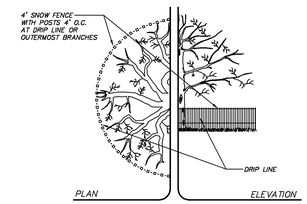
N.T.S.

POSTS SHOULD NOT BE SPACED MORE THAN 10' APART



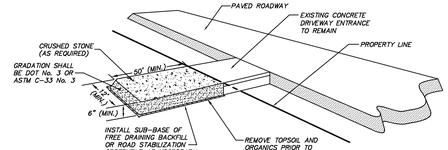
INSTALLATION DETAIL SEDIMENT CONTROL FABRIC

N.T.S.



TREE PROTECTION

N.T.S.



CONSTRUCTION ENTRANCE

ANTI-TRACKING PAD DETAIL

N.T.S.

LEGEND

- SECURITY FENCE
- SILT FENCE
- TREE TO BE REMOVED
- TREE PROTECTION
- HAYBALES
- SILT SACK

GENERAL CONSTRUCTION PHASING:

PHASE 1: DEMOLITION

1. Access site using existing driveway entrance along Barry Place. Contractor parking and stockpiling to be on-site.
2. Remove vegetation.
3. Remove existing structures, hardscapes, and site features, excluding the existing access driveway.
4. Install sedimentation and erosion controls.

PHASE 2: SITE GRADING/FOUNDATION CONSTRUCTION

1. Rough in proposed driveway and construction access.
2. Rough grade site.
3. Construct retaining walls.
4. Excavate for proposed building foundation.
5. Construct proposed building foundation.
6. Backfill and rough grade around building foundation.

PHASE 3: SITE UTILITIES

1. Install storm drainage system.
2. Install utilities and sewer lateral connection.

PHASE 4: BUILDING CONSTRUCTION

1. Construct proposed building.

PHASE 5: SITE FEATURES

1. Construct remainder of retaining walls, as required.
2. Construct curbing and hardscapes.
3. Construct driveway.
4. Fine grade and stabilize all slopes.
5. Landscape as required.
6. Remove sedimentation and erosion controls.

PHASE 6: ENTRY DRIVEWAY

1. Remove existing pavement.
2. Construct new entry driveway and curbing.
3. Fine grade and stabalize slopes.
4. Landscape as required.
5. Remove sedimentation and erosion controls.

NOTE:
THIS PLAN SHALL BE USED EXPRESSLY FOR THE IMPLEMENTATION OF SEDIMENTATION AND EROSION CONTROL MEASURES. IN NO WAY IS THIS PLAN INTENDED FOR PURPOSES OTHER THAN SEDIMENTATION AND EROSION CONTROL MEASURES.

CONTOUR INTERVAL = ONE FOOT

1 INCH = 30 FEET

SCALE

30 0 30

IN FEET

D'ANDREA SURVEYING & ENGINEERING, P.C.

· LAND PLANNERS
· ENGINEERS
· SURVEYORS

P.O. BOX 549 RIVERSIDE, CT 06878

6 NEIL LANE TEL. 637-1779

REV.	DATE	DESCRIPTION
0	12-15-22	ZONING SUBMISSION

DEREK E. DAUNAIS, CT PE No. 22861

12-15-22

ENGINEER

ONLY COPIES OF THIS MAP, BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C-5.0	SEDIMENTATION AND EROSION CONTROL PLAN

BARFIELD_22HO_SANDE_00_ProDWG (ARP)

22HO

CONSTRUCTION NOTES:

1. The contractor shall obtain all appropriate permits prior to commencing construction.
2. The contractor shall be solely responsible to coordinate his work with the work being done by others. The contractor shall likewise bear the responsibility for delays or other factors related to the work by others. No claims shall be allowed due to the contractor's failure to adequately coordinate such work.
3. All construction shall be inspected by a professional engineer prior to backfill and as the work progresses.
4. The project engineer shall be notified a minimum of three working days prior to the commencement of each phase of construction.
5. Appropriate measures shall be taken to control any sedimentation and erosion which may result during construction.
6. All specimen trees shall be protected during the construction period, except those specifically designated to be removed, in accordance with generally accepted standards.
7. There shall be no dumping of construction debris and/or excess excavated material into or in proximity to any inland or tidal wetland areas. All excavated material shall be stockpiled and contained on-site within silt fencing. The contractor shall be responsible for the removal of all excess material excavated during construction. All excess material shall be removed in a careful and environmetally sound manner and shall be disposed of legally off-site.
8. The proposed building shall be designed by the architect in order to conform with current applicable zoning setback criteria and regulations, and a building permit shall be obtained prior to commencing construction.
9. Existing utilities in conflict through or above this parcel shall be relocated as directed by the appropriate utility company or the owner. The contractor shall excavate test pits to verify the location and depth of utilities where conflicts may exist.
10. Pavement replacement shall be bituminous concrete, placed in accordance with the City of Stamford standards and/or Connecticut State Highway specifications.
11. Shoulders and disturbed areas shall receive four inches of topsoil; fine graded and seeded as soon as practical to prevent erosion.
12. The contractor shall not commence any paving until the grading and shaping of the compacted gravel base has been approved by the project engineer.
13. Regrading, filling, and other such alterations to the site shall be restricted to the minimum level necessary to complete the project as shown on the plan.
14. Existing inverts on storm drains, sanitary sewers, and utility conduits shall be field verified where appropriate, before commencing construction. The contractor shall excavate test pits where indicated hereon or wherever design conflicts may occur. The contractor shall notify the project engineer of the test pit schedule. Design conflicts if any, shall be brought to the immediate attention of the project engineer. Plate or backfill and patch test pits as directed by the project engineer.
15. Manhole structures shall be precast concrete with gaskets as manufactured by Eastern Precast Co., Inc. or engineer approved equal, unless noted otherwise.
16. Precast concrete cone section to be eccentric. Flat slab tops to have eccentric openings. Eccentric cone sections shall be used when the vertical distance between manhole frame and top of highest pipe is six (6) feet or greater, otherwise flat slab tops shall be used. Aluminum manhole steps (drop form type) shall be provided in all manholes at 12 inch intervals. Each step shall be capable of supporting a minimum load of 1,000 pounds. Wall joints to be "O-ring" rubber gasket type with the interior and exterior faces of joints to be sealed with waterproof non-shrink grout.
17. Connection between manholes and PVC sanitary sewer or storm drain pipes shall be made with flexible rubber boot type connections sealed water tight with a stainless steel clamp. The contractor shall make sure that all connections of new sanitary sewers to manholes are water tight. Connections to manholes for reinforced concrete storm and sanitary sewer pipe shall be made with concrete brick masonry and non-shrink grout. The Contractor shall make sure that all connections of new sanitary sewers to manholes are water tight.
18. All gravity PVC storm drain and sanitary sewer pipes shall conform to ASTM D 3034 "Standard Specification for type PSM Poly Vinyl Chloride (PVC) Sewer Pipe and Fittings" or approved equal (SDR35).
19. Corrugated plastic pipe (CPP) shall be HDPE, N-12, smooth interior pipe as manufactured by Advanced Drainage Systems, Inc. or engineer approved equal and shall comply with AASHTO M294-94 Type S (smooth inner liner).
20. All reinforced concrete pipe (RCP) shall be Class IV.
21. Where unsuitable foundation is encountered during construction of storm drains or sanitary sewers, the contractor shall remove the unsuitable material and replace it with other material approved by the project engineer.
22. Bedding and backfill material shall conform to ASTM D2321 specification "standard recommended practice for underground installations of flexible thermoplastic sewer pipe (PVC)."
23. All drainage and sewer conduits within the City right-of-way shall have 2 foot minimum cover or be encased in concrete if located under a paved or traveled way.
24. All storm drainage and sewer connections shall be sloped at 2% (minimum) or as otherwise noted.
25. The contractor shall provide all equipment, tools, labor and materials necessary to satisfactorily clean and remove all visible obstructions, dirt, sand, sludge, roots, gravel, stones, etc., from the storm drains, sanitary sewers, and structures.
26. Processed aggregate shall be in accordance with the City of Stamford standards and/or Connecticut State Highway specifications.
27. Roadway pavement shall be 2 course bituminous concrete placed in accordance with the City of Stamford standards and/or Connecticut State Highway specifications.
28. All existing manhole frames, catch basin grates, and utility structures shall be adjusted to new finish grade as required. Contractor to coordinate with existing utility companies to ensure their facilities are adjusted to finish grade.
29. Curbs and sidewalks in the City right-of-way shall be constructed in accordance with the City of Stamford specifications. The contractor shall pay specific attention to the location of construction joints.
30. All traffic control devices including traffic signs and pavement markings shall be installed in conformance with the Manual on Uniform Traffic Control Devices for Streets and Highways, U.S. Department of Transportation, Federal Highway Administration, Millenium Edition, as amended to date.

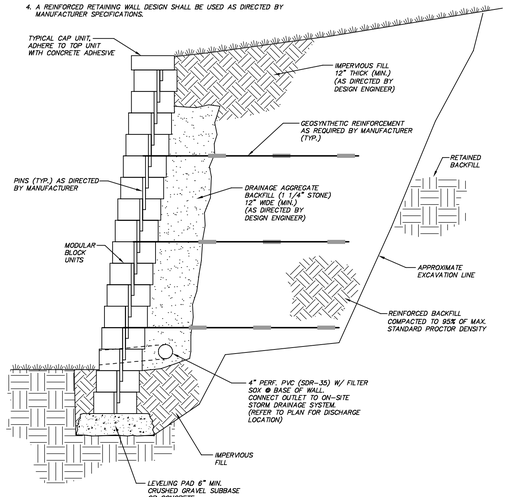
STANDARD CITY OF STAMFORD NOTES:

1. A Street Opening Permit is required for all work within the City of Stamford Right-of-Way.
2. All work within the City of Stamford Right-of-Way shall be constructed to City of Stamford requirements, the State of Connecticut Basic Building Code and the Connecticut Guidelines for Soil Erosion and Sedimentation Control.
3. The Engineering Bureau of the City of Stamford shall be notified three days priar to any commencement of construction or work within the City of Stamford Right-of-Way.
4. Trees within the City of Stamford Right-of-Way to be removed shall be posted in accordance with the Tree Ordinance.
5. Prior to any excavation the Contractor and/or Applicant/Owner, in accordance with Public Act 77-350, shall be required to contact "Call Before You Dig" at 1-800-922-4455 for mark out of underground utilities.
6. All retaining walls three (3) feet or higher measured from finished grade at the bottom of the wall to finished grade at the top of the wall and retaining walls supporting a surcharge or impounding Class I, II or III-A liquids are required to have a Building Permit. Retaining walls shall be designed and inspected during construction by a Professional Engineer licensed in the State of Connecticut. Prior to the issuance of a Certificate of Occupancy, retaining walls shall be certified by a Professional Engineer licensed in the State of Connecticut.
7. Certification will be required by a professional engineer licensed in the State of Connecticut that work has been completed in compliance with the approved drawings.
8. A Final Improvement Location Survey will be required by a professional land surveyor licensed in the State of Connecticut.
9. Connection to a city-owned storm sewer shall require the Waiver Covering Storm Sewer Connection to be filed with the City of Stamford Engineering Bureau.
10. Granite block or other decorative stone or brick, depressed curb, driveway apron and curbing within the City of Stamford Right-of-Way shall require the Waiver Covering Granite Block Depressed Curb and Driveway Aprons to be filed with the City of Stamford Engineering Bureau.
11. Sediment and erosion controls shall be maintained and repaired as necessary throughout construction until the site is stabilized.
12. To obtain a Certificate of Occupancy, submittal must include all items outlined in the Checklist for Certificate of Occupancy (Appendix D of the City of Stamford Drainage Manual).

BARFIELD_22HD_ED_D_REVISIONS (.MSP)

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELEGATING THE STRUCTURAL DESIGN OF THE REINFORCED MODULAR BLOCK WALLS TO THE MANUFACTURER OF THE WALL SYSTEM. THE DESIGN AND AS-BUILT CERTIFICATION OF THE WALL SYSTEM MUST BE PREPARED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT.
2. DETAIL SHOWS TYPICAL MODULAR BLOCK WALL. ACTUAL CONSTRUCTION TECHNIQUES WILL VARY DEPENDENT ON MANUFACTURER AND DESIGN ENGINEER SPECIFICATIONS. IN ALL CASES CONTRACTOR MUST PROVIDE DETAILED ENGINEERING SHOP DRAWINGS BEARING THE SEAL AND SIGNATURE OF A P.E. LICENSED IN THE STATE OF CONNECTICUT.
3. COLOR AND TEXTURE OF MODULAR BLOCK WALL FACE SHALL BE APPROVED BY THE OWNER.
4. A REINFORCED RETAINING WALL DESIGN SHALL BE USED AS DIRECTED BY MANUFACTURER SPECIFICATIONS.



TYPICAL SECTION – REINFORCED MODULAR CONCRETE BLOCK RETAINING WALL (DELEGATED DESIGN)

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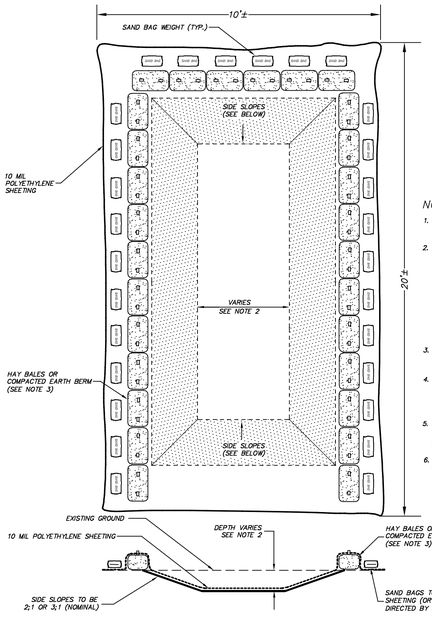


NOTES:

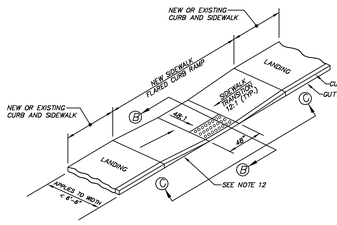
1. CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.
2. THE CONTRACTOR SHALL SUBMIT THE DESIGN, LOCATION AND SIZING OF THE CONCRETE WASHOUT AREA(S) WITH THE PROJECT'S EROSION AND SEDIMENTATION CONTROL PLAN AND SHALL BE APPROVED BY THE ENGINEER.

   LOCATION: WASHOUT AREA(S) ARE TO BE LOCATED WITHIN THE EXISTING ASPHALT PARKING LOT AND AT LEAST 50 FEET FROM ANY STREAM, WETLAND, STORM DRAINS, OR OTHER SENSITIVE RESOURCE. THE FLOOD CONTINGENCY PLAN MUST ADDRESS THE CONCRETE WASHOUT IF THE WASHOUT IS TO BE LOCATED WITHIN THE FLOODPLAIN.

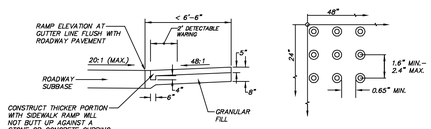
   SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING, BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.
3. SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, HAY BALES OR OTHER CONTROL MEASURES, AS APPROVED BY THE ENGINEER, SHOULD BE USED AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONTAINMENT.
4. SIGNS SHOULD BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE AREA(S) AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. WASHOUT AREA(S) SHOULD BE FLAGGED WITH SAFETY FENCING OR OTHER APPROVED METHOD.
5. WASHOUT AREA(S) ARE TO BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTREGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. CHECKED AFTER HEAVY RAINS.
6. HARDENED CONCRETE WASTE SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S HEIGHT. THE WASTE CAN BE STORED AT AN UPLAND LOCATION, AS APPROVED BY THE ENGINEER. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS, AND GUIDELINES.

CONCRETE WASHOUT AREA

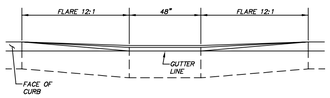
N.T.S.



PARALLEL SIDEWALK RAMP

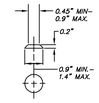


SECTION B–B



SECTION C–C

DOME SPACING



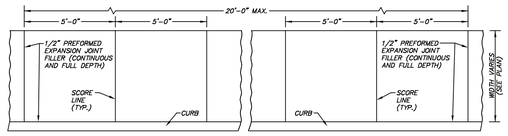
DOME SECTION

NOTES:

1. MAXIMUM SLOPES OF ADJOINING GUTTERS AND ROAD SURFACES IMMEDIATELY ADJACENT TO THE SIDEWALK RAMP OR ACCESSIBLE ROUTE SHOULD NOT EXCEED 20:1.
2. CARE SHALL BE TAKEN TO ASSURE UNIFORM GRADE ON THE RAMP, FREE OF SAGS AND ABRUPT GRADE CHANGES.
3. ALL RAMPS SHALL BE CONSTRUCTED OF CLASS "C" CONCRETE IN ACCORDANCE WITH CONNECTICUT STANDARD SPECIFICATIONS ARTICLE M.03.01.
4. SIDEWALK RAMPS SHALL HAVE A COARSE BROOM FINISH TRANSVERSE TO THE SLOPE OF THE RAMP. THE SURFACE ALONG ACCESSIBLE ROUTES SHALL BE STABLE, FIRM AND SLIP RESISTANT IN COMPLIANCE WITH ADAAG SECTION 4.5.
5. DIAGONAL SIDEWALK RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
6. REMOVAL OF EXISTING SIDEWALK FOR NEW RAMP INSTALLATIONS SHALL BE TO THE NEAREST EXPANSION/CONTRACTION JOINT OR DUMMY JOINT. 12:1 MAY NOT BE ACHIEVABLE DUE TO SIDEWALK GRADE. IN RECOGNITION OF THIS, A MINIMUM LIMIT OF 15" FOR A PARALLEL RAMP SHALL BE USED. REMOVAL SHALL NOT BE FURTHER THAN 2" FROM THE PROPOSED RAMP UNLESS DIRECTED BY THE ENGINEER. SAW CUT REQUIRED FOR DUMMY JOINTS SHALL BE INCLUDED IN THE COST OF "CONCRETE SIDEWALK."
7. EXPANSION JOINTS IN CONCRETE SHALL MATCH THOSE IN ADJACENT SIDEWALKS BUT IN NO CASE SHALL THE SPACING BETWEEN EXPANSION JOINTS EXCEED 12' UNLESS OTHERWISE NOTED.
8. RAISED ISLANDS IN MARKED CROSSINGS SHALL HAVE SIDEWALK RAMPS AT BOTH SIDES AND A LEVEL AREA AT LEAST 4' LONG BETWEEN THE RAMPS. IF THIS CANNOT BE ACHIEVED, THE RAISED ISLAND SHALL BE CUT THROUGH LEVEL WITH THE ROADWAY AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
9. SIDEWALK RAMPS SHALL BE CONSTRUCTED AND PAID FOR UNDER THE ITEM "CONCRETE SIDEWALK" INCLUDING CURBING WITHIN THE LIMITS OF THE NEW SIDEWALK RAMP AND DETECTABLE WARNING STRIPS.
10. CURBING WITHIN THE LIMITS OF NEW SIDEWALK RAMP SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE REQUIREMENTS OF FORM 817 SECTIONS 8.11 AND 8.13.
11. HANDICAP RAMPS CONFORMING WITH CONNECTICUT GENERAL STATUTES, SEC. 7-118A, SHALL BE INCORPORATED IN ALL PROPOSED SIDEWALKS AT ALL STREET INTERSECTIONS, AND AT ALL OTHER LOCATIONS WHERE THE GRADE OF A DRIVEWAY OR OTHER FACILITY TAKES PRECEDENCE OVER THE GRADE OF THE PROPOSED SIDEWALK.
12. TRANSITION TO FULL HEIGHT CURB. INSTALL STONE CURBING IF ADJACENT CURBING IS STONE. INSTALL CONCRETE CURBING IF ADJACENT CURBING IS CONCRETE OR BITUMINOUS.
13. INSTALL THE EDGE OF THE DETECTABLE WARNING 6" FROM THE EDGE OF ROAD.
14. TO PERMIT WHEELCHAIR WHEELS TO ROLL BETWEEN DOMES, ALIGN DOMES ON A SQUARE GRID IN THE DIRECTION OF PEDESTRIAN TRAVEL.

DETAILS FOR PEDESTRIAN ACCESS RAMPS

N.T.S.



CONCRETE FOR THE SIDEWALK SHALL BE PLACED TO A UNIFORM DEPTH OF FIVE (5) INCHES UPON A SIX (6) INCH 3/4" CRUSHED STONE BASE. THE SURFACE EDGES OF EACH PANEL SHALL BE ROUNDED TO A RADIUS OF 1/4 INCH.

CONCRETE SHALL BE ConnDOT CLASS "F" CEMENT TYPE II (4,400 PSI MIN.) AND SHALL HAVE BETWEEN 6–7% AIR ENTRAINMENT.

WELDED WIRE FABRIC (WWF) SHALL BE 6x6 – W2.9xW2.9 (SHEETS ONLY). DISCONTINUE AT EXPANSION JOINTS.

WWF SHALL BE INSTALLED MID DEPTH OF SIDEWALK AND SHALL BE SUPPORTED ON CONCRETE BLOCK OR OTHER APPROVED MATERIAL.

A 1/2" THICK APPROVED PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED TRANSVERSELY EVERY 20 FT. MAX. AND BETWEEN NEW CONCRETE CURBING AND SIDEWALKS.

A 1/2" THICK APPROVED PREFORMED EXPANSION JOINT FILLER SHALL BE UTILIZED BETWEEN ALL RIGID STRUCTURES (INCLUDING WALLS) AND NEW SIDEWALK WORK.

A MARKED OR SCORED CONTROL JOINT SHALL BE MADE AT FIVE FOOT INTERVALS BETWEEN BITUMINOUS JOINTS. CONTROL JOINTS SHALL BE 1" DEEP.

ADDITIONAL CONTROL JOINTS SHALL BE PLACED AS REQUIRED TO ELIMINATE ANY CONDITION WHICH WILL CAUSE STRESS VERTICES (EXAMPLE AT CORNERS OF STRUCTURES). JOINTS SHALL BE ORIENTED AS DIRECTED BY THE PROJECT ENGINEER.

SURFACE SHALL BE GIVEN A BROOM FINISH ORIENTED PERPENDICULAR TO DIRECTION OF PEDESTRIAN TRAFFIC FLOW.

ANY CHANGES REQUIRED BY LOCAL FIELD CONDITIONS SHALL BE MADE ONLY BY ORDER OF THE PROJECT ENGINEER OR THE CITY ENGINEER.

PLAN OF A SECTION OF CONCRETE SIDEWALK

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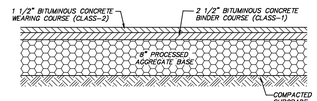
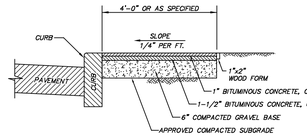


BITUMINOUS CONCRETE DRIVEWAY AND PARKING LOT DETAIL

N.T.S.



BITUMINOUS CONCRETE SIDEWALK

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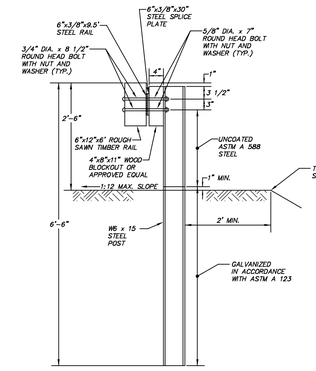
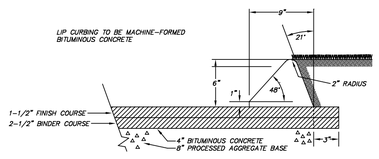


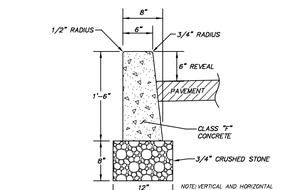
WOODEN GUIDERAIL DETAIL

N.T.S.



PAVEMENT AND CURBING DETAIL

N.T.S.



CONCRETE CURB DETAIL

N.T.S.

NOTES:

1. ALL CURBING TO BE CAST-IN-PLACE WITHIN CITY RIGHT-OF-WAY.
2. APPROVED 1/2" PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED AT A MAXIMUM SPACING OF 10 FEET COINCIDING WITH EXPANSION JOINTS IN SIDEWALK.

NOTE: THE VAN ACCESSIBLE SIGN SHALL ONLY BE USED FOR DESIGNATING VAN ACCESSIBLE SPACES.

"RESERVED PARKING PERMIT REQUIRED" & "VAN ACCESSIBLE" signs shall have white lettering against a blue background.

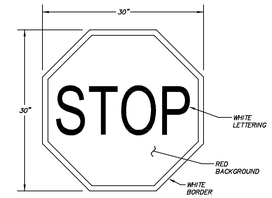
All accessible signage sizes, lettering, and symbols shall comply with federal and state specifications.

All accessible signage shall be installed 60" (minimum) above the floor or ground surface of the parking space, measured to the bottom of the sign.

Confirm fine amount prior to sign fabrication.

RESERVED PARKING SPACE SIGN DETAIL

N.T.S.



All "STOP" signs shall be an octagon with a white legend and border on a red background.

The standard "STOP" sign shall be 30 x 30 inches.

All "STOP" signs shall be installed at a height of at least 5 feet, measured from the bottom of the sign to the near edge of the pavement.

"STOP" sign lettering, color, size, and installation shall be in conformance with the Manual on Uniform Traffic Control Devices for Streets and Highways, U.S. Department of Transportation, Federal Highway Administration, Millennium Edition, as amended to date.

"STOP" SIGN DETAIL (R1-1)

N.T.S.

D'ANDREA SURVEYING & ENGINEERING, P.C.
· LAND PLANNERS
· ENGINEERS
· SURVEYORS
P.O. BOX 549 RIVERSIDE, CT 06878
6 NEIL LANE TEL. 637-1779

0	12-15-22	ZONING SUBMISSION
REV.	DATE	DESCRIPTION

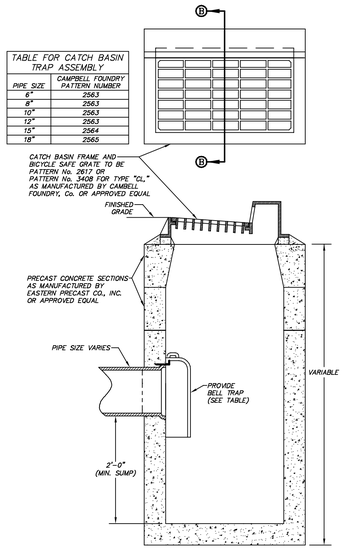
DEREK E. DAUNAIS, CT PE No. 22861

12-15-22
ENGINEER

ONLY COPIES OF THIS MAP, BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C-6.1	NOTES AND DETAILS

22HD



SECTION "B–B"

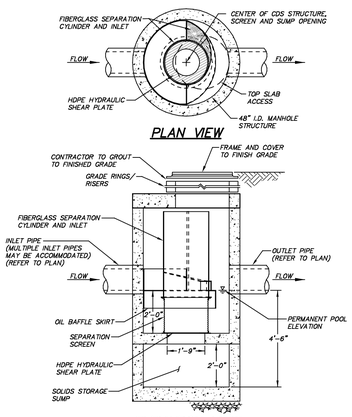
SINGLE CATCH BASIN DETAIL (TYPE "C")

N.T.S.

NOTES:
CATCH BASIN SHALL HAVE A MINIMUM SUMP OF 2 FEET AS MEASURED FROM THE LOWEST PIPE INVERT ELEVATION TO THE INTERIOR BOTTOM OF THE STRUCTURE.

CONTRACTOR SHALL PURCHASE AND INSTALL A SEPARATE SUMP SECTION. NO OUTLET OR INLET PIPES SHALL PENETRATE THE BOTTOM SUMP SECTION.

REFER TO DEVELOPMENT PLAN FOR SIZES, LOCATIONS, AND INVERT ELEVATIONS OF ALL PIPES.

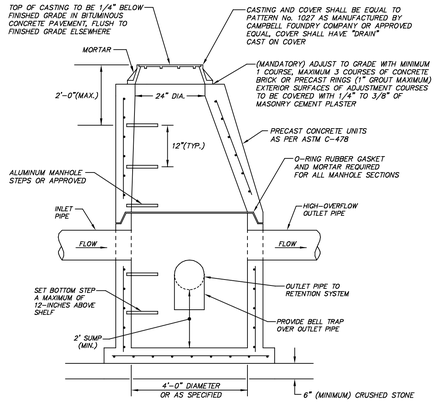


STORMWATER TREATMENT SYSTEM TYPICAL CONTECH CDS2015–4 DETAIL

N.T.S.

NOTES:

1. FINAL MODEL SIZE AND DIMENSIONS OF STORMWATER TREATMENT SYSTEM SHALL BE DETERMINED BY THE SYSTEM MANUFACTURER AND APPROVED BY THE SUPERVISING ENGINEER. ALTERNATE STORMWATER TREATMENT SYSTEM STRUCTURES AND DESIGNS SHALL BE APPROVED BY THE SUPERVISING ENGINEER.
2. STORMWATER TREATMENT SYSTEM CDS2015–4 IS MANUFACTURED BY CONTECH ENGINEERED SOLUTIONS LLC, 1–800–338–2042.
3. DESIGN OF INTERNAL PVC PIPING AND BAFFLES WILL BE PROVIDED BY CONTECH ENGINEERED SOLUTIONS LLC.
4. LOCATION AND SIZE OF MANHOLE OPENINGS MAY BE ADJUSTED BY LICENSED MANUFACTURER.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M306) LOAD RATING.

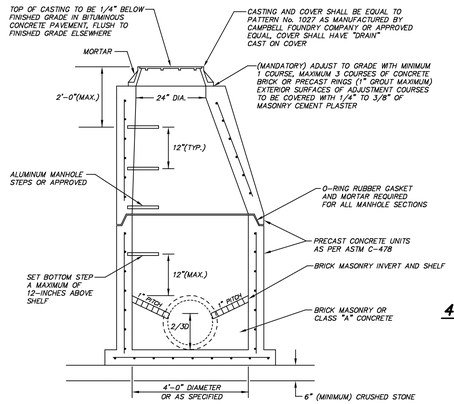


STORM DRAIN MANHOLE WITH HIGH–OVERFLOW OUTLET DETAIL

N.T.S.

NOTES:
MANHOLE SHALL HAVE A MINIMUM SUMP OF 2 FEET AS MEASURED FROM THE LOWEST PIPE INVERT ELEVATION TO THE INTERIOR BOTTOM OF THE STRUCTURE.

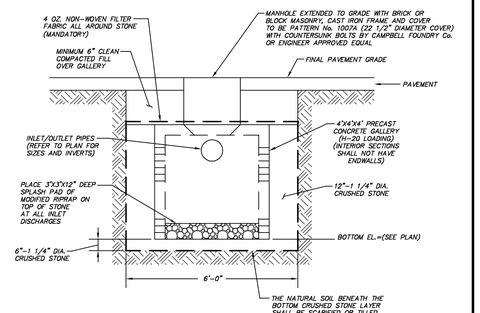
REFER TO DEVELOPMENT PLAN FOR SIZES, LOCATIONS, AND INVERT ELEVATION OF ALL PIPES.



TYPICAL STORM DRAIN MANHOLE DETAIL

N.T.S.

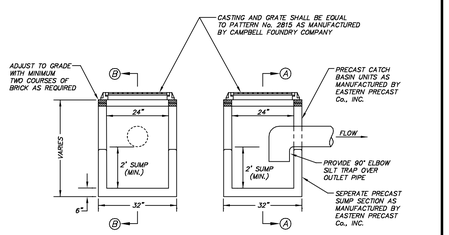
NOTE:
REFER TO DEVELOPMENT PLAN FOR SIZES, LOCATIONS, AND INVERT ELEVATIONS OF ALL PIPES.



4'X4'X4' PRECAST CONCRETE GALLERY DRYWELL DETAIL FOR STORMWATER RETENTION/INFILTRATION SYSTEMS (RS–1 & RS–2)

N.T.S.

NOTE: DURING CONSTRUCTION MUDDY AND TURBID WATER SHALL BE PREVENTED FROM ENTERING THE DRYWELLS.



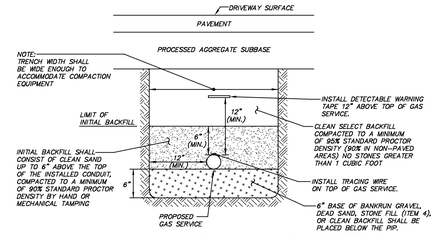
24"x24" YD/CB DETAIL TYPE "CL"

N.T.S.

NOTES:
CATCH BASIN SHALL HAVE A MINIMUM SUMP OF 2 FEET AS MEASURED FROM THE LOWEST PIPE INVERT ELEVATION TO THE INTERIOR BOTTOM OF THE STRUCTURE.

CONTRACTOR SHALL PURCHASE AND INSTALL A SEPARATE SUMP SECTION. NO OUTLET OR INLET PIPES SHALL PENETRATE THE BOTTOM SUMP SECTION.

REFER TO DEVELOPMENT PLAN FOR SIZES, LOCATIONS, AND INVERT ELEVATIONS OF ALL PIPES.

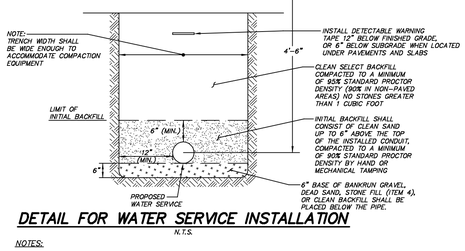


DETAIL FOR GAS SERVICE INSTALLATION

N.T.S.

NOTES:

1. THE CONTRACTOR SHALL HAVE ALL MATERIAL SELECTION AND INSTALLATION SPECIFICATIONS APPROVED BY THE GAS COMPANY PRIOR TO INSTALLATION.
2. ACTUAL NUMBER AND SIZE OF SERVICES TO BE INSTALLED MAY VARY. CONTRACTOR SHALL COORDINATE ACTUAL NUMBER AND SIZE OF SERVICES TO BE INSTALLED WITH BOTH THE OWNER AND THE GAS COMPANY.

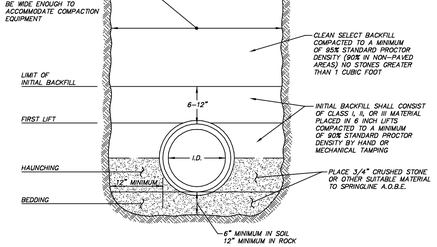


DETAIL FOR WATER SERVICE INSTALLATION

N.T.S.

NOTES:

1. THE CONTRACTOR SHALL HAVE ALL MATERIAL SELECTION AND INSTALLATION SPECIFICATIONS APPROVED BY THE AQUARION WATER COMPANY PRIOR TO INSTALLATION.
2. ACTUAL NUMBER AND SIZE OF SERVICES TO BE INSTALLED MAY VARY. CONTRACTOR SHALL COORDINATE ACTUAL NUMBER AND SIZE OF SERVICES TO BE INSTALLED WITH BOTH THE OWNER AND THE AQUARION WATER COMPANY.

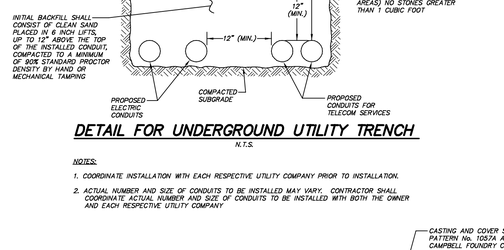


DETAIL FOR PVC SANITARY SEWER AND PVC/CPP STORM DRAIN INSTALLATION

N.T.S.

NOTES:

1. REFER TO ASTM D2321 (STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY–FLOW APPLICATIONS) FOR TRENCHING SPECIFICATIONS.



DETAIL FOR UNDERGROUND UTILITY TRENCH

N.T.S.

NOTES:

1. COORDINATE INSTALLATION WITH EACH RESPECTIVE UTILITY COMPANY PRIOR TO INSTALLATION.
2. ACTUAL NUMBER AND SIZE OF CONDUITS TO BE INSTALLED MAY VARY. CONTRACTOR SHALL COORDINATE ACTUAL NUMBER AND SIZE OF CONDUITS TO BE INSTALLED WITH BOTH THE OWNER AND EACH RESPECTIVE UTILITY COMPANY

Soil Boring Data:
Soil borings performed on
November 28, 2022 through
December 5, 2022.

B–A
0.0'–Asphalt
0.4'–Brown black fine to coarse sand with some silt little gravel (Fill)
1.0'–Cobbles with fractured partly weathered bedrock
6.0'–Augor Refusal/Bedrock
11.0'–No Groundwater
End boring @ 11.0'

B–B
0.0'–Asphalt
0.4'–Sand and Gravel Base
1.0'–Brown fine to medium Sand
4.0'–Partly Decomposed Bedrock
6.0'–Augor Refusal/Bedrock
10.0'–No Groundwater
End boring @ 10.0'

B–C
0.0'–Asphalt
0.5'–Brown fine coarse sand and cobbles
2.5'–Fractured Bedrock
6.0'–No Groundwater
End boring @ 6.0'

B–D
0.0'–Asphalt
0.8'–Brown fine to coarse sand, little silt, and little fine gravel
4.0'–Brown red fine to medium sand and silt little coarse sand, fine gravel (Possible Fill)
5.5'–Partly decomposed bedrock
7.0'–Augor Refusal Bedrock
12.0'–No Groundwater
End boring @ 12.0' (refusal)

B–E
0.0'–Asphalt
0.4'–Brown Black Grey fine to medium sand and fine to coarse gravel with some silt (Fill)
1.0'–Partly Decomposed Bedrock
6.5'–Augor Refusal Bedrock
9.5'–No Groundwater
End boring @ 9.5' (refusal)

B–4/B–F
0.0'–Asphalt
0.3'–Gravel Base
1.0'–Brown fine to medium sand and silt little fine to coarse gravel (Fill)
3.0'–Grey brown fine sand and silt, little cobbles
6.0'–Partly weathered bedrock
6.5'–Augor Refusal Bedrock
6.5'–No Groundwater
End boring @ 6.5'

B–G
0.0'–Topsoil
0.5'–Brown fine to medium sand and fine gravel with silt
1.5'–Partly decomposed bedrock
2.2'–Augor Refusal Bedrock
2.2'–No Groundwater
End boring @ 2.2' (refusal)

B–1
0.0'–Asphalt
0.4'–Brown fine to coarse sand, little silt, fine gravel
5.0'–Brown fine to coarse sand, little silt, fine gravel
6.0'–Boulders and/or fractured bedrock
10.0'–Brown fine to coarse sand with some fine gravel, little silt (possibly partly decomposed bedrock)
15.0'–partly decomposed/fractured bedrock
20.7'–No Groundwater
End boring @ 20.7'

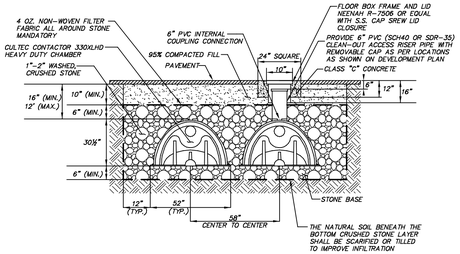
B–2
0.0'–Topsoil
0.2'–Brown fine to medium sand and silt, some fine gravel
3.0'–Partly decomposed bedrock
10.2'–No Groundwater
End boring @ 10.2' (refusal)

B–3
0.0'–Asphalt
0.4'–Dark brown fine to medium sand and fine gravel with some silt (fill)
2.0'–Augor Refusal
2.0'–No Groundwater
End boring @ 2.0' (refusal)

B–5
0.0'–Asphalt
0.3'–Gravel Base
1.0'–Brown fine to medium sand and fine gravel with some silt (fill)
5.0'–Grey fine to medium sand and silt
8.5'–Brown fine to medium sand and silt with some gravel (possibly partly decomposed bedrock)
11.0'–Augor Refusal
11.0'–No Groundwater
End boring @ 11.0' (refusal)

B–6
0.0'–Asphalt
0.6'–Dark brown tan fine to medium sand and silt with little fine to coarse gravel (fill)
3.0'–Grey fine sand and silt with little fine to coarse gravel
9.0'–No Groundwater
End boring @ 9.0'

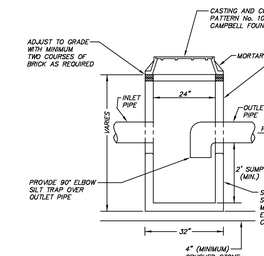
B–7
0.0'–Asphalt
0.5'–Brown fine to medium sand and fine to coarse gravel, little silt (fill)
5.0'–Grey fine to medium sand and silt with little fine gravel
8.0'–Partly decomposed bedrock
8.5'–Spoon Refusal
8.5'–No Groundwater
End boring @ 8.5' (refusal)



TYPICAL CROSS SECTION DETAIL CULTEC CHAMBER SYSTEM RECHARGER 330XLHD PAVED (H–20) LOADING

NOTES:

1. STORMWATER CHAMBERS SHALL BE MANUFACTURED BY CULTEC, INC. (800) 428–5832 OR ENGINEER APPROVED EQUAL.
2. ALL CHAMBERS SHALL BE INSTALLED ACCORDING TO MANUFACTURER SPECIFICATIONS.
3. THE SOILS BENEATH THE INFILTRATION SYSTEM SHALL BE SCARIFIED OR TILLED TO IMPROVE INFILTRATION.



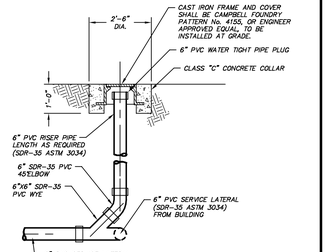
JUNCTION BOX DETAIL

N.T.S.

NOTES:
JUNCTION BOX SHALL HAVE A MINIMUM SUMP OF 2 FEET AS MEASURED FROM THE LOWEST PIPE INVERT ELEVATION TO THE INTERIOR BOTTOM OF THE STRUCTURE.

CONTRACTOR SHALL PURCHASE AND INSTALL A SEPARATE SUMP SECTION. NO OUTLET OR INLET PIPES SHALL PENETRATE THE BOTTOM SUMP SECTION.

REFER TO DEVELOPMENT PLAN FOR SIZES, LOCATIONS, AND INVERT ELEVATION OF ALL PIPES.



CLEANOUT IN PAVEMENT

N.T.S.

D'ANDREA SURVEYING & ENGINEERING, P.C.
· LAND PLANNERS
· ENGINEERS
· SURVEYORS
P.O. BOX 549 RIVERSIDE, CT 06878
6 NEIL LANE TEL. 637–1779

REV.	DATE	DESCRIPTION
0	12–15–22	ZONING SUBMISSION

DEREK E. DAUNAIS, CT PE No. 22861

12–15–22
ENGINEER

ONLY COPIES OF THIS MAP, BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C–6.2	DETAILS

BARFOLD_22HQ_LD_D_REVS.DWG (ASP)

22HQ

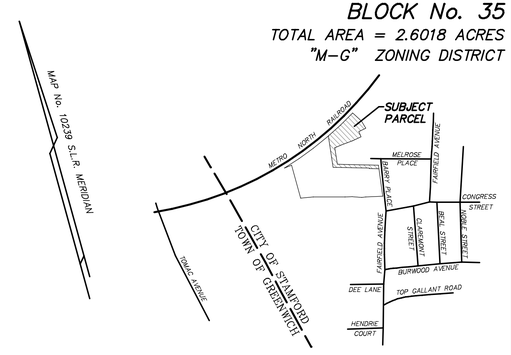
NOTES:

1. The purpose of this plan is only to highlight the Low Impact Developement portions of the project, as per City requirements. This plan shall not be used for any other portion of construction.
2. Elevations shown are based on the North American Vertical Datum of 1988 (NAVD 88).
3. Refer to Sheets C–3.1, C–3.2, C–4.1, and C–4.2 for a detailed depiction of the proposed site development and storm drainage improvements.
4. Refer to Sheet C–6.2 for soil boring data.

BLOCK No. 35

TOTAL AREA = 2.6018 ACRES

"M–G" ZONING DISTRICT



LOCATION MAP – 1"=800'±

DRAINAGE AREA 3A
TOTAL AREA = 32,196 S.F.
IMPERVIOUS AREA = 28,462 S.F.
COLLECTED AND PIPED
TO RETENTION SYSTEM #1 (RS–1)
1/2 WQV = 1,134.9 C.F.

PROPOSED "1/2 WQV"
RETENTION/INFILTRATION
SYSTEM #1 (RS–1)
(STRUCTURAL BMP)
24–4'x4'x4' PRECAST
CONCRETE GALLERIES
(STORAGE VOLUME = 1,362 C.F.)

APPROXIMATE
SOILS BOUNDARY
LIMIT

306

307

DRAINAGE AREA 3B
TOTAL AREA = 48,758 S.F.
IMPERVIOUS AREA = 39,329 S.F.
COLLECTED AND PIPED
TO RETENTION SYSTEM #2 (RS–2)
1/2 WQV = 1,576.5 C.F.

PROPOSED "1/2 WQV"
RETENTION/INFILTRATION
SYSTEM #2 (RS–2)
(STRUCTURAL BMP)
40–4'x4'x4' PRECAST
CONCRETE GALLERIES
(STORAGE VOLUME = 2,166 C.F.)

DRAINAGE AREA 3C
TOTAL AREA = 13,083 S.F.
IMPERVIOUS AREA = 10,801 S.F.
COLLECTED AND PIPED
TO RETENTION SYSTEM #3 (RS–3)
1/2 WQV = 432.3 C.F.

PROPOSED "1/2 WQV"
RETENTION/INFILTRATION
SYSTEM #3 (RS–3)
(STRUCTURAL BMP)
8–CULTEC 330XLHD UNITS
(STORAGE VOLUME = 686 C.F.)

PROPOSED
INDUSTRIAL
BUILDING
35,000 S.F.±
F.F. EL.=52.5±

BENCHMARK:
"U" CUT CURB
ELEV= 50.75
DATUM: NAVD 88

"M–G" DISTRICT
"R–6" DISTRICT
MELROSE AVENUE
BARRY PLACE

HYDROLOGIC SOIL GROUP SUMMARY

MAP UNIT SYMBOL	MAP UNIT NAME	HYDROLOGIC SOIL GROUP (HSG)
306	UDORTHENTS–URBAN LAND COMPLEX	B
307	URBAN LAND	D

SOIL INFORMATION TAKEN FROM THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS).

TOTAL SITE AREA	113,335 SQ.FT.
DISTURBED AREA	111,935 SQ.FT.
PRE–DEVELOPMENT IMPERVIOUS AREA	91,662 SQ.FT.
POST–DEVELOPMENT IMPERVIOUS AREA	92,234 SQ. FT.
REQUIRED 1/2 WQV	3,694.9 CUBIC FEET
PROVIDED RET. VOL.	4,214 CUBIC FEET

CONTOUR INTERVAL = ONE FOOT

1 INCH = 30 FEET

SCALE

30 0 30

IN FEET

REV.	DATE	DESCRIPTION
0	12–15–22	ZONING SUBMISSION

DEREK E. DAUNAIS, CT PE No. 22861

12–15–22

ENGINEER

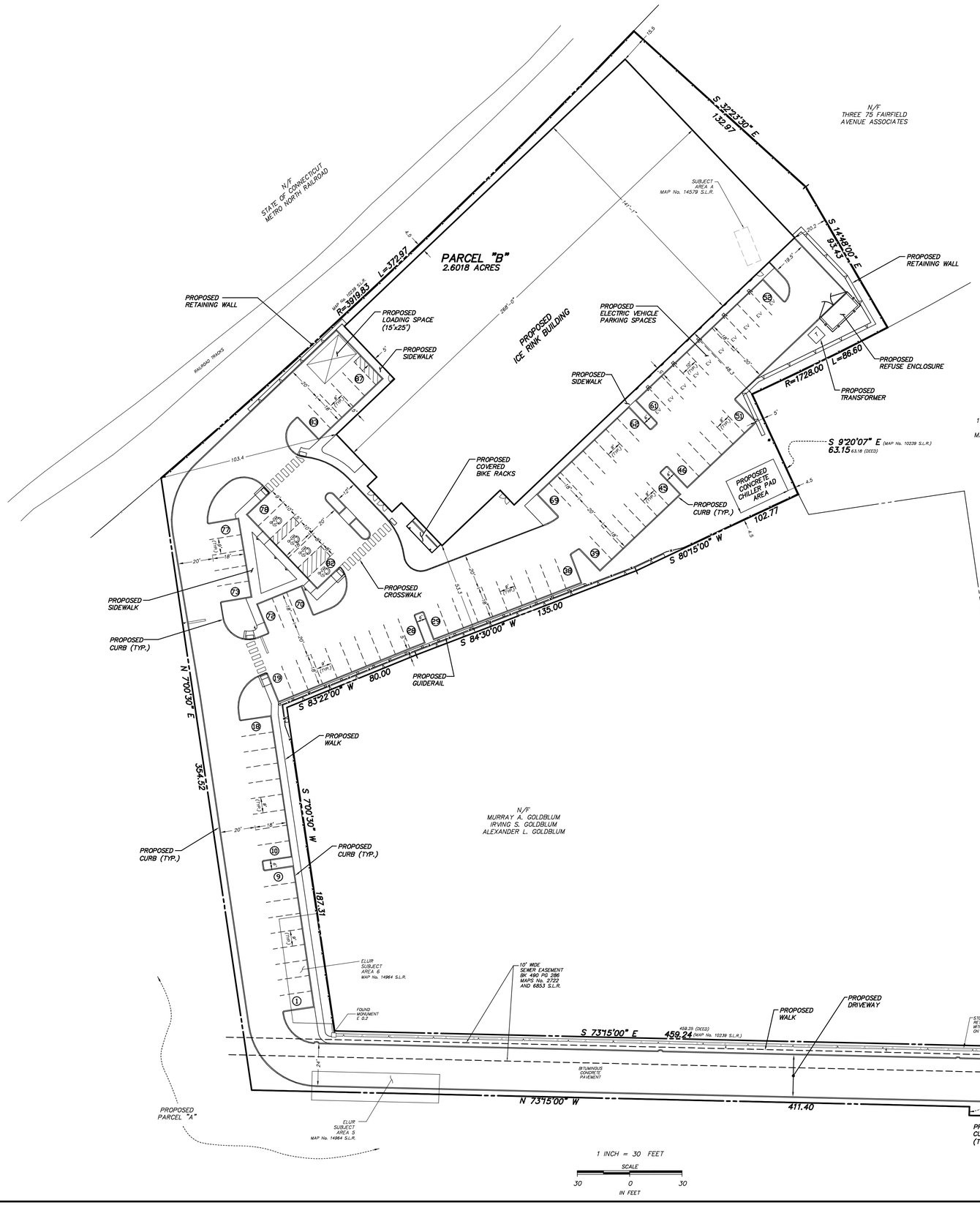
ONLY COPIES OF THIS MAP, BEARING AN ORIGINAL IMPRINT OF THE ENGINEER'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

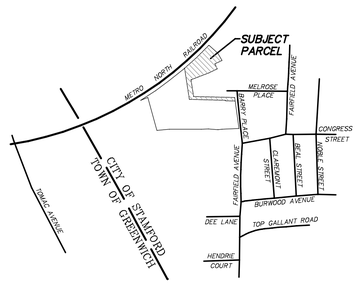
D'ANDREA SURVEYING & ENGINEERING, P.C.
• LAND PLANNERS
• ENGINEERS
• SURVEYORS
P.O. BOX 549, RIVERSIDE, CT 06878
6 NEIL LANE, TEL. 637–1779

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
C–7.0	LOW IMPACT DEVELOPMENT PLAN

BARFIELD_22HQ_LID_00_ReviD.DWG (XREF)
22HQ

BLOCK No. 35





LOCATION MAP – 1"=800'±

PROPOSED PARCEL "B"
BUILDING COVERAGE

LOT AREA = 2.6018 ACRES
OR 113,335 S.F.

BUILDING = 35,665 S.F.

PERCENT COVERAGE = 31.5%

PARKING SUMMARY (PROVIDED)

REGULAR	= 73 SPACES
ELEC. VEHICLE	= 10 SPACES
HANDICAPPED	= 4 SPACES
TOTAL	= 87 SPACES

REFER TO A MAP ENTITLED "PRELIMINARY SUBDIVISION MAP OF PROPERTY AT 23 & 50 BARRY PLACE IN STAMFORD, CONNECTICUT PREPARED FOR CONTINENTAL FAMILY HOLDINGS, LLC," DATED DECEMBER 15, 2022, PREPARED BY D'ANDREA SURVEYING & ENGINEERING, P.C.

THIS MAP IS A ZONING LOCATION SURVEY. BOUNDARY INFORMATION BASED UPON A RESURVEY, AND NEW BOUNDARIES BASED UPON AN ORIGINAL SURVEY, AND HAS BEEN PREPARED IN ACCORDANCE WITH HORIZONTAL ACCURACY CLASS A-2 OF CONNECTICUT STATE REGULATIONS SEC. 20-300b-1 THROUGH 20-300b-20.

NEW MONUMENTATION HAS NOT BEEN SET AS A RESULT OF THIS SURVEY.

ONLY COPIES OF THIS MAP, BEARING AN ORIGINAL IMPRINT OF THE SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE TRUE, VALID COPIES.

AREA = 2.6018 ACRES

REFER TO VOLUME 10922 PAGE 224 AND
MAPS No. 10239 AND 14579 S.L.R.

LAND LIES IN "M-G" ZONING DISTRICT

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED.

D'ANDREA SURVEYING & ENGINEERING, P.C.

_____, SURVEYOR
ROBERT L. LIDDEL JR., CT LS No. 15775
RIVERSIDE, CONNECTICUT DECEMBER 15, 2022

1 INCH = 30 FEET

SCALE
30 0 30
IN FEET

ZONING LOCATION SURVEY
OF PROPERTY AT
50 BARRY PLACE
IN
STAMFORD, CONNECTICUT
PREPARED FOR
WINGS REAL ESTATE HOLDINGS, LLC

BARFIELD_23HQ_ZLS_0.DWG (DED)

22HQ

BLOCK No. 35

TOTAL AREA = 2.6018 ACRES

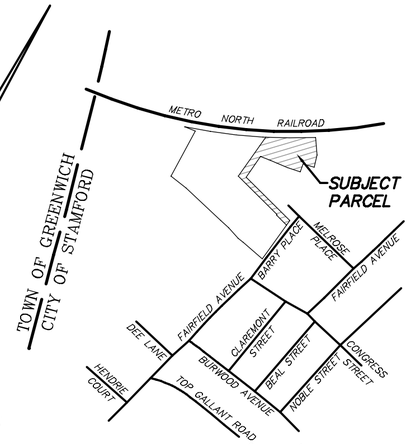
"M-G" ZONING DISTRICT (EXISTING)

N/F
STATE OF CONNECTICUT
METRO NORTH RAILROAD

MAP No. 10239 S.L.R. MERIDIAN

TOWN OF GREENWICH
CITY OF STAMFORD

THREE ; AVENUE



LOCATION MAP – 1"=800'±

PROPOSED
ICE RINK BUILDING

F.F. EL.=52.5±

BUILDING

L.O.
SUBJECT AREA A
MAP No. 14964 S.L.R.

N/F
1 BARRY PLACE LLC

GRADE PLANE ANALYSIS

6 Ft Envelope
O/S Line

Segment	Length (ft) (L)	Average Grade (ft) (Z)	Length x Grade (L) x (Z)
A	19.7	71.0	1398.7
B	15.3	69.5	1063.4
C	109.2	68.1	7436.5
D	208.2	52.4	10909.7
E	20.9	52.5	1097.3
F	10.9	52.5	572.3
G	45.2	52.5	2373.0
H	33.2	52.5	1743.0
I	38.9	52.3	2034.5
J	30.7	52.2	1602.5
K	47.7	52.2	2489.9
L	43.3	52.3	2264.6
M	155.4	61.7	9588.2
N	68.1	71.0	4835.1
Total	846.7		49408.6

Average Grade: ====> $\sum (L*Z) / \sum L$	58.4
First Floor Elevation: ====>	52.5
Differential: ====>	-5.9

LEGEND

———30———	EXISTING CONTOUR
- - - -30- - - -	EXISTING OFF-SITE CONTOUR (TAKEN FROM CITY GIS)
× 30.0	EXISTING SPOT ELEVATION
× T=30.0 B=29.5	EXISTING TOP/BOTTOM SPOT ELEVATION
30	PROPOSED CONTOUR
× 30.0	PROPOSED SPOT ELEVATION

NOTES:

1. The purpose of this plan is only for the calculation of the average grade for the proposed building. It shall not be used for any other aspect of construction.
2. Proposed grades were taken from the Site Grading Plan, Sheet C-3.1 of the Civil plan set.
3. Elevations shown are based on the North American Vertical Datum of 1988 (NAVD 88.)

CONTOUR INTERVAL = ONE FOOT

1 INCH = 20 FEET

SCALE
20 0 20
IN FEET

REV.	DATE	DESCRIPTION
0	12-15-22	ZONING SUBMISSION

DEREK E. DAUNAIS CT. PE No. 22861

ENGINEER 12-15-22

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• LAND PLANNERS
• ENGINEERS
• SURVEYORS
P.O. BOX 549
RIVERSIDE, CT 06878
6 NEIL LANE
TEL. 637-1779

PROJECT	WINGS ARENA
PREPARED FOR	WINGS REAL ESTATE HOLDINGS, LLC
LOCATION	50 BARRY PLACE STAMFORD, CONNECTICUT
1 OF 1	PROPOSED GRADE PLANE PLAN

BARFIELD_22HQ_AG_01_Rev0.DWG (DED)

22HQ

50 BARRY PLACE

WINGS ARENA
50 BARRY PLACE
STAMFORD, CT 06902

ZONING SUBMISSION
12/15/2022

DRAWING LIST

NO.	NAME
G1.0	COVER
A1.0	PROPOSED GROUND FLOOR PLAN
A1.1	PROPOSED SECOND FLOOR & ROOF PLAN
A2.0	PROPOSED ELEVATIONS
A3.0	3D VIEWS

ROGERS McCAGG

ARCHITECTS | PLANNERS
INTERIOR DESIGNERS
44 North Main Street, South Norwalk CT 06854
T 203 354 5200 F 203 354 5201
www.rm-arch.com

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LOCATION PLAN

50 BARRY PLACE

WINGS ARENA

50 BARRY PLACE
STAMFORD, CT 06902

ISSUE & REVISIONS

No.	DATE	DESCRIPTION
1	12/15/2022	ZONING SUBMISSION

STATE OF CONNECTICUT · CHRISTOPHER M. MCCAGG · REG. NO. 13335 · LICENSED ARCHITECT

NOT FOR CONSTRUCTION

SCALE	DATE
	12/15/2022

SHEET TITLE
COVER

PROJECT No.	SHEET No.
WRG01.00	G1.0

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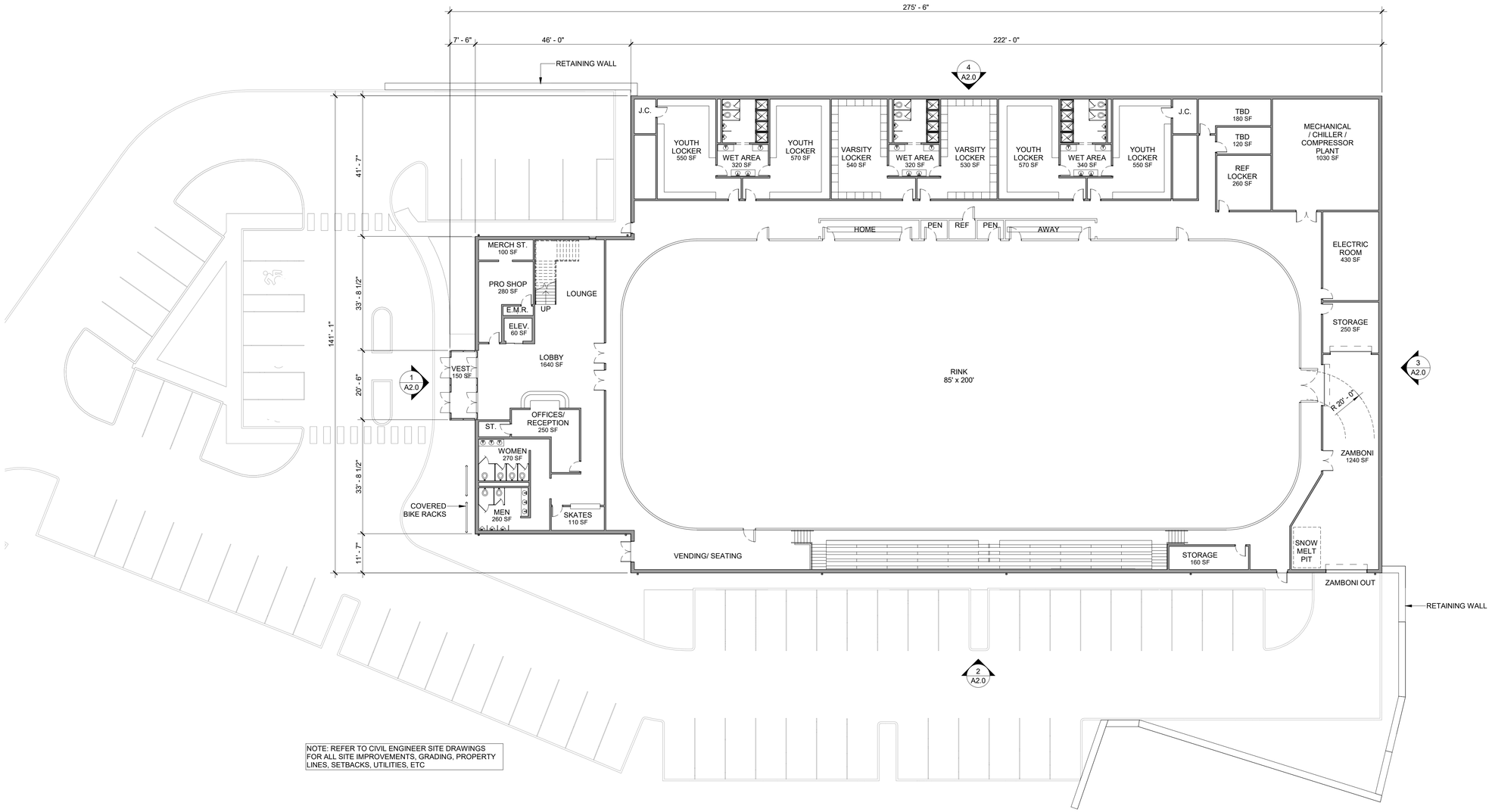

1 GROUND FLOOR PLAN
1/16" = 1'-0"

12/9/2022 3:45:24 PM

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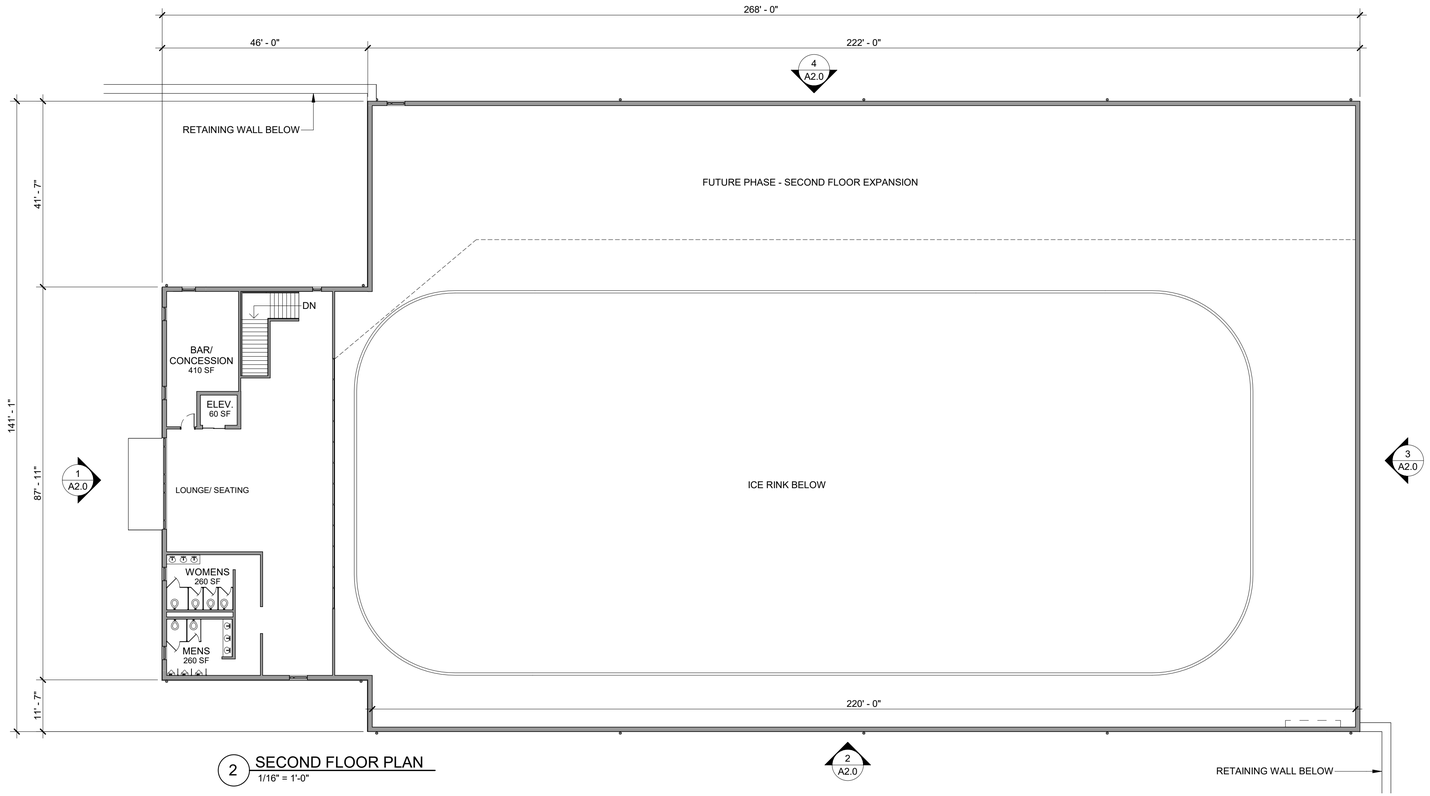
SCALE	DATE
1/16" = 1'-0"	12/15/2022

SHEET TITLE
PROPOSED GROUND FLOOR PLAN

PROJECT No.	SHEET No.
WRG01.00	A1.0



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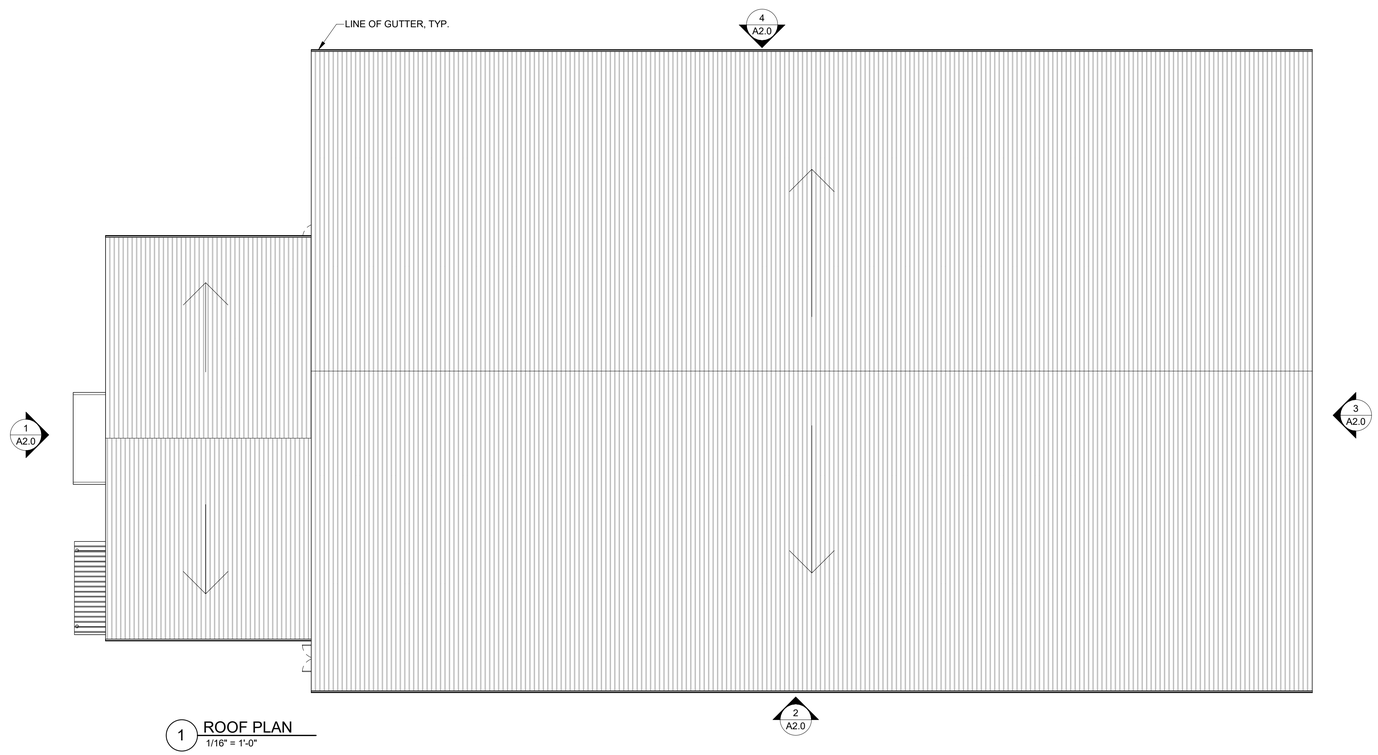

1 ROOF PLAN
1/16" = 1'-0"

NORTH

0 8 16

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LOCATION PLAN

50 BARRY PLACE

WINGS ARENA

50 BARRY PLACE
STAMFORD, CT 06902

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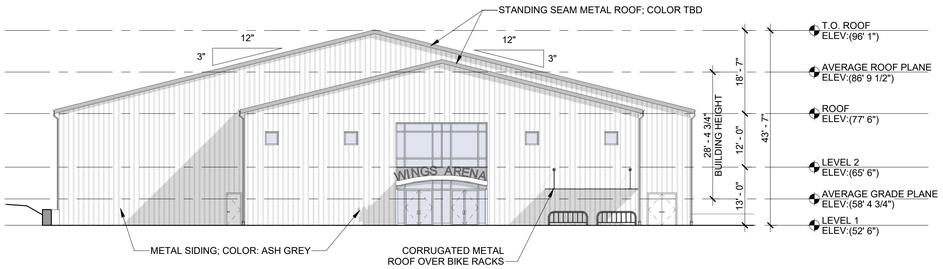
LICENSED ARCHITECT

SCALE	DATE
1/16" = 1'-0"	12/15/2022

SHEET TITLE
PROPOSED SECOND
FLOOR & ROOF PLAN

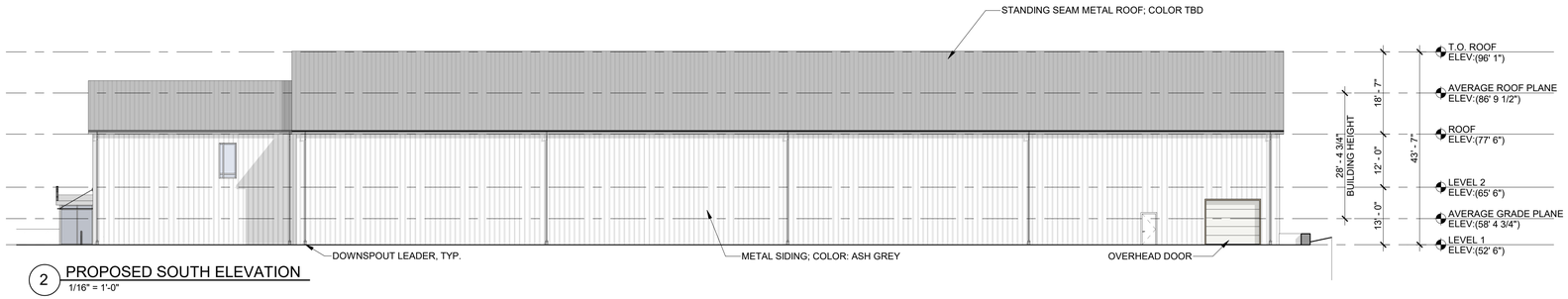
PROJECT No.	SHEET No.
WRG01.00	A1.1



1 PROPOSED WEST ELEVATION
1/16" = 1'-0"

TOTAL SIGNAGE AREA
42 SQ. FT.

5 PROPOSED SIGNAGE
1/8" = 1'-0"



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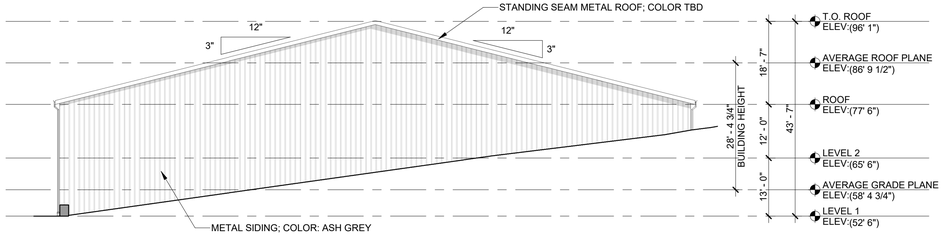

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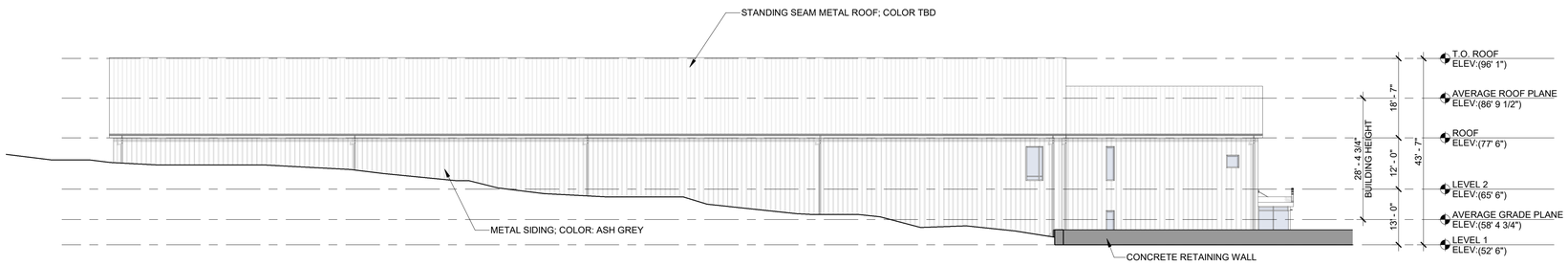

4 PROPOSED NORTH ELEVATION
1/16" = 1'-0"

0 8 16

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LOCATION PLAN

50 BARRY PLACE

WINGS ARENA

50 BARRY PLACE
STAMFORD, CT 06902

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NO. 13335
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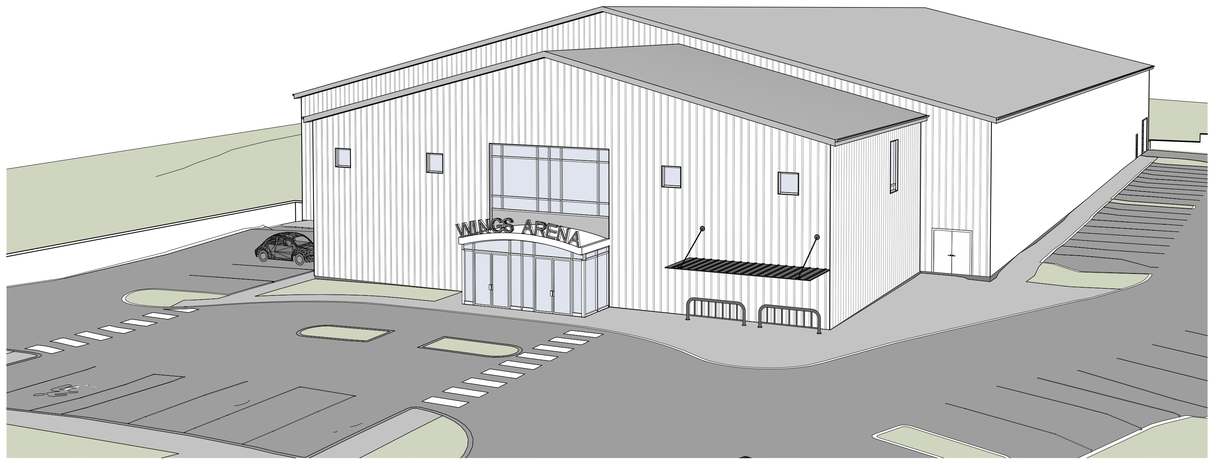
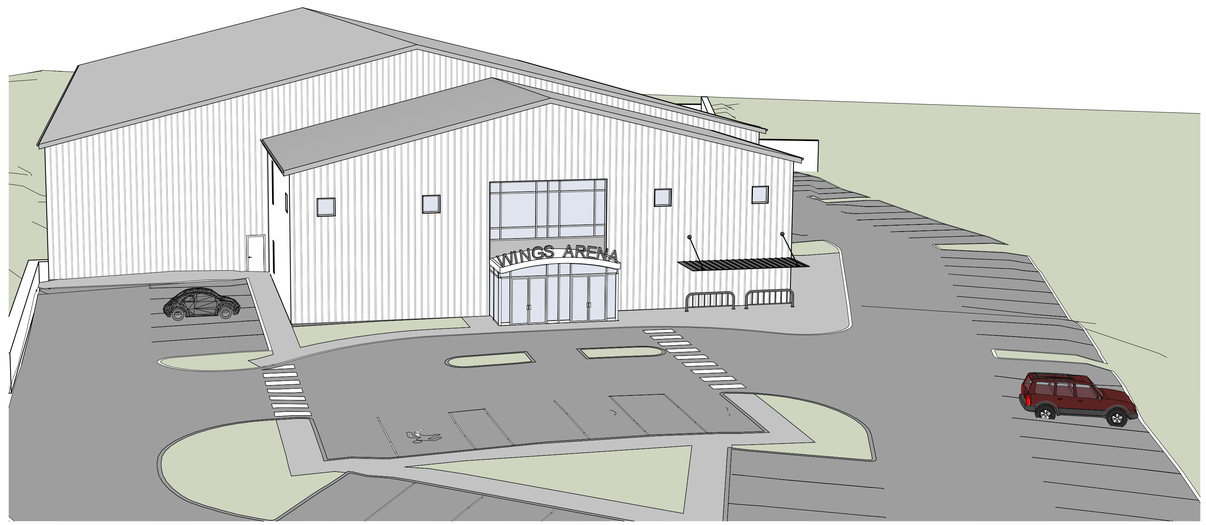
SCALE	DATE
As indicated	12/15/2022

SHEET TITLE
PROPOSED ELEVATIONS

PROJECT No.	SHEET No.
WRG01.00	A2.0



1 SOUTHWEST VIEW



2 NORTHWEST VIEW

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LOCATION PLAN

50 BARRY PLACE

WINGS ARENA

50 BARRY PLACE
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SCALE	DATE
	12/15/2022

SHEET TITLE
3D VIEWS

PROJECT No.	SHEET No.
WRG01.00	A3.0

ENGINEERING SUMMARY REPORT

FOR
"WINGS ARENA"

LOCATED AT
50 BARRY PLACE
STAMFORD, CONNECTICUT

PREPARED FOR
WINGS REAL ESTATE HOLDINGS, LLC

December 15, 2022

Derek E. Daunais, PE
CT License No. 22861

21VP_DSR_1

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D'Andrea Surveying & Engineering, PC

Applicant / Site Information:

Applicant: **Wings Real Estate Holdings, LLC**
Benoit Morin
PO Box 145, Riverside, CT 06878
(410) 749-4946
benoitrmorin@gmail.com

Engineer: **D'Andrea Surveying & Engineering, PC**
Derek E. Daunais, PE
6 Neil Lane Riverside, CT 06878
(203) 637-1779
derek@rvdi.com

Site Information:

50 Barry Place
Block 35, Tax Account #003-1399
Existing / Proposed Zone: M-G Zoning District
Existing / Proposed Use: Commercial

Table of Contents

Introduction	**1**
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Proposed Conditions	**2**
Narrative of Impacts to State Drainage Facilities	**3**
Conclusion	**4**
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Proposed Conditions – Watershed Map	**Exhibit B**
NRCS Soil Map & Hydrologic Soil Group Rating	**Exhibit C**
FIRM Map	**Exhibit D**
Site Vicinity Map	**Exhibit E**
USGS Topographic Quad Map	**Exhibit F**
Rainfall Depths and Intensity	**Exhibit G**
Stormwater Calculations	**Appendix A**
HydroCAD Summary Table – Existing & Proposed Conditions	**Appendix B**
HydroCAD Analysis – Existing Conditions	**Appendix C**
HydroCAD Analysis – Proposed Conditions	**Appendix D**
DCIA Worksheet	**Appendix E**

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Introduction:

The applicant for the proposed arena development project, to be located at 50 Barry Place in Stamford, Connecticut, is proposing improvements to the subject property, proposed Parcel "B". The purpose of this report is to summarize the stormwater treatment improvements for the site as part of the proposed commercial redevelopment for Parcel "B". Proposed Parcel "B" is part of a proposed two-lot subdivision of an existing larger, 11.7733-acre, property that consists of 23 & 50 Barry Place. This property is located along the western side of Barry Place, just south of the intersection with Melrose Avenue. Parcel "B" will be bordered by proposed Parcel "A" to the south and west, Metro-North railroad to the north and commercial properties to the east. Parcel "B" is located in the M-G zoning district and will have a total area of 2.6018 acres. The parcel is located outside all Flood Hazard Areas (refer to Exhibit D).

The proposed improvements will include the removal of all existing buildings, site features, and pavement on Parcel "B" and the construction of a new commercial arena building. Also included as part of the development would be attendant improvements such as the construction of new bituminous concrete driveways and parking lot areas with curbing, retaining walls, sidewalks, installation of a stormwater collection, retention and conveyance system, installation of various underground utilities, and the implementation of a planting plan. The existing driveway entrance to the site is proposed to remain and to be repaved. Refer to the Site Plan Review Set, prepared by D'Andrea Surveying & Engineering, P.C. for a depiction of existing conditions and the proposed site improvements.

The proposed development of Parcel "B" will slightly increase the total amount of impervious coverage from 91,662 square feet (S.F.) (or 80.9%) to 92,234 S.F. (or 81.4%), which is an increase of approximately 572 S.F. or (0.6%), as compared to existing conditions. A proposed storm drainage system, including catch basins with deep sumps and traps, cyclonic hydrodynamic oil/grit removal treatment systems, and subsurface retention/infiltration systems, will be installed to treat Water Quality Flow (WQF), infiltrate a minimum of the half Water Quality Flow (WQF), and reduce both peak flow discharge rates and runoff volume to off-site areas, as compared to existing conditions. There are currently no stormwater retention or infiltration treatment measures on the site. Drainage patterns and discharge points will be similar as under existing conditions.

The on-site watershed drainage basins for existing and proposed conditions were modeled using HydroCAD 10.0 developed by HydroCAD Software Solutions LLC. The software was used to generate peak stormwater runoff flow rates for the 1-year to 100-year storm events, using the National Resources Conservation Services (NRCS) method.

Existing Conditions:

Currently, proposed Parcel "B" supports a commercial building, an accessory pump house building, and bituminous concrete access driveway and large parking lot areas. There is a small lawn/vegetated brush area to the southeast of the existing building. Stormwater runoff from the majority of the site (Drainage Area DA-1) is collected by an on-site storm drainage system and routed through a recently upgraded storm drainage system, Point of Concern (POC) "A", that runs

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through proposed Parcel "A". This storm drainage system is used to convey and discharge stormwater runoff into a riprap plunge pool at the western border of Parcel "A" toward the Innis Arden Golf Club property. The outflow from the riprap plunge pool then flows into an off-site stream channel that directs the runoff into a nearby irrigation pond located on the Innis Arden Golf Club property. There is also a small portion of the site (Drainage Area DA-2) that discharges stormwater runoff onto the adjacent commercial property, POC "B". Refer to Exhibit "A" for a depiction of existing conditions stormwater runoff flow patterns and watershed areas.

The existing, recently upgraded, storm drainage system that runs through Parcel "A" contains an off-line hydrodynamic oil/grit separator stormwater treatment system. This system was sized to treat the stormwater runoff from the majority of the entire property prior to subdivision, including the portion of the property that contains all of proposed Parcel "B". Refer to a previously submitted report entitled "Drainage Summary Report for Storm Drainage Improvements Located at 23-50 Barry Place, Stamford, Connecticut," prepared for Barry Place Ventures, LLC, revised May 5, 2016, as prepared by D'Andrea Surveying & Engineering, P.C.

Proposed Conditions:

Under proposed conditions, drainage patterns and discharge points will be similar as under existing conditions for Parcel "B". However, storm drainage treatment and retention facilities have been proposed to help control and treat stormwater runoff before it is discharged off-site. The proposed drainage analysis includes the division of Parcel "B" into five different sub-watershed area discharging to two points of concern. Refer to Exhibit "B" for a depiction of proposed conditions stormwater runoff flow patterns and watershed areas.

DA-1 will consist of the majority of the entry driveway along the southern portion of Parcel "B". The majority of this area will consist of a paved driveway surface, similar as under existing conditions. Stormwater runoff from this area will be collected by deep sump catch basins and discharged into the existing storm drainage system (POC A) that runs through this area. The collected stormwater runoff will be routed through the existing hydrodynamic oil/grit separator stormwater treatment system located on proposed Parcel "A" prior to discharging off-site toward the Innis Arden Gold Club property.

DA-2 will consist of a very small lawn/planted area in a corner of the property to the south of the proposed arena building. Stormwater runoff from this area will flow overland toward the adjoining commercial property (POC B) in a similar manner as under existing conditions.

The remainder of the site, including the proposed arena building, all of the proposed parking areas, and the majority of the proposed driveway has been divided into three sub-watershed area, DA-3A, DA-3B, and DA-3C. The stormwater runoff from these three drainage areas will first be collected by the proposed storm drainage system, including deep sump catch basins in the parking lot areas. The collected runoff will then be routed through new hydrodynamic oil/grit separator stormwater treatment systems and discharged into a subsurface retention/infiltration system. These retention/infiltration systems have been designed to retain a minimum of the half water quality volume from their contributing watershed areas. Refer to Appendix "A" for half water quality volume calculations and retention system stage-storage data.

The overflow from these systems will be routed into the existing on-site storm drainage system (POC A) that runs through Parcel "A" and discharges toward the Innis Arden Golf Club.

The proposed cyclonic hydrodynamic oil/grit removal treatment systems will be designed to treat a minimum of the water quality flow rate from their contributing watershed areas.

The bottoms of the proposed subsurface retention/infiltration systems have been designed to be set a minimum of 1-foot above any underlying restrictive layer in accordance with the City of Stamford Drainage Manual standards. The Soil Survey of Fairfield County, Connecticut, as developed by the United States Department of Agriculture (USDA) and the Soil Conservation Service (SCS) classifies the majority of the on-site soil group as Urban Land with a hydrologic soil group rating of D. Refer to Exhibit "C" for the NRCS soil delineation map and hydrologic soil group rating. However, on-site test borings were performed, which have characterized the soils in the areas of the proposed retention/infiltration systems as predominately sand and silt with some gravel, which generally have good infiltration characteristics. The boring logs have also determined the depth to bedrock and found no groundwater in the area within the test boring limits. Additional deep test pits and hydraulic conductivity tests will be performed in the areas of the proposed retention systems prior to installation to verify the infiltration rates of the existing soils and if any seasonal high-groundwater (or mottling) is evident. The results of this additional testing will be submitted to the City for review.

Based on the HydroCAD model, both the volume and peak rate of stormwater runoff exiting the site will be decreased for all storm events to POC A and B. Refer to Appendix "B" for a summary and comparison of the peak flow and volume discharge from the subject property for both existing and proposed conditions. In addition to reducing the peak flows, infiltrating half the Water Quality Volume from the proposed improvements will help pretreat stormwater runoff from the proposed asphalt parking lot and building roof prior to discharging downstream.

During the construction phase of the project, pretreatment of stormwater runoff will be provided by the use of temporary soil and erosion controls as outlined on the "Sedimentation and Erosion Control Plan," prepared by D'Andrea Surveying & Engineering, P.C. This includes the stockpiling of excess materials for control of sediment and periodic on-site inspections to ensure that the development of the site remains "tight" and stable throughout the construction phase.

Narrative of Impacts to State Drainage Facilities

The Metro-North railroad right-of-way lies adjacent to the northern property line of the proposed development. There are no proposed direct stormwater runoff connections from the proposed development to the railroad right-of-way from any of the proposed building or driveway improvements.

Under existing conditions, none of the stormwater runoff from the property flows toward or is discharged onto the railroad right-of-way. Under proposed conditions, there will continue to be no proposed stormwater runoff from any portion of the property that flows toward or is discharged onto the railroad right-of-way. Instead, surface runoff from the property flows in a

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southwesterly direction away from the railroad right-of-way. Therefore, there will be no adverse impacts to any existing storm drainage systems that may lie within the railroad right-of-way, as a result of the proposed development.

There are no existing drainage rights or easements recorded between the subject property and the contiguous State property.

Conclusion

The proposed improvements have been designed to provide water quality treatment measures that will both mitigate stormwater runoff from the site and reduce runoff volumes and peak flow rates, as compared to existing conditions.

Based on the above information, the proposed improvements are designed in accordance with the City of Stamford Stormwater Drainage Manual and will not adversely impact adjacent or downstream properties or City-owned drainage facilities

Exhibits "A" & "B"

Watershed Maps
Existing & Proposed Conditions

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D'Andrea Surveying & Engineering, PC

BARFIELD_22HQ_DSR_EXHIBIT-A_0.DWG (AGR)

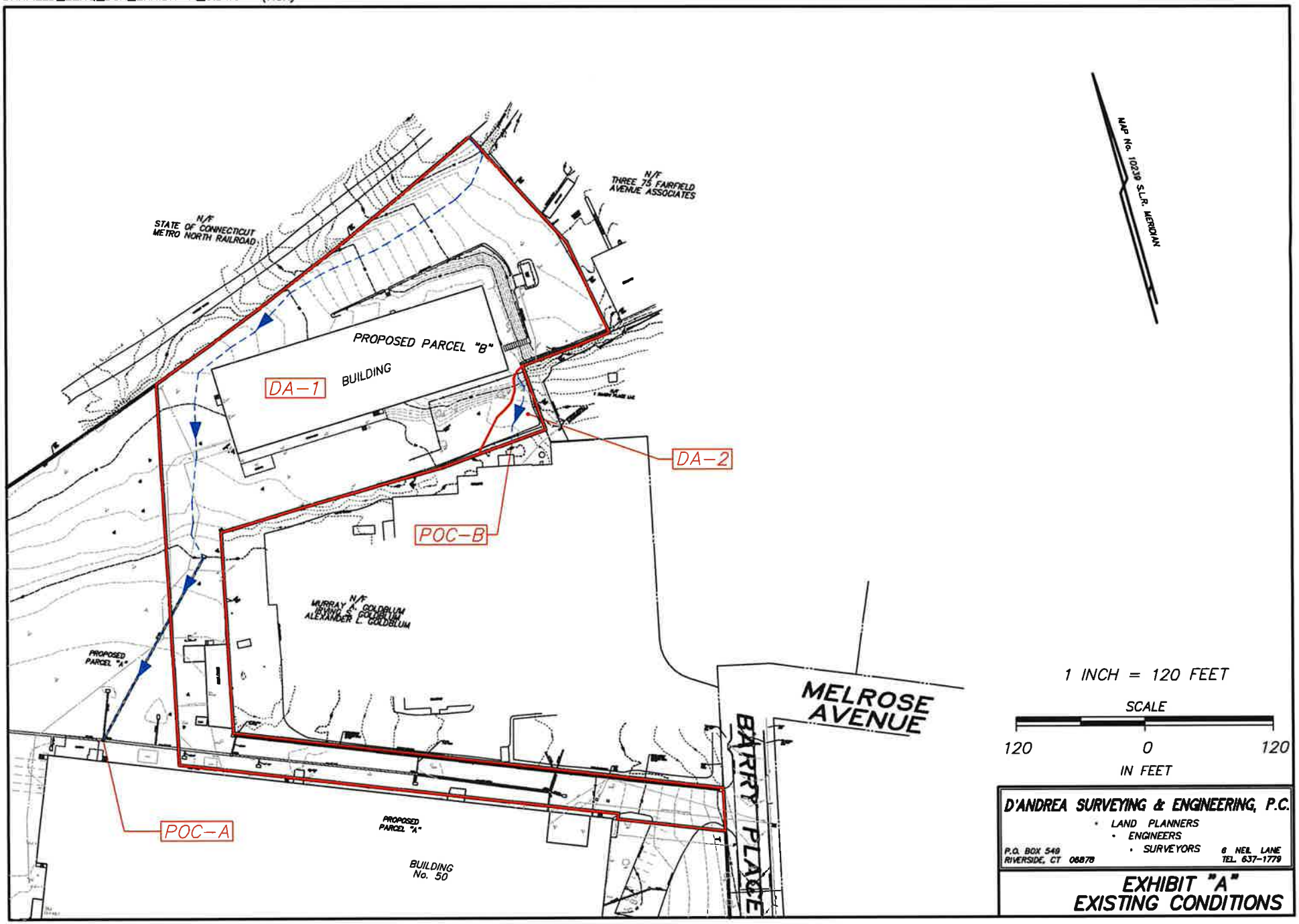

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EXHIBIT "A"
EXISTING CONDITIONS

BARFIELD_22HQ_DSR_EXHIBIT-B_0.DWG (AGR)

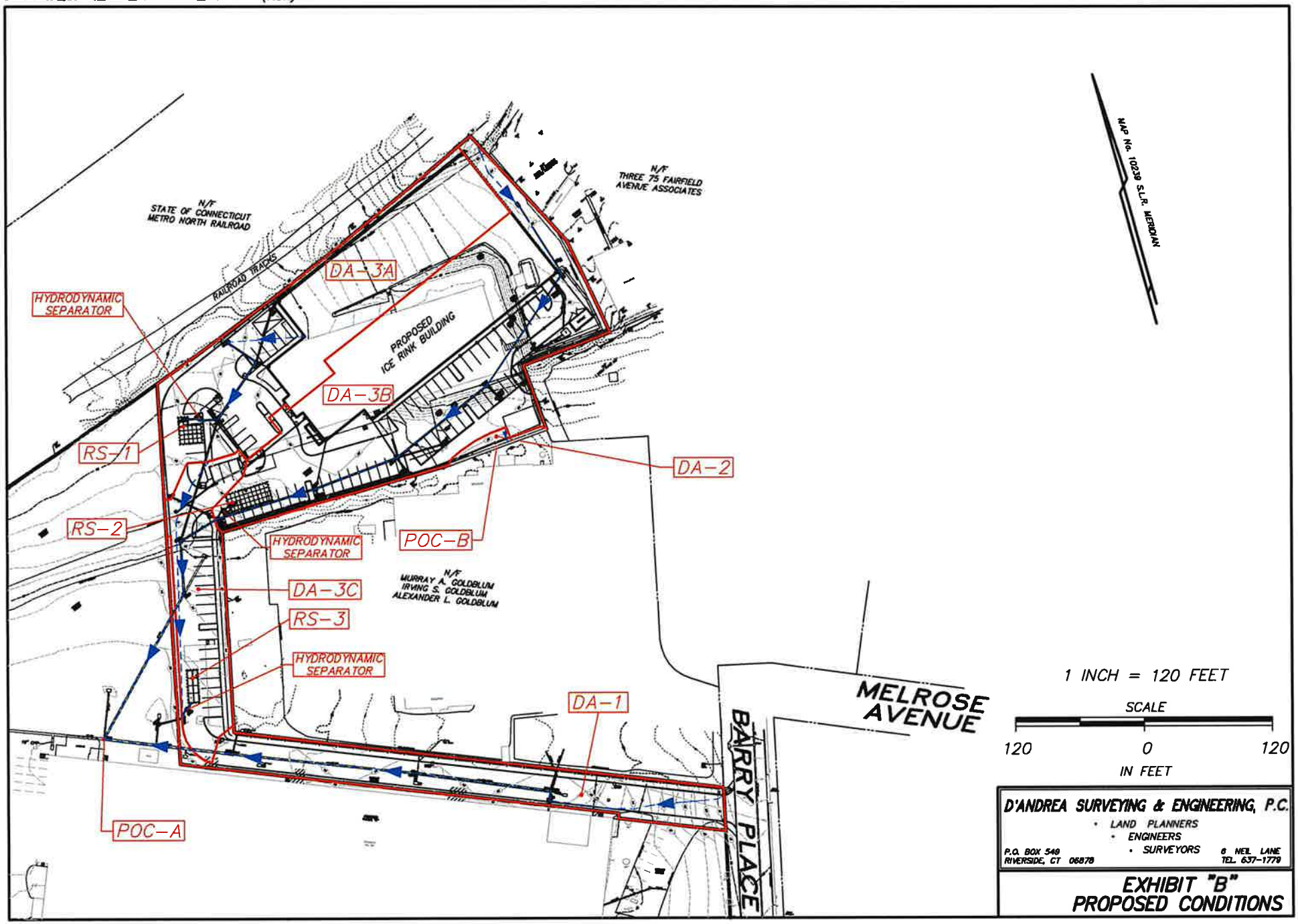

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EXHIBIT "B"
PROPOSED CONDITIONS

Exhibit "C"

NRCS Soil Map &
Hydraulic Soil Group Rating

Hydrologic Soil Group—State of Connecticut
(23-50 Barry Place, Stamford, CT)

Map Scale: 1:2,540 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 22, Sep 12, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 4, 2020—Oct 31, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	B	0.6	4.9%
75C	Hollis-Chatfield-Rock outcrop complex, 3 to 15 percent slopes	D	1.4	11.1%
284B	Paxton-Urban land complex, 3 to 8 percent slopes	C	0.1	0.6%
306	Udorthents-Urban land complex	B	0.6	4.3%
307	Urban land	D	10.2	79.1%
Totals for Area of Interest			**12.9**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

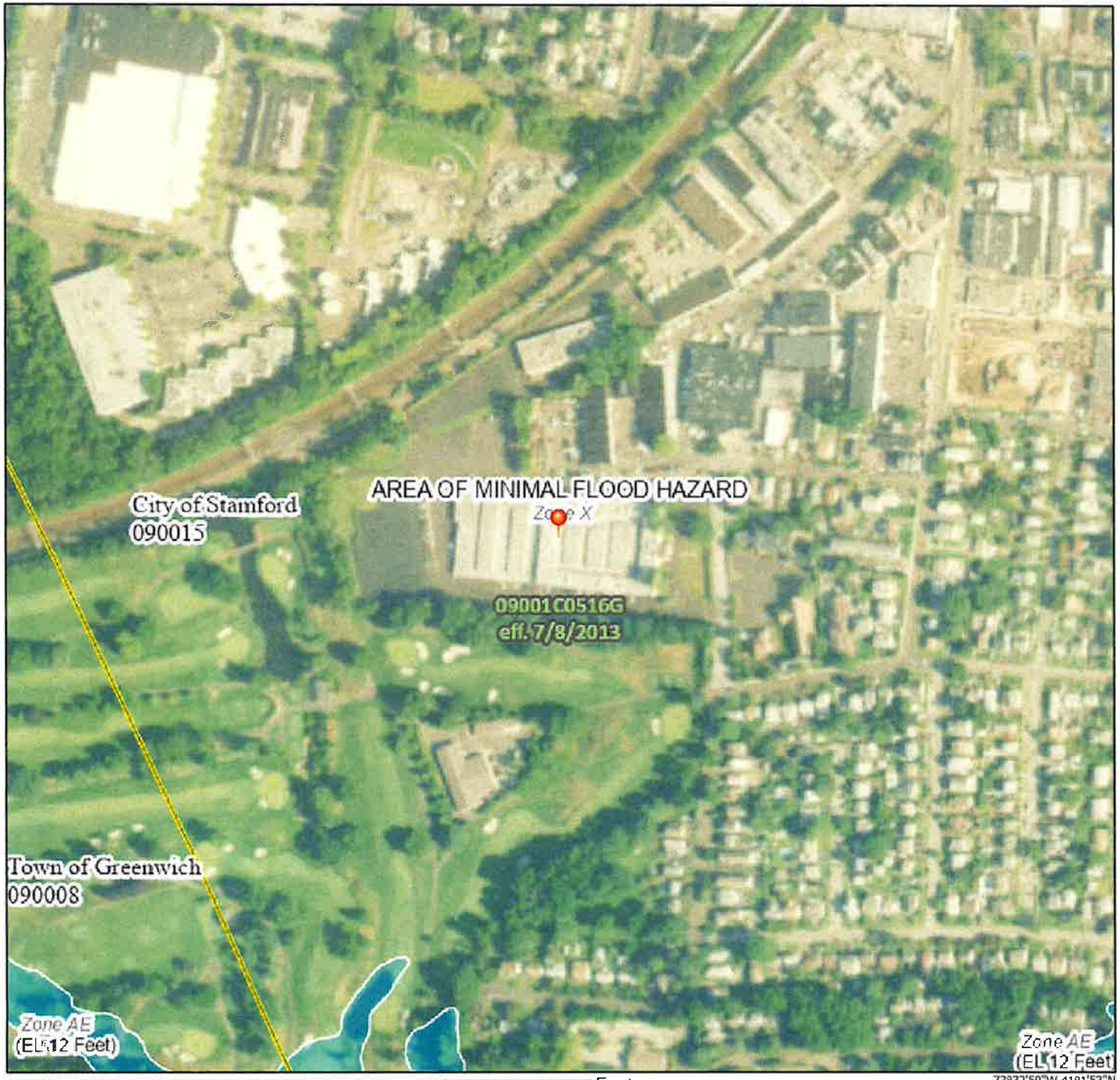
Exhibit "D"

FIRM Map

National Flood Hazard Layer FIRMette

FEMA

73°33'37"W 41°2'20"N



73°32'59"W 41°1'53"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

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, Area of 1% annual chance flood with average depth less than one foot or with drainag 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

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represe 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

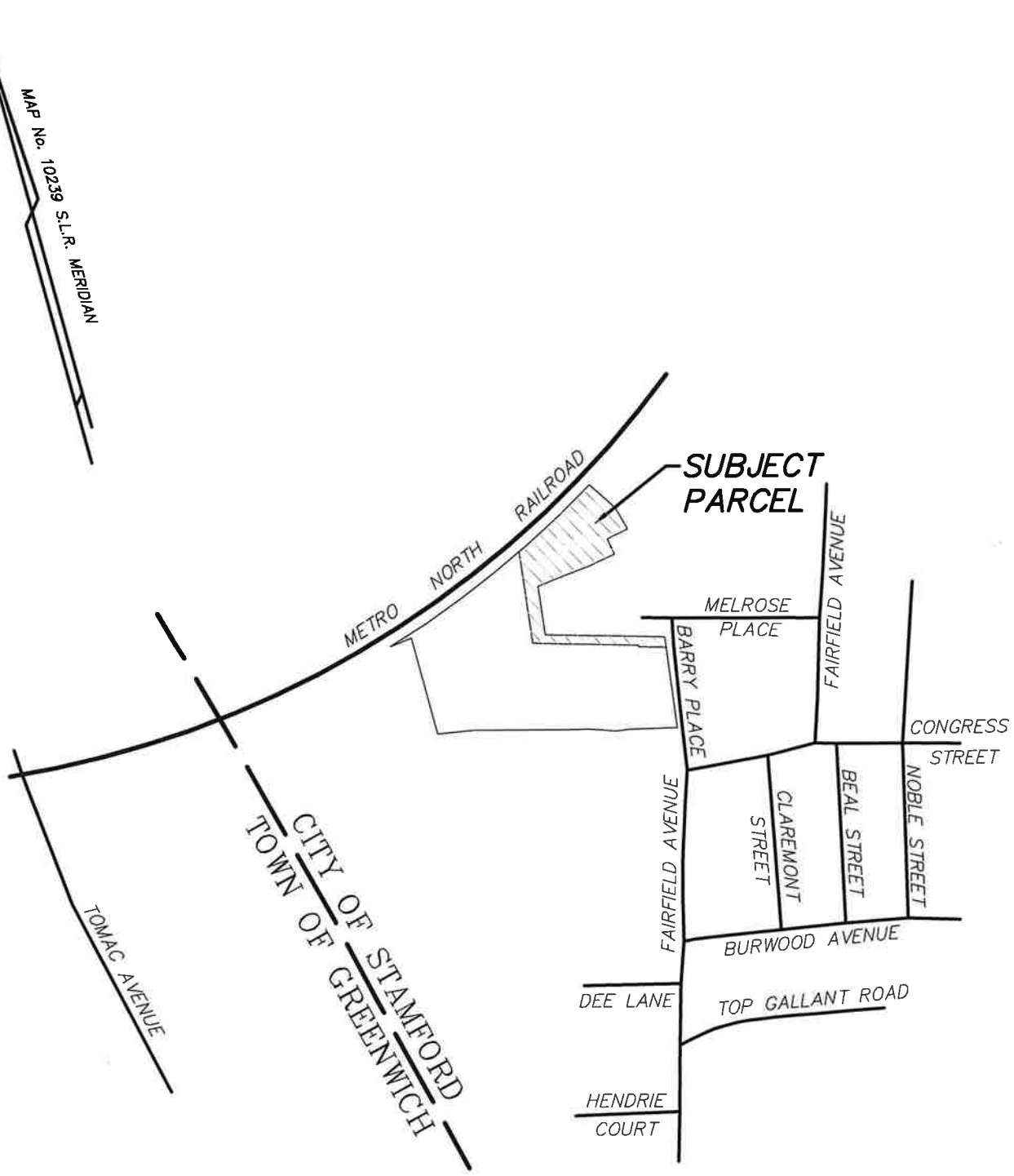
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/29/2022 at 5:09 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by 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.

Exhibit "E"

Site Vicinity Map

LAND PLANNERS • ENGINEERS • SURVEYORS
D'Andrea Surveying & Engineering, PC



LOCATION MAP – 1"=600'±

Exhibit "F"

USGS Topographic Quad Map

LAND PLANNERS • ENGINEERS • SURVEYORS
D'Andrea Surveying & Engineering, PC

50 Barry Place, Stamford - USGS Quad Map 113

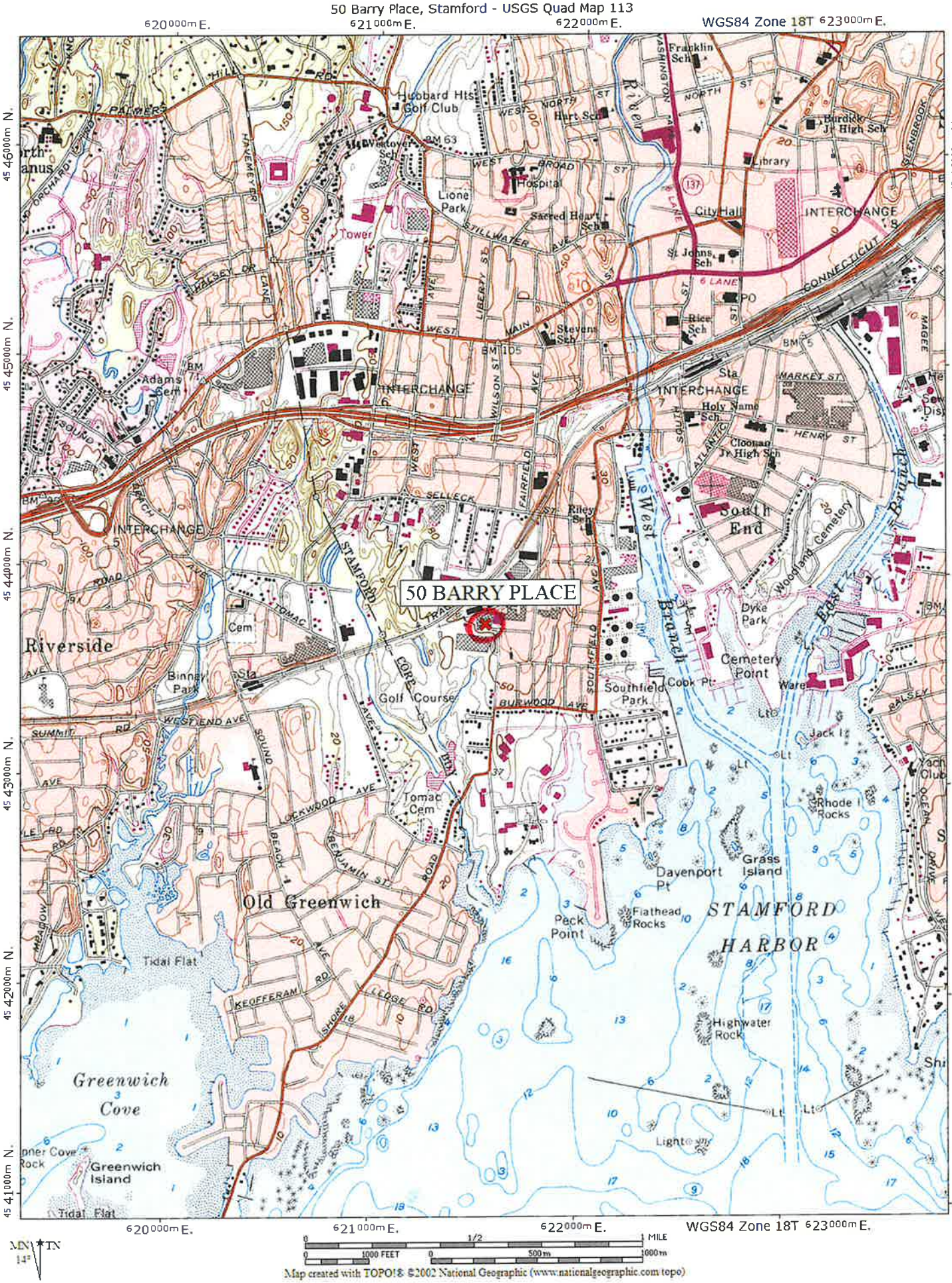


Exhibit "G"

Rainfall Depths and Intensity

LAND PLANNERS • ENGINEERS • SURVEYORS
D'Andrea Surveying & Engineering, PC

NOAA Atlas 14, Volume 10, Version 3
Location name: Stamford, Connecticut, USA*
Latitude: 41.0351°, Longitude: -73.555°
Elevation: 43.61 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.364 (0.280-0.466)	0.425 (0.326-0.545)	0.525 (0.401-0.674)	0.607 (0.462-0.783)	0.721 (0.532-0.961)	0.807 (0.584-1.10)	0.896 (0.630-1.25)	0.993 (0.666-1.41)	1.13 (0.731-1.65)	1.24 (0.783-1.84)
10-min	0.516 (0.396-0.661)	0.602 (0.462-0.772)	0.743 (0.568-0.955)	0.860 (0.654-1.11)	1.02 (0.754-1.36)	1.14 (0.828-1.55)	1.27 (0.893-1.77)	1.41 (0.944-2.00)	1.60 (1.03-2.34)	1.75 (1.11-2.61)
15-min	0.607 (0.466-0.777)	0.709 (0.544-0.908)	0.875 (0.670-1.12)	1.01 (0.770-1.31)	1.20 (0.887-1.60)	1.35 (0.973-1.82)	1.49 (1.05-2.08)	1.66 (1.11-2.36)	1.88 (1.22-2.76)	2.06 (1.31-3.07)
30-min	0.849 (0.652-1.09)	0.992 (0.761-1.27)	1.23 (0.937-1.57)	1.42 (1.08-1.83)	1.69 (1.24-2.25)	1.89 (1.37-2.56)	2.10 (1.47-2.92)	2.32 (1.56-3.30)	2.63 (1.70-3.84)	2.87 (1.81-4.27)
60-min	1.09 (0.838-1.40)	1.27 (0.978-1.63)	1.58 (1.21-2.02)	1.83 (1.39-2.36)	2.17 (1.60-2.89)	2.43 (1.76-3.29)	2.70 (1.89-3.75)	2.98 (2.00-4.24)	3.37 (2.18-4.93)	3.67 (2.32-5.46)
2-hr	1.42 (1.10-1.80)	1.67 (1.29-2.12)	2.08 (1.60-2.65)	2.42 (1.85-3.10)	2.88 (2.14-3.82)	3.24 (2.35-4.36)	3.60 (2.54-4.99)	4.00 (2.69-5.65)	4.55 (2.95-6.61)	4.98 (3.16-7.37)
3-hr	1.64 (1.27-2.07)	1.93 (1.50-2.45)	2.42 (1.87-3.07)	2.82 (2.16-3.60)	3.37 (2.51-4.45)	3.79 (2.76-5.09)	4.22 (2.99-5.84)	4.70 (3.17-6.62)	5.37 (3.49-7.78)	5.91 (3.76-8.70)
6-hr	2.06 (1.61-2.59)	2.44 (1.91-3.08)	3.08 (2.39-3.89)	3.60 (2.78-4.57)	4.33 (3.24-5.69)	4.87 (3.58-6.51)	5.44 (3.88-7.50)	6.08 (4.12-8.51)	7.00 (4.57-10.1)	7.75 (4.94-11.3)
12-hr	2.52 (1.98-3.16)	3.02 (2.37-3.78)	3.83 (2.99-4.80)	4.50 (3.49-5.67)	5.42 (4.09-7.09)	6.11 (4.52-8.14)	6.85 (4.92-9.40)	7.68 (5.23-10.7)	8.90 (5.83-12.7)	9.91 (6.35-14.4)
24-hr	2.94 (2.32-3.66)	3.56 (2.81-4.43)	4.58 (3.60-5.71)	5.42 (4.24-6.79)	6.58 (4.99-8.56)	7.44 (5.54-9.86)	8.36 (6.06-11.5)	9.45 (6.45-13.1)	11.1 (7.27-15.7)	12.4 (7.97-17.9)
2-day	3.29 (2.61-4.06)	4.05 (3.21-5.00)	5.28 (4.18-6.55)	6.31 (4.96-7.85)	7.72 (5.90-10.0)	8.77 (6.57-11.6)	9.90 (7.24-13.6)	11.3 (7.72-15.5)	13.3 (8.79-18.9)	15.1 (9.74-21.7)
3-day	3.56 (2.84-4.37)	4.38 (3.49-5.40)	5.74 (4.55-7.08)	6.86 (5.41-8.50)	8.40 (6.44-10.8)	9.54 (7.17-12.6)	10.8 (7.91-14.7)	12.3 (8.42-16.8)	14.6 (9.61-20.5)	16.5 (10.7-23.6)
4-day	3.81 (3.05-4.67)	4.68 (3.74-5.74)	6.10 (4.85-7.51)	7.28 (5.76-9.00)	8.90 (6.83-11.5)	10.1 (7.61-13.3)	11.4 (8.38-15.5)	13.0 (8.92-17.7)	15.4 (10.2-21.6)	17.4 (11.2-24.8)
7-day	4.54 (3.64-5.53)	5.48 (4.39-6.69)	7.01 (5.61-8.59)	8.29 (6.59-10.2)	10.0 (7.74-12.8)	11.4 (8.57-14.8)	12.8 (9.37-17.2)	14.4 (9.94-19.6)	16.9 (11.2-23.6)	19.0 (12.3-26.9)
10-day	5.25 (4.23-6.38)	6.23 (5.02-7.59)	7.85 (6.30-9.58)	9.19 (7.33-11.3)	11.0 (8.52-14.0)	12.4 (9.38-16.1)	13.9 (10.2-18.5)	15.6 (10.8-21.0)	18.1 (12.0-25.1)	20.1 (13.0-28.4)
20-day	7.39 (5.99-8.93)	8.50 (6.88-10.3)	10.3 (8.32-12.5)	11.8 (9.47-14.4)	13.9 (10.7-17.4)	15.4 (11.7-19.7)	17.1 (12.5-22.4)	18.8 (13.1-25.2)	21.2 (14.1-29.2)	23.1 (15.0-32.3)
30-day	9.17 (7.46-11.0)	10.4 (8.43-12.5)	12.3 (9.98-14.9)	13.9 (11.2-16.9)	16.2 (12.5-20.2)	17.9 (13.5-22.7)	19.6 (14.3-25.5)	21.4 (14.9-28.5)	23.7 (15.9-32.5)	25.5 (16.6-35.5)
45-day	11.4 (9.29-13.6)	12.7 (10.3-15.2)	14.8 (12.0-17.8)	16.5 (13.4-20.0)	19.0 (14.8-23.5)	20.9 (15.8-26.2)	22.7 (16.6-29.2)	24.5 (17.2-32.5)	26.8 (18.0-36.6)	28.5 (18.6-39.6)
60-day	13.2 (10.8-15.8)	14.6 (11.9-17.4)	16.8 (13.7-20.2)	18.7 (15.2-22.5)	21.3 (16.6-26.3)	23.3 (17.7-29.2)	25.3 (18.5-32.4)	27.1 (19.0-35.9)	29.4 (19.8-40.0)	31.0 (20.3-43.0)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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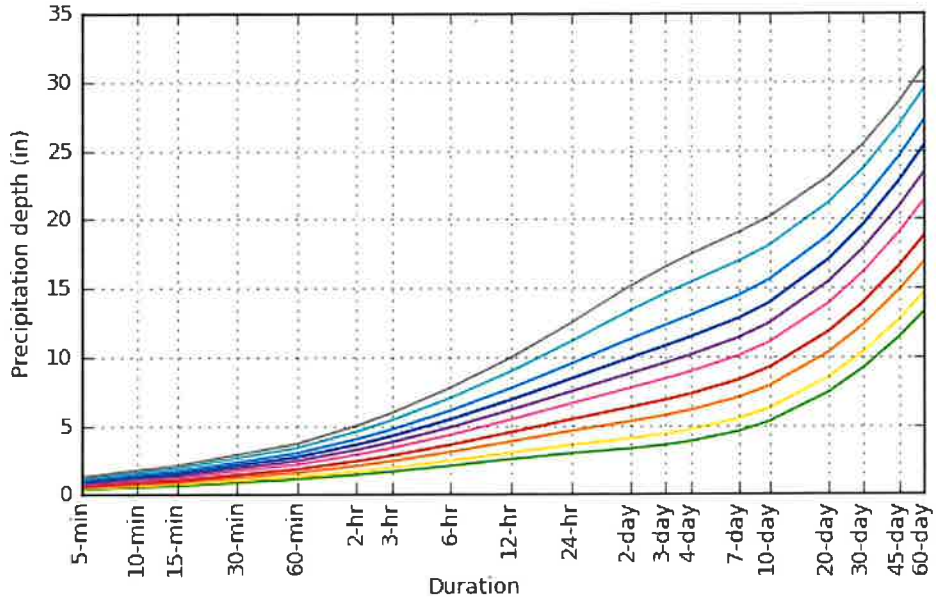
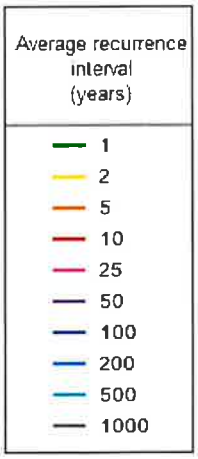
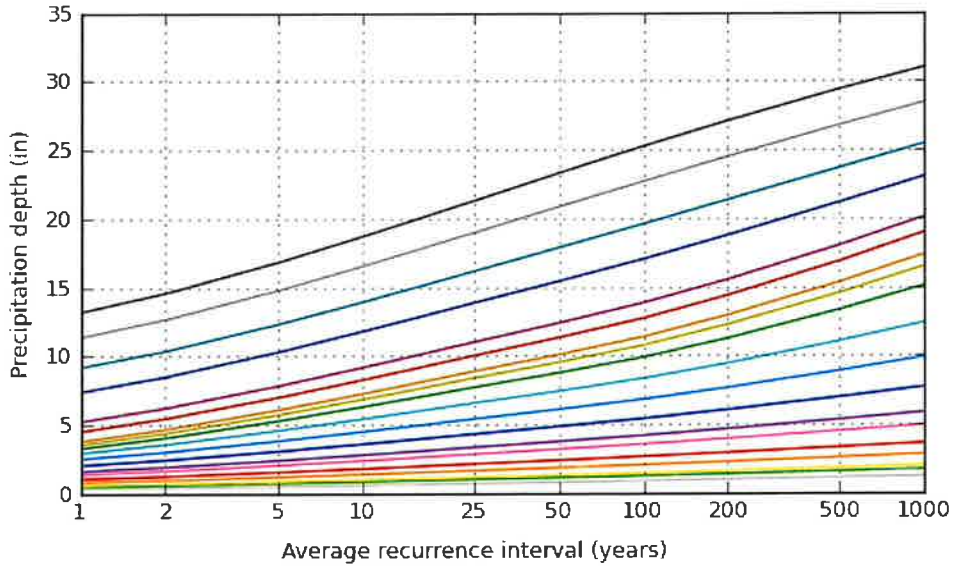
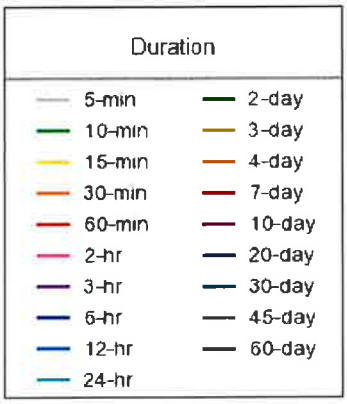
PF graphical

PDS-based depth-duration-frequency (DDF) curves
Latitude: 41.0351°, Longitude: -73.5550°









NOAA Atlas 14, Volume 10, Version 3

Created (GMT): Mon Dec 19 18:41:15 2022

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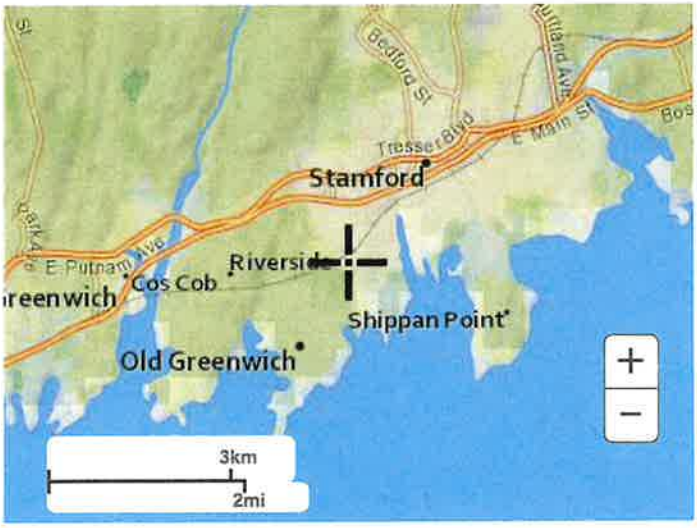
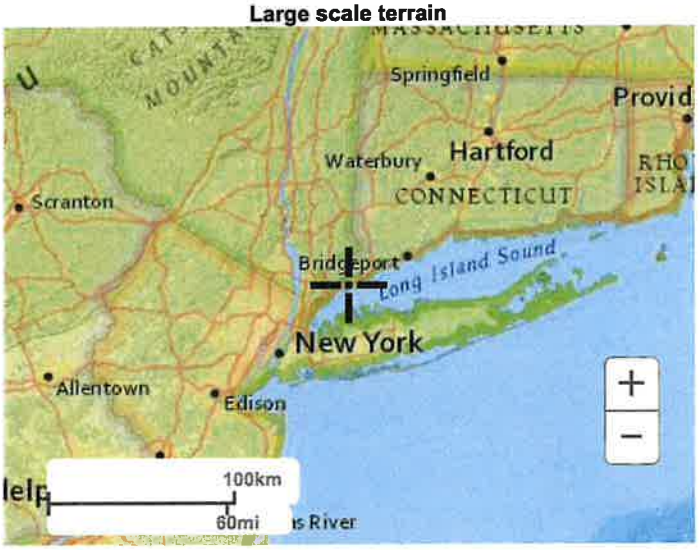
Maps & aerials

Small scale terrain



Large scale terrain



Large scale map

Large scale aerial

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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

Disclaimer

Appendix "A"

Stormwater Calculations

- **Water Quality Volume (WQV) Calculations**

$$WQV = \left(\frac{1\ in}{12\frac{in}{ft}}\right) RA$$

Where,
R= Volumetric Runoff Coefficient = 0.05+0.009I
I= Percent Impervious Coverage
A= Watershed Area (sf)

Drainage Area	Total Area (sf)	Impervious Coverage		R (Runoff Coefficient)	½ WQV (cf)
		Area (sf)	% Coverage		
Pr. Area #3A	32,196	28,462	88.4	0.846	1,134.9
Pr. Area #3B	48,758	39,329	80.7	0.776	1,576.5
Pr. Area #3C	13,083	10,801	82.6	0.793	432.3

Pr. Area #3A: The ½ WQV for this drainage area will be collected and infiltrated by Retention System #1. The storage volume of Retention System #1 below the 15" high-overflow outlet orifice is approximately 1,362 cubic feet. Refer to attached Stage-Area Storage Table for RS-1.

Pr. Area #3B: The ½ WQV for this drainage area will be collected and infiltrated by Retention System #2. The storage volume of Retention System #2 below the 15" high-overflow outlet orifice is approximately 2,166 cubic feet. Refer to attached Stage-Area Storage Table for RS-2.

Pr. Area #3C: The ½ WQV for this drainage area will be collected and infiltrated by Retention System #3. The storage volume of Retention System #3 below the 12" high-overflow outlet orifice is approximately 686 cubic feet. Refer to attached Stage-Area Storage Table for RS-3.

Infiltration System Drawdown Calculations

Name: Wings Real Estate Holdings, LLC
Address: 50 Barry Place, Stamford, Connecticut
Project: Wings Arena
Date: December 15, 2022

- **Drawdown Calculations**
  According to the NRCS Web Soil Survey in Exhibit "C", the majority of the site lies within a mapped area of HSG-D soils. The following drawdown calculations are based on the soils observed in each test boring in the vicinity of the respective best management practice. The test borings predominately consisted of sand and silt with some gravel. A Rawls Infiltration Rate of 0.52 (in/hr) (Loam) was used as a conservative estimate in these calculations.
- **Retention System #1**

$$Time_{drawdown} = \frac{DV}{(K)(A)}$$

DV	= Design Volume	=	$1{,}362\,ft^3$
K	= Infiltration Rate	=	0.52 in/hr
A	= Bottom Area	=	$476\,ft^2$

$$Time_{drawdown} = \frac{1{,}362\,ft^3}{(0.52\,{}^{in}/_{hr})({}^{1\,ft}/_{12\,in})(476\,ft^2)} = 66.0hrs$$

The proposed Rain Garden will draw down within 66.0 hours.

- **Retention System #2**

$$Time_{drawdown} = \frac{DV}{(K)(A)}$$

DV	= Design Volume	=	$2{,}166\,ft^3$
K	= Infiltration Rate	=	0.52 in/hr
A	= Bottom Area	=	$756\,ft^2$

$$Time_{drawdown} = \frac{2{,}166\,ft^3}{(0.52\,{}^{in}/_{hr})({}^{1\,ft}/_{12\,in})(756\,ft^2)} = 66.1hrs$$

The proposed Rain Garden will draw down within 66.1 hours.

Infiltration System Drawdown Calculations (Continued)

Name: Wings Real Estate Holdings, LLC
Address: 50 Barry Place, Stamford, Connecticut
Project: Wings Arena
Date: December 15, 2022

- **Retention System #3**

$$Time_{drawdown} = \frac{DV}{(K)(A)}$$

DV = Design Volume	=	$686\ ft^3$
K = Infiltration Rate	=	0.52 in/hr
A = Bottom Area	=	$352\ ft^2$

$$Time_{drawdown} = \frac{686\ ft^3}{(0.52\ ^{in}/_{hr})(^{1\ ft}/_{12in})(352\ ft^2)} = 45.0 hrs$$

The proposed Rain Garden retention volume will drawdown within 45.0 hours.

Stage-Area-Storage for Pond 6P: RS-1

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
42.50	0	44.58	673	46.66	1,396
42.54	8	44.62	688	46.70	1,399
42.58	16	44.66	702	46.74	1,402
42.62	25	44.70	717	46.78	1,404
42.66	33	44.74	731	46.82	1,407
42.70	41	44.78	746	46.86	1,410
42.74	49	44.82	760	46.90	1,412
42.78	57	44.86	774	46.94	1,415
42.82	65	44.90	789	46.98	1,418
42.86	74	44.94	803	47.02	1,420
42.90	82	44.98	818	47.06	1,422
42.94	90	45.02	832	47.10	1,424
42.98	98	45.06	847	47.14	1,426
43.02	109	45.10	861	47.18	1,428
43.06	123	45.14	875	47.22	1,430
43.10	137	45.18	890	47.26	1,433
43.14	151	45.22	904	47.30	1,435
43.18	165	45.26	919	47.34	1,437
43.22	180	45.30	933	47.38	1,439
43.26	194	45.34	947	47.42	1,441
43.30	209	45.38	962	47.46	1,443
43.34	223	45.42	976	47.50	1,445
43.38	238	45.46	990	47.54	1,447
43.42	252	45.50	1,005	47.58	1,449
43.46	267	45.54	1,019	47.62	1,451
43.50	282	45.58	1,034	47.66	1,453
43.54	296	45.62	1,048	47.70	1,455
43.58	311	45.66	1,062	47.74	1,457
43.62	325	45.70	1,077	47.78	1,459
43.66	340	45.74	1,091	47.82	1,461
43.70	354	45.78	1,105	47.86	1,463
43.74	369	45.82	1,120	47.90	1,465
43.78	383	45.86	1,134	47.94	1,467
43.82	398	45.90	1,148	47.98	1,469
43.86	412	45.94	1,162	48.02	1,471
43.90	427	45.98	1,177	48.06	1,473
43.94	442	46.02	1,191	48.10	1,475
43.98	456	46.06	1,205	48.14	1,477
44.02	471	46.10	1,220	48.18	1,480
44.06	485	46.14	1,234	48.22	1,482
44.10	500	46.18	1,248	48.26	1,484
44.14	514	46.22	1,263	48.30	**1,486**
44.18	529	46.26	1,277		
44.22	543	46.30	1,291		
44.26	558	46.34	1,305		
44.30	572	46.38	1,320		
44.34	587	46.42	1,334		
44.38	601	46.46	1,348		
44.42	616	46.50	1,362		
44.46	630	46.54	1,377		
44.50	644	46.58	1,391		
44.54	659	46.62	1,394		

← HIGH-OVERFLOW OUTLET

Stage-Area-Storage for Pond 7P: RS-2

Elevation (feet)	Storage (cubic-feet)
41.00	0
41.10	33
41.20	66
41.30	99
41.40	132
41.50	165
41.60	222
41.70	280
41.80	338
41.90	398
42.00	458
42.10	517
42.20	577
42.30	636
42.40	696
42.50	755
42.60	814
42.70	874
42.80	933
42.90	992
43.00	1,051
43.10	1,110
43.20	1,169
43.30	1,228
43.40	1,287
43.50	1,346
43.60	1,405
43.70	1,464
43.80	1,523
43.90	1,581
44.00	1,640
44.10	1,699
44.20	1,757
44.30	1,816
44.40	1,874
44.50	1,933
44.60	1,991
44.70	2,050
44.80	2,108
44.90	2,166
45.00	2,225
45.10	2,273
45.20	2,283
45.30	2,293
45.40	2,303
45.50	2,314
45.60	2,322
45.70	2,330
45.80	2,338
45.90	2,346
46.00	2,355
46.10	2,363
46.20	2,371
46.30	2,379
46.40	2,388
46.50	2,396
46.60	2,404
46.70	2,412
46.80	2,421
46.90	2,429
47.00	2,437
47.10	2,445
47.20	2,453
47.30	2,462
47.40	2,470
47.50	2,478
47.60	2,486
47.70	2,495
47.80	2,503
47.90	2,511
48.00	**2,519**

← HIGH - OVERFLOW OUTLET

Stage-Area-Storage for Pond 8P: RS-3

Elevation (feet)	Storage (cubic-feet)
36.30	0
36.35	7
36.40	14
36.45	21
36.50	28
36.55	35
36.60	42
36.65	49
36.70	56
36.75	63
36.80	70
36.85	84
36.90	98
36.95	112
37.00	126
37.05	140
37.10	154
37.15	168
37.20	182
37.25	196
37.30	210
37.35	224
37.40	237
37.45	251
37.50	265
37.55	278
37.60	292
37.65	305
37.70	319
37.75	332
37.80	346
37.85	359
37.90	372
37.95	386
38.00	399
38.05	412
38.10	425
38.15	438
38.20	451
38.25	464
38.30	476
38.35	489
38.40	501
38.45	513
38.50	525
38.55	537
38.60	549
38.65	561
38.70	572
38.75	583
38.80	594
38.85	605
38.90	616
38.95	626
39.00	636
39.05	645
39.10	654
39.15	663
39.20	671
39.25	679
39.30	686 ← HIGH-OVERFLOW OUTLET
39.35	693
39.40	700
39.45	707
39.50	714
39.55	721
39.60	728
39.65	735
39.70	742
39.75	749
39.80	756
39.85	764
39.90	766
39.95	767
40.00	769
40.05	771
40.10	773
40.15	774
40.20	776
40.25	778
40.30	**780**

Appendix "B"

HydroCAD Summary Table
Existing & Proposed Conditions

Name: Wings Real Estate Holdings, LLC
Address: 50 Barry Place Stamford, CT
Project: Wings Arena

HYDROCAD SUMMARY TABLE

Storm Frequency	Flow/Volume	Existing	Proposed	Δ	Δ (%)
1 Year	q (ft^3/s)	6.85	6.79	-0.06	-1%
	v (ft^3)	21,262	16,849	-4,413	-21%
2 Year	q (ft^3/s)	8.54	8.49	-0.05	-1%
	v (ft^3)	26,846	22,461	-4,385	-16%
5 Year	q (ft^3/s)	11.3	11.29	-0.01	0%
	v (ft^3)	36,121	36,121	-4,325	-12%
10 Year	q (ft^3/s)	13.56	13.56	0.00	0%
	v (ft^3)	43,808	39,541	-4,267	-10%
25 Year	q (ft^3/s)	16.65	16.65	0.00	0%
	v (ft^3)	54,464	50,284	-4,180	-8%
50 Year	q (ft^3/s)	18.93	18.93	0.00	0%
	v (ft^3)	62,384	58,273	-4,111	-7%
100 Year	q (ft^3/s)	21.37	21.37	-0.02	0%
	v (ft^3)	70,868	66,833	-4,035	-6%

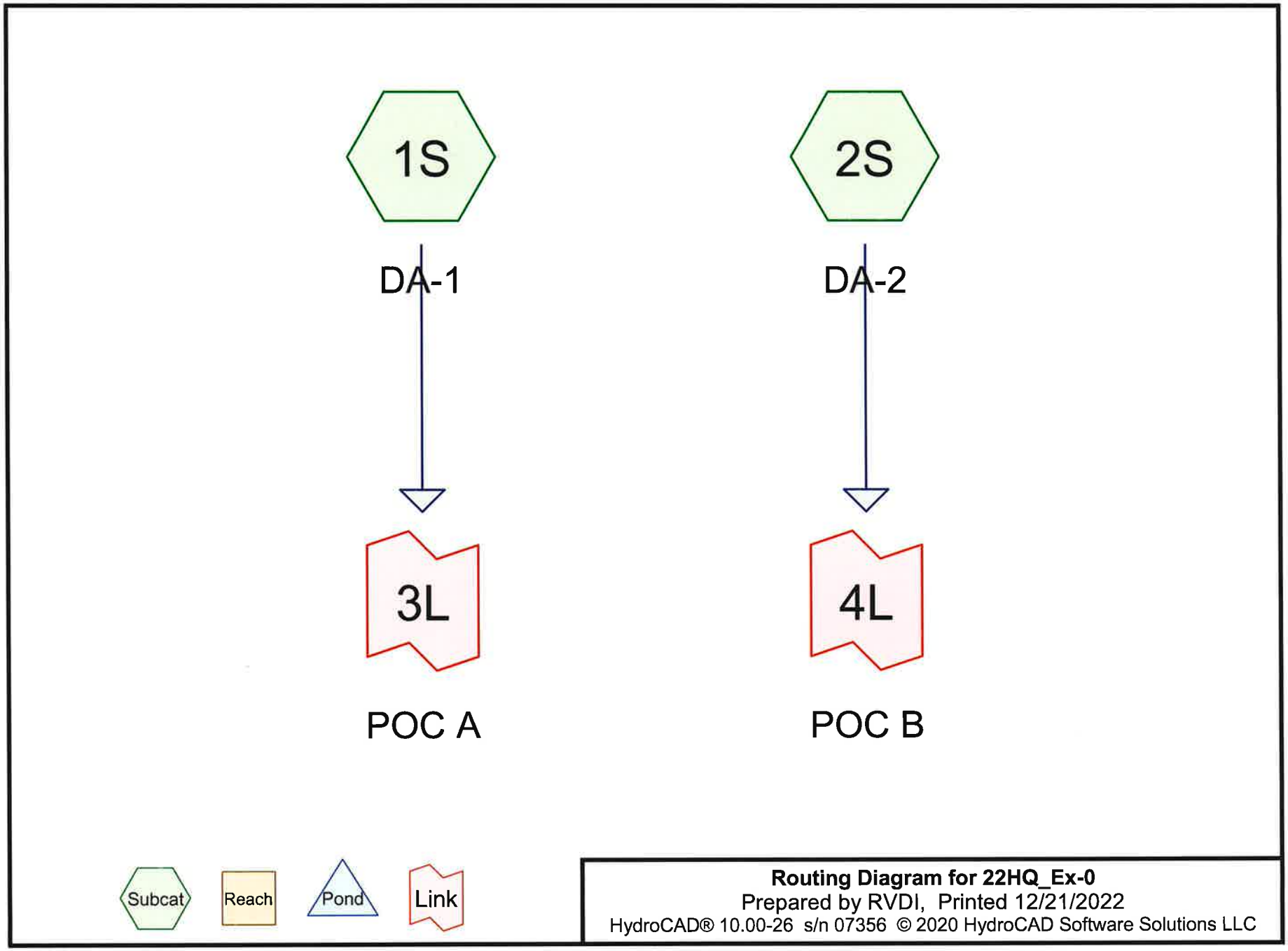
Table 1: Comparison of Existing and Proposed Peak Flow Rates and Volumes for POC "A".

Storm Frequency	Flow/Volume	Existing	Proposed	Δ	Δ (%)
1 Year	q (ft^3/s)	0.02	0.02	-0.00	0%
	v (ft^3)	115	65	-50	-43%
2 Year	q (ft^3/s)	0.04	0.03	-0.01	-25%
	v (ft^3)	176	96	-80	-45%
5 Year	q (ft^3/s)	0.07	0.05	-0.02	-29%
	v (ft^3)	292	153	-139	-48%
10 Year	q (ft^3/s)	0.09	0.07	-0.02	-22%
	v (ft^3)	397	203	-194	-49%
25 Year	q (ft^3/s)	0.13	0.09	-0.04	-31%
	v (ft^3)	552	276	-276	-50%
50 Year	q (ft^3/s)	0.16	0.11	-0.05	-31%
	v (ft^3)	672	332	-340	-51%
100 Year	q (ft^3/s)	0.19	0.13	-0.06	-32%
	v (ft^3)	805	394	-411	-51%

Table 1: Comparison of Existing and Proposed Peak Flow Rates and Volumes for POC "B".

Appendix "C"

HydroCAD Analysis - Existing Conditions



Routing Diagram for 22HQ_Ex-0
Prepared by RVDI, Printed 12/21/2022
HydroCAD® 10.00-26 s/n 07356 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
15,908	74	>75% Grass cover, Good, HSG C (1S, 2S)
91,662	98	Paved parking, HSG C (1S)
5,765	70	Woods, Good, HSG C (1S, 2S)
113,335	**93**	**TOTAL AREA**

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1
Runoff Area=111,312 sf 82.35% Impervious Runoff Depth=2.29"
Tc=5.0 min CN=94 Runoff=6.85 cfs 21,262 cf

Subcatchment 2S: DA-2
Runoff Area=2,023 sf 0.00% Impervious Runoff Depth=0.68"
Flow Length=64' Tc=16.5 min CN=70 Runoff=0.02 cfs 115 cf

Link 3L: POC A
Inflow=6.85 cfs 21,262 cf
Primary=6.85 cfs 21,262 cf

Link 4L: POC B
Inflow=0.02 cfs 115 cf
Primary=0.02 cfs 115 cf

Total Runoff Area = 113,335 sf Runoff Volume = 21,376 cf Average Runoff Depth = 2.26"
19.12% Pervious = 21,673 sf 80.88% Impervious = 91,662 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1 Runoff Area=111,312 sf 82.35% Impervious Runoff Depth=2.89"
Tc=5.0 min CN=94 Runoff=8.54 cfs 26,846 cf

Subcatchment 2S: DA-2 Runoff Area=2,023 sf 0.00% Impervious Runoff Depth=1.05"
Flow Length=64' Tc=16.5 min CN=70 Runoff=0.04 cfs 176 cf

Link 3L: POC A Inflow=8.54 cfs 26,846 cf
Primary=8.54 cfs 26,846 cf

Link 4L: POC B Inflow=0.04 cfs 176 cf
Primary=0.04 cfs 176 cf

Total Runoff Area = 113,335 sf Runoff Volume = 27,022 cf Average Runoff Depth = 2.86"
19.12% Pervious = 21,673 sf 80.88% Impervious = 91,662 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1 Runoff Area=111,312 sf 82.35% Impervious Runoff Depth=3.89"
Tc=5.0 min CN=94 Runoff=11.30 cfs 36,121 cf

Subcatchment 2S: DA-2 Runoff Area=2,023 sf 0.00% Impervious Runoff Depth=1.73"
Flow Length=64' Tc=16.5 min CN=70 Runoff=0.07 cfs 292 cf

Link 3L: POC A Inflow=11.30 cfs 36,121 cf
Primary=11.30 cfs 36,121 cf

Link 4L: POC B Inflow=0.07 cfs 292 cf
Primary=0.07 cfs 292 cf

Total Runoff Area = 113,335 sf Runoff Volume = 36,413 cf Average Runoff Depth = 3.86"
19.12% Pervious = 21,673 sf 80.88% Impervious = 91,662 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1
Runoff Area=111,312 sf 82.35% Impervious Runoff Depth=4.72"
Tc=5.0 min CN=94 Runoff=13.56 cfs 43,808 cf

Subcatchment 2S: DA-2
Runoff Area=2,023 sf 0.00% Impervious Runoff Depth=2.35"
Flow Length=64' Tc=16.5 min CN=70 Runoff=0.09 cfs 397 cf

Link 3L: POC A
Inflow=13.56 cfs 43,808 cf
Primary=13.56 cfs 43,808 cf

Link 4L: POC B
Inflow=0.09 cfs 397 cf
Primary=0.09 cfs 397 cf

Total Runoff Area = 113,335 sf Runoff Volume = 44,205 cf Average Runoff Depth = 4.68"
19.12% Pervious = 21,673 sf 80.88% Impervious = 91,662 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1
Runoff Area=111,312 sf 82.35% Impervious Runoff Depth=5.87"
Tc=5.0 min CN=94 Runoff=16.65 cfs 54,464 cf

Subcatchment 2S: DA-2
Runoff Area=2,023 sf 0.00% Impervious Runoff Depth=3.27"
Flow Length=64' Tc=16.5 min CN=70 Runoff=0.13 cfs 552 cf

Link 3L: POC A
Inflow=16.65 cfs 54,464 cf
Primary=16.65 cfs 54,464 cf

Link 4L: POC B
Inflow=0.13 cfs 552 cf
Primary=0.13 cfs 552 cf

Total Runoff Area = 113,335 sf Runoff Volume = 55,016 cf Average Runoff Depth = 5.83"
19.12% Pervious = 21,673 sf 80.88% Impervious = 91,662 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1 Runoff Area=111,312 sf 82.35% Impervious Runoff Depth=6.73"
Tc=5.0 min CN=94 Runoff=18.93 cfs 62,384 cf

Subcatchment 2S: DA-2 Runoff Area=2,023 sf 0.00% Impervious Runoff Depth=3.99"
Flow Length=64' Tc=16.5 min CN=70 Runoff=0.16 cfs 672 cf

Link 3L: POC A Inflow=18.93 cfs 62,384 cf
Primary=18.93 cfs 62,384 cf

Link 4L: POC B Inflow=0.16 cfs 672 cf
Primary=0.16 cfs 672 cf

Total Runoff Area = 113,335 sf Runoff Volume = 63,056 cf Average Runoff Depth = 6.68"
19.12% Pervious = 21,673 sf 80.88% Impervious = 91,662 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1 Runoff Area=111,312 sf 82.35% Impervious Runoff Depth=7.64"
Tc=5.0 min CN=94 Runoff=21.37 cfs 70,868 cf

Subcatchment 2S: DA-2 Runoff Area=2,023 sf 0.00% Impervious Runoff Depth=4.78"
Flow Length=64' Tc=16.5 min CN=70 Runoff=0.19 cfs 805 cf

Link 3L: POC A Inflow=21.37 cfs 70,868 cf
Primary=21.37 cfs 70,868 cf

Link 4L: POC B Inflow=0.19 cfs 805 cf
Primary=0.19 cfs 805 cf

Total Runoff Area = 113,335 sf Runoff Volume = 71,673 cf Average Runoff Depth = 7.59"
19.12% Pervious = 21,673 sf 80.88% Impervious = 91,662 sf

Summary for Subcatchment 1S: DA-1

Runoff = 16.65 cfs @ 12.07 hrs, Volume= 54,464 cf, Depth= 5.87"

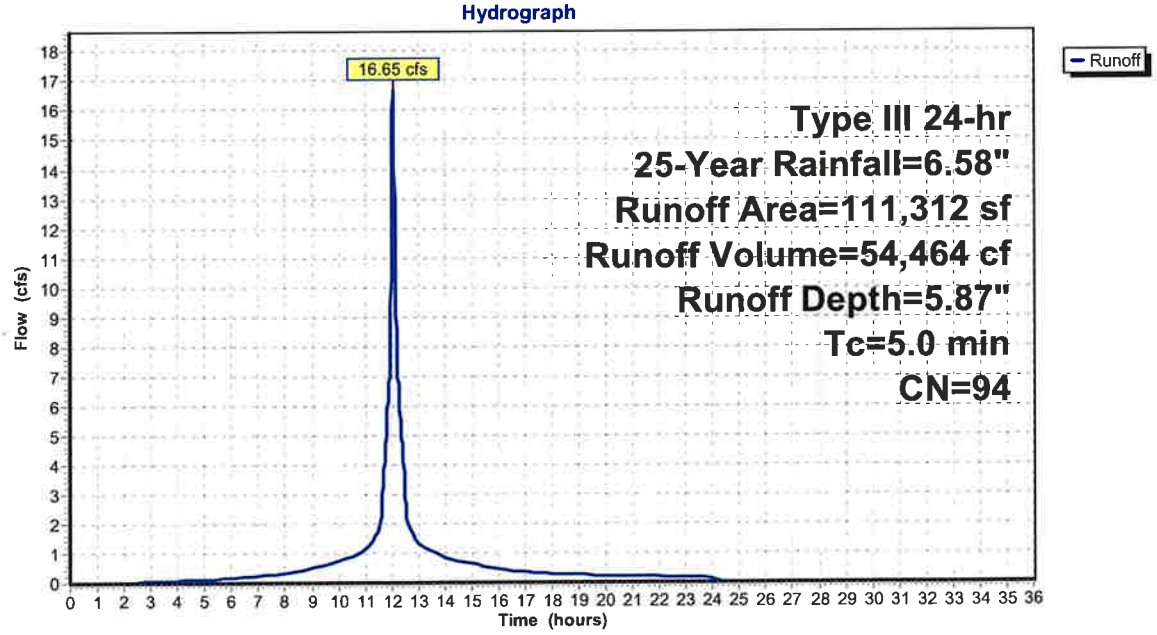
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.58"

Area (sf)	CN	Description
91,662	98	Paved parking, HSG C
15,878	74	>75% Grass cover, Good, HSG C
3,772	70	Woods, Good, HSG C
111,312	94	Weighted Average
19,650		17.65% Pervious Area
91,662		82.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: DA-1

Hydrograph



Summary for Subcatchment 2S: DA-2

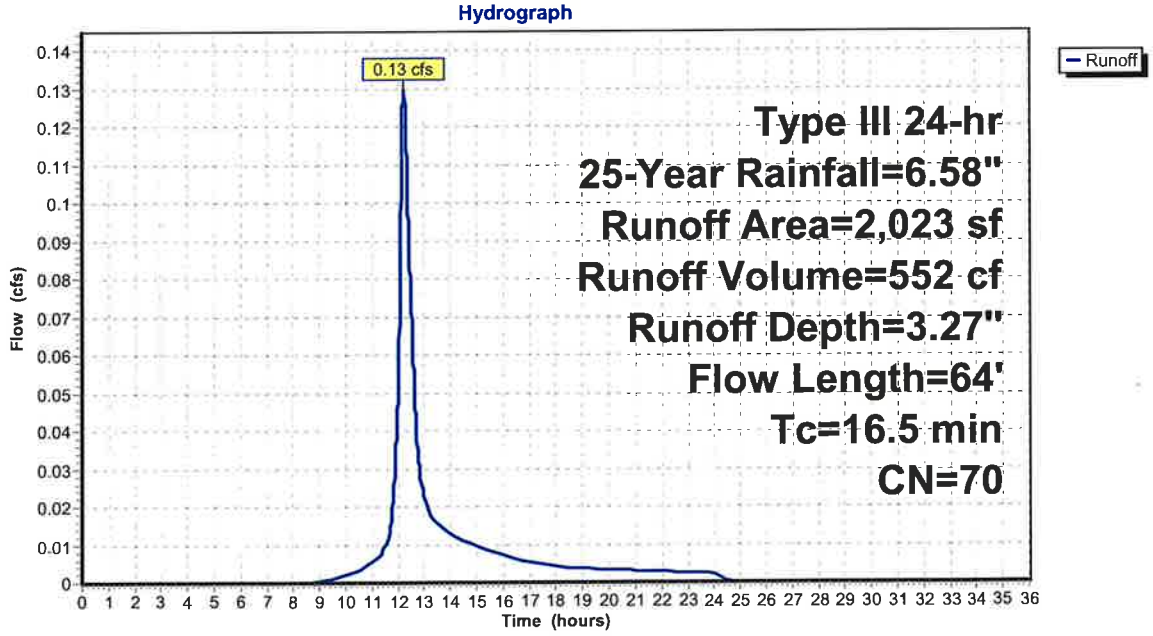
Runoff = 0.13 cfs @ 12.23 hrs, Volume= 552 cf, Depth= 3.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.58"

Area (sf)	CN	Description
30	74	>75% Grass cover, Good, HSG C
1,993	70	Woods, Good, HSG C
2,023	70	Weighted Average
2,023		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.4	14	0.3200	0.10		**Sheet Flow, 1** Woods: Dense underbrush n= 0.800 P2= 3.56"
14.1	50	0.0500	0.06		**Sheet Flow, 2** Woods: Dense underbrush n= 0.800 P2= 3.56"
16.5	64	Total			

Subcatchment 2S: DA-2

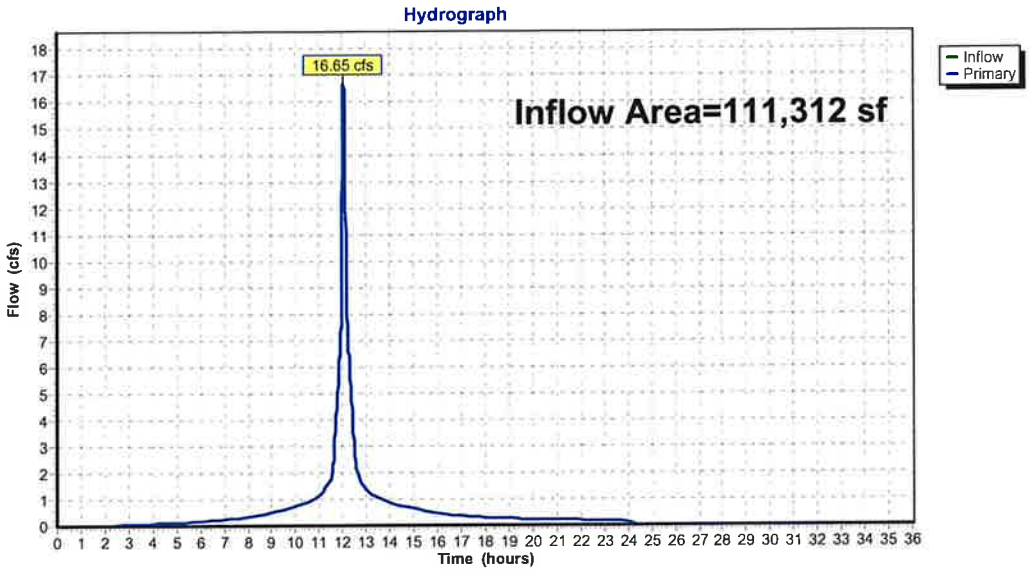


Summary for Link 3L: POC A

Inflow Area = 111,312 sf, 82.35% Impervious, Inflow Depth = 5.87" for 25-Year event
Inflow = 16.65 cfs @ 12.07 hrs, Volume= 54,464 cf
Primary = 16.65 cfs @ 12.07 hrs, Volume= 54,464 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link 3L: POC A

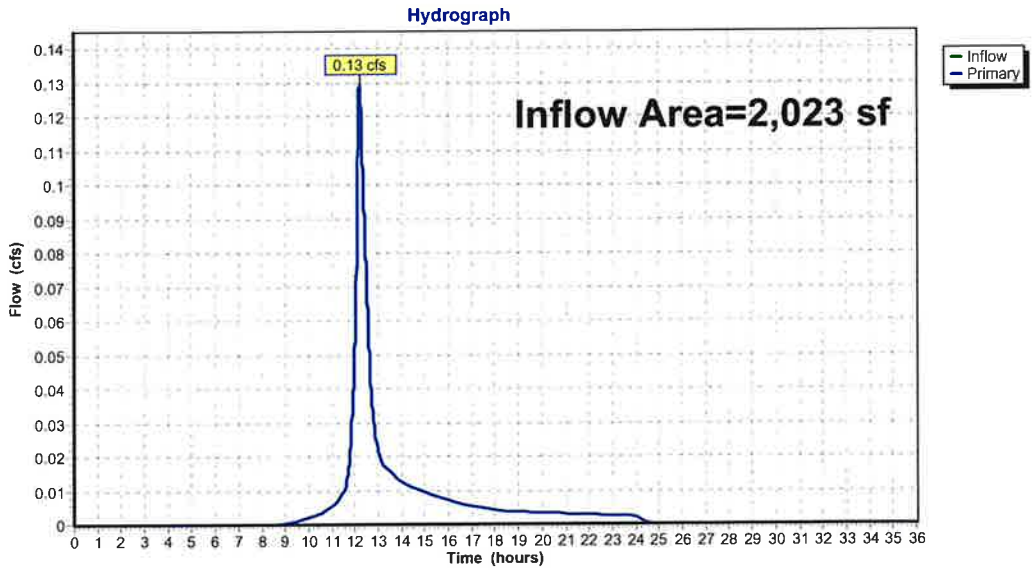


Summary for Link 4L: POC B

Inflow Area = 2,023 sf, 0.00% Impervious, Inflow Depth = 3.27" for 25-Year event
Inflow = 0.13 cfs @ 12.23 hrs, Volume= 552 cf
Primary = 0.13 cfs @ 12.23 hrs, Volume= 552 cf, Atten= 0%, Lag= 0.0 min

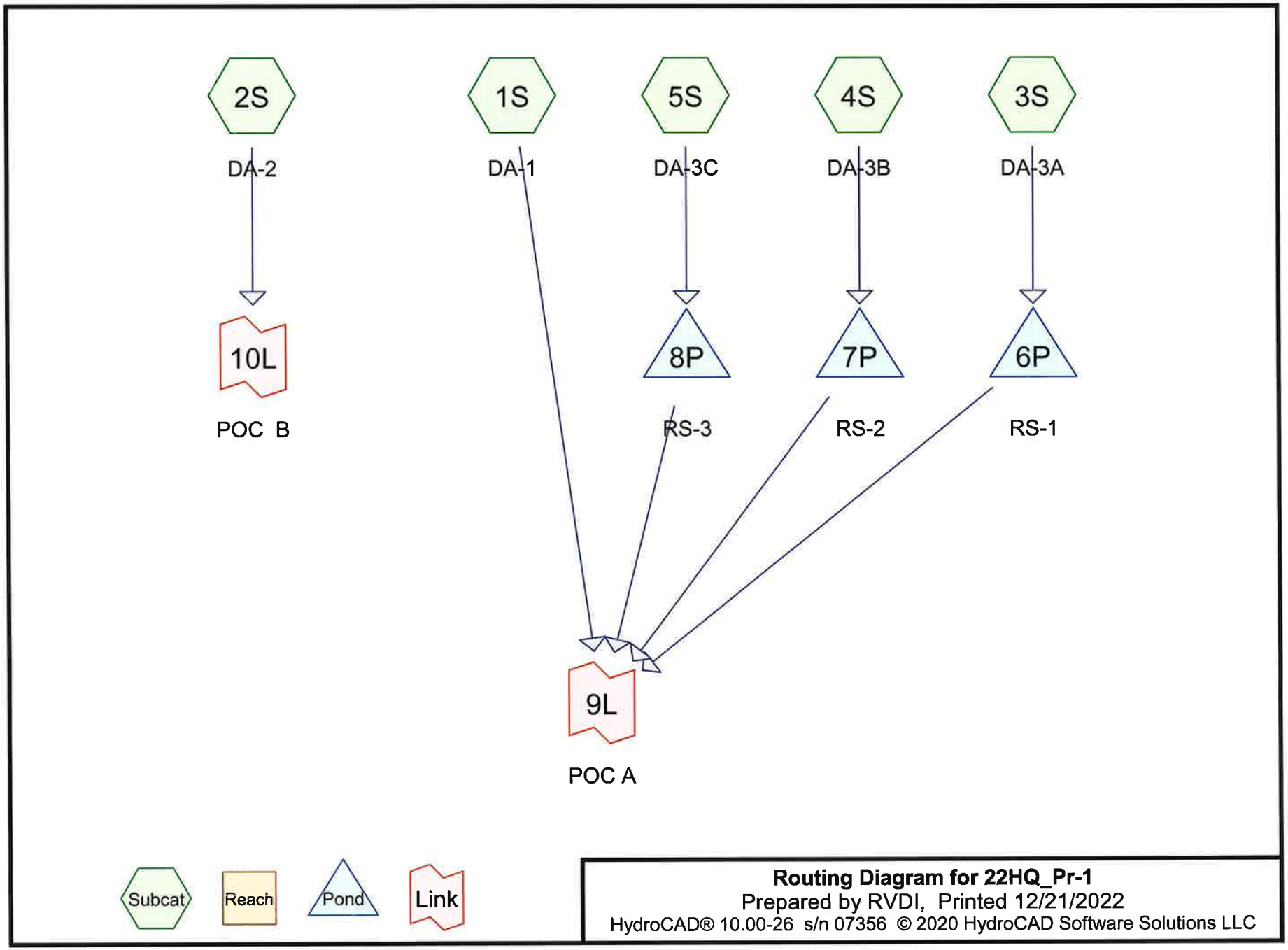
Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link 4L: POC B



Appendix "D"

HydroCAD Analysis - Proposed Conditions



Routing Diagram for 22HQ_Pr-1
Prepared by RVDI, Printed 12/21/2022
HydroCAD® 10.00-26 s/n 07356 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
21,101	74	>75% Grass cover, Good, HSG C (1S, 2S, 3S, 4S, 5S)
92,234	98	Paved parking, HSG C (1S, 3S, 4S, 5S)
113,335	**94**	**TOTAL AREA**

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1
Runoff Area=18,398 sf 74.15% Impervious Runoff Depth=2.10"
Tc=5.0 min CN=92 Runoff=1.06 cfs 3,227 cf

Subcatchment 2S: DA-2
Runoff Area=900 sf 0.00% Impervious Runoff Depth=0.87"
Tc=5.0 min CN=74 Runoff=0.02 cfs 65 cf

Subcatchment 3S: DA-3A
Runoff Area=32,196 sf 88.40% Impervious Runoff Depth=2.39"
Tc=5.0 min CN=95 Runoff=2.04 cfs 6,415 cf

Subcatchment 4S: DA-3B
Runoff Area=48,758 sf 80.66% Impervious Runoff Depth=2.20"
Tc=5.0 min CN=93 Runoff=2.91 cfs 8,926 cf

Subcatchment 5S: DA-3C
Runoff Area=13,083 sf 82.56% Impervious Runoff Depth=2.29"
Tc=5.0 min CN=94 Runoff=0.81 cfs 2,499 cf

Pond 6P: RS-1
Peak Elev=47.21' Storage=1,430 cf Inflow=2.04 cfs 6,415 cf
15.0" Round Culvert n=0.013 L=115.0' S=0.0365 '/' Outflow=2.04 cfs 5,052 cf

Pond 7P: RS-2
Peak Elev=45.77' Storage=2,336 cf Inflow=2.91 cfs 8,926 cf
15.0" Round Culvert n=0.013 L=37.0' S=0.0703 '/' Outflow=2.90 cfs 6,758 cf

Pond 8P: RS-3
Peak Elev=39.75' Storage=750 cf Inflow=0.81 cfs 2,499 cf
12.0" Round Culvert n=0.013 L=20.0' S=0.0250 '/' Outflow=0.79 cfs 1,813 cf

Link 9L: POC A
Inflow=6.79 cfs 16,849 cf
Primary=6.79 cfs 16,849 cf

Link 10L: POC B
Inflow=0.02 cfs 65 cf
Primary=0.02 cfs 65 cf

Total Runoff Area = 113,335 sf Runoff Volume = 21,131 cf Average Runoff Depth = 2.24"
18.62% Pervious = 21,101 sf 81.38% Impervious = 92,234 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1 Runoff Area=18,398 sf 74.15% Impervious Runoff Depth=2.69"
Tc=5.0 min CN=92 Runoff=1.34 cfs 4,131 cf

Subcatchment 2S: DA-2 Runoff Area=900 sf 0.00% Impervious Runoff Depth=1.28"
Tc=5.0 min CN=74 Runoff=0.03 cfs 96 cf

Subcatchment 3S: DA-3A Runoff Area=32,196 sf 88.40% Impervious Runoff Depth=3.00"
Tc=5.0 min CN=95 Runoff=2.53 cfs 8,044 cf

Subcatchment 4S: DA-3B Runoff Area=48,758 sf 80.66% Impervious Runoff Depth=2.79"
Tc=5.0 min CN=93 Runoff=3.65 cfs 11,348 cf

Subcatchment 5S: DA-3C Runoff Area=13,083 sf 82.56% Impervious Runoff Depth=2.89"
Tc=5.0 min CN=94 Runoff=1.00 cfs 3,155 cf

Pond 6P: RS-1 Peak Elev=47.30' Storage=1,435 cf Inflow=2.53 cfs 8,044 cf
15.0" Round Culvert n=0.013 L=115.0' S=0.0365 '/' Outflow=2.53 cfs 6,681 cf

Pond 7P: RS-2 Peak Elev=45.91' Storage=2,347 cf Inflow=3.65 cfs 11,348 cf
15.0" Round Culvert n=0.013 L=37.0' S=0.0703 '/' Outflow=3.65 cfs 9,180 cf

Pond 8P: RS-3 Peak Elev=39.81' Storage=758 cf Inflow=1.00 cfs 3,155 cf
12.0" Round Culvert n=0.013 L=20.0' S=0.0250 '/' Outflow=0.99 cfs 2,469 cf

Link 9L: POC A Inflow=8.49 cfs 22,461 cf
Primary=8.49 cfs 22,461 cf

Link 10L: POC B Inflow=0.03 cfs 96 cf
Primary=0.03 cfs 96 cf

Total Runoff Area = 113,335 sf Runoff Volume = 26,774 cf Average Runoff Depth = 2.83"
18.62% Pervious = 21,101 sf 81.38% Impervious = 92,234 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1 Runoff Area=18,398 sf 74.15% Impervious Runoff Depth=3.68"
Tc=5.0 min CN=92 Runoff=1.80 cfs 5,642 cf

Subcatchment 2S: DA-2 Runoff Area=900 sf 0.00% Impervious Runoff Depth=2.03"
Tc=5.0 min CN=74 Runoff=0.05 cfs 153 cf

Subcatchment 3S: DA-3A Runoff Area=32,196 sf 88.40% Impervious Runoff Depth=4.00"
Tc=5.0 min CN=95 Runoff=3.32 cfs 10,742 cf

Subcatchment 4S: DA-3B Runoff Area=48,758 sf 80.66% Impervious Runoff Depth=3.79"
Tc=5.0 min CN=93 Runoff=4.87 cfs 15,384 cf

Subcatchment 5S: DA-3C Runoff Area=13,083 sf 82.56% Impervious Runoff Depth=3.89"
Tc=5.0 min CN=94 Runoff=1.33 cfs 4,246 cf

Pond 6P: RS-1 Peak Elev=47.45' Storage=1,442 cf Inflow=3.32 cfs 10,742 cf
15.0" Round Culvert n=0.013 L=115.0' S=0.0365 '/' Outflow=3.32 cfs 9,379 cf

Pond 7P: RS-2 Peak Elev=46.20' Storage=2,371 cf Inflow=4.87 cfs 15,384 cf
15.0" Round Culvert n=0.013 L=37.0' S=0.0703 '/' Outflow=4.85 cfs 13,216 cf

Pond 8P: RS-3 Peak Elev=39.91' Storage=766 cf Inflow=1.33 cfs 4,246 cf
12.0" Round Culvert n=0.013 L=20.0' S=0.0250 '/' Outflow=1.33 cfs 3,560 cf

Link 9L: POC A Inflow=11.29 cfs 31,796 cf
Primary=11.29 cfs 31,796 cf

Link 10L: POC B Inflow=0.05 cfs 153 cf
Primary=0.05 cfs 153 cf

Total Runoff Area = 113,335 sf Runoff Volume = 36,166 cf Average Runoff Depth = 3.83"
18.62% Pervious = 21,101 sf 81.38% Impervious = 92,234 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1	Runoff Area=18,398 sf 74.15% Impervious Runoff Depth=4.50" Tc=5.0 min CN=92 Runoff=2.18 cfs 6,899 cf
Subcatchment 2S: DA-2	Runoff Area=900 sf 0.00% Impervious Runoff Depth=2.70" Tc=5.0 min CN=74 Runoff=0.07 cfs 203 cf
Subcatchment 3S: DA-3A	Runoff Area=32,196 sf 88.40% Impervious Runoff Depth=4.84" Tc=5.0 min CN=95 Runoff=3.97 cfs 12,975 cf
Subcatchment 4S: DA-3B	Runoff Area=48,758 sf 80.66% Impervious Runoff Depth=4.61" Tc=5.0 min CN=93 Runoff=5.86 cfs 18,735 cf
Subcatchment 5S: DA-3C	Runoff Area=13,083 sf 82.56% Impervious Runoff Depth=4.72" Tc=5.0 min CN=94 Runoff=1.59 cfs 5,149 cf
Pond 6P: RS-1	Peak Elev=47.58' Storage=1,449 cf Inflow=3.97 cfs 12,975 cf 15.0" Round Culvert n=0.013 L=115.0' S=0.0365 '/' Outflow=3.96 cfs 11,612 cf
Pond 7P: RS-2	Peak Elev=46.50' Storage=2,396 cf Inflow=5.86 cfs 18,735 cf 15.0" Round Culvert n=0.013 L=37.0' S=0.0703 '/' Outflow=5.83 cfs 16,567 cf
Pond 8P: RS-3	Peak Elev=39.98' Storage=768 cf Inflow=1.59 cfs 5,149 cf 12.0" Round Culvert n=0.013 L=20.0' S=0.0250 '/' Outflow=1.59 cfs 4,463 cf
Link 9L: POC A	Inflow=13.56 cfs 39,541 cf Primary=13.56 cfs 39,541 cf
Link 10L: POC B	Inflow=0.07 cfs 203 cf Primary=0.07 cfs 203 cf

Total Runoff Area = 113,335 sf Runoff Volume = 43,960 cf Average Runoff Depth = 4.65"
18.62% Pervious = 21,101 sf 81.38% Impervious = 92,234 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1	Runoff Area=18,398 sf 74.15% Impervious Runoff Depth=5.64" Tc=5.0 min CN=92 Runoff=2.70 cfs 8,648 cf
Subcatchment 2S: DA-2	Runoff Area=900 sf 0.00% Impervious Runoff Depth=3.68" Tc=5.0 min CN=74 Runoff=0.09 cfs 276 cf
Subcatchment 3S: DA-3A	Runoff Area=32,196 sf 88.40% Impervious Runoff Depth=5.99" Tc=5.0 min CN=95 Runoff=4.86 cfs 16,066 cf
Subcatchment 4S: DA-3B	Runoff Area=48,758 sf 80.66% Impervious Runoff Depth=5.76" Tc=5.0 min CN=93 Runoff=7.22 cfs 23,386 cf
Subcatchment 5S: DA-3C	Runoff Area=13,083 sf 82.56% Impervious Runoff Depth=5.87" Tc=5.0 min CN=94 Runoff=1.96 cfs 6,401 cf
Pond 6P: RS-1	Peak Elev=47.80' Storage=1,460 cf Inflow=4.86 cfs 16,066 cf 15.0" Round Culvert n=0.013 L=115.0' S=0.0365 '/' Outflow=4.85 cfs 14,703 cf
Pond 7P: RS-2	Peak Elev=47.00' Storage=2,437 cf Inflow=7.22 cfs 23,386 cf 15.0" Round Culvert n=0.013 L=37.0' S=0.0703 '/' Outflow=7.17 cfs 21,218 cf
Pond 8P: RS-3	Peak Elev=40.07' Storage=772 cf Inflow=1.96 cfs 6,401 cf 12.0" Round Culvert n=0.013 L=20.0' S=0.0250 '/' Outflow=1.96 cfs 5,715 cf
Link 9L: POC A	Inflow=16.65 cfs 50,284 cf Primary=16.65 cfs 50,284 cf
Link 10L: POC B	Inflow=0.09 cfs 276 cf Primary=0.09 cfs 276 cf

Total Runoff Area = 113,335 sf Runoff Volume = 54,777 cf Average Runoff Depth = 5.80"
18.62% Pervious = 21,101 sf 81.38% Impervious = 92,234 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1	Runoff Area=18,398 sf 74.15% Impervious Runoff Depth=6.49" Tc=5.0 min CN=92 Runoff=3.08 cfs 9,949 cf
Subcatchment 2S: DA-2	Runoff Area=900 sf 0.00% Impervious Runoff Depth=4.43" Tc=5.0 min CN=74 Runoff=0.11 cfs 332 cf
Subcatchment 3S: DA-3A	Runoff Area=32,196 sf 88.40% Impervious Runoff Depth=6.84" Tc=5.0 min CN=95 Runoff=5.51 cfs 18,362 cf
Subcatchment 4S: DA-3B	Runoff Area=48,758 sf 80.66% Impervious Runoff Depth=6.61" Tc=5.0 min CN=93 Runoff=8.23 cfs 26,846 cf
Subcatchment 5S: DA-3C	Runoff Area=13,083 sf 82.56% Impervious Runoff Depth=6.73" Tc=5.0 min CN=94 Runoff=2.23 cfs 7,332 cf
Pond 6P: RS-1	Peak Elev=47.99' Storage=1,470 cf Inflow=5.51 cfs 18,362 cf 15.0" Round Culvert n=0.013 L=115.0' S=0.0365 '/' Outflow=5.50 cfs 16,999 cf
Pond 7P: RS-2	Peak Elev=47.43' Storage=2,472 cf Inflow=8.23 cfs 26,846 cf 15.0" Round Culvert n=0.013 L=37.0' S=0.0703 '/' Outflow=8.15 cfs 24,678 cf
Pond 8P: RS-3	Peak Elev=40.15' Storage=774 cf Inflow=2.23 cfs 7,332 cf 12.0" Round Culvert n=0.013 L=20.0' S=0.0250 '/' Outflow=2.22 cfs 6,646 cf
Link 9L: POC A	Inflow=18.93 cfs 58,273 cf Primary=18.93 cfs 58,273 cf
Link 10L: POC B	Inflow=0.11 cfs 332 cf Primary=0.11 cfs 332 cf

Total Runoff Area = 113,335 sf Runoff Volume = 62,822 cf Average Runoff Depth = 6.65"
18.62% Pervious = 21,101 sf 81.38% Impervious = 92,234 sf

Time span=0.00-36.00 hrs, dt=0.01 hrs, 3601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: DA-1	Runoff Area=18,398 sf 74.15% Impervious Runoff Depth=7.40" Tc=5.0 min CN=92 Runoff=3.48 cfs 11,345 cf
Subcatchment 2S: DA-2	Runoff Area=900 sf 0.00% Impervious Runoff Depth=5.25" Tc=5.0 min CN=74 Runoff=0.13 cfs 394 cf
Subcatchment 3S: DA-3A	Runoff Area=32,196 sf 88.40% Impervious Runoff Depth=7.76" Tc=5.0 min CN=95 Runoff=6.22 cfs 20,820 cf
Subcatchment 4S: DA-3B	Runoff Area=48,758 sf 80.66% Impervious Runoff Depth=7.52" Tc=5.0 min CN=93 Runoff=9.30 cfs 30,555 cf
Subcatchment 5S: DA-3C	Runoff Area=13,083 sf 82.56% Impervious Runoff Depth=7.64" Tc=5.0 min CN=94 Runoff=2.51 cfs 8,329 cf
Pond 6P: RS-1	Peak Elev=48.23' Storage=1,482 cf Inflow=6.22 cfs 20,820 cf 15.0" Round Culvert n=0.013 L=115.0' S=0.0365 '/' Outflow=6.20 cfs 19,457 cf
Pond 7P: RS-2	Peak Elev=47.95' Storage=2,515 cf Inflow=9.30 cfs 30,555 cf 15.0" Round Culvert n=0.013 L=37.0' S=0.0703 '/' Outflow=9.19 cfs 28,387 cf
Pond 8P: RS-3	Peak Elev=40.23' Storage=777 cf Inflow=2.51 cfs 8,329 cf 12.0" Round Culvert n=0.013 L=20.0' S=0.0250 '/' Outflow=2.51 cfs 7,644 cf
Link 9L: POC A	Inflow=21.35 cfs 66,833 cf Primary=21.35 cfs 66,833 cf
Link 10L: POC B	Inflow=0.13 cfs 394 cf Primary=0.13 cfs 394 cf

Total Runoff Area = 113,335 sf Runoff Volume = 71,444 cf Average Runoff Depth = 7.56"
18.62% Pervious = 21,101 sf 81.38% Impervious = 92,234 sf

Summary for Subcatchment 1S: DA-1

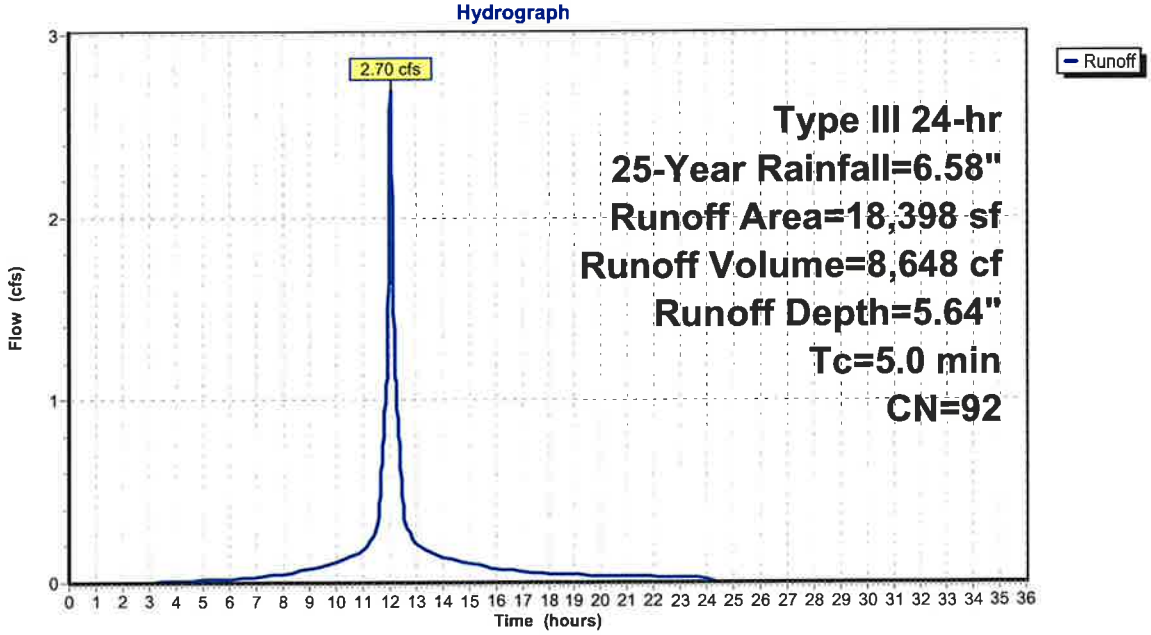
Runoff = 2.70 cfs @ 12.07 hrs, Volume= 8,648 cf, Depth= 5.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.58"

Area (sf)	CN	Description
13,642	98	Paved parking, HSG C
4,756	74	>75% Grass cover, Good, HSG C
18,398	92	Weighted Average
4,756		25.85% Pervious Area
13,642		74.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, 1

Subcatchment 1S: DA-1



Summary for Subcatchment 2S: DA-2

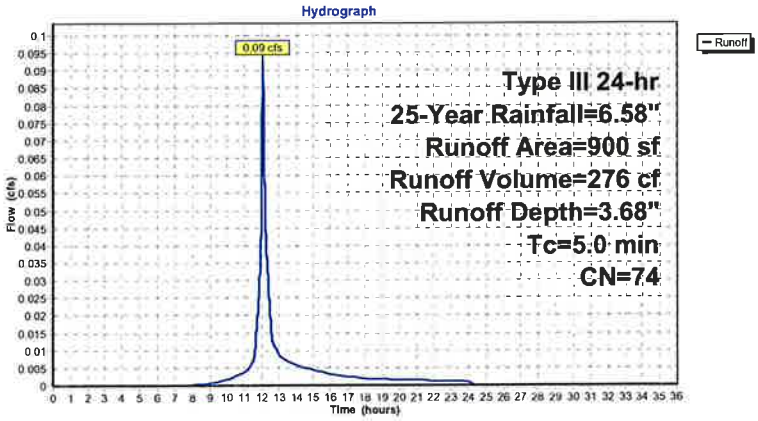
Runoff = 0.09 cfs @ 12.07 hrs, Volume= 276 cf, Depth= 3.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.58"

Area (sf)	CN	Description
900	74	>75% Grass cover, Good, HSG C
900		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, 1**

Subcatchment 2S: DA-2



Summary for Subcatchment 3S: DA-3A

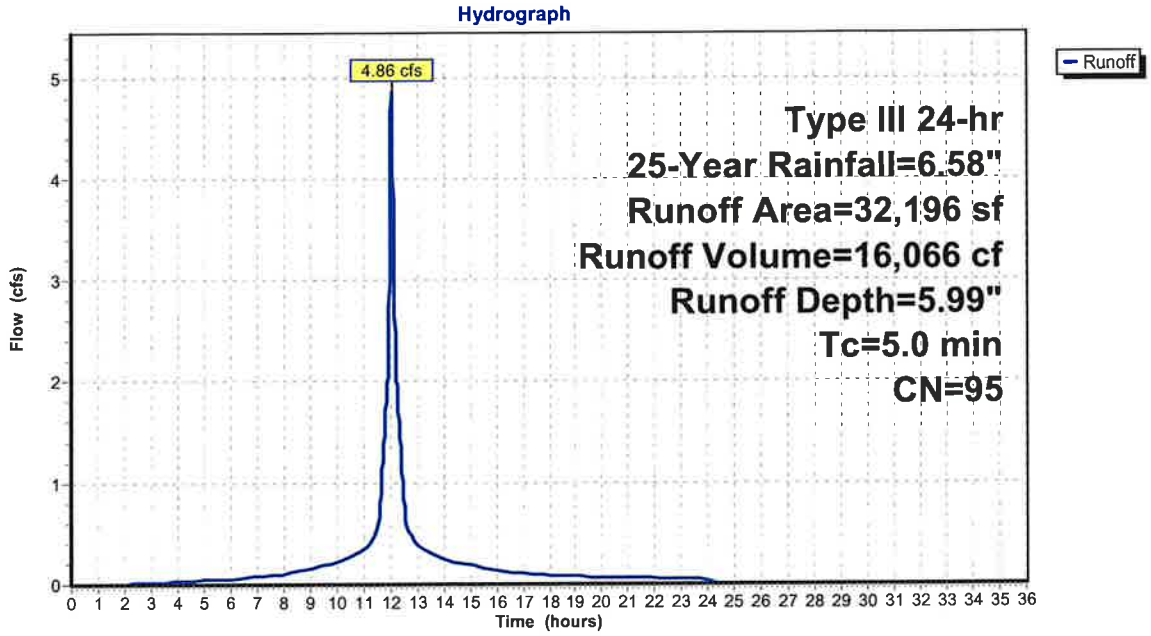
Runoff = 4.86 cfs @ 12.07 hrs, Volume= 16,066 cf, Depth= 5.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.58"

Area (sf)	CN	Description
28,462	98	Paved parking, HSG C
3,734	74	>75% Grass cover, Good, HSG C
32,196	95	Weighted Average
3,734		11.60% Pervious Area
28,462		88.40% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, 1**

Subcatchment 3S: DA-3A



Summary for Subcatchment 4S: DA-3B

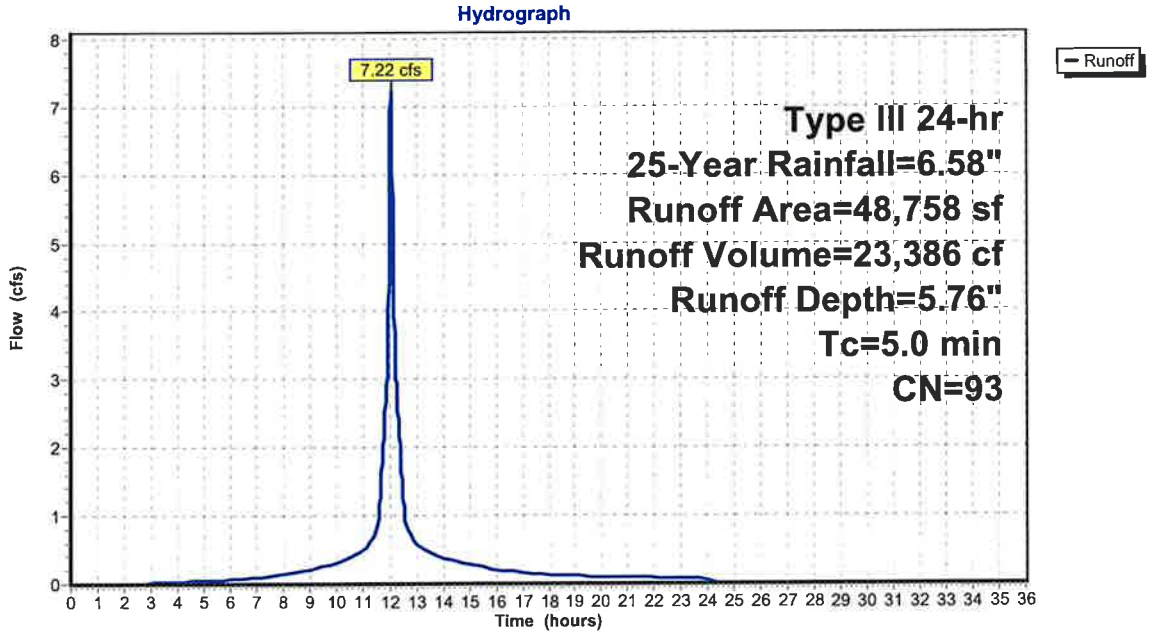
Runoff = 7.22 cfs @ 12.07 hrs, Volume= 23,386 cf, Depth= 5.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.58"

Area (sf)	CN	Description
39,329	98	Paved parking, HSG C
9,429	74	>75% Grass cover, Good, HSG C
48,758	93	Weighted Average
9,429		19.34% Pervious Area
39,329		80.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, 1**

Subcatchment 4S: DA-3B



Summary for Subcatchment 5S: DA-3C

Runoff = 1.96 cfs @ 12.07 hrs, Volume= 6,401 cf, Depth= 5.87"

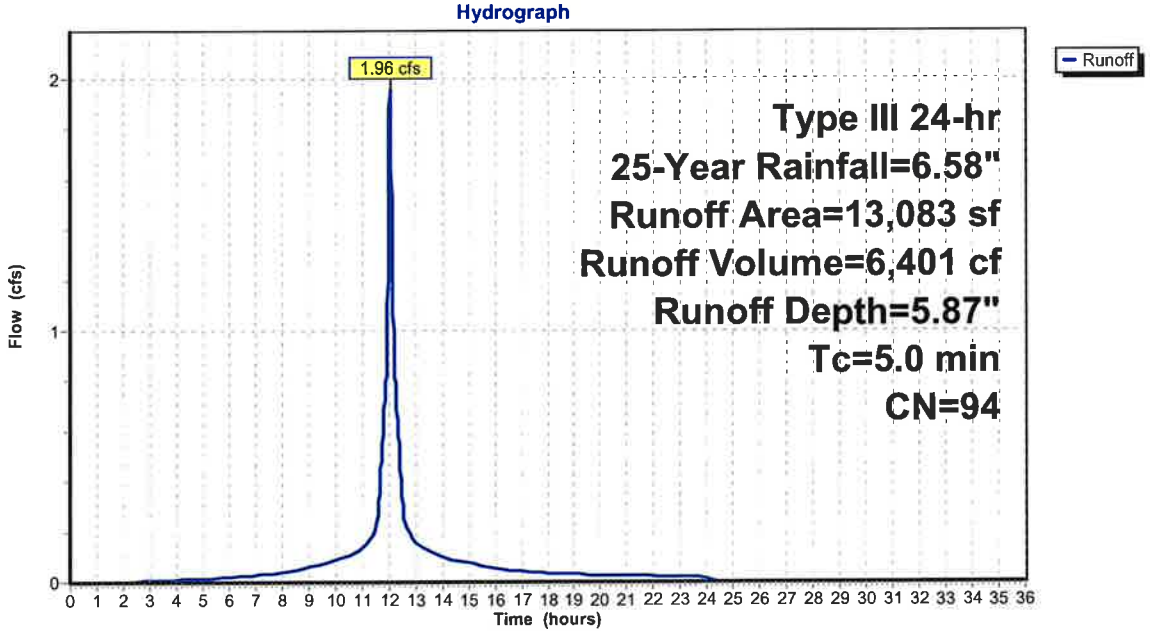
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-Year Rainfall=6.58"

Area (sf)	CN	Description
10,801	98	Paved parking, HSG C
2,282	74	>75% Grass cover, Good, HSG C
13,083	94	Weighted Average
2,282		17.44% Pervious Area
10,801		82.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, 1

Subcatchment 5S: DA-3C

Hydrograph



Summary for Pond 6P: RS-1

Inflow Area = 32,196 sf, 88.40% Impervious, Inflow Depth = 5.99" for 25-Year event
Inflow = 4.86 cfs @ 12.07 hrs, Volume= 16,066 cf
Outflow = 4.85 cfs @ 12.07 hrs, Volume= 14,703 cf, Atten= 0%, Lag= 0.2 min
Primary = 4.85 cfs @ 12.07 hrs, Volume= 14,703 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 47.80' @ 12.07 hrs Surf.Area= 1,022 sf Storage= 1,460 cf

Plug-Flow detention time= 78.5 min calculated for 14,699 cf (91% of inflow)
Center-of-Mass det. time= 34.8 min (795.3 - 760.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	42.50'	355 cf	**28.40'W x 18.00'L x 4.50'H Field A** 2,300 cf Overall - 1,413 cf Embedded = 887 cf x 40.0% Voids
#2A	43.00'	1,064 cf	**Concrete Galley 4x4x4** x 24 Inside #1 Inside= 42.0"W x 43.0"H => 12.67 sf x 3.50'L = 44.3 cf Outside= 52.8"W x 48.0"H => 14.72 sf x 4.00'L = 58.9 cf 24 Chambers in 6 Rows
#3	47.00'	66 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 664 cf Overall x 10.0% Voids
		1,486 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
47.00	511	0	0
48.30	511	664	664

Device	Routing	Invert	Outlet Devices
#1	Primary	46.50'	**15.0" Round Culvert** L= 115.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 46.50' / 42.30' S= 0.0365 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=4.84 cfs @ 12.07 hrs HW=47.80' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 4.84 cfs @ 3.94 fps)

Pond 6P: RS-1 - Chamber Wizard Field A

Chamber Model = Concrete Galley 4x4x4 (Concrete Galley, UCPI 4x4x4 Galley or equivalent)
Inside= 42.0"W x 43.0"H => 12.67 sf x 3.50'L = 44.3 cf
Outside= 52.8"W x 48.0"H => 14.72 sf x 4.00'L = 58.9 cf

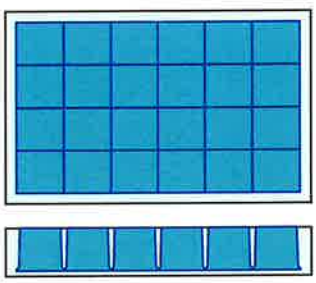
4 Chambers/Row x 4.00' Long = 16.00' Row Length +12.0" End Stone x 2 = 18.00' Base Length
6 Rows x 52.8" Wide + 12.0" Side Stone x 2 = 28.40' Base Width
6.0" Base + 48.0" Chamber Height = 4.50' Field Height

24 Chambers x 44.3 cf = 1,064.3 cf Chamber Storage
24 Chambers x 58.9 cf = 1,413.0 cf Displacement

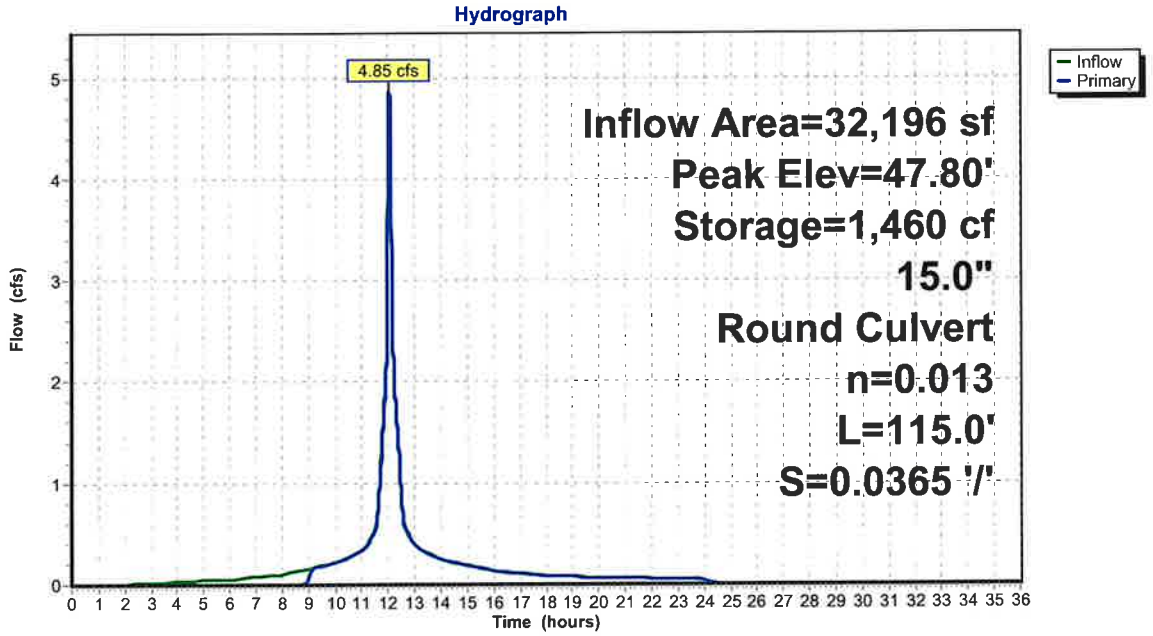
2,300.4 cf Field - 1,413.0 cf Chambers = 887.4 cf Stone x 40.0% Voids = 354.9 cf Stone Storage

Chamber Storage + Stone Storage = 1,419.2 cf = 0.033 af
Overall Storage Efficiency = 61.7%
Overall System Size = 18.00' x 28.40' x 4.50'

24 Chambers
85.2 cy Field
32.9 cy Stone



Pond 6P: RS-1



Summary for Pond 7P: RS-2

Inflow Area = 48,758 sf, 80.66% Impervious, Inflow Depth = 5.76" for 25-Year event
Inflow = 7.22 cfs @ 12.07 hrs, Volume= 23,386 cf
Outflow = 7.17 cfs @ 12.08 hrs, Volume= 21,218 cf, Atten= 1%, Lag= 0.5 min
Primary = 7.17 cfs @ 12.08 hrs, Volume= 21,218 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 47.00' @ 12.08 hrs Surf.Area= 1,646 sf Storage= 2,437 cf

Plug-Flow detention time= 82.4 min calculated for 21,218 cf (91% of inflow)
Center-of-Mass det. time= 36.0 min (805.5 - 769.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	41.00'	540 cf	**19.60'W x 42.00'L x 4.50'H Field A** 3,704 cf Overall - 2,355 cf Embedded = 1,349 cf x 40.0% Voids
#2A	41.50'	1,774 cf	**Concrete Galley 4x4x4** x 40 Inside #1 Inside= 42.0"W x 43.0"H => 12.67 sf x 3.50'L = 44.3 cf Outside= 52.8"W x 48.0"H => 14.72 sf x 4.00'L = 58.9 cf 40 Chambers in 4 Rows
#3	45.50'	206 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 2,058 cf Overall x 10.0% Voids
		2,519 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
45.50	823	0	0
48.00	823	2,058	2,058

Device	Routing	Invert	Outlet Devices
#1	Primary	44.90'	**15.0" Round Culvert** L= 37.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 44.90' / 42.30' S= 0.0703 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=7.17 cfs @ 12.08 hrs HW=47.00' TW=0.00' (Dynamic Tailwater)
↳**1=Culvert** (Inlet Controls 7.17 cfs @ 5.84 fps)

Pond 7P: RS-2 - Chamber Wizard Field A

Chamber Model = Concrete Galley 4x4x4 (Concrete Galley, UCPI 4x4x4 Galley or equivalent)
Inside= 42.0"W x 43.0"H => 12.67 sf x 3.50'L = 44.3 cf
Outside= 52.8"W x 48.0"H => 14.72 sf x 4.00'L = 58.9 cf

10 Chambers/Row x 4.00' Long = 40.00' Row Length +12.0" End Stone x 2 = 42.00' Base Length
4 Rows x 52.8" Wide + 12.0" Side Stone x 2 = 19.60' Base Width
6.0" Base + 48.0" Chamber Height = 4.50' Field Height

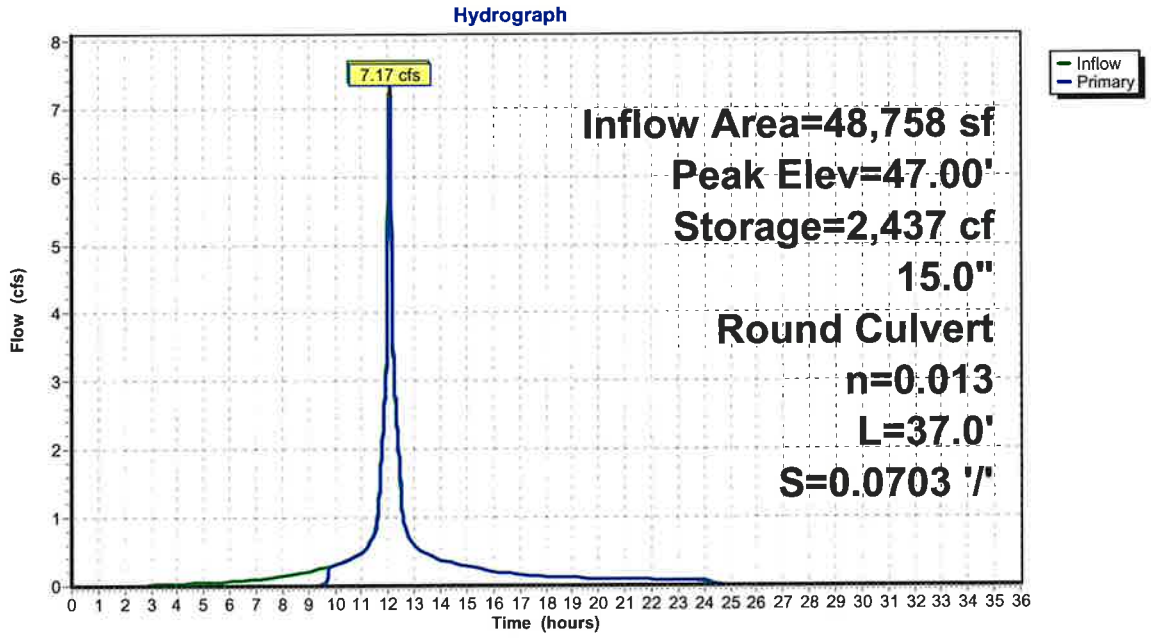
40 Chambers x 44.3 cf = 1,773.8 cf Chamber Storage
40 Chambers x 58.9 cf = 2,355.1 cf Displacement

3,704.4 cf Field - 2,355.1 cf Chambers = 1,349.3 cf Stone x 40.0% Voids = 539.7 cf Stone Storage

Chamber Storage + Stone Storage = 2,313.5 cf = 0.053 af
Overall Storage Efficiency = 62.5%
Overall System Size = 42.00' x 19.60' x 4.50'

40 Chambers
137.2 cy Field
50.0 cy Stone

Pond 7P: RS-2



Summary for Pond 8P: RS-3

Inflow Area = 13,083 sf, 82.56% Impervious, Inflow Depth = 5.87" for 25-Year event
Inflow = 1.96 cfs @ 12.07 hrs, Volume= 6,401 cf
Outflow = 1.96 cfs @ 12.07 hrs, Volume= 5,715 cf, Atten= 0%, Lag= 0.2 min
Primary = 1.96 cfs @ 12.07 hrs, Volume= 5,715 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Peak Elev= 40.07' @ 12.07 hrs Surf.Area= 703 sf Storage= 772 cf

Plug-Flow detention time= 90.9 min calculated for 5,714 cf (89% of inflow)
Center-of-Mass det. time= 39.5 min (804.7 - 765.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	36.30'	322 cf	**11.17'W x 31.50'L x 3.54'H Field A** 1,246 cf Overall - 440 cf Embedded = 806 cf x 40.0% Voids
#2A	36.80'	440 cf	**Cultec R-330XLHD** x 8 Inside #1 Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap Row Length Adjustment= +1.50' x 7.45 sf x 2 rows
#3	39.80'	18 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc) 176 cf Overall x 10.0% Voids
		780 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
39.80	351	0	0
40.30	351	176	176

Device	Routing	Invert	Outlet Devices
#1	Primary	39.30'	**12.0" Round Culvert** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 39.30' / 38.80' S= 0.0250 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.95 cfs @ 12.07 hrs HW=40.07' TW=0.00' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 1.95 cfs @ 2.99 fps)

Pond 8P: RS-3 - Chamber Wizard Field A

Chamber Model = Cultec R-330XLHD (Cultec Recharger® 330XLHD)
Effective Size= 47.8"W x 30.0"H => 7.45 sf x 7.00'L = 52.2 cf
Overall Size= 52.0"W x 30.5"H x 8.50'L with 1.50' Overlap
Row Length Adjustment= +1.50' x 7.45 sf x 2 rows

52.0" Wide + 6.0" Spacing = 58.0" C-C Row Spacing

4 Chambers/Row x 7.00' Long +1.50' Row Adjustment = 29.50' Row Length +12.0" End Stone x 2 = 31.50' Base Length
2 Rows x 52.0" Wide + 6.0" Spacing x 1 + 12.0" Side Stone x 2 = 11.17' Base Width
6.0" Base + 30.5" Chamber Height + 6.0" Cover = 3.54' Field Height

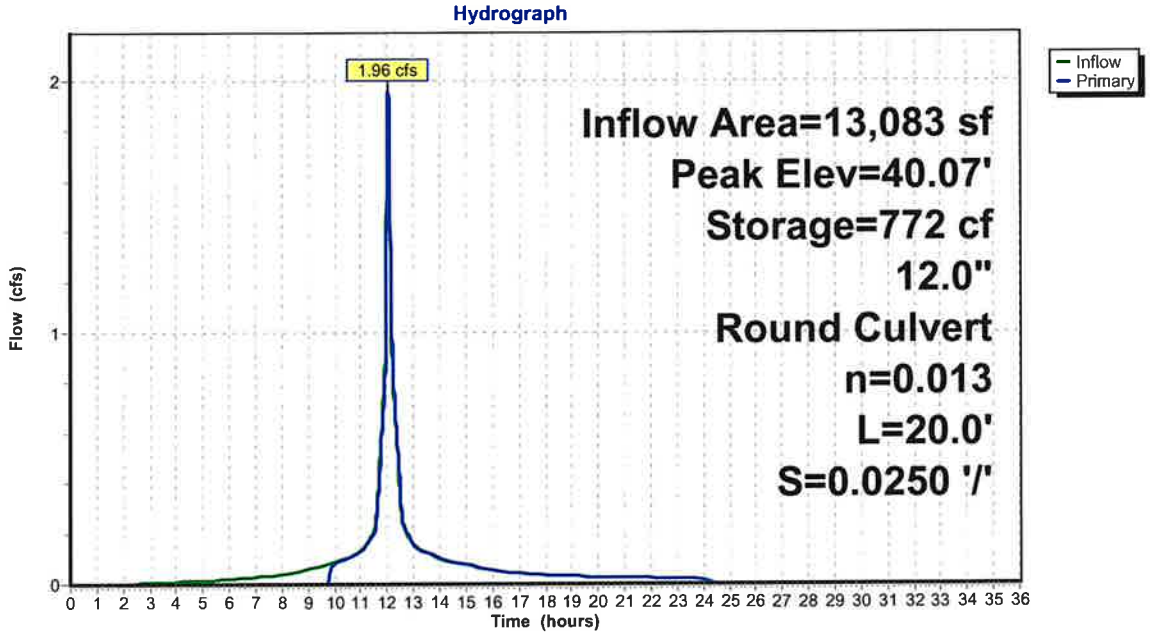
8 Chambers x 52.2 cf +1.50' Row Adjustment x 7.45 sf x 2 Rows = 439.6 cf Chamber Storage

1,245.8 cf Field - 439.6 cf Chambers = 806.2 cf Stone x 40.0% Voids = 322.5 cf Stone Storage

Chamber Storage + Stone Storage = 762.1 cf = 0.017 af
Overall Storage Efficiency = 61.2%
Overall System Size = 31.50' x 11.17' x 3.54'

8 Chambers
46.1 cy Field
29.9 cy Stone

Pond 8P: RS-3

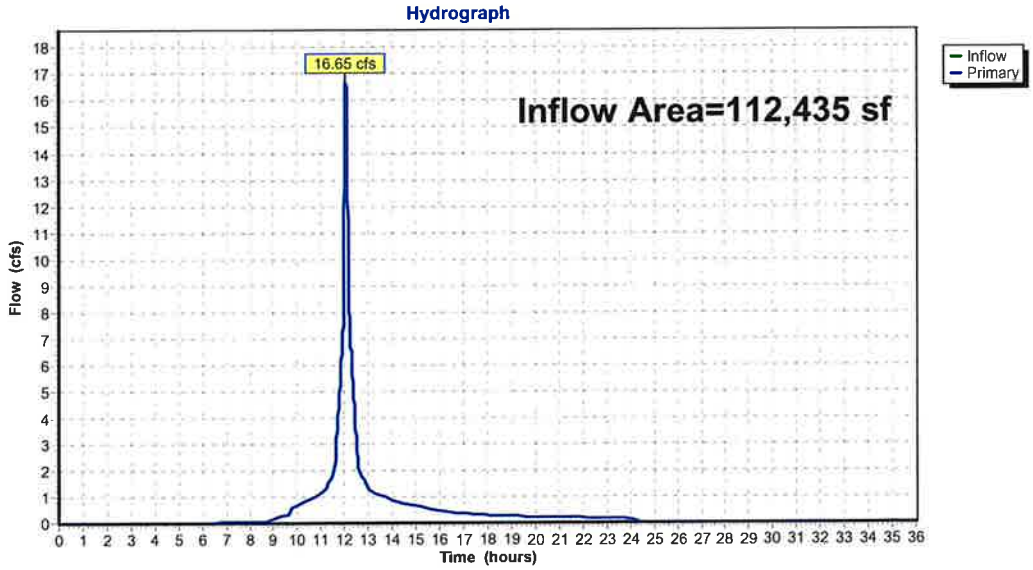


Summary for Link 9L: POC A

Inflow Area = 112,435 sf, 82.03% Impervious, Inflow Depth = 5.37" for 25-Year event
Inflow = 16.65 cfs @ 12.08 hrs, Volume= 50,284 cf
Primary = 16.65 cfs @ 12.08 hrs, Volume= 50,284 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link 9L: POC A

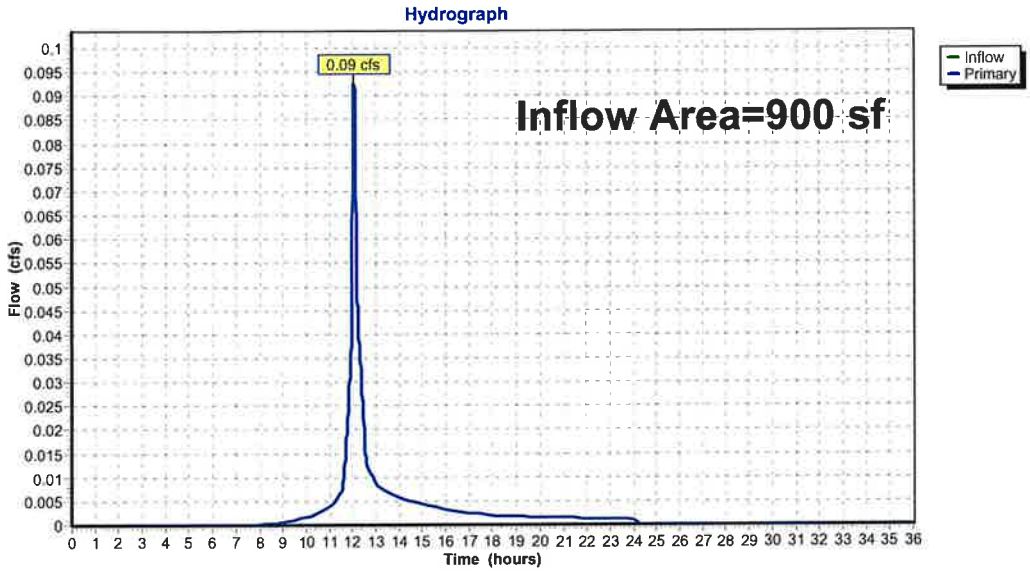


Summary for Link 10L: POC B

Inflow Area = 900 sf, 0.00% Impervious, Inflow Depth = 3.68" for 25-Year event
Inflow = 0.09 cfs @ 12.07 hrs, Volume= 276 cf
Primary = 0.09 cfs @ 12.07 hrs, Volume= 276 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Link 10L: POC B



Appendix "E"

DCIA Worksheet

Directly Connected Impervious Area Tracking Worksheet
City of Stamford Drainage Manual

Note to user: complete all cells of this color only, as indicated by section headings

Part 1: General Information (All Projects)	
Project Name	Wings Arena
Project Address	50 Barry Place
Project Applicant	Wings Real Estate Holdings, LLC
Title of Plan	Site Grading Plan
Revision Date of Plan	12/15/2022
Tax Account Number	003-1399

Part 2: Project Details (All Projects)		
1. What type of development is this? (choose from dropdown)	Redevelopment	
2. What is the total area of the project site?	113,335	ft^2
3. What is the total area of land disturbance for this project?	111,935	ft^2
4. Does project site drain to High Quality Waters, a Direct Waterfront, or within 500 ft. of Tidal Wetlands? (Yes/No)	No	
Does Standard 1 apply based on information above?	Yes	

Part 3: Water Quality Target Total (Only for Standard 1 Projects)		
5. What is the current (pre-development) ***DCIA*** for the site?	91,662	ft^2
6. Will the proposed development increase ***DCIA*** (without consideration of proposed stormwater management)? (Yes/No)	Yes	
7. What is the proposed-development ***total impervious area*** for the site?	92,234	ft^2
Water Quality Volume (WQV)	7389.8	ft^3
Standard 1 requirement	Retain 1/2 WQV on-site	
Required retention volume	3694.9	ft^3
Provided retention volume for proposed development	4,214.0	ft^3

Part 4: Proposed DCIA Tracking (Only for Standard 1 Projects)		
Pre-development ***total impervious area***	91,662	ft^2
Current ***DCIA***	91,662	ft^2
Proposed-development ***total impervious area***	92,234	ft^2
Proposed-development ***DCIA*** (after stormwater management)	13,642	ft^2
Net change in ***DCIA*** from current to proposed-development	-78,020	ft^2

Part 5: Post-Development (As-Built Certified) DCIA Tracking (Only for Standard 1 Projects)		
Post-development (per as-built) ***total impervious area***		ft^2
Post-development (per as-built) ***DCIA*** (after stormwater management)		ft^2
Net change in ***DCIA*** from current to post-development		ft^2

Certification Statement

I hereby certify that the information contained in this worksheet is true and correct.

Engineer's Signature _____ Date _____ Engineer's Seal _____

November 18, 2022

Mr. Benoit Morin
Wings Real Estate Development, LLC
41 Owenoke Way
Riverside, CT 06878

Re: Traffic Impact Study
23-50 Barry Place – Ice Rink
Stamford, Connecticut
SLR #141.20963.00001

Dear Mr. Morin,

At your request, SLR International Corporation (SLR) has undertaken this study to evaluate the traffic-related implications associated with the proposed development to be located at 23-50 Barry Street in Stamford, Connecticut. **Figure 1** displays the study area and location map. The proposed project plans to construct an ice rink behind the existing Conair Corporation building and convert the existing northern one-way driveway to two way.

The work comprising the study consisted of several tasks, including data collection, review of roadway and traffic conditions, estimation of site-generated traffic volumes, and assessment of future traffic operations. For this study, the following intersections were evaluated:

1. Barry Place at Fairfield Avenue
2. Melrose Place at Fairfield Avenue
3. Fairfield Avenue at Congress Street
4. Congress Street at Southfield Avenue
5. Fairfield Avenue at Selleck Street

Figure 2 displays the study intersection locations.

EXISTING CONDITIONS

The existing information involving the vehicle volumes, transit, and crash history was collected to determine the existing conditions of the area around the proposed development.

Site Environs

Barry Place and Melrose Place are short, low volume, 25 miles per hour (mph) local roads that both connect to Fairfield Avenue and provide the primary connections to the proposed development. There are no sidewalks on either side of both streets. There is on-street parking and many curb cuts along Melrose Place, with few curb cuts and no on-street parking along Barry Place.

Fairfield Avenue is a major collector that runs north/south that connects the local neighborhoods to the south to Selleck Street, which is a minor arterial to the north. Selleck Street then filters into Interstate 95 (I-95). The area around the street is a mixture of residential, commercial, and industrial land uses, with a speed limit of 25 mph and multiple intersecting side streets. All the intersections are stop controlled, and there is limited pedestrian and bicycle infrastructure along the street. The northern section of Fairfield Avenue does have a sidewalk on one side of the street that connects to Selleck Street but ends at Barry Place. There are many large and wide curb cuts that align the street with on-street parking on either side of the north section.

Congress Street is a 25 mph short section of roadway that connects Fairfield Avenue to Southfield Avenue, which runs parallel to the harbor and provides another access point to Selleck Street. The street services residential housing with on-street parking on the north side of the street and no pedestrian or bicycle infrastructure.

Existing Transit Routes

CTtransit is Connecticut Department of Transportation's (CTDOT) bus service. CTtransit Stamford operates 15 local bus routes. Buses connect with other services in Norwalk, with the New Haven Line in several locations, the Harlem Line on Metro-North Railroad, and with Bee-Line buses in Westchester County, New York. CTtransit Stamford also operates the I-Bus, an express service between downtown Stamford and White Plains, New York. CTtransit Stamford bus route 324 has stops along the study intersections.

Route 324 operates between the Stamford Transportation Center and Stamford's Waterside neighborhood. Route 324 buses operate via Richmond Hill Avenue and Fairfield Avenue to Top Gallant Road, then return northward via Southfield Avenue, Greenwich Avenue, and South State Street to the Stamford Transportation Center. There are multiple stops along Fairfield Avenue within the study area, with another stop close to the Congress Street and Southfield Avenue intersection.

Crash Data Summary

Information on traffic crash statistics for the study intersections was obtained from the Connecticut Crash Data Repository for the roughly 3-year period of November 10, 2019, to November 10, 2022. The crash data collected for this period is shown in **Table 1**, summarized by location.

A total of 17 crashes were recorded in the 3-year period within the study area. All 17 crashes resulted in property damage only, with no injuries reported. Four of those crashes occurred at study intersections, and 13 occurred along the roadway segment. Most of the crashes occurred along Fairfield Avenue and at the Fairfield Avenue intersection with Selleck Drive, which is the only signalized intersection. The three crashes that occurred at the intersection were all rear-end collisions, which is common for signalized intersections. No crashes were recorded at the intersections of Fairfield Avenue at Barry Place, Fairfield Avenue at Congress Street, and Congress Street at Southfield Avenue or along Barry Place.

Table 1 Crash Data Summary

Location		Crash Severity		Type of Collision					
		Property Damage Only	Total	Sideswipe (Same Direction)	Rear-End	Angle	Head On	Unknown	Total
Intersections									
1	Fairfield Avenue at Selleck Street (Signalized)	3	**3**	-	3	-	-	-	3
2	Fairfield Avenue at Melrose Place (Unsignalized)	1	**1**	1	-	-	-	-	1
Intersection Totals		**4**	**4**	**1**	**3**	-	-	-	4
Roadway Segments									
Congress Street (Fairfield Avenue to Southfield Avenue)		2	**2**	-	-	1	-	1	**2**
Melrose Place (Barry Place to Fairfield Avenue)		1	**1**	1	-	-	-	-	**1**
Fairfield Avenue (Barry Place to Selleck Street)		10	**10**	-	1	5	1	3	**10**
Roadway Totals		**13**	**13**	**1**	**1**	**6**	**1**	**4**	**13**
TOTAL		**17**	**17**	**2**	**4**	**6**	**1**	**4**	**17**

Source: Connecticut Crash Data Repository from November 10, 2019, to November 10, 2022

Intersection Sight Distance

Intersection sight distance was measured at the proposed development driveway. The proposed development will be accessed through an existing driveway along Barry Place, which is a low volume, low speed local road. The driveway is currently one way inbound but will be converted to two way for the proposed ice rink. Intersection sight distance was calculated to be 280', assuming a conservative 25 mph speed limit using CTDOT methodology.

Intersection sight distance is determined through the creation of clear sight triangles. Each quadrant of the intersection should contain a triangular area free of obstructions. For vehicles approaching an intersection, the length of the legs of the triangle should be long enough such that the driver can see any potentially conflicting vehicles in sufficient time to slow or stop before colliding. For vehicles departing from an intersection, the length of the legs of the triangle should be sufficient for a stopped driver to depart from the intersection and turn onto the main road safely.

Intersection sight distance was measured in accordance with criteria set forth in the 2003 CTDOT *Highway Design Manual*. For a speed of 25 mph, 280 feet of intersection sight distance is required. Looking right from the proposed development driveway, a driver can see more than the 280 feet required for a speed of 25 mph. Looking left, the required sight line extends into the intersection of Barry Place at Melrose Place. At a conventional intersection, left-turning vehicles typically travel at a speed of 15 mph. For a speed of 15 mph, approximately 165 feet of intersection sight distance is required. Looking left, a driver can see the 165 feet required for a speed of 15 mph.

Existing Traffic Volumes

Traffic monitoring data from August 2020 (collected during the COVID-19 epoch) on Fairfield Avenue north of Sunnyside Avenue was obtained from CTDOT. The annualized average daily traffic (AADT) at this location in 2020 was recorded as 4,200 vehicles combined. However, this was roughly half of the traffic that was recorded in December 2017 (8,000 vehicles combined). There was no AADT data available for the other roadways in the study area.

To supplement the state traffic monitoring data, multimodal traffic counts were conducted, including vehicle turning movement and pedestrian crossing counts at the study intersections. The counts were conducted on Thursday, October 26, 2022, from 4:00 p.m. to 6:00 p.m. and Saturday, October 29, 2022, from 11:00 a.m. to 1:00 p.m. to capture recreational activity. For analysis, the highest single peak-hour volume for each time period was extracted from the count data. The study area peak hours were found to be from 5:00 p.m. to 6:00 p.m. (weekday afternoon peak hour) and from 12:00 p.m. to 1:00 p.m. (Saturday midday peak hour). These volumes were used to develop 2024 background and combined volumes. The existing peak-hour traffic volumes are shown in **Figure 3**. The existing peak-hour pedestrian volumes are shown in **Figure 4**. The counts are included in the Appendix.

PROPOSED DEVELOPMENT

As stated previously, the proposed project plans to construct a single ice rink in the back portion of the Conair Corporation office. Access to the site will be through an existing driveway off Barry Place.

Proposed Development Trip Generation

The proposed new site-generated peak-hour trips were estimated using statistical data published by the Institute of Transportation Engineers (ITE).[1] **Table 2** summarizes the site-generated traffic estimates for the proposed development during the study peak hours.

Table 2 Proposed Development Traffic Estimates

Land Use	Units (Number of Rinks)	P.M. Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Development							
LUC 465 – Ice Skating Rink	1	28	17	45	63	50	113

Notes:
1. *Trip Generation*, 11th Edition, Institute of Transportation Engineers

As shown in Table 2, the proposed development is estimated to generate 45 total vehicle trips (28 vehicles entering and 17 vehicles exiting) during the weekday afternoon peak hour and 113 total vehicle trips (63 vehicles entering and 50 vehicles exiting) during the Saturday midday peak hour.

Proposed Development Trip Distribution

The geographic distribution of the proposed development site-generated traffic was estimated based on review of the roadway traffic patterns in the vicinity of the site. **Figure 5** illustrates the distribution for the proposed site-generated traffic through the study area. Based on the proposed development trip generation and trip distribution, the proposed development site-generated trips were assigned to the study area intersections. **Figure 6** displays the resulting proposed development trip assignment.

Background Development Trip Generation

The background development site-generated peak-hour trips were estimated using statistical data published by the Institute of Transportation Engineers (ITE).[2] **Table 3** summarizes the site-generated traffic estimates for the Sound Waters Center and larger Boccuzzi Park project during the study peak hours. The

[1] *Trip Generation, 11th Edition*, Institute of Transportation Engineers, 2021

background trips associated with the redevelopment park do not assume any credits due to exiting trips and therefore are conservative for this study.

FUTURE (2024) CONDITIONS

The proposed development is anticipated to be completed by 2024. Future (2024) Conditions were evaluated both with and without the proposed development to determine possible traffic impacts.

Background Traffic Volumes

The background traffic scenario is reflective of Future (2024) Conditions if the proposed development was not built. Background (2024) Conditions includes traffic associated with other nearby expected upcoming developments as well as general traffic growth.

Based on correspondence with the City of Stamford and CTDOT, the Sound Waters Center and larger Boccuzzi Park project were included in Background (2024) Conditions. This project looks to build a 12,000-square-foot educational facility, a redesigned park, and realigned driveway. The new driveway will connect to the existing Congress Street and Southfield Avenue intersection, turning the existing T-intersection into a four-way-stop controlled intersection. The project is currently under construction and expected to be completed by 2024. Peak-hour trips for the planned development were estimated using statistical data published by ITE, and geographic distribution of the new traffic was estimated based on review of the roadway traffic patterns. Estimated trip generation and distribution for the planned development is included in the Appendix. The resulting estimated trip assignment for the Sound Waters Center is shown in **Figure 7.**

Based on correspondence with CTDOT, the existing traffic volumes were projected to Future (2024) Conditions using a growth rate of 0.7 percent per year. Background (2024) Conditions peak-hour traffic volumes were estimated by applying the growth rate to the existing peak-hour traffic volumes (shown in Figure 3) and then adding the estimated trip assignment for the Sound Waters Center (shown in Figure 7). The resultant Background (2024) Conditions peak-hour traffic volumes are shown in **Figure 8**.

Combined Traffic Volumes

The combined traffic scenario is reflective of Future (2024) Conditions once the proposed development is completed. Combined (2024) Conditions peak-hour traffic volumes were estimated by adding the proposed development trip assignment (shown in Figure 6) to the Background (2024) Conditions traffic volumes (shown in Figure 8). The resultant Combined (2024) Conditions peak-hour traffic volumes are shown in **Figure 9**.

INTERSECTION CAPACITY ANALYSIS

Intersection capacity analysis was performed at the study intersections under Background and Combined (2024) Conditions to evaluate each intersection's ability to process traffic volumes. These evaluations were used to determine possible traffic impacts from the proposed development based on the comparison of background and combined traffic operations.

Intersection operation results are expressed as a level of service (LOS). LOS is used to provide a qualitative evaluation of the efficiency of operations of an intersection in terms of delay and inconvenience based on certain quantitative calculations. A description of the various LOS designations, A through F, is given in the Appendix. LOS A describes operations with very low average control delay per vehicle while LOS F describes operations with long average delays. The study intersections were evaluated using the *Synchro 11* (*Trafficware*) traffic analysis software package. **Table 3** summarizes the capacity analysis findings under Background and Combined (2024) Conditions. The *Synchro* analysis worksheets are included in the Appendix.

It is important to note that LOS A to LOS D are generally considered acceptable conditions. However, in some areas, LOS E during peak hours is often deemed acceptable and can indicate an efficient tradeoff between traffic flow and the amount of land devoted to the movement of motor vehicles.

As shown in Table 3, the study intersections are expected to operate at acceptable overall LOS (LOS C or better) during both peak hours under Background and Combined (2024) Conditions. Additionally, all individual movements at the study intersections are expected to operate at acceptable LOS (LOS A to LOS C) under Background (2024) and Combined (2024) Conditions during both peak periods.

The signalized intersection of Fairfield Avenue and Selleck Street is expected to operate at LOS C overall under p.m. peak and at LOS B overall under Saturday peak Background and Combined (2024) Conditions.

QUEUE ANALYSIS

Queues were also evaluated using the *Synchro 11* (*Trafficware*) traffic analysis software package. For analysis, the 50th and 95th percentile queues are recorded. The northbound right-turn lane at the intersection of Fairfield Avenue and Selleck Street is 100 feet long. The 95th percentile queues are expected to exceed the available storage length under Background and Combined (2024) Conditions during the weekday afternoon peak period. The 50th percentile queue is also expected to exceed the available storage length, but it is not expected to extend past the retail driveway during the weekday afternoon peak period. While queuing at this movement occurs today and is expected to occur in the future regardless of if the proposed development occurs, the proposed development is not expected to increase the average or 95th percentile queue lengths by more than two vehicles during either peak period. There are no queue issues expected for the rest of the signalized intersection and with any of the unsignalized intersections in the study area.

Table 3 Capacity Analysis Summary Future (2024) Conditions

Intersection/Lane Group	Level of Service			
	P.M. Peak Hour		Saturday Peak Hour	
	Background	Combined	Background	Combined
Signalized				
Fairfield Avenue at Selleck Street				
Eastbound Through	C	C	C	C
Eastbound Right	A	A	A	A
Westbound Left	-	-	-	-
Westbound Through	C	C	B	B
Northbound Left	C	C	C	C
Northbound Right	C	C	C	C
Overall	***C***	***C***	***B***	***B***
Unsignalized				
Fairfield Avenue at Melrose Place				
Northbound Left/Through	A	A	A	A
Eastbound Left/Right	B	B	B	B
Fairfield Avenue at Barry Place				
Eastbound Left	A	A	A	A
Eastbound Through	A	A	A	A
Eastbound Right	A	A	A	A
Westbound Left	A	A	A	A
Fairfield Avenue at Congress Street				
Eastbound Left/Through	A	A	A	A
Westbound Through/Right	A	A	A	A
Southbound Left/Right	A	A	A	A
Congress Street at Southfield Avenue				
Northbound Left/Through/Right	A	A	A	A
Eastbound Left/Through/Right	A	A	A	A
Westbound Left/Through/Right	A	A	A	A
Southbound Left/Through/Right	A	A	A	A

Notes: LOS calculations were performed using *Synchro 11*.

SUMMARY

This study was conducted to assess the traffic impacts of the proposed development to be located at 23-50 Barry Place in Stamford. The proposed project plans to construct one ice rink at the back of the existing Conair Corporation office building. Access to the site will be provided by an existing driveway off Barry Place that will be converted from a one-way to a two-way driveway.

To determine a profile of existing conditions, data assembly efforts were undertaken. Estimates of traffic that will be generated by the proposed development were developed based on statistical data published by ITE, and intersection capacity analysis and queue analysis was performed at the study intersections under Background and Combined (2024) Conditions.

It was found that all study intersections are expected to operate at acceptable overall LOS (LOS C or better) during both peak hours under Background and Combined (2024) Conditions. The north intersection sight distance is expected to meet requirements for a 15 mph speed limit, but there is potential for parked cars to block sight lines. Therefore, it is suggested to move an existing 'No Parking' sign along Melrose Place east to prevent vehicles parking and blocking sight distance.

Based on the results of the capacity analysis, it is our opinion that the increase in traffic because of the proposed development can be accommodated by the surrounding roadway system. As such, no traffic mitigation is necessary.

We hope this report is useful to you and the City of Stamford. If you have any questions or need anything further, please do not hesitate to contact either of the undersigned.

Sincerely,

SLR International Corporation

Emily Foster, PE
Senior Transportation Engineer

Matthew Pelletier, PE
Associate Transportation Engineer

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Figures

- Figure 1 – Study Area
- Figure 2 – Study Intersections
- Figure 3 – Existing Traffic Volumes
- Figure 4 – Existing Pedestrian Volumes
- Figure 5 – Development Percent Distribution
- Figure 6 – Development Trip Assignment
- Figure 7 – Sound Waters Center Estimated Trip Assignment
- Figure 8 – Background (2024) Conditions Traffic Volumes
- Figure 9 – Combined (2024) Conditions Traffic Volumes

Appendix

- Traffic and Pedestrian Counts
- Information on the Sound Waters Center and larger Boccuzzi Park project
- LOS Designation Descriptions
- *Synchro* Analysis Worksheets

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SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

STUDY AREA

23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N

0 80 160 240
Feet

SCALE 1:3,000
DATE 11/17/2022
141.20963.01
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FIG. 1

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SLR

195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

STUDY INTERSECTIONS

23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N

0 125 250 375
Feet

SCALE 1:4,500
DATE 11/17/2022
141.20963.01
PROJ. NO.

FIG. 2

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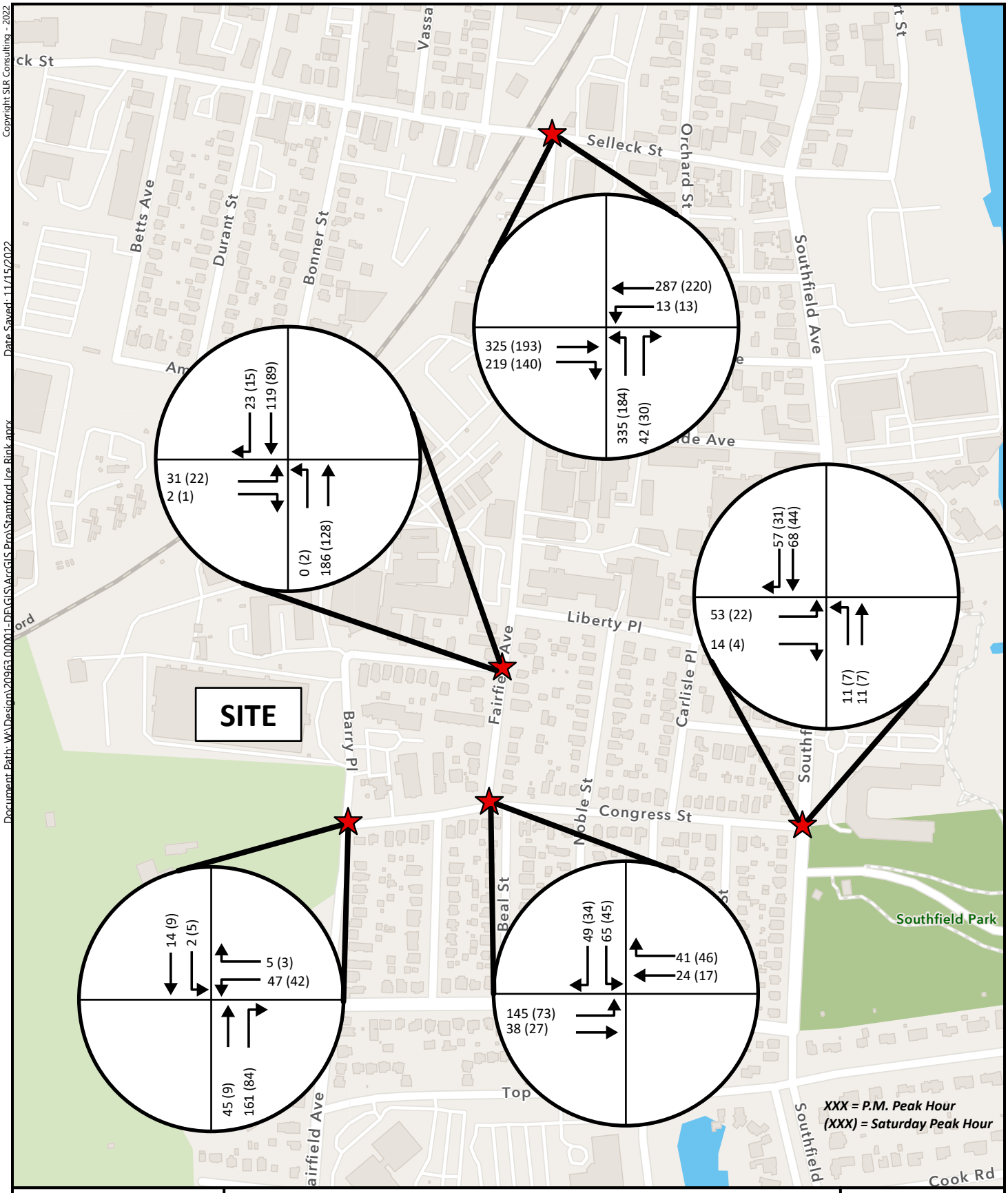

SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

EXISTING TRAFFIC VOLUMES

23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N

0 150 300 450
Feet

SCALE 1:5,500
DATE 11/15/2022
141.20963.01
PROJ. NO.

FIG. 3

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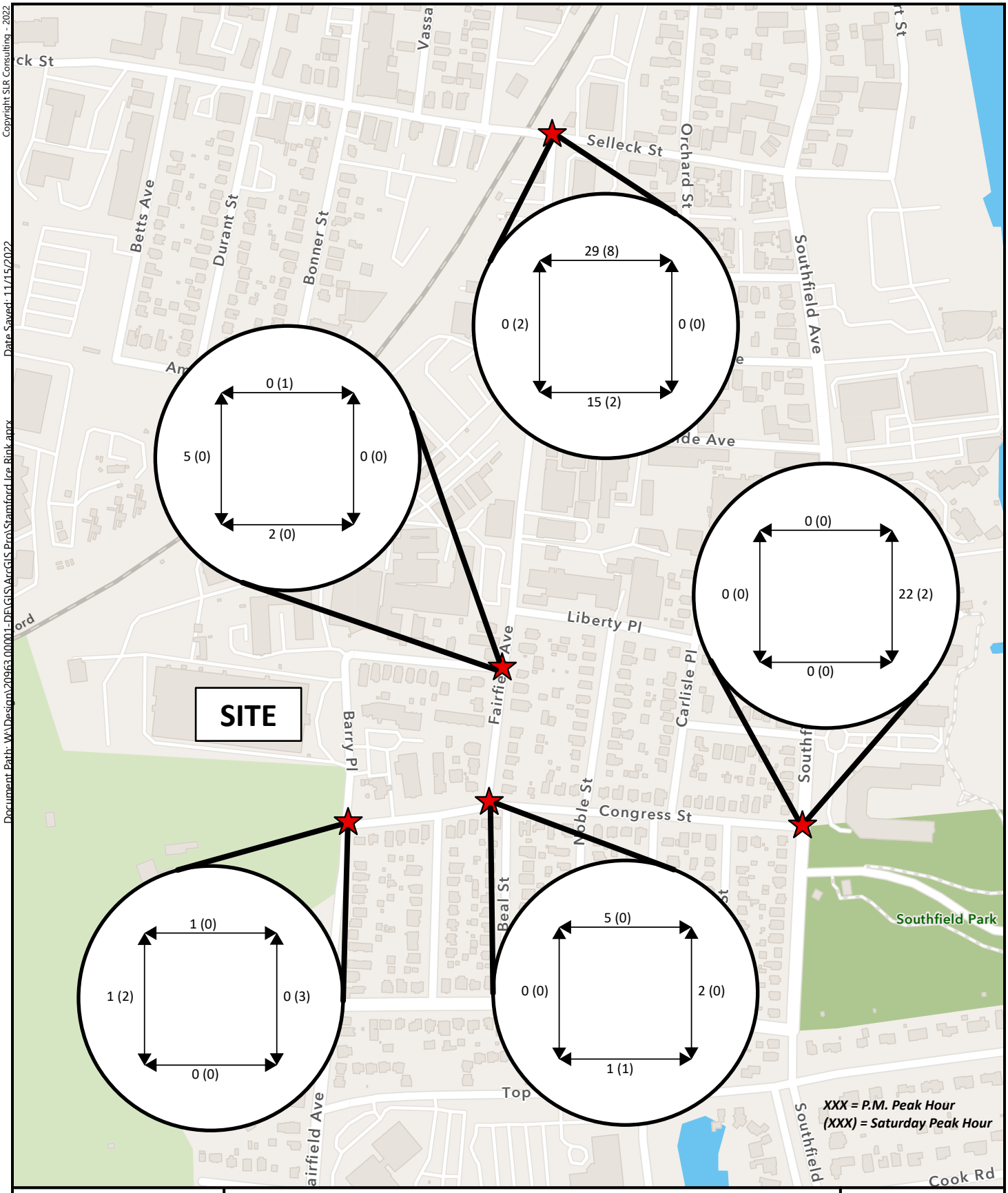


SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

EXISTING PEDESTRIAN VOLUMES

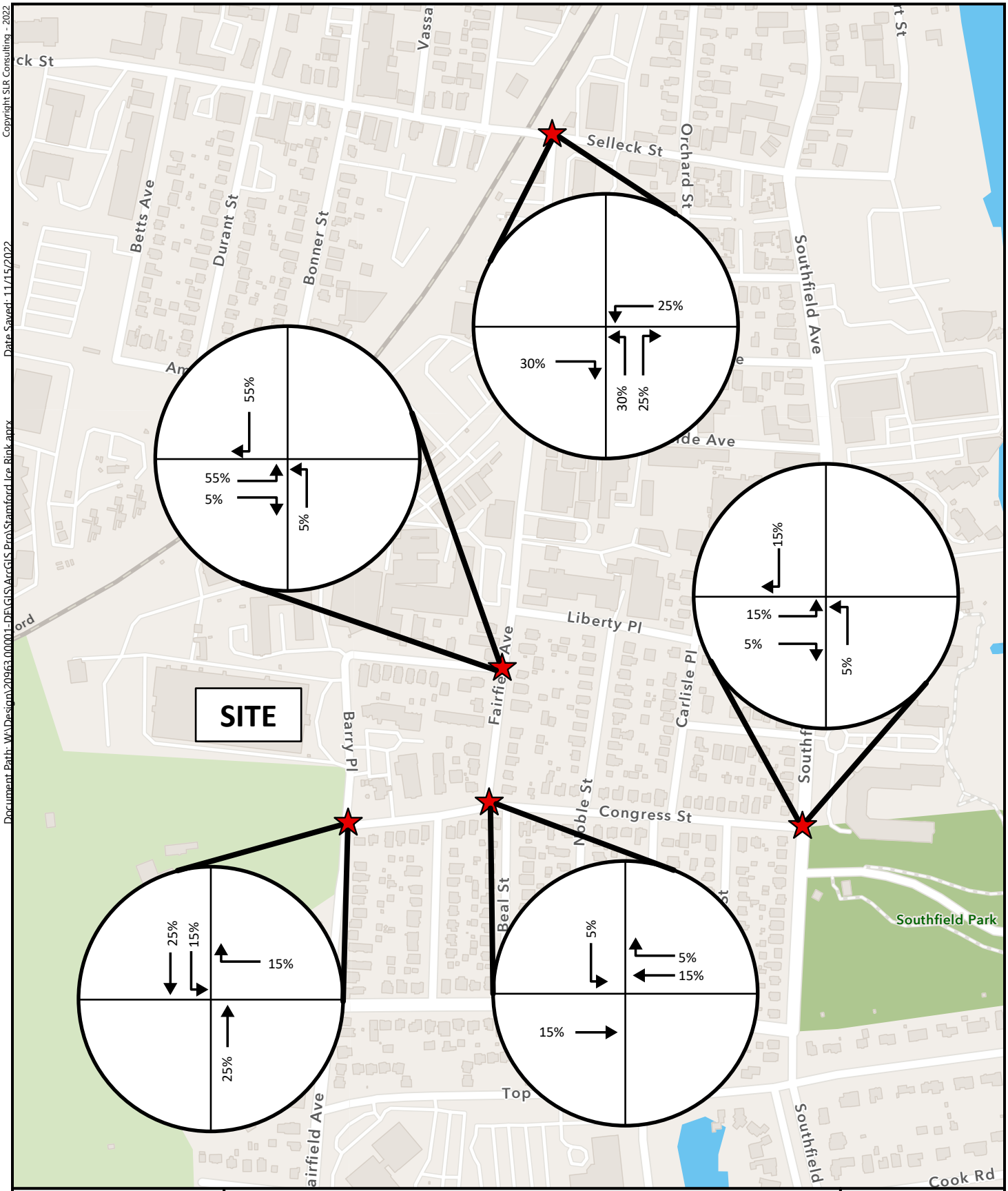
23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N

0 150 300 450
Feet

SCALE 1:5,500
DATE 11/15/2022
141.20963.01
PROJ. NO.

FIG. 4



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SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

DEVELOPMENT % DISTRIBUTION

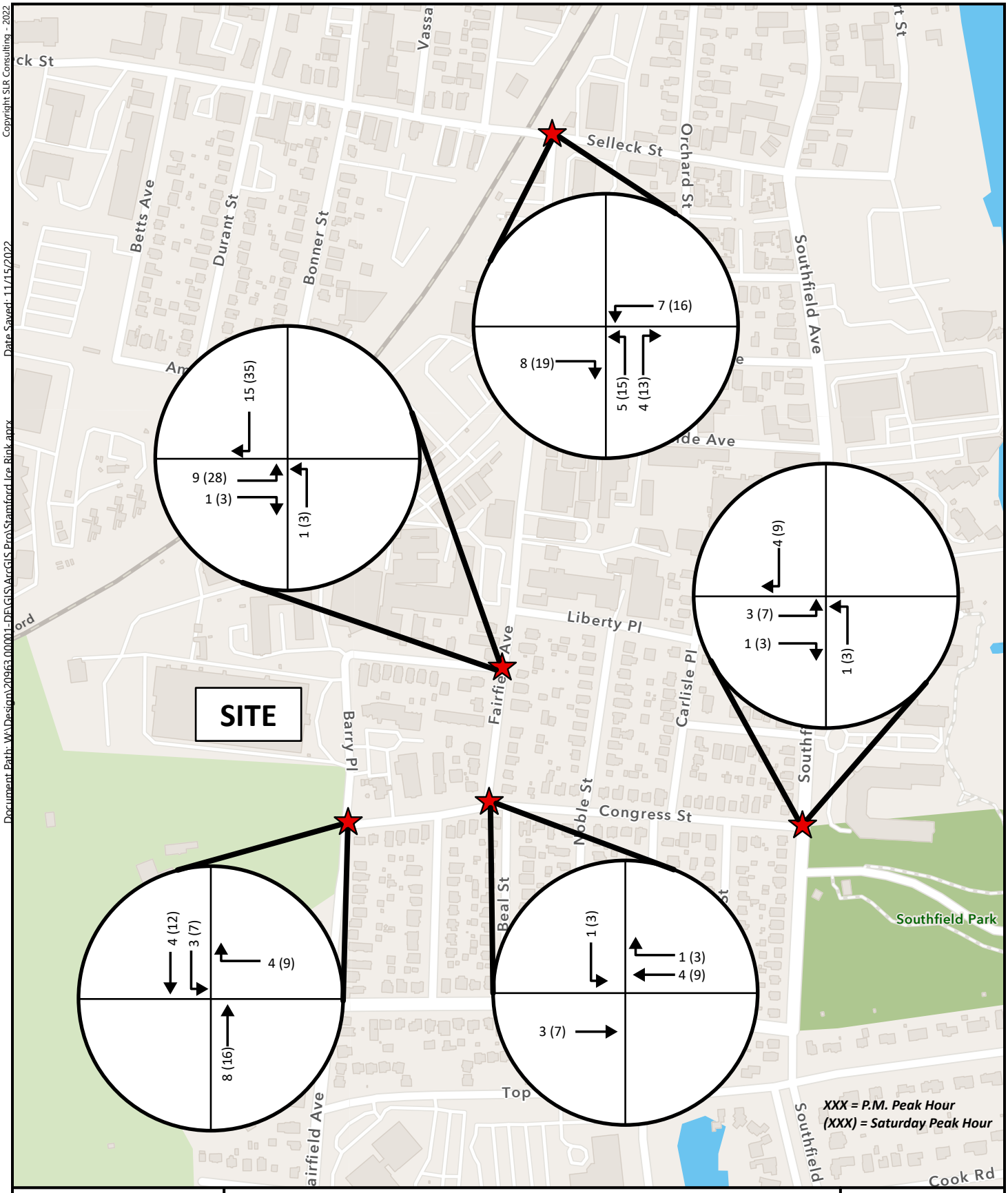
23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N

0 150 300 450
Feet

SCALE 1:5,500
DATE 11/15/2022
141.20963.01
PROJ. NO.

FIG. 5



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SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

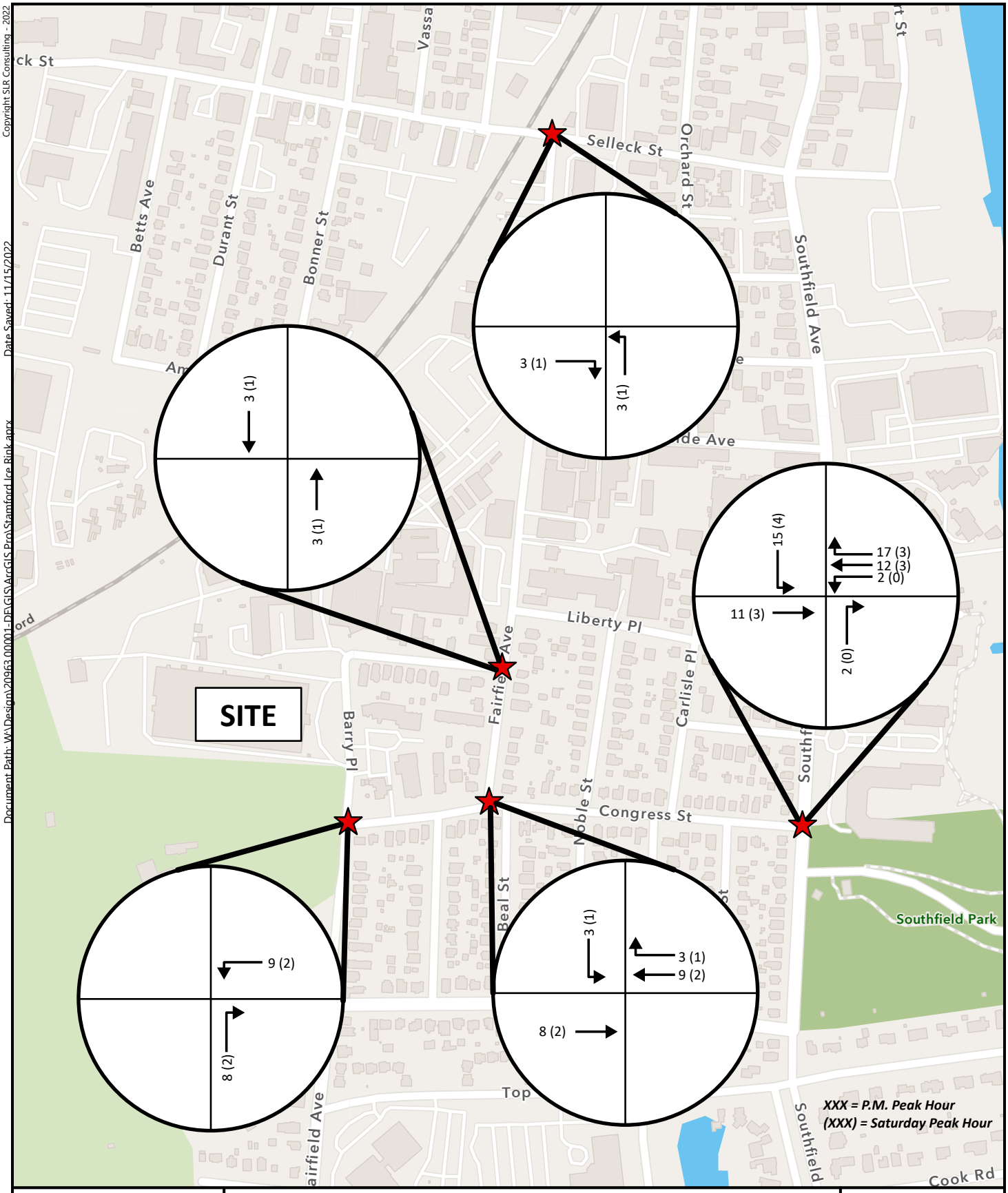
DEVELOPMENT TRIP ASSIGNMENT

23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N
0 150 300 450
Feet

SCALE 1:5,500
DATE 11/15/2022
141.20963.01
PROJ. NO.

FIG. 6



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SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

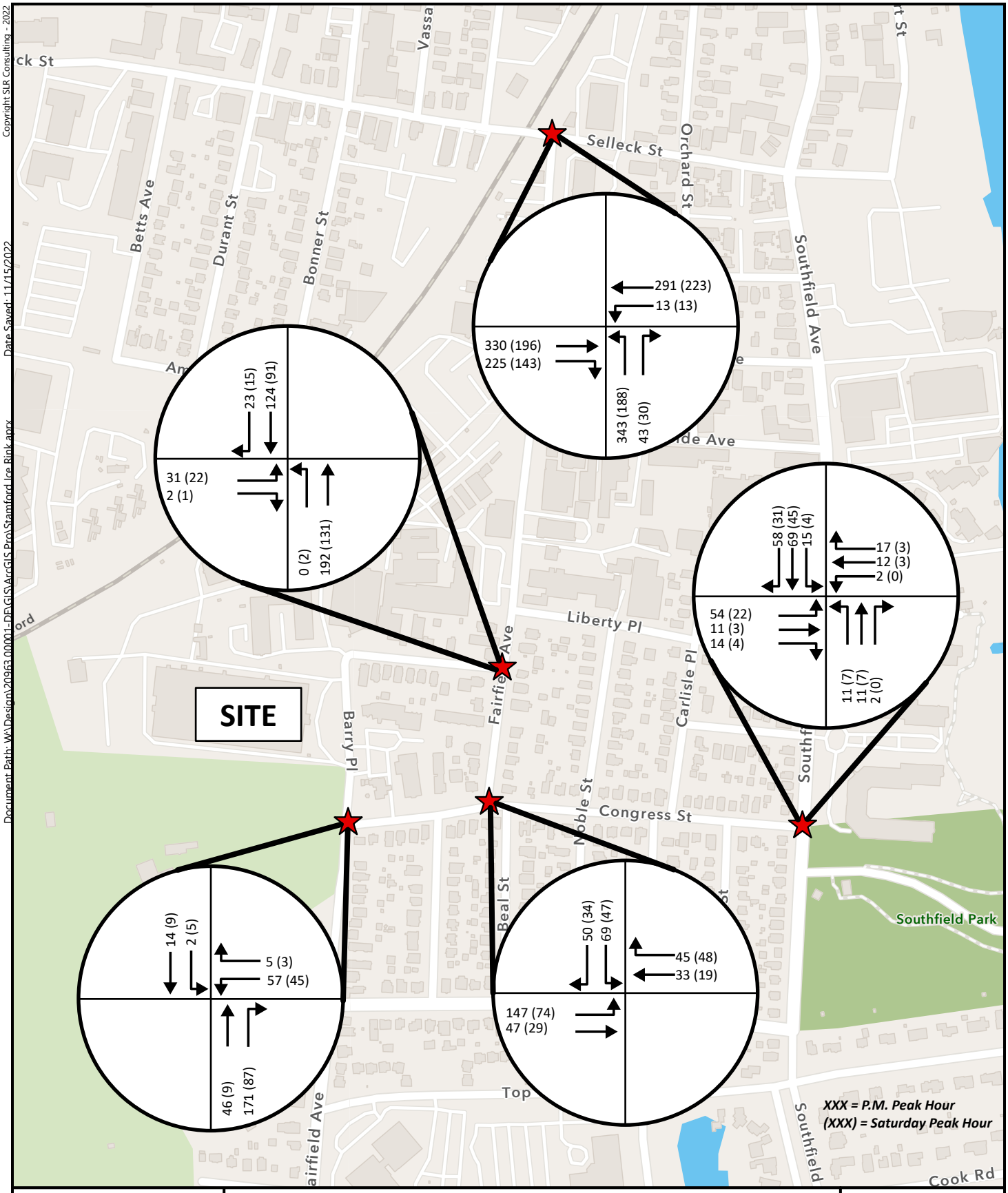
SOUND WATERS CENTER TRIP ASSIGNMENT

23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N
0 150 300 450
Feet

SCALE 1:5,500
DATE 11/15/2022
141.20963.01
PROJ. NO.

FIG. 7



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SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

BACKGROUND (2024) TRAFFIC VOLUMES

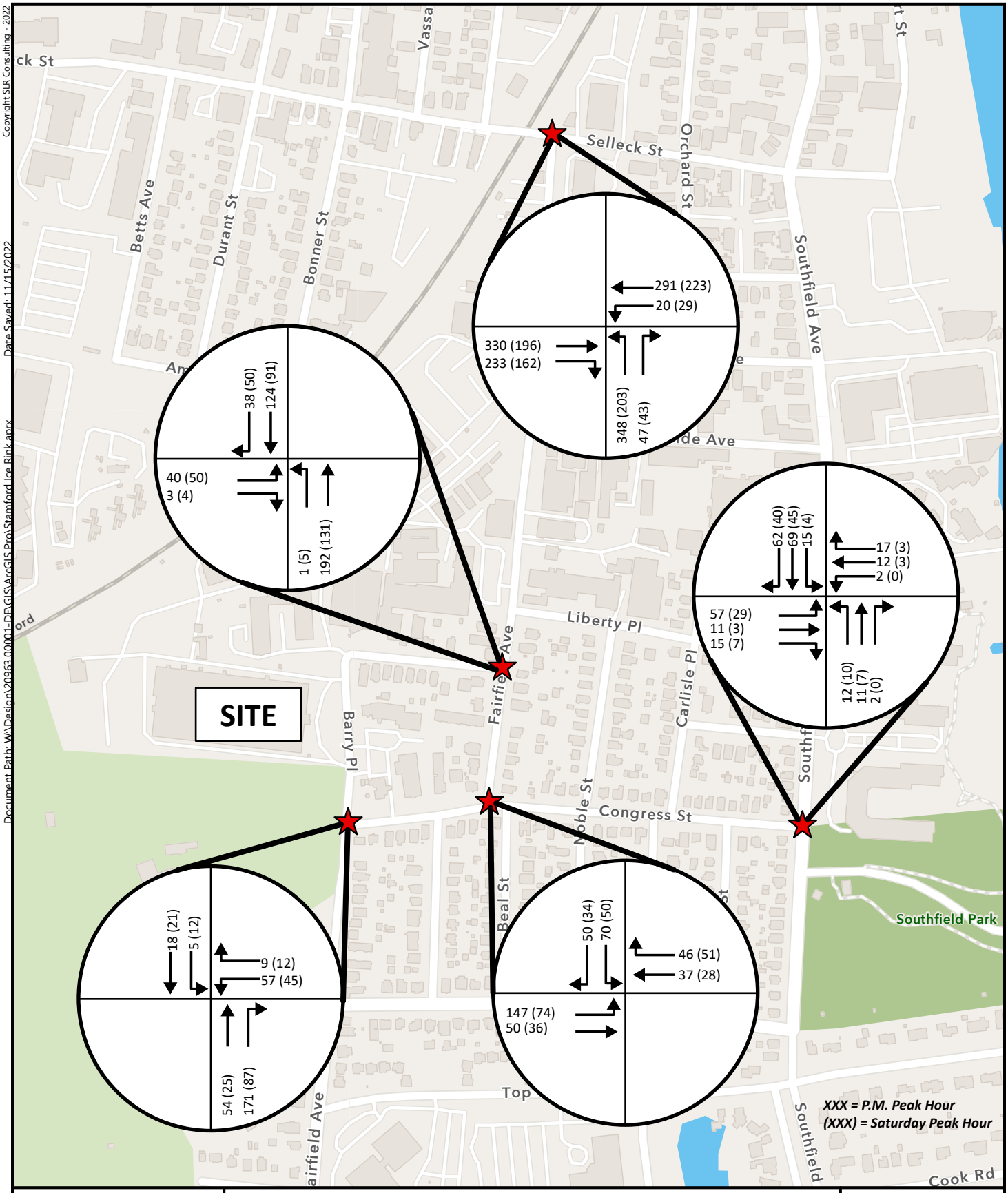
23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N

0 150 300 450
Feet

SCALE 1:5,500
DATE 11/15/2022
141.20963.01
PROJ. NO.

FIG. 8



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SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

COMBINED (2024) TRAFFIC VOLUMES

23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N

0 150 300 450
Feet

SCALE 1:5,500
DATE 11/15/2022
141.20963.01
PROJ. NO.

FIG. 9

APPENDIX

P.M.TRAFFIC COUNTS (4:00 to 6:00 p.m.)
Locations 1,2,3,4 and 5
Wednesday October 26, 2022
Stamford, CT

Reliable Traffic Counts, LLC
Vehicle/Data Collection Service
11 Branhaven Dr. East Haven, CT 06512 Tel. 203-530-2042 Fax: 203-469-0215 rtcvdc@aol.com

Fairfield Ave. at Barry Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-1W
Site Code : 00000001
Start Date : 10/26/2022
Page No : 1

Groups Printed- CARS - TRUCKS - BUSES

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	6	0	0	6	1	0	5	2	8	25	3	0	0	28	0	0	0	0	0	42
04:15 PM	0	0	0	0	0	3	0	14	1	18	19	5	0	0	24	0	0	0	0	0	42
04:30 PM	0	4	0	0	4	1	0	12	0	13	21	5	0	0	26	0	0	0	3	3	46
04:45 PM	0	1	2	0	3	1	0	16	0	17	30	0	0	0	30	0	0	0	0	0	50
Total	0	11	2	0	13	6	0	47	3	56	95	13	0	0	108	0	0	0	3	3	180
05:00 PM	0	1	1	0	2	0	0	5	0	5	50	12	0	0	62	0	0	0	0	0	69
05:15 PM	0	4	1	0	5	0	0	14	0	14	36	8	0	0	44	0	0	0	0	0	63
05:30 PM	0	4	0	0	4	4	0	18	0	22	42	9	0	0	51	0	0	0	1	1	78
05:45 PM	0	5	0	1	6	1	0	10	0	11	33	16	0	0	49	0	0	0	0	0	66
Total	0	14	2	1	17	5	0	47	0	52	161	45	0	0	206	0	0	0	1	1	276
Grand Total	0	25	4	1	30	11	0	94	3	108	256	58	0	0	314	0	0	0	4	4	456
Apprch %	0	83.3	13.3	3.3		10.2	0	87	2.8		81.5	18.5	0	0		0	0	0	100		
Total %	0	5.5	0.9	0.2	6.6	2.4	0	20.6	0.7	23.7	56.1	12.7	0	0	68.9	0	0	0	0.9	0.9	
CARS	0	25	4	1	30	10	0	89	3	102	256	58	0	0	314	0	0	0	4	4	450
% CARS	0	100	100	100	100	90.9	0	94.7	100	94.4	100	100	0	0	100	0	0	0	100	100	98.7
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUSES	0	0	0	0	0	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	6
% BUSES	0	0	0	0	0	9.1	0	5.3	0	5.6	0	0	0	0	0	0	0	0	0	0	1.3

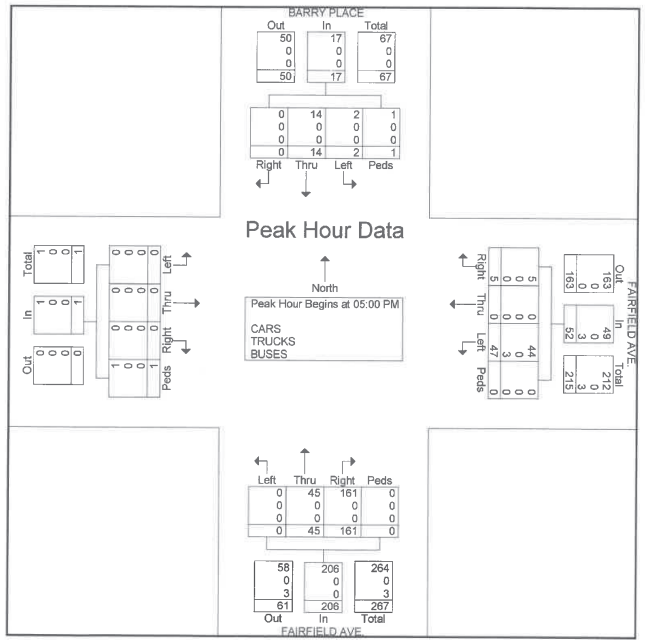
Fairfield Ave. at Barry Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-1W
Site Code : 00000001
Start Date : 10/26/2022
Page No : 3

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	1	**1**	0	2	0	0	5	0	5	**50**	12	0	0	**62**	0	0	0	0	0	69
05:15 PM	0	4	1	0	5	0	0	14	0	14	36	8	0	0	44	0	0	0	0	0	63
05:30 PM	0	4	0	0	4	**4**	0	**18**	0	**22**	42	9	0	0	51	0	0	0	**1**	**1**	**78**
05:45 PM	0	**5**	0	**1**	**6**	1	0	10	0	11	33	**16**	0	0	49	0	0	0	0	0	66
Total Volume	0	14	2	1	17	5	0	47	0	52	161	45	0	0	206	0	0	0	1	1	276
% App. Total	0	82.4	11.8	5.9		9.6	0	90.4	0		78.2	21.8	0	0		0	0	0	100		
PHF	.000	.700	.500	.250	.708	.313	.000	.653	.000	.591	.805	.703	.000	.000	.831	.000	.000	.000	.250	.250	.885
CARS	0	14	2	1	17	5	0	44	0	49	161	45	0	0	206	0	0	0	1	1	273
% CARS	0	100	100	100	100	100	0	93.6	0	94.2	100	100	0	0	100	0	0	0	100	100	98.9
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUSES	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	3
% BUSES	0	0	0	0	0	0	0	6.4	0	5.8	0	0	0	0	0	0	0	0	0	0	1.1



Fairfield Ave. at Barry Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-1W
Site Code : 00000001
Start Date : 10/26/2022
Page No : 4

Groups Printed- CARS

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	6	0	0	6	0	0	5	2	7	25	3	0	0	28	0	0	0	0	0	41
04:15 PM	0	0	0	0	0	3	0	13	1	17	19	5	0	0	24	0	0	0	0	0	41
04:30 PM	0	4	0	0	4	1	0	12	0	13	21	5	0	0	26	0	0	0	3	3	46
04:45 PM	0	1	2	0	3	1	0	15	0	16	30	0	0	0	30	0	0	0	0	0	49
Total	0	11	2	0	13	5	0	45	3	53	95	13	0	0	108	0	0	0	3	3	177
05:00 PM	0	1	1	0	2	0	0	4	0	4	50	12	0	0	62	0	0	0	0	0	68
05:15 PM	0	4	1	0	5	0	0	13	0	13	36	8	0	0	44	0	0	0	0	0	62
05:30 PM	0	4	0	0	4	4	0	17	0	21	42	9	0	0	51	0	0	0	1	1	77
05:45 PM	0	5	0	1	6	1	0	10	0	11	33	16	0	0	49	0	0	0	0	0	66
Total	0	14	2	1	17	5	0	44	0	49	161	45	0	0	206	0	0	0	1	1	273
Grand Total	0	25	4	1	30	10	0	89	3	102	256	58	0	0	314	0	0	0	4	4	450
Apprch %	0	83.3	13.3	3.3		9.8	0	87.3	2.9		81.5	18.5	0	0		0	0	0	100		
Total %	0	5.6	0.9	0.2	6.7	2.2	0	19.8	0.7	22.7	56.9	12.9	0	0	69.8	0	0	0	0.9	0.9	

Fairfield Ave. at Barry Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-1W
Site Code : 00000001
Start Date : 10/26/2022
Page No : 5

Groups Printed- TRUCKS

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Fairfield Ave. at Barry Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-1W
Site Code : 00000001
Start Date : 10/26/2022
Page No : 6

Groups Printed- BUSES

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	3
Grand Total	0	0	0	0	0	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0	6
Apprch %	0	0	0	0		16.7	0	83.3	0		0	0	0	0		0	0	0	0		
Total %	0	0	0	0	0	16.7	0	83.3	0	100	0	0	0	0	0	0	0	0	0	0	

Fairfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-2W
Site Code : 00000002
Start Date : 10/26/2022
Page No : 1

Groups Printed- CARS - TRUCKS - BUSES

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	12	0	9	0	21	7	1	0	0	8	0	0	0	0	0	0	8	15	0	23	52
04:15 PM	14	0	16	2	32	13	4	0	0	17	0	0	0	0	0	0	11	13	0	24	73
04:30 PM	9	0	10	0	19	6	5	0	0	11	0	0	0	0	0	0	6	17	0	23	53
04:45 PM	15	0	10	1	26	7	5	0	0	12	0	0	0	0	0	0	17	21	0	38	76
Total	50	0	45	3	98	33	15	0	0	48	0	0	0	0	0	0	42	66	0	108	254
05:00 PM	7	0	19	2	28	15	6	0	1	22	0	0	0	0	0	1	15	42	0	58	108
05:15 PM	14	0	12	1	27	11	6	0	1	18	0	0	0	0	0	0	7	31	0	38	83
05:30 PM	16	0	11	1	28	10	4	0	0	14	0	0	0	0	0	0	12	34	0	46	88
05:45 PM	12	0	23	1	36	5	8	1	0	14	0	0	0	1	1	0	4	38	0	42	93
Total	49	0	65	5	119	41	24	1	2	68	0	0	0	1	1	1	38	145	0	184	372
Grand Total	99	0	110	8	217	74	39	1	2	116	0	0	0	1	1	1	80	211	0	292	626
Apprch %	45.6	0	50.7	3.7		63.8	33.6	0.9	1.7		0	0	0	100		0.3	27.4	72.3	0		
Total %	15.8	0	17.6	1.3	34.7	11.8	6.2	0.2	0.3	18.5	0	0	0	0.2	0.2	0.2	12.8	33.7	0	46.6	
CARS	95	0	110	8	213	74	39	1	2	116	0	0	0	1	1	1	80	211	0	292	622
% CARS	96	0	100	100	98.2	100	100	100	100	100	0	0	0	100	100	100	100	100	0	100	99.4
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUSES	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
% BUSES	4	0	0	0	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6

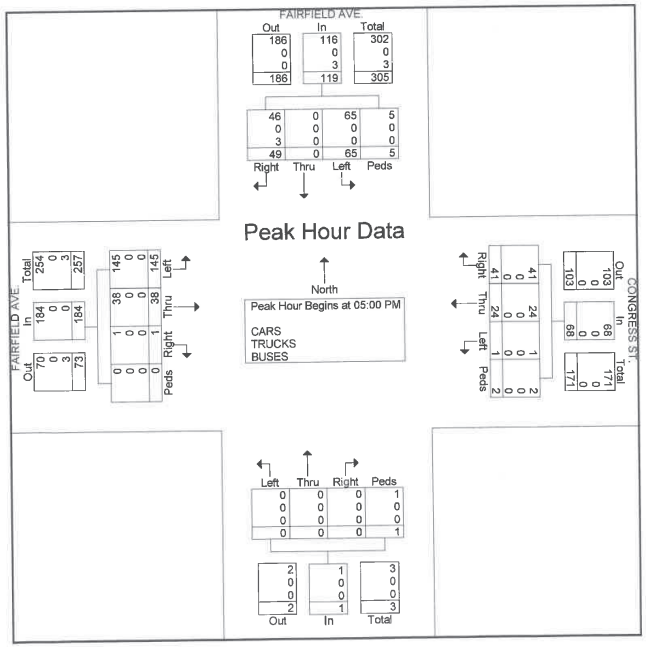
Fairfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-2W
Site Code : 00000002
Start Date : 10/26/2022
Page No : 3

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	7	0	19	**2**	28	**15**	6	0	**1**	**22**	0	0	0	0	0	**1**	**15**	**42**	0	**58**	**108**
05:15 PM	14	0	12	1	27	11	6	0	1	18	0	0	0	0	0	0	7	31	0	38	83
05:30 PM	**16**	0	11	1	28	10	4	0	0	14	0	0	0	0	0	0	12	34	0	46	88
05:45 PM	12	0	**23**	1	**36**	5	**8**	**1**	0	14	0	0	0	**1**	**1**	0	4	38	0	42	93
Total Volume	49	0	65	5	119	41	24	1	2	68	0	0	0	1	1	1	38	145	0	184	372
% App. Total	41.2	0	54.6	4.2		60.3	35.3	1.5	2.9		0	0	0	100		0.5	20.7	78.8	0		
PHF	.766	.000	.707	.625	.826	.683	.750	.250	.500	.773	.000	.000	.000	.250	.250	.250	.633	.863	.000	.793	.861
CARS	46	0	65	5	116	41	24	1	2	68	0	0	0	1	1	1	38	145	0	184	369
% CARS	93.9	0	100	100	97.5	100	100	100	100	100	0	0	0	100	100	100	100	100	0	100	99.2
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUSES	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
% BUSES	6.1	0	0	0	2.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8



Fairfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-2W
Site Code : 00000002
Start Date : 10/26/2022
Page No : 4

Groups Printed- CARS

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	12	0	9	0	21	7	1	0	0	8	0	0	0	0	0	0	8	15	0	23	52
04:15 PM	14	0	16	2	32	13	4	0	0	17	0	0	0	0	0	0	11	13	0	24	73
04:30 PM	9	0	10	0	19	6	5	0	0	11	0	0	0	0	0	0	6	17	0	23	53
04:45 PM	14	0	10	1	25	7	5	0	0	12	0	0	0	0	0	0	17	21	0	38	75
Total	49	0	45	3	97	33	15	0	0	48	0	0	0	0	0	0	42	66	0	108	253
05:00 PM	7	0	19	2	28	15	6	0	1	22	0	0	0	0	0	1	15	42	0	58	108
05:15 PM	13	0	12	1	26	11	6	0	1	18	0	0	0	0	0	0	7	31	0	38	82
05:30 PM	15	0	11	1	27	10	4	0	0	14	0	0	0	0	0	0	12	34	0	46	87
05:45 PM	11	0	23	1	35	5	8	1	0	14	0	0	0	1	1	0	4	38	0	42	92
Total	46	0	65	5	116	41	24	1	2	68	0	0	0	1	1	1	38	145	0	184	369
Grand Total	95	0	110	8	213	74	39	1	2	116	0	0	0	1	1	1	80	211	0	292	622
Apprch %	44.6	0	51.6	3.8		63.8	33.6	0.9	1.7		0	0	0	100		0.3	27.4	72.3	0		
Total %	15.3	0	17.7	1.3	34.2	11.9	6.3	0.2	0.3	18.6	0	0	0	0.2	0.2	0.2	12.9	33.9	0	46.9	

Fairfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-2W
Site Code : 00000002
Start Date : 10/26/2022
Page No : 5

Groups Printed- TRUCKS

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Fairfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-2W
Site Code : 00000002
Start Date : 10/26/2022
Page No : 6

Groups Printed- BUSES

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Grand Total	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Apprch %	100	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %	100	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Fairfield Ave. at Melrose Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-3WR
Site Code : 00000003
Start Date : 10/26/2022
Page No : 1

Groups Printed- CARS - TRUCKS - BUSES

	FAIRFIELD AVE. SOUTHBOUND					WESTBOUND					FAIRFIELD AVE. NORTHBOUND					MELROSE PLACE EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	6	22	0	1	29	0	0	0	0	0	0	21	1	0	22	0	0	13	0	13	64
04:15 PM	2	31	0	0	33	0	0	0	1	1	0	29	0	0	29	1	0	11	3	15	78
04:30 PM	11	21	0	0	32	0	0	0	0	0	0	23	0	0	23	0	0	11	1	12	67
04:45 PM	3	27	0	0	30	0	0	0	0	0	0	30	1	0	31	2	0	6	0	8	69
Total	22	101	0	1	124	0	0	0	1	1	0	103	2	0	105	3	0	41	4	48	278
05:00 PM	9	23	0	0	32	0	0	0	0	0	0	58	0	0	58	2	0	5	0	7	97
05:15 PM	6	29	0	0	35	0	0	0	0	0	0	38	0	1	39	0	0	5	1	6	80
05:30 PM	7	32	0	0	39	0	0	0	0	0	0	45	0	0	45	0	0	10	1	11	95
05:45 PM	1	35	0	0	36	0	0	0	0	0	0	45	0	1	46	0	0	11	3	14	96
Total	23	119	0	0	142	0	0	0	0	0	0	186	0	2	188	2	0	31	5	38	368
Grand Total	45	220	0	1	266	0	0	0	1	1	0	289	2	2	293	5	0	72	9	86	646
Apprch %	16.9	82.7	0	0.4		0	0	0	100		0	98.6	0.7	0.7		5.8	0	83.7	10.5		
Total %	7	34.1	0	0.2	41.2	0	0	0	0.2	0.2	0	44.7	0.3	0.3	45.4	0.8	0	11.1	1.4	13.3	
CARS	45	213	0	1	259	0	0	0	1	1	0	288	2	2	292	5	0	72	9	86	638
% CARS	100	96.8	0	100	97.4	0	0	0	100	100	0	99.7	100	100	99.7	100	0	100	100	100	98.8
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0	0.2
BUSES	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
% BUSES	0	3.2	0	0	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1

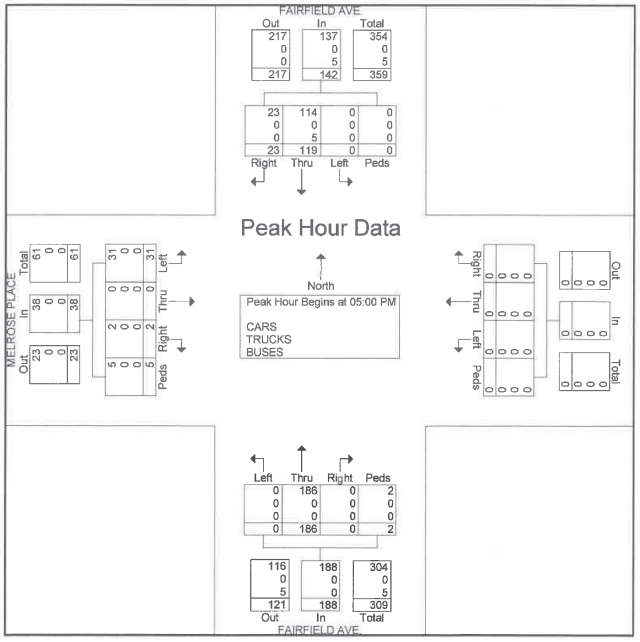
Fairfield Ave. at Melrose Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-3WR
Site Code : 00000003
Start Date : 10/26/2022
Page No : 3

	FAIRFIELD AVE. SOUTHBOUND					WESTBOUND					FAIRFIELD AVE. NORTHBOUND					MELROSE PLACE EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**9**	23	0	0	32	0	0	0	0	0	0	**58**	0	0	**58**	**2**	0	5	0	7	**97**
05:15 PM	6	29	0	0	35	0	0	0	0	0	0	38	0	**1**	39	0	0	5	1	6	80
05:30 PM	7	32	0	0	**39**	0	0	0	0	0	0	45	0	0	45	0	0	10	1	11	95
05:45 PM	1	**35**	0	0	36	0	0	0	0	0	0	45	0	1	46	0	0	**11**	**3**	**14**	96
Total Volume	23	119	0	0	142	0	0	0	0	0	0	186	0	2	188	2	0	31	5	38	368
% App. Total	16.2	83.8	0	0		0	0	0	0		0	98.9	0	1.1		5.3	0	81.6	13.2		
PHF	.639	.850	.000	.000	.910	.000	.000	.000	.000	.000	.000	.802	.000	.500	.810	.250	.000	.705	.417	.679	.948
CARS	23	114	0	0	137	0	0	0	0	0	0	186	0	2	188	2	0	31	5	38	363
% CARS	100	95.8	0	0	96.5	0	0	0	0	0	0	100	0	100	100	100	0	100	100	100	98.6
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUSES	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
% BUSES	0	4.2	0	0	3.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4



Fairfield Ave. at Melrose Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-3WR
Site Code : 00000003
Start Date : 10/26/2022
Page No : 4

Groups Printed- CARS

	FAIRFIELD AVE. SOUTHBOUND					WESTBOUND					FAIRFIELD AVE. NORTHBOUND					MELROSE PLACE EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	6	22	0	1	29	0	0	0	0	0	0	20	1	0	21	0	0	13	0	13	63
04:15 PM	2	30	0	0	32	0	0	0	1	1	0	29	0	0	29	1	0	11	3	15	77
04:30 PM	11	21	0	0	32	0	0	0	0	0	0	23	0	0	23	0	0	11	1	12	67
04:45 PM	3	26	0	0	29	0	0	0	0	0	0	30	1	0	31	2	0	6	0	8	68
Total	22	99	0	1	122	0	0	0	1	1	0	102	2	0	104	3	0	41	4	48	275
05:00 PM	9	21	0	0	30	0	0	0	0	0	0	58	0	0	58	2	0	5	0	7	95
05:15 PM	6	28	0	0	34	0	0	0	0	0	0	38	0	1	39	0	0	5	1	6	79
05:30 PM	7	31	0	0	38	0	0	0	0	0	0	45	0	0	45	0	0	10	1	11	94
05:45 PM	1	34	0	0	35	0	0	0	0	0	0	45	0	1	46	0	0	11	3	14	95
Total	23	114	0	0	137	0	0	0	0	0	0	186	0	2	188	2	0	31	5	38	363
Grand Total	45	213	0	1	259	0	0	0	1	1	0	288	2	2	292	5	0	72	9	86	638
Apprch %	17.4	82.2	0	0.4		0	0	0	100		0	98.6	0.7	0.7		5.8	0	83.7	10.5		
Total %	7.1	33.4	0	0.2	40.6	0	0	0	0.2	0.2	0	45.1	0.3	0.3	45.8	0.8	0	11.3	1.4	13.5	

Fairfield Ave. at Melrose Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-3WR
Site Code : 00000003
Start Date : 10/26/2022
Page No : 5

Groups Printed- TRUCKS

	FAIRFIELD AVE. SOUTHBOUND					WESTBOUND					FAIRFIELD AVE. NORTHBOUND					MELROSE PLACE EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Apprch %	0	0	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	100	0	0	100	0	0	0	0	0	

Fairfield Ave. at Melrose Place

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-3WR
Site Code : 00000003
Start Date : 10/26/2022
Page No : 6

Groups Printed- BUSES

	FAIRFIELD AVE. SOUTHBOUND					WESTBOUND					FAIRFIELD AVE. NORTHBOUND					MELROSE PLACE EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Grand Total	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Apprch %	0	100	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %	0	100	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Fairfield Ave. at Selleck St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-4W
Site Code : 00000004
Start Date : 10/26/2022
Page No : 1

Groups Printed- CARS - TRUCKS - BUSES

	SOUTHBOUND					SELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	1	1	0	64	1	0	65	11	0	59	1	71	49	55	0	0	104	241
04:15 PM	0	0	0	9	9	0	48	3	0	51	13	0	71	2	86	43	72	0	1	116	262
04:30 PM	0	0	0	6	6	0	52	4	0	56	10	0	67	5	82	44	67	0	0	111	255
04:45 PM	0	0	0	5	5	0	54	4	0	58	13	0	63	0	76	47	73	0	1	121	260
Total	0	0	0	21	21	0	218	12	0	230	47	0	260	8	315	183	267	0	2	452	1018
05:00 PM	0	0	0	8	8	0	63	4	0	67	13	0	86	4	103	56	79	0	0	135	313
05:15 PM	0	0	0	4	4	0	92	3	0	95	10	0	83	2	95	56	84	0	0	140	334
05:30 PM	0	0	0	7	7	0	78	4	0	82	8	0	83	6	97	62	61	0	0	123	309
05:45 PM	0	0	0	10	10	0	54	2	0	56	11	0	87	3	101	51	102	0	0	153	320
Total	0	0	0	29	29	0	287	13	0	300	42	0	339	15	396	225	326	0	0	551	1276
Grand Total	0	0	0	50	50	0	505	25	0	530	89	0	599	23	711	408	593	0	2	1003	2294
Apprch %	0	0	0	100		0	95.3	4.7	0		12.5	0	84.2	3.2		40.7	59.1	0	0.2		
Total %	0	0	0	2.2	2.2	0	22	1.1	0	23.1	3.9	0	26.1	1	31	17.8	25.9	0	0.1	43.7	
CARS	0	0	0	50	50	0	500	25	0	525	88	0	594	23	705	398	587	0	2	987	2267
% CARS	0	0	0	100	100	0	99	100	0	99.1	98.9	0	99.2	100	99.2	97.5	99	0	100	98.4	98.8
TRUCKS	0	0	0	0	0	0	2	0	0	2	1	0	4	0	5	3	4	0	0	7	14
% TRUCKS	0	0	0	0	0	0	0.4	0	0	0.4	1.1	0	0.7	0	0.7	0.7	0.7	0	0	0.7	0.6
BUSES	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	7	2	0	0	9	13
% BUSES	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0.2	0	0.1	1.7	0.3	0	0	0.9	0.6

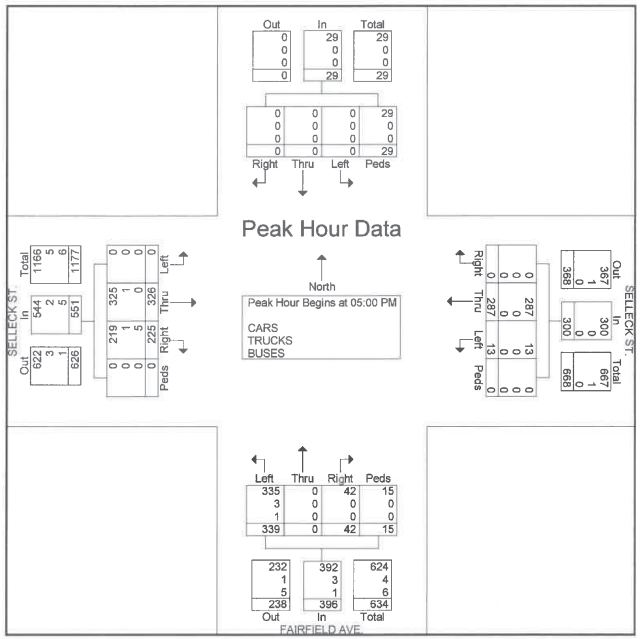
Fairfield Ave. at Selleck St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-4W
Site Code : 00000004
Start Date : 10/26/2022
Page No : 3

	SOUTHBOUND					SELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	0	0	8	8	0	63	**4**	0	67	**13**	0	86	4	**103**	56	79	0	0	135	313
05:15 PM	0	0	0	4	4	0	**92**	3	0	**95**	10	0	83	2	95	56	84	0	0	140	**334**
05:30 PM	0	0	0	7	7	0	78	4	0	82	8	0	83	**6**	97	**62**	61	0	0	123	309
05:45 PM	0	0	0	**10**	**10**	0	54	2	0	56	11	0	**87**	3	101	51	**102**	0	0	**153**	320
Total Volume	0	0	0	29	29	0	287	13	0	300	42	0	339	15	396	225	326	0	0	551	1276
% App. Total	0	0	0	100		0	95.7	4.3	0		10.6	0	85.6	3.8		40.8	59.2	0	0		
PHF	.000	.000	.000	.725	.725	.000	.780	.813	.000	.789	.808	.000	.974	.625	.961	.907	.799	.000	.000	.900	.955
CARS	0	0	0	29	29	0	287	13	0	300	42	0	335	15	392	219	325	0	0	544	1265
% CARS	0	0	0	100	100	0	100	100	0	100	100	0	98.8	100	99.0	97.3	99.7	0	0	98.7	99.1
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	1	1	0	0	2	5
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0.9	0	0.8	0.4	0.3	0	0	0.4	0.4
BUSES	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5	0	0	0	5	6
% BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	0.3	2.2	0	0	0	0.9	0.5



Fairfield Ave. at Selleck St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-4W
Site Code : 00000004
Start Date : 10/26/2022
Page No : 4

Groups Printed- CARS

	SOUTHBOUND					SELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	1	1	0	60	1	0	61	10	0	58	1	69	49	52	0	0	101	232
04:15 PM	0	0	0	9	9	0	47	3	0	50	13	0	71	2	86	42	72	0	1	115	260
04:30 PM	0	0	0	6	6	0	52	4	0	56	10	0	67	5	82	43	66	0	0	109	253
04:45 PM	0	0	0	5	5	0	54	4	0	58	13	0	63	0	76	45	72	0	1	118	257
Total	0	0	0	21	21	0	213	12	0	225	46	0	259	8	313	179	262	0	2	443	1002
05:00 PM	0	0	0	8	8	0	63	4	0	67	13	0	86	4	103	54	79	0	0	133	311
05:15 PM	0	0	0	4	4	0	92	3	0	95	10	0	81	2	93	55	84	0	0	139	331
05:30 PM	0	0	0	7	7	0	78	4	0	82	8	0	81	6	95	60	61	0	0	121	305
05:45 PM	0	0	0	10	10	0	54	2	0	56	11	0	87	3	101	50	101	0	0	151	318
Total	0	0	0	29	29	0	287	13	0	300	42	0	335	15	392	219	325	0	0	544	1265
Grand Total	0	0	0	50	50	0	500	25	0	525	88	0	594	23	705	398	587	0	2	987	2267
Apprch %	0	0	0	100		0	95.2	4.8	0		12.5	0	84.3	3.3		40.3	59.5	0	0.2		
Total %	0	0	0	2.2	2.2	0	22.1	1.1	0	23.2	3.9	0	26.2	1	31.1	17.6	25.9	0	0.1	43.5	

Fairfield Ave. at Selleck St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-4W
Site Code : 00000004
Start Date : 10/26/2022
Page No : 5

Groups Printed- TRUCKS

	SOUTHBOUND					SELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	2	0	0	2	1	0	1	0	2	0	1	0	0	1	5
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	3
Total	0	0	0	0	0	0	2	0	0	2	1	0	1	0	2	2	3	0	0	5	9
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	1	1	0	0	2	5
Grand Total	0	0	0	0	0	0	2	0	0	2	1	0	4	0	5	3	4	0	0	7	14
Apprch %	0	0	0	0		0	100	0	0		20	0	80	0		42.9	57.1	0	0		
Total %	0	0	0	0	0	0	14.3	0	0	14.3	7.1	0	28.6	0	35.7	21.4	28.6	0	0	50	

Fairfield Ave. at Selleck St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
5:00 TO 6:00 P.M.

File Name : 1409-4W
Site Code : 00000004
Start Date : 10/26/2022
Page No : 6

Groups Printed- BUSES

	SOUTHBOUND					SELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	4
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	2	2	0	0	4	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5	0	0	0	5	6
Grand Total	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	7	2	0	0	9	13
Apprch %	0	0	0	0		0	100	0	0		0	0	100	0		77.8	22.2	0	0		
Total %	0	0	0	0	0	0	23.1	0	0	23.1	0	0	7.7	0	7.7	53.8	15.4	0	0	69.2	

Southfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
4:45 TO 5:45 P.M.

File Name : 1409-5W
Site Code : 00000005
Start Date : 10/26/2022
Page No : 1

Groups Printed- CARS - TRUCKS - BUSES

	SOUTHFIELD AVE. SOUTHBOUND						WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total		Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	6	18	0	2	26		0	0	0	0	0	0	34	3	0	37	9	0	9	0	18	81
04:15 PM	8	16	0	0	24		0	0	0	7	7	0	16	4	0	20	6	0	18	0	24	75
04:30 PM	10	21	0	0	31		0	0	0	0	0	0	21	0	0	21	3	0	9	0	12	64
04:45 PM	11	16	0	0	27		0	0	0	10	10	0	31	4	0	35	0	0	22	0	22	94
Total	35	71	0	2	108		0	0	0	17	17	0	102	11	0	113	18	0	58	0	76	314
05:00 PM	9	21	1	0	31		0	1	0	6	7	0	36	5	0	41	2	0	22	0	24	103
05:15 PM	16	15	0	0	31		0	0	0	6	6	0	26	2	0	28	2	0	14	0	16	81
05:30 PM	15	16	0	0	31		0	0	0	5	5	0	35	2	0	37	5	0	7	0	12	85
05:45 PM	17	16	0	0	33		0	0	0	5	5	0	26	2	0	28	5	0	10	0	15	81
Total	57	68	1	0	126		0	1	0	22	23	0	123	11	0	134	14	0	53	0	67	350
Grand Total	92	139	1	2	234		0	1	0	39	40	0	225	22	0	247	32	0	111	0	143	664
Apprch %	39.3	59.4	0.4	0.9			0	2.5	0	97.5		0	91.1	8.9	0		22.4	0	77.6	0		
Total %	13.9	20.9	0.2	0.3	35.2		0	0.2	0	5.9	6	0	33.9	3.3	0	37.2	4.8	0	16.7	0	21.5	
CARS	92	137	1	2	232		0	1	0	39	40	0	216	22	0	238	32	0	111	0	143	653
% CARS	100	98.6	100	100	99.1		0	100	0	100	100	0	96	100	0	96.4	100	0	100	0	100	98.3
TRUCKS	0	0	0	0	0		0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
% TRUCKS	0	0	0	0	0		0	0	0	0	0	0	0.9	0	0	0.8	0	0	0	0	0	0.3
BUSES	0	2	0	0	2		0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	9
% BUSES	0	1.4	0	0	0.9		0	0	0	0	0	0	3.1	0	0	2.8	0	0	0	0	0	1.4

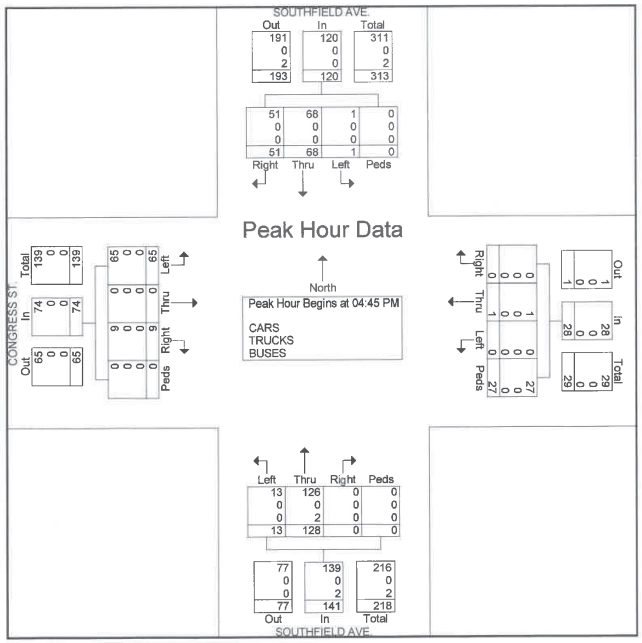
Southfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
4:45 TO 5:45 P.M.

File Name : 1409-5W
Site Code : 00000005
Start Date : 10/26/2022
Page No : 3

	SOUTHFIELD AVE. SOUTHBOUND					WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	11	16	0	0	27	0	0	0	**10**	**10**	0	31	4	0	35	0	0	**22**	0	22	94
05:00 PM	9	**21**	**1**	0	**31**	0	**1**	0	6	7	0	**36**	**5**	0	**41**	2	0	22	0	**24**	**103**
05:15 PM	**16**	15	0	0	31	0	0	0	6	6	0	26	2	0	28	2	0	14	0	16	81
05:30 PM	15	16	0	0	31	0	0	0	5	5	0	35	2	0	37	**5**	0	7	0	12	85
Total Volume	51	68	1	0	120	0	1	0	27	28	0	128	13	0	141	9	0	65	0	74	363
% App. Total	42.5	56.7	0.8	0		0	3.6	0	96.4		0	90.8	9.2	0		12.2	0	87.8	0		
PHF	.797	.810	.250	.000	.968	.000	.250	.000	.675	.700	.000	.889	.650	.000	.860	.450	.000	.739	.000	.771	.881
CARS	51	68	1	0	120	0	1	0	27	28	0	126	13	0	139	9	0	65	0	74	361
% CARS	100	100	100	0	100	0	100	0	100	100	0	98.4	100	0	98.6	100	0	100	0	100	99.4
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUSES	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
% BUSES	0	0	0	0	0	0	0	0	0	0	0	1.6	0	0	1.4	0	0	0	0	0	0.6



Southfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
4:45 TO 5:45 P.M.

File Name : 1409-5W
Site Code : 00000005
Start Date : 10/26/2022
Page No : 4

Groups Printed- CARS

	SOUTHFIELD AVE. SOUTHBOUND					WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	6	17	0	2	25	0	0	0	0	0	0	31	3	0	34	9	0	9	0	18	77
04:15 PM	8	16	0	0	24	0	0	0	7	7	0	15	4	0	19	6	0	18	0	24	74
04:30 PM	10	20	0	0	30	0	0	0	0	0	0	19	0	0	19	3	0	9	0	12	61
04:45 PM	11	16	0	0	27	0	0	0	10	10	0	31	4	0	35	0	0	22	0	22	94
Total	35	69	0	2	106	0	0	0	17	17	0	96	11	0	107	18	0	58	0	76	306
05:00 PM	9	21	1	0	31	0	1	0	6	7	0	36	5	0	41	2	0	22	0	24	103
05:15 PM	16	15	0	0	31	0	0	0	6	6	0	25	2	0	27	2	0	14	0	16	80
05:30 PM	15	16	0	0	31	0	0	0	5	5	0	34	2	0	36	5	0	7	0	12	84
05:45 PM	17	16	0	0	33	0	0	0	5	5	0	25	2	0	27	5	0	10	0	15	80
Total	57	68	1	0	126	0	1	0	22	23	0	120	11	0	131	14	0	53	0	67	347
Grand Total	92	137	1	2	232	0	1	0	39	40	0	216	22	0	238	32	0	111	0	143	653
Apprch %	39.7	59.1	0.4	0.9		0	2.5	0	97.5		0	90.8	9.2	0		22.4	0	77.6	0		
Total %	14.1	21	0.2	0.3	35.5	0	0.2	0	6	6.1	0	33.1	3.4	0	36.4	4.9	0	17	0	21.9	

Southfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
4:45 TO 5:45 P.M.

File Name : 1409-5W
Site Code : 00000005
Start Date : 10/26/2022
Page No : 5

Groups Printed- TRUCKS

	SOUTHFIELD AVE. SOUTHBOUND					WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Apprch %	0	0	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	100	0	0	100	0	0	0	0	0	

Southfield Ave. at Congress St.

P.M.TRAFFIC COUNTS (4:00 p.m. to 6:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
4:45 TO 5:45 P.M.

File Name : 1409-5W
Site Code : 00000005
Start Date : 10/26/2022
Page No : 6

Groups Printed- BUSES

	SOUTHFIELD AVE. SOUTHBOUND					WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	6
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
Grand Total	0	2	0	0	2	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	9
Apprch %	0	100	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
Total %	0	22.2	0	0	22.2	0	0	0	0	0	0	77.8	0	0	77.8	0	0	0	0	0	

Mid-day TRAFFIC COUNTS (11:00 to 1:00 p.m.)
Locations 1,2,3,4 and 5
Saturday October 29, 2022
Stamford, CT

Reliable Traffic Counts, LLC
Vehicle/Data Collection Service
11 Branhaven Dr. East Haven, CT 06512 Tel. 203-530-2042 Fax 203-469-0215 rtcvdc@aol.com

Fairfield Ave. at Barry Place

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-1s
Site Code : 00000001
Start Date : 10/29/2022

Groups Printed- CARS - TRUCKS - BUSES

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	3	0	0	3	0	0	8	0	8	8	2	0	0	10	0	2	0	0	2	23
11:15 AM	0	1	1	0	2	0	0	8	0	8	10	1	0	0	11	0	0	0	0	0	21
11:30 AM	0	1	1	0	2	1	0	15	0	16	10	2	0	0	12	0	0	0	0	0	30
11:45 AM	0	0	1	0	1	3	0	11	0	14	14	1	0	0	15	0	0	0	0	0	30
Total	0	5	3	0	8	4	0	42	0	46	42	6	0	0	48	0	2	0	0	2	104
12:00 PM	0	2	0	0	2	0	1	7	0	8	20	2	0	0	22	0	0	0	0	0	32
12:15 PM	0	1	3	0	4	1	0	11	2	14	14	2	0	0	16	0	0	0	0	0	34
12:30 PM	0	3	2	0	5	1	0	10	1	12	17	3	0	0	20	0	0	0	1	1	38
12:45 PM	0	3	0	0	3	1	1	14	0	16	33	2	0	0	35	0	0	0	1	1	55
Total	0	9	5	0	14	3	2	42	3	50	84	9	0	0	93	0	0	0	2	2	159
Grand Total	0	14	8	0	22	7	2	84	3	96	126	15	0	0	141	0	2	0	2	4	263
Apprch %	0	63.6	36.4	0		7.3	2.1	87.5	3.1		89.4	10.6	0	0		0	50	0	50		
Total %	0	5.3	3	0	8.4	2.7	0.8	31.9	1.1	36.5	47.9	5.7	0	0	53.6	0	0.8	0	0.8	1.5	
CARS	0	14	8	0	22	7	2	82	3	94	126	15	0	0	141	0	2	0	2	4	261
% CARS	0	100	100	0	100	100	100	97.6	100	97.9	100	100	0	0	100	0	100	0	100	100	99.2
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUSES	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
% BUSES	0	0	0	0	0	0	0	2.4	0	2.1	0	0	0	0	0	0	0	0	0	0	0.8

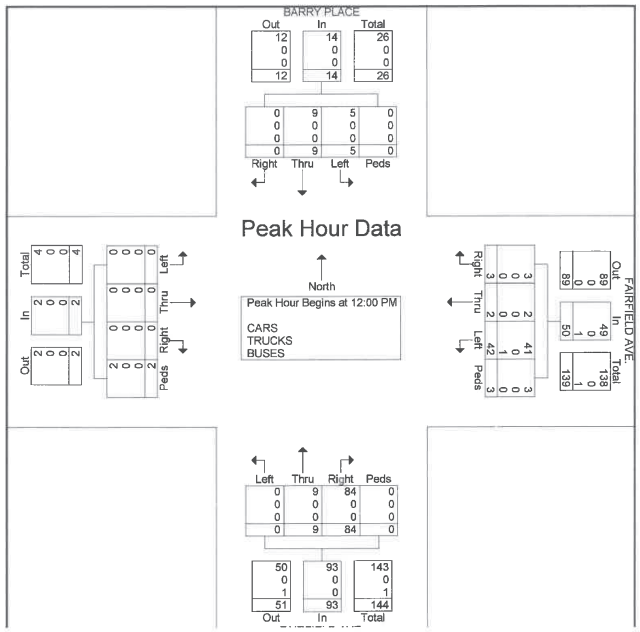
Fairfield Ave. at Barry Place

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-1s
Site Code : 00000001
Start Date : 10/29/2022
Page No : 3

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	2	0	0	2	0	**1**	7	0	8	20	2	0	0	22	0	0	0	0	0	32
12:15 PM	0	1	**3**	0	4	**1**	0	11	**2**	14	14	2	0	0	16	0	0	0	0	0	34
12:30 PM	0	**3**	2	0	**5**	1	0	10	1	12	17	**3**	0	0	20	0	0	0	**1**	**1**	38
12:45 PM	0	3	0	0	3	1	1	**14**	0	**16**	**33**	2	0	0	**35**	0	0	0	1	1	**55**
Total Volume	0	9	5	0	14	3	2	42	3	50	84	9	0	0	93	0	0	0	2	2	159
% App. Total	0	64.3	35.7	0		6	4	84	6		90.3	9.7	0	0		0	0	0	100		
PHF	.000	.750	.417	.000	.700	.750	.500	.750	.375	.781	.636	.750	.000	.000	.664	.000	.000	.000	.500	.500	.723
CARS	0	9	5	0	14	3	2	41	3	49	84	9	0	0	93	0	0	0	2	2	158
% CARS	0	100	100	0	100	100	100	97.6	100	98.0	100	100	0	0	100	0	0	0	100	100	99.4
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUSES	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
% BUSES	0	0	0	0	0	0	0	2.4	0	2.0	0	0	0	0	0	0	0	0	0	0	0.6



Fairfield Ave. at Barry Place

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-1s
Site Code : 00000001
Start Date : 10/29/2022
Page No : 4

Groups Printed- CARS

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	3	0	0	3	0	0	8	0	8	8	2	0	0	10	0	2	0	0	2	23
11:15 AM	0	1	1	0	2	0	0	8	0	8	10	1	0	0	11	0	0	0	0	0	21
11:30 AM	0	1	1	0	2	1	0	15	0	16	10	2	0	0	12	0	0	0	0	0	30
11:45 AM	0	0	1	0	1	3	0	10	0	13	14	1	0	0	15	0	0	0	0	0	29
Total	0	5	3	0	8	4	0	41	0	45	42	6	0	0	48	0	2	0	0	2	103
12:00 PM	0	2	0	0	2	0	1	7	0	8	20	2	0	0	22	0	0	0	0	0	32
12:15 PM	0	1	3	0	4	1	0	11	2	14	14	2	0	0	16	0	0	0	0	0	34
12:30 PM	0	3	2	0	5	1	0	10	1	12	17	3	0	0	20	0	0	0	1	1	38
12:45 PM	0	3	0	0	3	1	1	13	0	15	33	2	0	0	35	0	0	0	1	1	54
Total	0	9	5	0	14	3	2	41	3	49	84	9	0	0	93	0	0	0	2	2	158
Grand Total	0	14	8	0	22	7	2	82	3	94	126	15	0	0	141	0	2	0	2	4	261
Apprch %	0	63.6	36.4	0		7.4	2.1	87.2	3.2		89.4	10.6	0	0		0	50	0	50		
Total %	0	5.4	3.1	0	8.4	2.7	0.8	31.4	1.1	36	48.3	5.7	0	0	54	0	0.8	0	0.8	1.5	

Fairfield Ave. at Barry Place

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-1s
Site Code : 00000001
Start Date : 10/29/2022
Page No : 5

Groups Printed- TRUCKS

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Fairfield Ave. at Barry Place

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-1s
Site Code : 00000001
Start Date : 10/29/2022
Page No : 6

Groups Printed- BUSES

	BARRY PLACE SOUTHBOUND					FAIRFIELD AVE. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
Apprch %	0	0	0	0		0	0	100	0		0	0	0	0		0	0	0	0		
Total %	0	0	0	0	0	0	0	100	0	100	0	0	0	0	0	0	0	0	0	0	

Fairfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-2s
Site Code : 00000002
Start Date : 10/29/2022
Page No : 1

Groups Printed- CARS - TRUCKS - BUSES

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	3	0	5	0	8	10	5	0	1	16	0	0	0	1	1	0	2	12	0	14	39
11:15 AM	6	0	9	1	16	10	4	0	0	14	0	0	0	0	0	0	1	11	0	12	42
11:30 AM	12	1	6	0	19	9	4	0	0	13	0	0	0	1	1	0	5	12	0	17	50
11:45 AM	9	0	15	0	24	12	6	0	0	18	0	0	0	0	0	0	7	10	0	17	59
Total	30	1	35	1	67	41	19	0	1	61	0	0	0	2	2	0	15	45	0	60	190
12:00 PM	7	0	6	0	13	10	1	0	0	11	0	0	0	0	0	0	5	16	0	21	45
12:15 PM	6	0	16	0	22	12	8	0	0	20	0	0	0	0	0	0	3	18	0	21	63
12:30 PM	9	0	13	0	22	12	3	0	0	15	0	0	0	1	1	0	8	15	0	23	61
12:45 PM	12	0	10	0	22	12	5	0	0	17	0	0	0	0	0	0	11	24	0	35	74
Total	34	0	45	0	79	46	17	0	0	63	0	0	0	1	1	0	27	73	0	100	243
Grand Total	64	1	80	1	146	87	36	0	1	124	0	0	0	3	3	0	42	118	0	160	433
Apprch %	43.8	0.7	54.8	0.7		70.2	29	0	0.8		0	0	0	100		0	26.2	73.8	0		
Total %	14.8	0.2	18.5	0.2	33.7	20.1	8.3	0	0.2	28.6	0	0	0	0.7	0.7	0	9.7	27.3	0	37	
CARS	63	1	80	1	145	87	36	0	1	124	0	0	0	3	3	0	42	118	0	160	432
% CARS	98.4	100	100	100	99.3	100	100	0	100	100	0	0	0	100	100	0	100	100	0	100	99.8
TRUCKS	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% TRUCKS	1.6	0	0	0	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

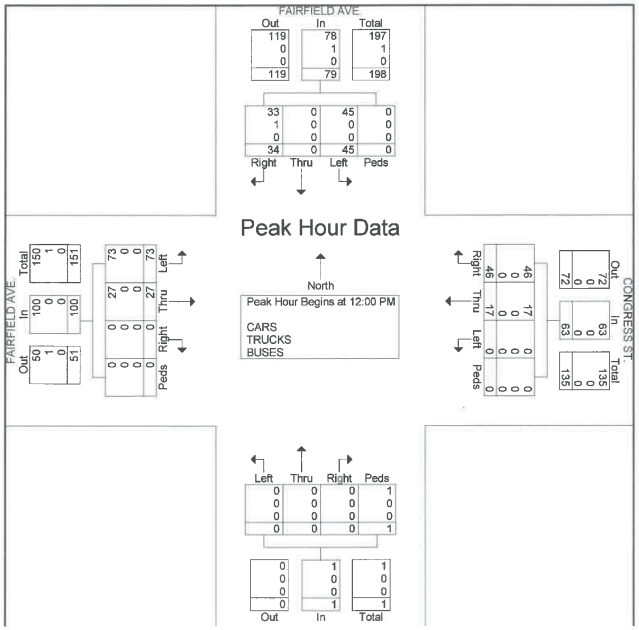
Fairfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-2s
Site Code : 00000002
Start Date : 10/29/2022
Page No : 3

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	7	0	6	0	13	10	1	0	0	11	0	0	0	0	0	0	5	16	0	21	45
12:15 PM	6	0	**16**	0	**22**	**12**	**8**	0	0	**20**	0	0	0	0	0	0	3	18	0	21	63
12:30 PM	9	0	13	0	22	12	3	0	0	15	0	0	0	**1**	**1**	0	8	15	0	23	61
12:45 PM	**12**	0	10	0	22	12	5	0	0	17	0	0	0	0	0	0	**11**	**24**	0	**35**	**74**
Total Volume	34	0	45	0	79	46	17	0	0	63	0	0	0	1	1	0	27	73	0	100	243
% App. Total	43	0	57	0		73	27	0	0		0	0	0	100		0	27	73	0		
PHF	.708	.000	.703	.000	.898	.958	.531	.000	.000	.788	.000	.000	.000	.250	.250	.000	.614	.760	.000	.714	.821
CARS	33	0	45	0	78	46	17	0	0	63	0	0	0	1	1	0	27	73	0	100	242
% CARS	97.1	0	100	0	98.7	100	100	0	0	100	0	0	0	100	100	0	100	100	0	100	99.6
TRUCKS	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% TRUCKS	2.9	0	0	0	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4
BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Fairfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-2s
Site Code : 00000002
Start Date : 10/29/2022
Page No : 4

Groups Printed- CARS

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	3	0	5	0	8	10	5	0	1	16	0	0	0	1	1	0	2	12	0	14	39
11:15 AM	6	0	9	1	16	10	4	0	0	14	0	0	0	0	0	0	1	11	0	12	42
11:30 AM	12	1	6	0	19	9	4	0	0	13	0	0	0	1	1	0	5	12	0	17	50
11:45 AM	9	0	15	0	24	12	6	0	0	18	0	0	0	0	0	0	7	10	0	17	59
Total	30	1	35	1	67	41	19	0	1	61	0	0	0	2	2	0	15	45	0	60	190
12:00 PM	7	0	6	0	13	10	1	0	0	11	0	0	0	0	0	0	5	16	0	21	45
12:15 PM	6	0	16	0	22	12	8	0	0	20	0	0	0	0	0	0	3	18	0	21	63
12:30 PM	9	0	13	0	22	12	3	0	0	15	0	0	0	1	1	0	8	15	0	23	61
12:45 PM	11	0	10	0	21	12	5	0	0	17	0	0	0	0	0	0	11	24	0	35	73
Total	33	0	45	0	78	46	17	0	0	63	0	0	0	1	1	0	27	73	0	100	242
Grand Total	63	1	80	1	145	87	36	0	1	124	0	0	0	3	3	0	42	118	0	160	432
Apprch %	43.4	0.7	55.2	0.7		70.2	29	0	0.8		0	0	0	100		0	26.2	73.8	0		
Total %	14.6	0.2	18.5	0.2	33.6	20.1	8.3	0	0.2	28.7	0	0	0	0.7	0.7	0	9.7	27.3	0	37	

Fairfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-2s
Site Code : 00000002
Start Date : 10/29/2022
Page No : 5

Groups Printed- TRUCKS

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Apprch %	100	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %	100	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Fairfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-2s
Site Code : 00000002
Start Date : 10/29/2022
Page No : 6

Groups Printed- BUSES

	FAIRFIELD AVE. SOUTHBOUND					CONGRESS ST. WESTBOUND					NORTHBOUND					FAIRFIELD AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Fairfield Ave. at Selleck St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-4s
Site Code : 00000004
Start Date : 10/29/2022
Page No : 1

Groups Printed- CARS - TRUCKS - BUSES

	SOUTHBOUND					SHELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SHELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	3	3	0	51	5	0	56	2	0	53	0	55	29	40	0	0	69	183
11:15 AM	0	0	0	7	7	0	53	6	0	59	8	0	51	1	60	28	55	0	0	83	209
11:30 AM	0	0	0	1	1	0	51	3	0	54	7	0	36	0	43	31	39	0	0	70	168
11:45 AM	0	0	0	0	0	0	44	5	0	49	7	0	43	0	50	41	61	0	0	102	201
Total	0	0	0	11	11	0	199	19	0	218	24	0	183	1	208	129	195	0	0	324	761
12:00 PM	0	0	0	2	2	0	51	2	0	53	5	0	46	0	51	30	45	0	0	75	181
12:15 PM	0	0	0	0	0	0	42	6	0	48	13	0	42	2	57	38	51	0	1	90	195
12:30 PM	0	0	0	3	3	0	72	3	0	75	7	0	38	0	45	36	50	0	1	87	210
12:45 PM	0	0	0	3	3	0	56	2	0	58	6	0	59	0	65	42	49	0	0	91	217
Total	0	0	0	8	8	0	221	13	0	234	31	0	185	2	218	146	195	0	2	343	803
Grand Total	0	0	0	19	19	0	420	32	0	452	55	0	368	3	426	275	390	0	2	667	1564
Apprch %	0	0	0	100		0	92.9	7.1	0		12.9	0	86.4	0.7		41.2	58.5	0	0.3		
Total %	0	0	0	1.2	1.2	0	26.9	2	0	28.9	3.5	0	23.5	0.2	27.2	17.6	24.9	0	0.1	42.6	
CARS	0	0	0	19	19	0	419	32	0	451	54	0	366	3	423	267	388	0	2	657	1550
% CARS	0	0	0	100	100	0	99.8	100	0	99.8	98.2	0	99.5	100	99.3	97.1	99.5	0	100	98.5	99.1
TRUCKS	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	6	2	0	0	8	11
% TRUCKS	0	0	0	0	0	0	0.2	0	0	0.2	1.8	0	0.3	0	0.5	2.2	0.5	0	0	1.2	0.7
BUSES	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	3
% BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	0.2	0.7	0	0	0	0.3	0.2

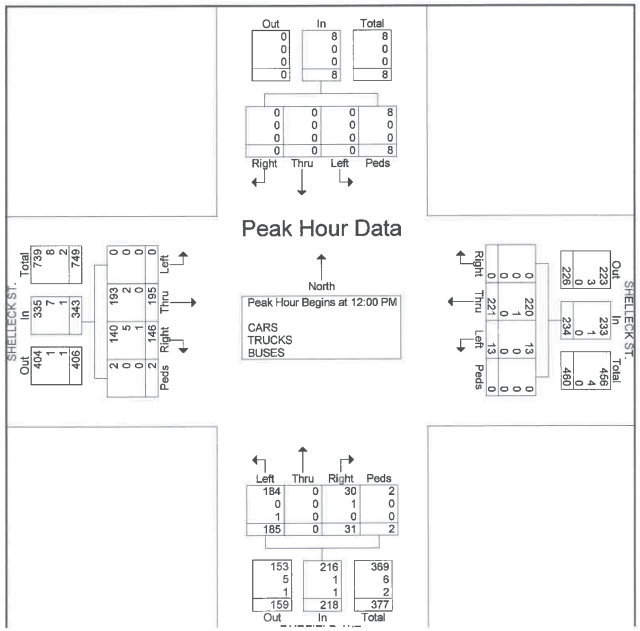
Fairfield Ave. at Selleck St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-4s
Site Code : 00000004
Start Date : 10/29/2022
Page No : 3

	SOUTHBOUND					SHELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SHELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	0	0	2	2	0	51	2	0	53	5	0	46	0	51	30	45	0	0	75	181
12:15 PM	0	0	0	0	0	0	42	**6**	0	48	**13**	0	42	**2**	57	38	**51**	0	**1**	90	195
12:30 PM	0	0	0	**3**	**3**	0	**72**	3	0	**75**	7	0	38	0	45	36	50	0	1	87	210
12:45 PM	0	0	0	3	3	0	56	2	0	58	6	0	**59**	0	**65**	**42**	49	0	0	**91**	**217**
Total Volume	0	0	0	8	8	0	221	13	0	234	31	0	185	2	218	146	195	0	2	343	803
% App. Total	0	0	0	100		0	94.4	5.6	0		14.2	0	84.9	0.9		42.6	56.9	0	0.6		
PHF	.000	.000	.000	.667	.667	.000	.767	.542	.000	.780	.596	.000	.784	.250	.838	.869	.956	.000	.500	.942	.925
CARS	0	0	0	8	8	0	220	13	0	233	30	0	184	2	216	140	193	0	2	335	792
% CARS	0	0	0	100	100	0	99.5	100	0	99.6	96.8	0	99.5	100	99.1	95.9	99.0	0	100	97.7	98.6
TRUCKS	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	5	2	0	0	7	9
% TRUCKS	0	0	0	0	0	0	0.5	0	0	0.4	3.2	0	0	0	0.5	3.4	1.0	0	0	2.0	1.1
BUSES	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
% BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	0.5	0.7	0	0	0	0.3	0.2



Fairfield Ave. at Selleck St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-4s
Site Code : 00000004
Start Date : 10/29/2022
Page No : 4

Groups Printed- CARS

	SOUTHBOUND					SHELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SHELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	3	3	0	51	5	0	56	2	0	53	0	55	28	40	0	0	68	182
11:15 AM	0	0	0	7	7	0	53	6	0	59	8	0	51	1	60	28	55	0	0	83	209
11:30 AM	0	0	0	1	1	0	51	3	0	54	7	0	36	0	43	31	39	0	0	70	168
11:45 AM	0	0	0	0	0	0	44	5	0	49	7	0	42	0	49	40	61	0	0	101	199
Total	0	0	0	11	11	0	199	19	0	218	24	0	182	1	207	127	195	0	0	322	758
12:00 PM	0	0	0	2	2	0	51	2	0	53	5	0	46	0	51	29	45	0	0	74	180
12:15 PM	0	0	0	0	0	0	42	6	0	48	13	0	42	2	57	38	50	0	1	89	194
12:30 PM	0	0	0	3	3	0	72	3	0	75	7	0	38	0	45	34	50	0	1	85	208
12:45 PM	0	0	0	3	3	0	55	2	0	57	5	0	58	0	63	39	48	0	0	87	210
Total	0	0	0	8	8	0	220	13	0	233	30	0	184	2	216	140	193	0	2	335	792
Grand Total	0	0	0	19	19	0	419	32	0	451	54	0	366	3	423	267	388	0	2	657	1550
Apprch %	0	0	0	100		0	92.9	7.1	0		12.8	0	86.5	0.7		40.6	59.1	0	0.3		
Total %	0	0	0	1.2	1.2	0	27	2.1	0	29.1	3.5	0	23.6	0.2	27.3	17.2	25	0	0.1	42.4	

Fairfield Ave. at Selleck St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-4s
Site Code : 00000004
Start Date : 10/29/2022
Page No : 5

Groups Printed- TRUCKS

	SOUTHBOUND					SHELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SHELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
12:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2	1	0	0	3	5
Total	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	5	2	0	0	7	9
Grand Total	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	6	2	0	0	8	11
Apprch %	0	0	0	0		0	100	0	0		50	0	50	0		75	25	0	0		
Total %	0	0	0	0	0	0	9.1	0	0	9.1	9.1	0	9.1	0	18.2	54.5	18.2	0	0	72.7	

Fairfield Ave. at Selleck St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
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Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-4s
Site Code : 00000004
Start Date : 10/29/2022
Page No : 6

Groups Printed- BUSES

	SOUTHBOUND					SHELLECK ST. WESTBOUND					FAIRFIELD AVE. NORTHBOUND					SHELLECK ST. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	2
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	3
Apprch %	0	0	0	0		0	0	0	0		0	0	100	0		100	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	0	33.3	0	33.3	66.7	0	0	0	66.7	

Southfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-5s
Site Code : 00000005
Start Date : 10/29/2022
Page No : 1

Groups Printed- CARS - TRUCKS - BUSES

	SOUTHFIELD AVE. SOUTHBOUND					WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	4	13	0	0	17	0	0	0	0	0	0	11	1	0	12	0	0	3	0	3	32
11:15 AM	7	9	0	0	16	0	0	0	0	0	0	9	4	0	13	2	0	6	0	8	37
11:30 AM	9	11	0	0	20	0	0	0	1	1	0	6	1	0	7	1	0	5	0	6	34
11:45 AM	8	9	0	0	17	0	0	0	0	0	0	11	4	0	15	4	0	8	0	12	44
Total	28	42	0	0	70	0	0	0	1	1	0	37	10	0	47	7	0	22	0	29	147
12:00 PM	2	6	0	0	8	0	0	0	1	1	0	8	1	0	9	1	0	3	0	4	22
12:15 PM	10	16	0	0	26	0	0	1	0	1	0	13	4	0	17	2	0	3	0	5	49
12:30 PM	14	10	0	0	24	0	0	0	1	1	0	12	1	0	13	1	0	8	0	9	47
12:45 PM	5	12	0	0	17	0	0	0	0	0	0	15	1	0	16	0	0	8	0	8	41
Total	31	44	0	0	75	0	0	1	2	3	0	48	7	0	55	4	0	22	0	26	159
Grand Total	59	86	0	0	145	0	0	1	3	4	0	85	17	0	102	11	0	44	0	55	306
Apprch %	40.7	59.3	0	0		0	0	25	75		0	83.3	16.7	0		20	0	80	0		
Total %	19.3	28.1	0	0	47.4	0	0	0.3	1	1.3	0	27.8	5.6	0	33.3	3.6	0	14.4	0	18	
CARS	59	86	0	0	145	0	0	1	3	4	0	84	17	0	101	11	0	44	0	55	305
% CARS	100	100	0	0	100	0	0	100	100	100	0	98.8	100	0	99	100	0	100	0	100	99.7
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	1.2	0	0	1	0	0	0	0	0	0.3
BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Southfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
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Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-5s
Site Code : 00000005
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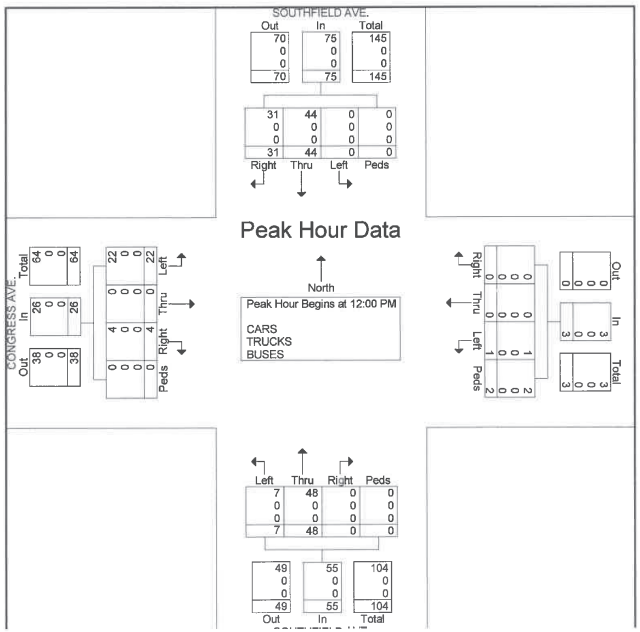
Page No : 3

	SOUTHFIELD AVE. SOUTHBOUND					WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	2	6	0	0	8	0	0	0	**1**	**1**	0	8	1	0	9	1	0	3	0	4	22
12:15 PM	10	**16**	0	0	**26**	0	0	**1**	0	1	0	13	**4**	0	**17**	**2**	0	3	0	5	**49**
12:30 PM	**14**	10	0	0	24	0	0	0	1	1	0	12	1	0	13	1	0	**8**	0	**9**	47
12:45 PM	5	12	0	0	17	0	0	0	0	0	0	**15**	1	0	16	0	0	8	0	8	41
Total Volume	31	44	0	0	75	0	0	1	2	3	0	48	7	0	55	4	0	22	0	26	159
% App. Total	41.3	58.7	0	0		0	0	33.3	66.7		0	87.3	12.7	0		15.4	0	84.6	0		
PHF	.554	.688	.000	.000	.721	.000	.000	.250	.500	.750	.000	.800	.438	.000	.809	.500	.000	.688	.000	.722	.811
CARS	31	44	0	0	75	0	0	1	2	3	0	48	7	0	55	4	0	22	0	26	159
% CARS	100	100	0	0	100	0	0	100	100	100	0	100	100	0	100	100	0	100	0	100	100
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% BUSES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Southfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-5s
Site Code : 00000005
Start Date : 10/29/2022
Page No : 4

Groups Printed- CARS

	SOUTHFIELD AVE. SOUTHBOUND					WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	4	13	0	0	17	0	0	0	0	0	0	11	1	0	12	0	0	3	0	3	32
11:15 AM	7	9	0	0	16	0	0	0	0	0	0	9	4	0	13	2	0	6	0	8	37
11:30 AM	9	11	0	0	20	0	0	0	1	1	0	5	1	0	6	1	0	5	0	6	33
11:45 AM	8	9	0	0	17	0	0	0	0	0	0	11	4	0	15	4	0	8	0	12	44
Total	28	42	0	0	70	0	0	0	1	1	0	36	10	0	46	7	0	22	0	29	146
12:00 PM	2	6	0	0	8	0	0	0	1	1	0	8	1	0	9	1	0	3	0	4	22
12:15 PM	10	16	0	0	26	0	0	1	0	1	0	13	4	0	17	2	0	3	0	5	49
12:30 PM	14	10	0	0	24	0	0	0	1	1	0	12	1	0	13	1	0	8	0	9	47
12:45 PM	5	12	0	0	17	0	0	0	0	0	0	15	1	0	16	0	0	8	0	8	41
Total	31	44	0	0	75	0	0	1	2	3	0	48	7	0	55	4	0	22	0	26	159
Grand Total	59	86	0	0	145	0	0	1	3	4	0	84	17	0	101	11	0	44	0	55	305
Apprch %	40.7	59.3	0	0		0	0	25	75		0	83.2	16.8	0		20	0	80	0		
Total %	19.3	28.2	0	0	47.5	0	0	0.3	1	1.3	0	27.5	5.6	0	33.1	3.6	0	14.4	0	18	

Southfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-5s
Site Code : 00000005
Start Date : 10/29/2022
Page No : 5

Groups Printed- TRUCKS

	SOUTHFIELD AVE. SOUTHBOUND					WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Apprch %	0	0	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	0	100	0	0	100	0	0	0	0	0	

Southfield Ave. at Congress St.

Mid-day TRAFFIC COUNTS (11:00 a.m. to 1:00 p.m.)
Stamford, CT
prepared by Reliable Traffic Counts, LLC
Weather Clear

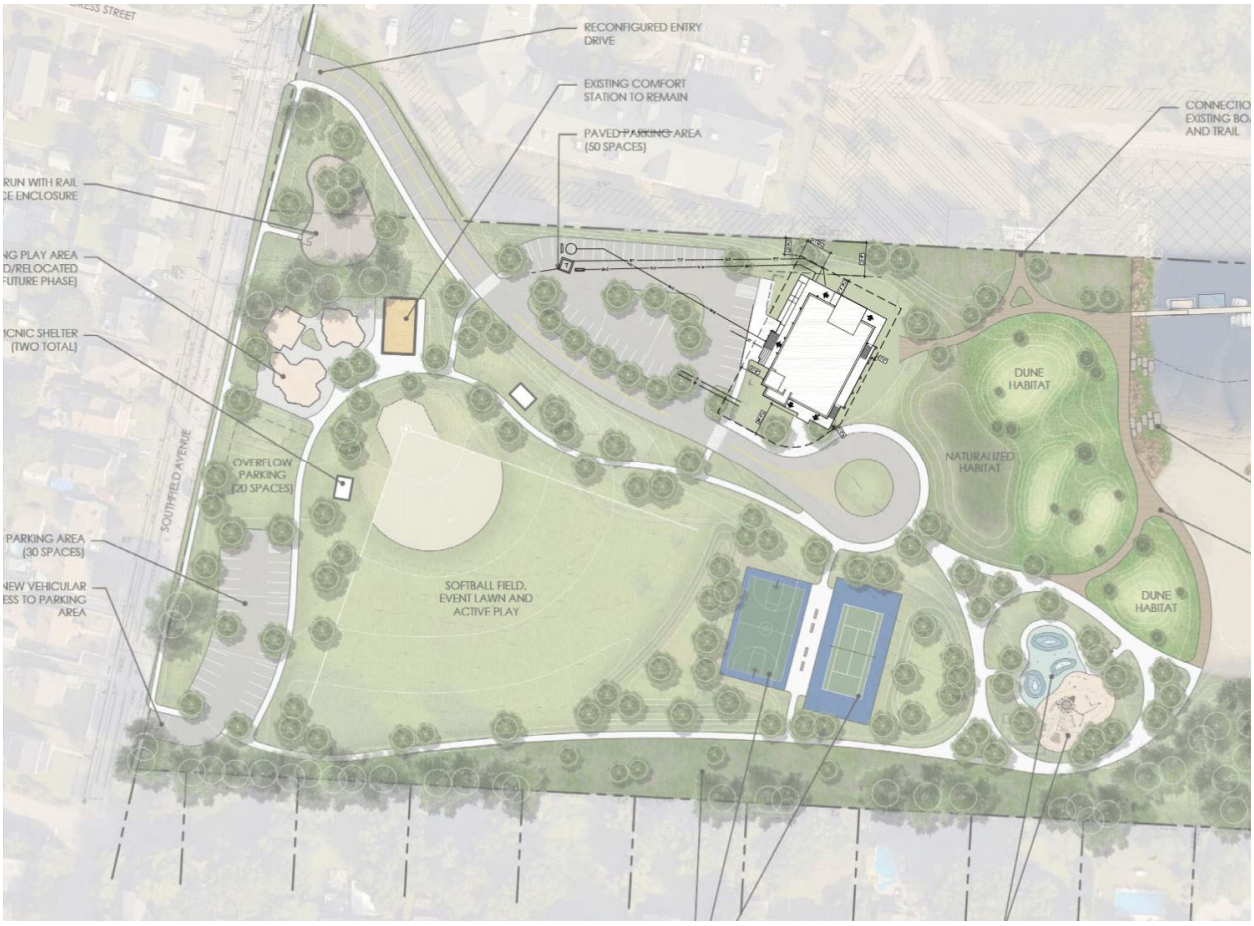
TRAFFIC COUNTS
PEAK HOUR
12:00 TO 1:00 P.M.

File Name : 1409-5s
Site Code : 00000005
Start Date : 10/29/2022
Page No : 6

Groups Printed- BUSES

	SOUTHFIELD AVE. SOUTHBOUND					WESTBOUND					SOUTHFIELD AVE. NORTHBOUND					CONGRESS AVE. EASTBOUND					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

SOUNDWATERS HARBOR CENTER



1 FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

1 SOUND SCIENCE WET LAB

AQUACULTURE STUDIES
MARINE BIOLOGY
WATER QUALITY SCIENCE
AQUATIC ANIMAL CARE

2 HARBOR CORPS SHOP

BOAT BUILDING
WOODWORK
METALWORK
FIBERGLASS
SMALL ENGINE REPAIR

FULLER D'ANGELO P.C. ARCHITECTS PLANNERS
SoundWaters

SOUNDWATERS
HARBOR CENTER
BOCCUZZI PARK
STAMFORD, CT.

2 SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

1 YOUNG MARINERS CLASSROOMS

MARITIME WORK SKILLS
MARITIME EDUCATION STUDIES
MARITIME HISTORY
NAVIGATION
MARINE RESEARCH
SAILING INSTRUCTION

2 MEETING

COLLABORATION
RESEARCH
SMALL GROUP LEARNING
PRESENTATION
DISTANCE LEARNING

3 STUDENT LOUNGE

STUDY SPACE
RELAX LEARNING
PRESENTATION

4 REMOTE TEACHING STUDIO

DISTANCE LEARNING
PRESENTATION

FULLER D'ANGELO P.C. ARCHITECTS PLANNERS
SoundWaters

SOUNDWATERS
HARBOR CENTER
BOCCUZZI PARK
STAMFORD, CT.

Land Use	P.M. Peak Hour			SAT Peak Hour		
	In	Out	Total	In	Out	Total
Sound Waters Center Trip Generation						
LUC 495 – 12,000 sq ft Recreational Community Center	28	31	59	7	6	13

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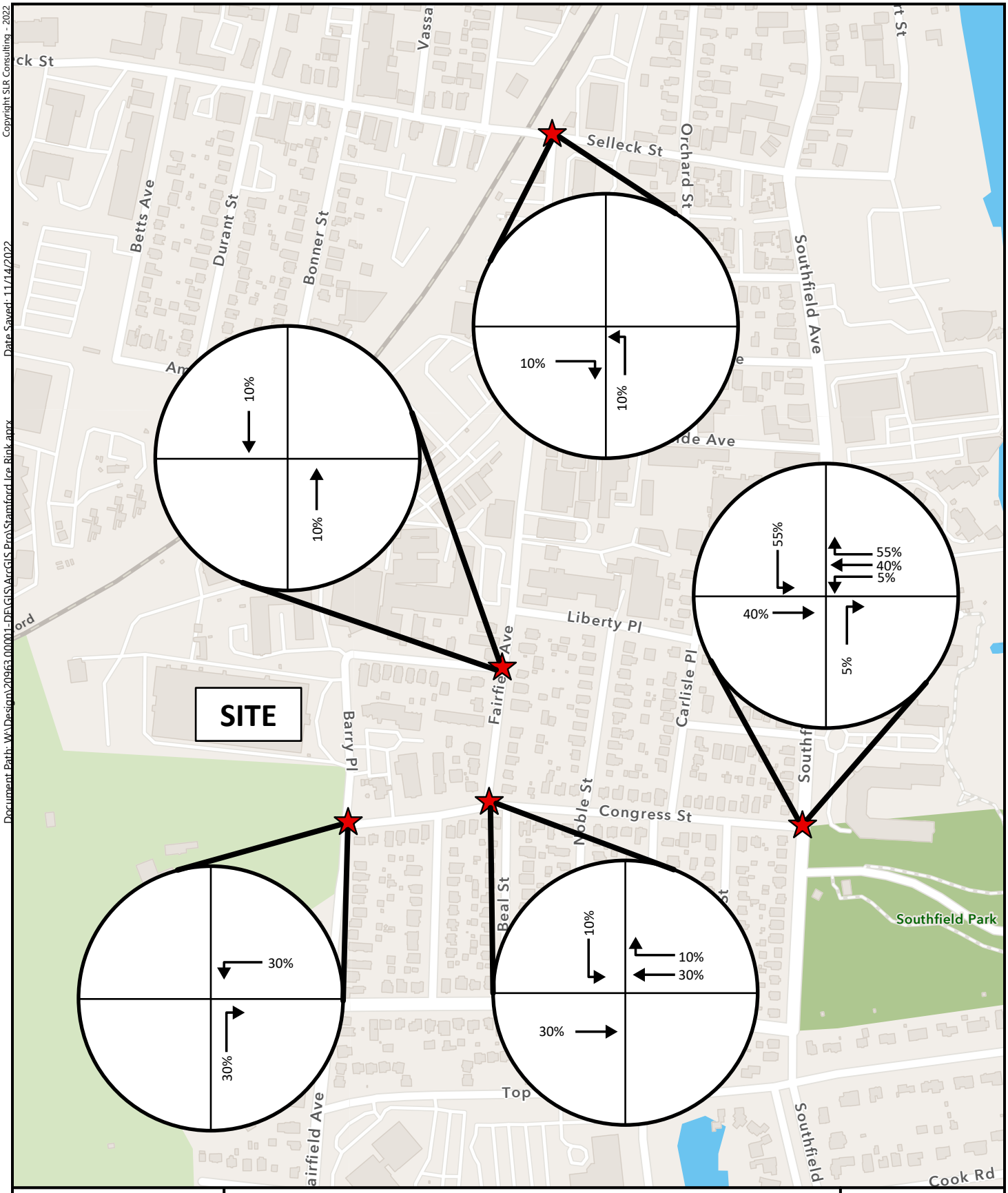
Date Saved: 11/14/2022

Document Path: W:\Design\20963.00001.DE\GIS\ArcGIS Pro\Stamford Ice Rink.aprx



SLR
195 CHURCH STREET
7TH FLOOR
NEW HAVEN, CT 06511
203.344.7887

SOUND WATERS CENTER DISTRIBUTION

23-50 BARRY PLACE ICE RINK
WINGS REAL ESTATE DEVELOPMENT, LLC
41 OWENOKE WAY
RIVERSIDE, CT 06878

N

0 150 300 450
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SCALE 1:5,500
DATE 11/14/2022
141.20963.01
PROJ. NO.

FIG. X

LEVEL OF SERVICE
FOR
SIGNALIZED INTERSECTIONS
(MOTORIZED VEHICLE MODE)

Level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions: in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Specifically, LOS criteria for traffic signals are stated in terms of the average control delay per vehicle, typically for a 15-min analysis period. Delay is a complex measure and depends on a number of variables, including the quality of progression, the cycle length, the green ratio, and the v/c ratio for the lane group. The criteria are given below.

LEVEL-OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS
MOTORIZED VEHICLE MODE

LOS By Volume-to-Capacity Ratio[1]		CONTROL DELAY (s/veh)
v/c ≤ 1.0	v/c > 1.0	
A	F	≤ 10
B	F	> 10 AND ≤ 20
C	F	> 20 AND ≤ 35
D	F	> 35 AND ≤ 55
E	F	> 55 AND ≤ 80
F	F	> 80

[1] For approach-based and intersection-wide assessments, LOS is defined solely by control delay.

Specific descriptions of each LOS for signalized intersections are provided below:

Level of Service A describes operations with a control delay of 10 s/veh and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

Level of Service B describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

Level of Service C describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate. Individual *cycle failures* (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.

Level of Service D describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.

Level of Service E describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.

Level of Service F describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Reference: Highway Capacity Manual 6, Transportation Research Board, 2016.

LEVEL OF SERVICE
FOR
UNSIGNALIZED INTERSECTIONS
ALL-WAY STOP-CONTROL (AWSC)

The criteria for AWSC intersections have different threshold values than do those for signalized intersections primarily because drivers expect different levels of performance from distinct types of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection. Thus a higher level of control delay is acceptable at a signalized intersection for the same LOS. The level-of-service criteria are given below.

LEVEL-OF SERVICE CRITERIA FOR AWSC INTERSECTIONS	
LOS[1]	**CONTROL DELAY (s/veh)**
A	**≤ 10**
B	**> 10 AND ≤ 15**
C	**> 15 AND ≤ 25**
D	**> 25 AND ≤ 35**
E	**> 35 AND ≤ 50**
F	**> 50**

[1] For approaches and intersection-wide assessment, LOS is defined solely by control delay.

Note: LOS F is assigned to a movement if the volume-to-capacity ratio exceeds 1.0, regardless of the control delay.

Reference: Highway Capacity Manual Version 6.0, Transportation Research Board, 2016.

LEVEL OF SERVICE
FOR TWO-WAY
STOP SIGN CONTROLLED INTERSECTIONS

The level of service for a TWSC (two-way stop controlled) intersection is determined by the computed or measured control delay and is defined for each minor movement. Level of service is not defined for the intersection as a whole. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS criteria are given in the Table**.** LOS criteria are given below:

LEVEL-OF SERVICE CRITERIA FOR AWSC INTERSECTIONS	
LOS[1]	**CONTROL DELAY (s/veh)**
A	**≤ 10**
B	**> 10 AND ≤ 15**
C	**> 15 AND ≤ 25**
D	**> 25 AND ≤ 35**
E	**> 35 AND ≤ 50**
F	**> 50**

Note: LOS criteria apply to each lane on a given approach and to each approach on the minor street.
LOS is not calculated for major-street approaches or for the intersection as a whole.
LOS F is assigned to a movement if the volume-to-capacity ratio exceeds 1.0, regardless of the control delay

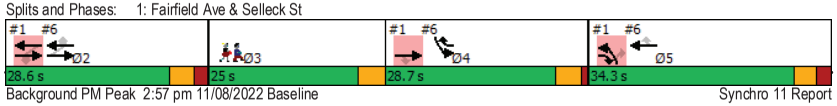
Reference: Highway Capacity Manual Version 6.0, Transportation Research Board, 2016.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø3	Ø4
Lane Configurations								
Traffic Volume (vph)	330	225	13	291	343	43		
Future Volume (vph)	330	225	13	291	343	43		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	0		0	100		
Storage Lanes		1	0		1	1		
Taper Length (ft)			25		25			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00		
Frt		0.850				0.850		
Flt Protected				0.998	0.950			
Satd. Flow (prot)	1863	1583	0	3356	1770	1583		
Flt Permitted				0.933	0.950			
Satd. Flow (perm)	1863	1583	0	3137	1770	1583		
Right Turn on Red		No				No		
Satd. Flow (RTOR)								
Link Speed (mph)	25			25	25			
Link Distance (ft)	230			247	1870			
Travel Time (s)	6.3			6.7	51.0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Parking (#/hr)				0				
Adj. Flow (vph)	359	245	14	316	373	47		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	359	245	0	330	373	47		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	0			0	12			
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	1.07	1.00	1.00		
Turning Speed (mph)		9	15		15	9		
Number of Detectors	0	0	1	1	1	1		
Detector Template			Left					
Leading Detector (ft)	0	0	20	45	45	45		
Trailing Detector (ft)	0	0	0	-5	5	5		
Detector 1 Position(ft)	0	0	0	-5	5	5		
Detector 1 Size(ft)	50	50	20	50	40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm		
Protected Phases	2 4	5		2	5		3	4
Permitted Phases		2 4	2			5		
Detector Phase	2	2	2	2	5	5		
Switch Phase								
Minimum Initial (s)		5.0	15.0	15.0	5.0	5.0	7.0	5.0
Minimum Split (s)		10.3	20.6	20.6	10.3	10.3	25.0	9.7

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø3	Ø4
Total Split (s)		34.3	28.6	28.6	34.3	34.3	25.0	28.7
Total Split (%)		29.4%	24.5%	24.5%	29.4%	29.4%	21%	25%
Maximum Green (s)		29.0	23.0	23.0	29.0	29.0	21.0	24.0
Yellow Time (s)		3.0	3.6	3.6	3.0	3.0	4.0	3.6
All-Red Time (s)		2.3	2.0	2.0	2.3	2.3	0.0	1.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		
Total Lost Time (s)		5.3		5.6	5.3	5.3		
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)		2.5	2.0	2.0	2.5	2.5	3.0	2.5
Recall Mode		None	Min	Min	None	None	None	None
Walk Time (s)							7.0	
Flash Dont Walk (s)							14.0	
Pedestrian Calls (#/hr)							44	
Act Effct Green (s)	21.5	52.5		21.5	21.2	21.2		
Actuated g/C Ratio	0.32	0.78		0.32	0.32	0.32		
v/c Ratio	0.60	0.20		0.33	0.67	0.09		
Control Delay	29.6	5.8		22.9	29.5	20.9		
Queue Delay	1.3	0.4		0.0	0.0	0.0		
Total Delay	30.9	6.2		22.9	29.5	20.9		
LOS	C	A		C	C	C		
Approach Delay	20.9			22.9	28.6			
Approach LOS	C			C	C			
Queue Length 50th (ft)	159	49		69	169	17		
Queue Length 95th (ft)	#301	81		118	269	42		
Internal Link Dist (ft)	150			167	1790			
Turn Bay Length (ft)						100		
Base Capacity (vph)	722	1241		1215	865	773		
Starvation Cap Reductn	186	599		0	0	0		
Spillback Cap Reductn	0	0		0	0	0		
Storage Cap Reductn	0	0		0	0	0		
Reduced v/c Ratio	0.67	0.38		0.27	0.43	0.06		

Intersection Summary			
Area Type:	Other		
Cycle Length: 116.6			
Actuated Cycle Length: 67.1			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 23.7		Intersection LOS: C	
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Fairfield Ave & Selleck St



Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	2	0	192	124	23
Future Vol, veh/h	31	2	0	192	124	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	2	0	209	135	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	357	148	160	0	-	0
Stage 1	148	-	-	-	-	-
Stage 2	209	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	641	899	1419	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	641	899	1419	-	-	-
Mov Cap-2 Maneuver	641	-	-	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	826	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1419	-	652	-	-
HCM Lane V/C Ratio	-	-	0.055	-	-
HCM Control Delay (s)	0	-	10.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	57	5	46	171	2	14
Future Vol, veh/h	57	5	46	171	2	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	5	50	186	2	15
Number of Lanes	1	0	1	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	1	0
HCM Control Delay	8	7.9	7.7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	92%	100%	0%
Vol Thru, %	21%	0%	0%	100%
Vol Right, %	79%	8%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	217	62	2	14
LT Vol	0	57	2	0
Through Vol	46	0	0	14
RT Vol	171	5	0	0
Lane Flow Rate	236	67	2	15
Geometry Grp	5	2	7	7
Degree of Util (X)	0.242	0.084	0.003	0.02
Departure Headway (Hd)	3.693	4.504	5.277	4.775
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	965	788	673	743
Service Time	1.747	2.577	3.048	2.546
HCM Lane V/C Ratio	0.245	0.085	0.003	0.02
HCM Control Delay	7.9	8	8.1	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.9	0.3	0	0.1

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	147	47	33	45	69	50
Future Vol, veh/h	147	47	33	45	69	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	160	51	36	49	75	54
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.1	7.6	8.3
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	76%	0%	58%
Vol Thru, %	24%	42%	0%
Vol Right, %	0%	58%	42%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	194	78	119
LT Vol	147	0	69
Through Vol	47	33	0
RT Vol	0	45	50
Lane Flow Rate	211	85	129
Geometry Grp	1	1	1
Degree of Util (X)	0.263	0.097	0.16
Departure Headway (Hd)	4.489	4.12	4.464
Convergence, Y/N	Yes	Yes	Yes
Cap	806	871	805
Service Time	2.489	2.139	2.483
HCM Lane V/C Ratio	0.262	0.098	0.16
HCM Control Delay	9.1	7.6	8.3
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.1	0.3	0.6

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	54	11	14	2	12	17	11	11	2	15	69	58
Future Vol, veh/h	54	11	14	2	12	17	11	11	2	15	69	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	12	15	2	13	18	12	12	2	16	75	63
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.3	7.5	7.8
HCM LOS	A	A	A	A

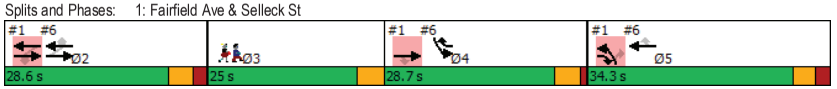
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	46%	68%	6%	11%
Vol Thru, %	46%	14%	39%	49%
Vol Right, %	8%	18%	55%	41%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	79	31	142
LT Vol	11	54	2	15
Through Vol	11	11	12	69
RT Vol	2	14	17	58
Lane Flow Rate	26	86	34	154
Geometry Grp	1	1	1	1
Degree of Util (X)	0.031	0.103	0.038	0.169
Departure Headway (Hd)	4.303	4.303	4.1	3.936
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	818	822	878	900
Service Time	2.401	2.388	2.1	2.011
HCM Lane V/C Ratio	0.032	0.105	0.039	0.171
HCM Control Delay	7.5	7.9	7.3	7.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.1	0.6

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø3	Ø4
Lane Configurations								
Traffic Volume (vph)	196	143	13	223	188	30		
Future Volume (vph)	196	143	13	223	188	30		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	0		0	100		
Storage Lanes		1	0		1	1		
Taper Length (ft)			25		25			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00		
Frt		0.850				0.850		
Flt Protected				0.997	0.950			
Satd. Flow (prot)	1863	1583	0	3352	1770	1583		
Flt Permitted				0.934	0.950			
Satd. Flow (perm)	1863	1583	0	3140	1770	1583		
Right Turn on Red		No				No		
Satd. Flow (RTOR)								
Link Speed (mph)	25			25	25			
Link Distance (ft)	230			247	1870			
Travel Time (s)	6.3			6.7	51.0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Parking (#/hr)				0				
Adj. Flow (vph)	213	155	14	242	204	33		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	213	155	0	256	204	33		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	0			0	12			
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	1.07	1.00	1.00		
Turning Speed (mph)		9	15		15	9		
Number of Detectors	0	0	1	1	1	1		
Detector Template			Left					
Leading Detector (ft)	0	0	20	45	45	45		
Trailing Detector (ft)	0	0	0	-5	5	5		
Detector 1 Position(ft)	0	0	0	-5	5	5		
Detector 1 Size(ft)	50	50	20	50	40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm		
Protected Phases	2 4	5		2	5		3	4
Permitted Phases		2 4	2			5		
Detector Phase	2	2	2	2	5	5		
Switch Phase								
Minimum Initial (s)		5.0	15.0	15.0	5.0	5.0	7.0	5.0
Minimum Split (s)		10.3	20.6	20.6	10.3	10.3	25.0	9.7

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø3	Ø4
Total Split (s)		34.3	28.6	28.6	34.3	34.3	25.0	28.7
Total Split (%)		29.4%	24.5%	24.5%	29.4%	29.4%	21%	25%
Maximum Green (s)		29.0	23.0	23.0	29.0	29.0	21.0	24.0
Yellow Time (s)		3.0	3.6	3.6	3.0	3.0	4.0	3.6
All-Red Time (s)		2.3	2.0	2.0	2.3	2.3	0.0	1.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		
Total Lost Time (s)		5.3		5.6	5.3	5.3		
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)		2.5	2.0	2.0	2.5	2.5	3.0	2.5
Recall Mode		None	Min	Min	None	None	None	None
Walk Time (s)							7.0	
Flash Dont Walk (s)							14.0	
Pedestrian Calls (#/hr)							44	
Act Effct Green (s)	17.8	39.1		17.8	12.0	12.0		
Actuated g/C Ratio	0.33	0.72		0.33	0.22	0.22		
v/c Ratio	0.35	0.14		0.25	0.52	0.09		
Control Delay	21.2	7.2		18.8	26.8	21.6		
Queue Delay	0.1	0.1		0.0	0.0	0.0		
Total Delay	21.2	7.3		18.8	26.8	21.6		
LOS	C	A		B	C	C		
Approach Delay	15.4			18.8	26.1			
Approach LOS	B			B	C			
Queue Length 50th (ft)	70	29		42	72	11		
Queue Length 95th (ft)	138	55		77	138	32		
Internal Link Dist (ft)	150			167	1790			
Turn Bay Length (ft)						100		
Base Capacity (vph)	869	1245		1464	1040	931		
Starvation Cap Reductn	108	452		0	0	0		
Spillback Cap Reductn	0	0		0	0	0		
Storage Cap Reductn	0	0		0	0	0		
Reduced v/c Ratio	0.28	0.20		0.17	0.20	0.04		

Intersection Summary			
Area Type:	Other		
Cycle Length: 116.6			
Actuated Cycle Length: 54			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 19.4		Intersection LOS: B	
Intersection Capacity Utilization 35.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Fairfield Ave & Selleck St



HCM 6th TWSC
2: Fairfield Ave & Melrose Pl 11/15/2022

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	1	2	131	91	15
Future Vol, veh/h	22	1	2	131	91	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	1	2	142	99	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	253	107	115	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	146	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	736	947	1474	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	735	947	1474	-	-	-
Mov Cap-2 Maneuver	735	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	881	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1474	-	742	-	-
HCM Lane V/C Ratio	0.001	-	0.034	-	-
HCM Control Delay (s)	7.4	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th AWSC
3: Barry Pl & Fairfield Ave 11/15/2022

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	3	9	87	5	9
Future Vol, veh/h	45	3	9	87	5	9
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	3	10	95	5	10
Number of Lanes	1	0	1	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	1	0
HCM Control Delay	7.6	7.1	7.7
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	94%	100%	0%
Vol Thru, %	9%	0%	0%	100%
Vol Right, %	91%	6%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	48	5	9
LT Vol	0	45	5	0
Through Vol	9	0	0	9
RT Vol	87	3	0	0
Lane Flow Rate	104	52	5	10
Geometry Grp	5	2	7	7
Degree of Util (X)	0.104	0.062	0.008	0.013
Departure Headway (Hd)	3.593	4.29	5.179	4.678
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	993	833	690	763
Service Time	1.63	2.324	2.919	2.418
HCM Lane V/C Ratio	0.105	0.062	0.007	0.013
HCM Control Delay	7.1	7.6	8	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.2	0	0

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	74	29	19	48	47	34
Future Vol, veh/h	74	29	19	48	47	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	32	21	52	51	37
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8	7.1	7.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	72%	0%	58%
Vol Thru, %	28%	28%	0%
Vol Right, %	0%	72%	42%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	103	67	81
LT Vol	74	0	47
Through Vol	29	19	0
RT Vol	0	48	34
Lane Flow Rate	112	73	88
Geometry Grp	1	1	1
Degree of Util (X)	0.133	0.076	0.101
Departure Headway (Hd)	4.288	3.744	4.116
Convergence, Y/N	Yes	Yes	Yes
Cap	831	944	858
Service Time	2.344	1.819	2.199
HCM Lane V/C Ratio	0.135	0.077	0.103
HCM Control Delay	8	7.1	7.7
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.2	0.3

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	3	4	0	3	3	7	7	0	4	45	31
Future Vol, veh/h	22	3	4	0	3	3	7	7	0	4	45	31
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	3	4	0	3	3	8	8	0	4	49	34
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.4	6.9	7.3	7.2
HCM LOS	A	A	A	A

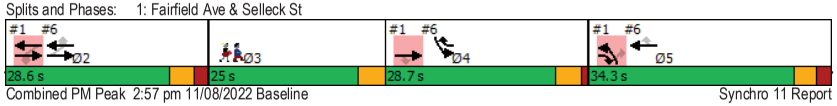
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	50%	76%	0%	5%
Vol Thru, %	50%	10%	50%	56%
Vol Right, %	0%	14%	50%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	29	6	80
LT Vol	7	22	0	4
Through Vol	7	3	3	45
RT Vol	0	4	3	31
Lane Flow Rate	15	32	7	87
Geometry Grp	1	1	1	1
Degree of Util (X)	0.018	0.037	0.007	0.092
Departure Headway (Hd)	4.166	4.186	3.836	3.79
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	858	853	928	945
Service Time	2.199	2.224	1.88	1.813
HCM Lane V/C Ratio	0.017	0.038	0.008	0.092
HCM Control Delay	7.3	7.4	6.9	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0	0.3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø3	Ø4
Lane Configurations								
Traffic Volume (vph)	330	233	20	291	348	47		
Future Volume (vph)	330	233	20	291	348	47		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	0		0	100		
Storage Lanes		1	0		1	1		
Taper Length (ft)			25		25			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00		
Frt		0.850				0.850		
Flt Protected				0.997	0.950			
Satd. Flow (prot)	1863	1583	0	3352	1770	1583		
Flt Permitted				0.916	0.950			
Satd. Flow (perm)	1863	1583	0	3080	1770	1583		
Right Turn on Red		No				No		
Satd. Flow (RTOR)								
Link Speed (mph)	25			25	25			
Link Distance (ft)	230			247	1870			
Travel Time (s)	6.3			6.7	51.0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Parking (#/hr)				0				
Adj. Flow (vph)	359	253	22	316	378	51		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	359	253	0	338	378	51		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	0			0	12			
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	1.07	1.00	1.00		
Turning Speed (mph)		9	15		15	9		
Number of Detectors	0	0	1	1	1	1		
Detector Template			Left					
Leading Detector (ft)	0	0	20	45	45	45		
Trailing Detector (ft)	0	0	0	-5	5	5		
Detector 1 Position(ft)	0	0	0	-5	5	5		
Detector 1 Size(ft)	50	50	20	50	40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm		
Protected Phases	2 4	5		2	5		3	4
Permitted Phases		2 4	2			5		
Detector Phase	2	2	2	2	5	5		
Switch Phase								
Minimum Initial (s)		5.0	15.0	15.0	5.0	5.0	7.0	5.0
Minimum Split (s)		10.3	20.6	20.6	10.3	10.3	25.0	9.7

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø3	Ø4
Total Split (s)		34.3	28.6	28.6	34.3	34.3	25.0	28.7
Total Split (%)		29.4%	24.5%	24.5%	29.4%	29.4%	21%	25%
Maximum Green (s)		29.0	23.0	23.0	29.0	29.0	21.0	24.0
Yellow Time (s)		3.0	3.6	3.6	3.0	3.0	4.0	3.6
All-Red Time (s)		2.3	2.0	2.0	2.3	2.3	0.0	1.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		
Total Lost Time (s)		5.3		5.6	5.3	5.3		
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)		2.5	2.0	2.0	2.5	2.5	3.0	2.5
Recall Mode		None	Min	Min	None	None	None	None
Walk Time (s)							7.0	
Flash Dont Walk (s)							14.0	
Pedestrian Calls (#/hr)							44	
Act Effct Green (s)	21.5	53.1		21.5	21.9	21.9		
Actuated g/C Ratio	0.32	0.78		0.32	0.32	0.32		
v/c Ratio	0.61	0.20		0.35	0.66	0.10		
Control Delay	30.1	5.8		23.4	29.2	20.7		
Queue Delay	1.3	0.4		0.0	0.0	0.0		
Total Delay	31.4	6.2		23.4	29.2	20.7		
LOS	C	A		C	C	C		
Approach Delay	21.0			23.4	28.2			
Approach LOS	C			C	C			
Queue Length 50th (ft)	162	51		73	172	19		
Queue Length 95th (ft)	#301	84		122	274	45		
Internal Link Dist (ft)	150			167	1790			
Turn Bay Length (ft)						100		
Base Capacity (vph)	714	1243		1180	855	765		
Starvation Cap Reductn	184	601		0	0	0		
Spillback Cap Reductn	0	0		0	0	0		
Storage Cap Reductn	0	0		0	0	0		
Reduced v/c Ratio	0.68	0.39		0.29	0.44	0.07		

Intersection Summary			
Area Type:	Other		
Cycle Length: 116.6			
Actuated Cycle Length: 67.7			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 23.8		Intersection LOS: C	
Intersection Capacity Utilization 51.5%		ICU Level of Service A	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Fairfield Ave & Selleck St



Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	3	1	192	124	38
Future Vol, veh/h	40	3	1	192	124	38
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	3	1	209	135	41

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	367	156	176	0	-	0
Stage 1	156	-	-	-	-	-
Stage 2	211	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	633	890	1400	-	-	-
Stage 1	872	-	-	-	-	-
Stage 2	824	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	632	890	1400	-	-	-
Mov Cap-2 Maneuver	632	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	824	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1400	-	645	-	-
HCM Lane V/C Ratio	0.001	-	0.072	-	-
HCM Control Delay (s)	7.6	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	57	9	54	171	5	18
Future Vol, veh/h	57	9	54	171	5	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	10	59	186	5	20
Number of Lanes	1	0	1	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	1	0
HCM Control Delay	8	8.1	7.8
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	86%	100%	0%
Vol Thru, %	24%	0%	0%	100%
Vol Right, %	76%	14%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	225	66	5	18
LT Vol	0	57	5	0
Through Vol	54	0	0	18
RT Vol	171	9	0	0
Lane Flow Rate	245	72	5	20
Geometry Grp	5	2	7	7
Degree of Util (X)	0.253	0.089	0.008	0.026
Departure Headway (Hd)	3.723	4.483	5.289	4.788
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	956	788	671	741
Service Time	1.783	2.573	3.065	2.563
HCM Lane V/C Ratio	0.256	0.091	0.007	0.027
HCM Control Delay	8.1	8	8.1	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1	0.3	0	0.1

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	147	50	37	46	70	50
Future Vol, veh/h	147	50	37	46	70	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	160	54	40	50	76	54
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	9.1	7.6	8.4
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	75%	0%	58%
Vol Thru, %	25%	45%	0%
Vol Right, %	0%	55%	42%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	197	83	120
LT Vol	147	0	70
Through Vol	50	37	0
RT Vol	0	46	50
Lane Flow Rate	214	90	130
Geometry Grp	1	1	1
Degree of Util (X)	0.268	0.104	0.163
Departure Headway (Hd)	4.499	4.142	4.487
Convergence, Y/N	Yes	Yes	Yes
Cap	803	866	801
Service Time	2.499	2.163	2.508
HCM Lane V/C Ratio	0.267	0.104	0.162
HCM Control Delay	9.1	7.6	8.4
HCM Lane LOS	A	A	A
HCM 95th-tile Q	1.1	0.3	0.6

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	11	15	2	12	17	12	11	2	15	69	62
Future Vol, veh/h	57	11	15	2	12	17	12	11	2	15	69	62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	62	12	16	2	13	18	13	12	2	16	75	67
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.3	7.6	7.9
HCM LOS	A	A	A	A

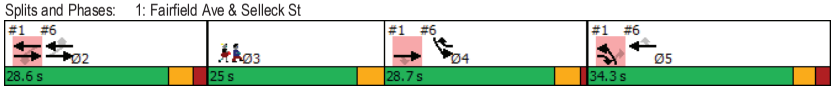
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	69%	6%	10%
Vol Thru, %	44%	13%	39%	47%
Vol Right, %	8%	18%	55%	42%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	25	83	31	146
LT Vol	12	57	2	15
Through Vol	11	11	12	69
RT Vol	2	15	17	62
Lane Flow Rate	27	90	34	159
Geometry Grp	1	1	1	1
Degree of Util (X)	0.033	0.108	0.039	0.173
Departure Headway (Hd)	4.421	4.311	4.117	3.934
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	814	820	875	900
Service Time	2.423	2.399	2.117	2.014
HCM Lane V/C Ratio	0.033	0.11	0.039	0.177
HCM Control Delay	7.6	7.9	7.3	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.4	0.1	0.6

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø3	Ø4
Lane Configurations								
Traffic Volume (vph)	196	162	29	223	203	43		
Future Volume (vph)	196	162	29	223	203	43		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)		0	0		0	100		
Storage Lanes		1	0		1	1		
Taper Length (ft)			25		25			
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00		
Frt		0.850				0.850		
Flt Protected				0.994	0.950			
Satd. Flow (prot)	1863	1583	0	3342	1770	1583		
Flt Permitted				0.901	0.950			
Satd. Flow (perm)	1863	1583	0	3029	1770	1583		
Right Turn on Red		No				No		
Satd. Flow (RTOR)								
Link Speed (mph)	25			25	25			
Link Distance (ft)	230			247	1870			
Travel Time (s)	6.3			6.7	51.0			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Parking (#/hr)				0				
Adj. Flow (vph)	213	176	32	242	221	47		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	213	176	0	274	221	47		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	0			0	12			
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	1.07	1.00	1.00		
Turning Speed (mph)		9	15		15	9		
Number of Detectors	0	0	1	1	1	1		
Detector Template			Left					
Leading Detector (ft)	0	0	20	45	45	45		
Trailing Detector (ft)	0	0	0	-5	5	5		
Detector 1 Position(ft)	0	0	0	-5	5	5		
Detector 1 Size(ft)	50	50	20	50	40	40		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Turn Type	NA	pm+ov	Perm	NA	Prot	Perm		
Protected Phases	2 4	5		2	5		3	4
Permitted Phases		2 4	2			5		
Detector Phase	2	2	2	2	5	5		
Switch Phase								
Minimum Initial (s)		5.0	15.0	15.0	5.0	5.0	7.0	5.0
Minimum Split (s)		10.3	20.6	20.6	10.3	10.3	25.0	9.7

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	Ø3	Ø4
Total Split (s)		34.3	28.6	28.6	34.3	34.3	25.0	28.7
Total Split (%)		29.4%	24.5%	24.5%	29.4%	29.4%	21%	25%
Maximum Green (s)		29.0	23.0	23.0	29.0	29.0	21.0	24.0
Yellow Time (s)		3.0	3.6	3.6	3.0	3.0	4.0	3.6
All-Red Time (s)		2.3	2.0	2.0	2.3	2.3	0.0	1.1
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		
Total Lost Time (s)		5.3		5.6	5.3	5.3		
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)		2.5	2.0	2.0	2.5	2.5	3.0	2.5
Recall Mode		None	Min	Min	None	None	None	None
Walk Time (s)							7.0	
Flash Dont Walk (s)							14.0	
Pedestrian Calls (#/hr)							44	
Act Effct Green (s)	17.3	39.5		17.3	12.7	12.7		
Actuated g/C Ratio	0.32	0.73		0.32	0.23	0.23		
v/c Ratio	0.36	0.15		0.28	0.53	0.13		
Control Delay	21.8	7.1		19.6	26.6	21.4		
Queue Delay	0.1	0.1		0.0	0.0	0.0		
Total Delay	21.9	7.2		19.6	26.6	21.4		
LOS	C	A		B	C	C		
Approach Delay	15.2			19.6	25.7			
Approach LOS	B			B	C			
Queue Length 50th (ft)	71	33		46	79	15		
Queue Length 95th (ft)	141	62		85	149	41		
Internal Link Dist (ft)	150			167	1790			
Turn Bay Length (ft)						100		
Base Capacity (vph)	878	1250		1428	1052	941		
Starvation Cap Reductn	108	458		0	0	0		
Spillback Cap Reductn	0	0		0	0	0		
Storage Cap Reductn	0	0		0	0	0		
Reduced v/c Ratio	0.28	0.22		0.19	0.21	0.05		

Intersection Summary			
Area Type:	Other		
Cycle Length: 116.6			
Actuated Cycle Length: 54.2			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 19.5		Intersection LOS: B	
Intersection Capacity Utilization 49.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Fairfield Ave & Selleck St



HCM 6th TWSC
2: Fairfield Ave & Melrose Pl 11/15/2022

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	4	5	131	91	50
Future Vol, veh/h	50	4	5	131	91	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	4	5	142	99	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	278	126	153	0	-	0
Stage 1	126	-	-	-	-	-
Stage 2	152	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	712	924	1428	-	-	-
Stage 1	900	-	-	-	-	-
Stage 2	876	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	709	924	1428	-	-	-
Mov Cap-2 Maneuver	709	-	-	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	876	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1428	-	721	-	-
HCM Lane V/C Ratio	0.004	-	0.081	-	-
HCM Control Delay (s)	7.5	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

HCM 6th AWSC
3: Barry Pl & Congress St 11/15/2022

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	12	25	87	12	21
Future Vol, veh/h	45	12	25	87	12	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	13	27	95	13	23
Number of Lanes	1	0	1	0	1	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	2	1	0
HCM Control Delay	7.6	7.3	7.8
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	79%	100%	0%
Vol Thru, %	22%	0%	0%	100%
Vol Right, %	78%	21%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	112	57	12	21
LT Vol	0	45	12	0
Through Vol	25	0	0	21
RT Vol	87	12	0	0
Lane Flow Rate	122	62	13	23
Geometry Grp	5	2	7	7
Degree of Util (X)	0.125	0.073	0.019	0.03
Departure Headway (Hd)	3.703	4.233	5.207	4.706
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	961	839	685	758
Service Time	1.753	2.296	2.954	2.453
HCM Lane V/C Ratio	0.127	0.074	0.019	0.03
HCM Control Delay	7.3	7.6	8.1	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.2	0.1	0.1

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	74	36	28	51	50	34
Future Vol, veh/h	74	36	28	51	50	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	39	30	55	54	37
Number of Lanes	0	1	1	0	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.1	7.3	7.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	SBLn1
Vol Left, %	67%	0%	60%
Vol Thru, %	33%	35%	0%
Vol Right, %	0%	65%	40%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	110	79	84
LT Vol	74	0	50
Through Vol	36	28	0
RT Vol	0	51	34
Lane Flow Rate	120	86	91
Geometry Grp	1	1	1
Degree of Util (X)	0.143	0.091	0.106
Departure Headway (Hd)	4.295	3.797	4.16
Convergence, Y/N	Yes	Yes	Yes
Cap	827	929	846
Service Time	2.358	1.88	2.258
HCM Lane V/C Ratio	0.145	0.093	0.108
HCM Control Delay	8.1	7.3	7.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.5	0.3	0.4

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	29	3	7	0	3	3	10	7	0	4	45	40
Future Vol, veh/h	29	3	7	0	3	3	10	7	0	4	45	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	3	8	0	3	3	11	8	0	4	49	43
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.4	6.9	7.3	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	59%	74%	0%	4%
Vol Thru, %	41%	8%	50%	51%
Vol Right, %	0%	18%	50%	45%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	17	39	6	89
LT Vol	10	29	0	4
Through Vol	7	3	3	45
RT Vol	0	7	3	40
Lane Flow Rate	18	42	7	97
Geometry Grp	1	1	1	1
Degree of Util (X)	0.022	0.049	0.007	0.101
Departure Headway (Hd)	4.211	4.179	3.866	3.773
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	848	853	919	949
Service Time	2.248	2.221	1.916	1.801
HCM Lane V/C Ratio	0.021	0.049	0.008	0.102
HCM Control Delay	7.3	7.4	6.9	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0	0.3