MAYOR Caroline Simmons



#### CITY OF STAMFORD ZONING BOARD LAND USE BUREAU

888 WASHINGTON BOULEVARD STAMFORD, CT 06904 -2152 DIRECTOR OF OPERATIONS

Matthew Quiñones

Land Use Bureau Chief Ralph Blessing

Principal Planner
Vineeta Mathur
(203) 977-4716
vmathur@stamfordct.gov

Associate Planner Lindsey Cohen (203) 977-4388 lcohen@stamfordct.gov

June 1, 2023

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







RE: <u>Application 223-24 – Raymond Mazzeo, c/o Redniss & Mead (22 First Street -Stamford, CT) – Text Change</u> – Proposing to amend 9.B.4.e, relating to building coverage and setbacks of structure not exceeding 20' in height within the P-D District.

RE: <u>Application 223-25 – 70 Forest Street LLC, 70 Forest Street and 251 Greyrock Place,</u>
<u>Stamford, CT – Map Change</u> – Proposing the rezoning of 251 Greyrock Place from current zoning district R-H to proposed zoning district P-D.

RE: Application 223-26 – 70 Forest Street LLC, 70 Forest Street and 251 Greyrock Place, Stamford, CT – Special Permit, Site & Architectural Plans and/or Requested Uses and a General Development Plan - Proposing to construct an attached 2 story (plus basement) parking garage on the property known as 251 Greyrock Place. The garage will be attached to 70 Forrest Street and will accommodate 36 spaces along with a roof deck.

Dear Ms. Dell:

In accordance with Section C6-40-10 of the Charter of the City of Stamford, the above captioned Applications for a Text Change, Map Change, Special Permit, Site & Architectural Plans and/or Requested Uses and a General Development Plan are hereby referred to the Planning Board of the City of Stamford for its advisory report.

A public hearing has not yet been scheduled. Referral comments should be filed with the Zoning Board Office by *July 6, 2023*.

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

Sincerely,

Vineeta Mathur Principal Planner



May 9, 2023

City of Stamford Zoning Board c/o Ralph Blessing, Land Use Bureau Chief 888 Washington Boulevard Stamford, CT 06901

Re: 70 Forest Street and 251 Greyrock Place

<u>Text Change, Zone Map Change, Special Permit, GDP, and Site and Architectural Plan Applications</u>

Dear Mr. Blessing and Board Members,

As discussed, on behalf of 70 Forest Street LLC, owner of the above referenced properties, enclosed please find applications and supportive materials for a Text Change, Zone Map Change, Special Permit, GDP, and Final Site and Architectural Plan Applications to facilitate the construction of a parking garage. Application details and design elements are described further in the attached Project Narrative and reflected in the enclosed plans.

In support of the applications, enclosed please find:

- 1. A check in the amount of \$3,580 for:
  - Text Fee: \$1,060
    Zone Change Fee: \$1,060
    Site Plan Fee: \$460
    Public Hearing Fee: \$1,000
- 2. Text Change Application;
- 3. Zone Map Change Application;
- 4. Special Permit Application;
- 5. GDP Application;
- 6. Final Site Plan Application;
- 7. Project Narrative;
- 8. Text Change;
- 9. Drawing List;
- 10. Zone Change Map;
- 11. Zone Change Map Description;
- 12. General Property Description;
- 13. Zoning Data Charts;

Page 2 of 2

- 14. Aerial Exhibit;
- 15. ALTA Survey;
- 16. Engineering Plans;
- 17. Architectural Plans;
- 18. Landscape Plans;
- 19. Engineering Letter;
- 20. Letter of Authorization;

Please feel free to contact us with any questions or comments. We look forward to continuing to work with you and the Planning & Zoning Boards on this opportunity.

Sincerely,

Raymond R. Mazzeo, AICP

**Enclosures** 

CC: V. Mathur, Principal Planner Redevelopment Team





May 9, 2023

City of Stamford Planning Board c/o Ralph Blessing, Land Use Bureau Chief 888 Washington Boulevard Stamford, CT 06901

Re: 70 Forest Street and 251 Greyrock Place

<u>Text Change, Zone Map Change, GDP, Special Permit, and Site and Architectural Plan Applications</u>

Dear Mr. Blessing,

Please let this letter serve as our formal request for members of the consultant team to speak, should the Planning Board have any questions for the applicant at the forthcoming referral meeting on the Text Change, Zone Map Change, Special Permit, GDP, and Site and Architectural Plan Applications.

Please let us know if you have any questions or would like additional information.

Sincerely,

Raymond R. Mazzeo, AICP

**Enclosures** 

CC: V. Mathur, Principal Planner

\$1,060,00



Fee Schedule

Government Center  $\cdot$  888 Washington Boulevard  $\cdot$  Stamford, CT 06904-2152 Phone: 203.977.4719 · Fax: 203.977.4100

#### APPLICATION FOR TEXT CHANGE OF THE STAMFORD ZONING REGULATIONS

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

Minor Text Change	\$1,060.00
Major Text Change	\$5,060.00
APPLICANT NAME (S): Raymond R. Mazzeo	
APPLICANT ADDRESS:c/o Redniss and Mead (22 First Street - Stamford	d, CT 06905)
APPLICANT PHONE #: 203-327-0500	
IS APPLICANT AN OWNER OF PROPERTY IN THE CITY OF STAMFORD? Yes	
LOCATION OF PROPERTY IN STAMFORD OWNED BY APPLICANT (S):12 Fastover	Road
PROPOSED TEXT CHANGE:	
Please see attached "Text Amendment"	1
	1949 t
DOES ANY PORTION OF THE PREMISES AFFECTED BY THIS APPLICATION LIE WITHIN 50 WITH GREENWICH, DARIEN OR NEW CANAAN? No (If yes, notification must community by registered mail within 7 days of receipt of application ~ PA 87-307).	
DATED AT STAMFORD, CONNECTICUT, THIS 9 DAY OF May	2023
SIGNED:	ne
NOTE: Application cannot be scheduled for Public Hearing until 35 days have elapsed fine Stamford Planning Board. If applicant wishes to withdraw application, please notify the Zoprior to Public Hearing so that the Board may have sufficient time to publicize the withdraw	oning Board at least three (3) days
STATE OF CONNECTICUT  SS STAMFORD  OUNTY OF FAIRFIELD	2023
the truth of the contents the contents the contents the truth of the contents the c	regoing application, who made oath to
Hotary Public, State of Connecticut y Commission Expires Mar 31, 2026	
Notary Public - Commi	ssioner of the Superior Court
FOR OFFICE USE ONLY	
APPL. #: Received in the office of the Zoning Board: Date: _	
Ву:	

\$1,060.00



Fee Schedule

Map Change (Affected Area of 1 Acre or Less)

#### APPLICATION FOR CHANGE IN THE ZONING MAP OF STAMFORD, CONNECTICUT

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 filing fee (see Fee Schedule below), payable to the City of Stamford.

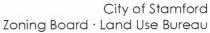
**NOTE**: Cost of required Public Hearing advertisements are payable by the Applicant and performance of mailing of required property owners is the sole responsibility of the applicant. **LAND RECORDS RECORDING FEE**: \$60.00 for First page - \$5.00 for each additional page)

	Map Change (Affected Area of greater than 1 Acre)	\$1,060.00 + \$2,000 per acre or portion thereof in excess of 1 acre
	70 Forget Street LLC	
	T NAME (S): 70 Forest Street LLC	
APPLICAN	T ADDRESS:c/o Redniss and Mead - 22 First Street Stamford, CT 06905	
APPLICAN	T PHONE #: c/o 203-327-0500	· · · · · · · · · · · · · · · · · · ·
IS APPLIC	ANT AN OWNER OF PROPERTY IN THE CITY OF STAMFORD?Yes, 70 Forest Street	
PRESENT	ZONING DISTRICT: R-H PROPOSED ZONING DISTRICT:	P-D
intersecting	OF PROPOSED CHANGE: (Give boundaries of each parcel in proposed change and indicate street. Also include Assessor's Card number and Town Clerk's Block number, and square foots of map showing area proposed for change.)	
	Please see attached Zone Change Description	
LIST NAMI	AND ADDRESS OF THE OWNERS OF ALL LAND INCLUDED WITHIN THE PROPOSED CH	ANGE:
<u>N</u>	AME & ADDRESS LOCATION	
	70 FOREST STREET LLC 70 Forest Street 8 E 50TH STREET 10TH FLOOR Stamford, CT NEW YORK, NY 10022	
ARE THEF	E DEED RESTRICTIONS THAT CONFLICT WITH THE PROPOSED ZONE DISTRICT FOR TH	HIS PROPERTY?
	n/a	
IF YES, LIS	T REFERENCE TO TOWN CLERK BOOK & PAGE #:	
WITH GRE	PORTION OF THE PREMISES AFFECTED BY THIS APPLICATION LIE WITHIN 500 FEET CENWICH, DARIEN OR NEW CANAAN? No (If yes, notification must be sent to by registered mail within 7 days of receipt of application – PA 87-307).	





DATED AT STAMFORD, CONNECTICUT	, THIS9	AY.	2/ May		20 23	_
	SIGNED: _/	layt	luge			_
NOTE: The application cannot be sche- Stamford Planning Board. If applicant of the Zoning Board at least three (3) work withdrawal. Applications withdrawn less days.	vishes to withdr ing days prior to	aw the appli o public hear	cation, this must ring in order to p	t be done in provide suff	n writing, and be ficient time to pu	received by blicize the
STATE OF CONNECTICUT ss STAMF	ord	lay	q		2023	
COUNTY OF FAIRFIELD	ΛΩ					
Personally appeared Kay M	onel 4	Maz	₹€○, signer of	f the forego	ing application, wh	no made oath to
the truth of the contents thereof, before me	1				>	
Notary Public, State of Connecticut My Commission Expires Mar 31, 2026			Notary Public - (	Commission	er of the Superior	Court
FOR OFFICE USE ONLY						
APPL. #:	Received in th	e office of the	e Zoning Board: L	Date:		
			Ву:		- · · · · · · · · · · · · · · · · · · ·	
		Revised 04/30	0/20			





Fee Schedule

Special Permit 20,000 sq. ft. or less

Special Permit more than 20,000 sq. ft.

Government Center · 888 Washington Boulevard · Stamford, CT 06904-2152

Phone: 203.977.4719 · Fax: 203.977.4100

\$460.00

\$460.00 + \$30 per 1,000 sq. ft. or portion thereof in

#### 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)

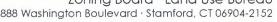
	ft.
70 FOREST STREET I. C	
APPLICANT NAME (S):70 FOREST STREET LLC	
APPLICANT ADDRESS: c/o Redniss and Mead - 22 First Street Stamford, CT 069	905
APPLICANT PHONE #: c/o 203-327-0500	
IS APPLICANT AN OWNER OF PROPERTY IN THE CITY OF STAMFORD? Yes	
LOCATION OF PROPERTY IN STAMFORD OWNED BY APPLICANT (S):	Forest Street and 251 Greyrock Place
ADDRESS OF SUBJECT PROPERTY:	
PRESENT ZONING DISTRICT: P-D (Companion Zone Change Application	1)
TITLE OF SITE PLANS & ARCHITECTURAL PLANS: Please see attached Draw	ring List
REQUESTED SPECIAL PERMIT: (Attach written statement describing request)	
Please see attached Project Narrative	
LOCATION: (Give boundaries of land affected, distance from nearest intersecting str	eets, lot depths and Town Clerk's Block Number)
Please see attached General Property Desc	cription
NAME AND ADDRESS OF OWNERS OF ALL PROPERTY INVOLVED IN REQUES NAME & ADDRESS LOCATION	Γ:
70 FOREST STREET LLC 18 E 50TH STREET 10TH FLOOR NEW YORK, NY 10022 70 Forest Street and 251 Greyrock Place Stamford, CT 06905	
DOES ANY PORTION OF THE PREMISES AFFECTED BY THIS APPLICATION LIE WITH GREENWICH, DARIEN OR NEW CANAAN? No (If yes, notific community by registered mail within 7 days of receipt of application – PA 87-307).	WITHIN 500 FEET OF THE BORDER LINE cation must be sent to Town Clerk of neighboring
DOES THE PROJECT RESULT IN THE CREATION OF 10 OR MORE UNITS OR 10 DISTURBANCE OF 20,000 SF OR MORE IN LAND AREA, THROUGH NEW DEVEL ENLARGEMENT OR SUBSTANTIAL ALTERATIONS? No (If yes, the Scorecard per Section 15.F).	OPMENT, RECONSTRUCTION,



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	T, THIS $q$	DAY OF MUL	20 23
	SIGNED:	1/4yl	upe-
NOTE: Application cannot be schedule Stamford Planning Board. If applicant prior to Public Hearing so that the Boa	wishes to withdraw a	pplication, please notify t	he Zoning Board at least three (3) days
STATE OF CONNECTICUT ss STAMF	FORD May	G	2023
COUNTY OF FAIRFIELD			
Personally appeared		signer of	the foregoing application, who made oath to
DAVID PINTO	19 )-	11/	
Notary Public, State of Connecticut— My Commission Expires Mar 31, 2026		Notary Public - Co	mmissioner of the Superior Court
FOR OFFICE USE ONLY			
APPL. #:	Received in the offi	ce of the Zoning Board: Da	ate:
		Ву:	

Revised 09/02/2020





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):	
APPLICANT ADDRESS:c/o Redniss and Mead - 2	2 First Street Stamford, CT 06905
APPLICANT PHONE #: c/o 203-327-0500	
IS APPLICANT AN OWNER OF PROPERTY IN THE	CITY OF STAMFORD? Yes
LOCATION OF PROPERTY IN STAMFORD OWNED	BY APPLICANT (S): 70 Forest Street and 251 Greyrock Place
ADDRESS OF SUBJECT PROPERTY: 70 For	est Street and 251 Greyrock Place
PRESENT ZONING DISTRICT: P-D (C	Companion Zone Change Application)
TITLE OF SITE PLANS & ARCHITECTURAL PLANS	Please see attached Drawing List
REQUESTED USE: Please see attached Project	Narrative
LOCATION: (Give boundaries of land affected, distan	nce from nearest intersecting streets, lot depths and Town Clerk's Block Number
Please see attached	General Property Description
NAME AND ADDRESS OF OWNERS OF ALL PROP NAME & ADDRESS	ERTY INVOLVED IN REQUEST:  LOCATION
70 FOREST STREET LLC 18 E 50TH STREET 10TH FLOOR NEW YORK, NY 10022	70 Forest Street and 251 Greyrock Place Stamford, CT 06905

DOES ANY PORTION OF THE PREMISES AFFECTED BY THIS APPLICATION LIE WITHIN 500 FEET OF THE BORDER LINE WITH GREENWICH, DARIEN OR NEW CANAAN? No (If yes, n community by registered mail within 7 days of receipt of application – PA 87-307). \_\_(If yes, notification must be sent to Town Clerk of neighboring

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





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	_ DAY OF TUY	2023	
	SIGNED:	Mayt	yge	
NOTE: The application cannot be scheduled Stamford Planning Board. If applicant with the Zoning Board at least three (3) working withdrawal. Applications withdrawn less days.	ishes to withdraw thing days prior to pub	ne application, this must b blic hearing in order to pro	e done in writing, and be received to be received to be sufficient time to publicize	ed by the
STATE OF CONNECTICUT  ss STAMFO COUNTY OF FAIRFIELD  Personally appeared  the truth of the contents thereof, before the.  Notary Public, State of Connecticut  My Commission Expires Mar 31, 2026	10/14	12	20 <u>2-3</u> ne foregoing application, who mad  mmissioner of the Superior Court	e oath to
FOR OFFICE USE ONLY	nter Mill Manual Philip Mark (1997) (1998) (			
APPL. #:	Received in the offi	ce of the Zoning Board: <i>Da</i>	te:	
		Ву:		

Revised 9/02/20





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) 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.

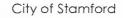
**NOTE**: Cost of required Public Hearing advertisements are payable by the Applicant and performance of required mailing to surrounding property owners is the sole responsibility of the applicant. **LAND RECORDS RECORDING FEE**: \$60.00 for First page - \$5.00 for each additional page)

#### (GENERAL DEVELOPMENT PLAN)

#### Fee Schedule

General Development Plan – Sites 20,000 sq. ft. or less parcel area.	\$460.00
General Development Plan – Sites more than 20,000 sq. ft. or parcel area.	\$460 + \$20 per 1,000 sq. ft. in excess of 20,000 sq. ft.

APPLICANT NAME (S): 70 FOREST STREET LLC
APPLICANT ADDRESS: _c/o Redniss & Mead - 22 First Street - Stamford, CT 06905
APPLICANT PHONE #: <u>c/o 203-327-0500</u>
IS APPLICANT AN OWNER OF PROPERTY IN THE CITY OF STAMFORD? Yes
LOCATION OF PROPERTY IN STAMFORD OWNED BY APPLICANT (S): 70 Forest Street and 251 Greyrock Place
ADDRESS OF SUBJECT PROPERTY: 70 Forest Street and 251 Greyrock Place
PRESENT ZONING DISTRICT: P-D (Companion Zone Change Application)
TITLE OF SITE PLANS & ARCHITECTURAL PLANS: Please see attached Drawing List
REQUESTED USE: Modification of GDP Approval# 204-14. Please see attached Project Narrative for further details
LOCATION: (Give boundaries of land affected, distance from nearest intersecting streets, lot depths and Town Clerk's Block Number)
Please see attached General Property Description
NAME AND ADDRESS OF OWNERS OF ALL PROPERTY INVOLVED IN REQUEST:  NAME & ADDRESS  LOCATION
70 FOREST STREET LLC 70 Forest Street and 18 E 50TH STREET 10TH FLOOR NEW YORK, NY 10022 70 Forest Street and 251 Greyrock Place Stamford, CT 06905
DOES ANY PORTION OF THE PREMISES AFFECTED BY THIS APPLICATION LIE WITHIN 500 FEET OF THE BORDER LINE WITH GREENWICH, DARIEN OR NEW CANAAN? No (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).





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, SIGNED: NOTE: Application cannot be scheduled for Public Hearing until 35 days have elaps 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 COUNTY OF FAIRFIELD , signer of the foregoing application, who made oath to DAVID PINTO Notary Public, State of Connecticut Notary Public - Commissioner of the Superior Court My Commission Expires Mar 31, 2026 **FOR OFFICE USE ONLY** Received in the office of the Zoning Board: Date: APPL. #:

Revised 09/02/2020

# Project Narrative 70 Forest Street & 251 Greyrock Place Text Change, Zone Change, GDP and Final Site & Architectural Plan Applications May 10, 2023

#### 1. Introduction/Background

70 Forest Street LLC ("the Applicant") is the owner of properties known as 70 Forest Street and 251 Greyrock Place (collectively "the Site"). The combined site is approximately 1.15 acres located in Master Plan Category 11 (Downtown). The 251 Greyrock property is currently located in the R-H (Multiple Family High Density Design) District while the 70 Forest Street property is located in the P-D (Planned Development) District.

70 Forest is home to HighGrove, a 17-story luxury apartment building constructed in 2011 and containing 93 apartments in a mix of mostly large 2- and 3-bedroom units. The Greyrock property is currently vacant, but previously supported a 2.5-story single-family home.

HighGrove has operated for the last 10+ years with a 100% valet parking garage, and is now looking to create some additional parking capacity for its residents. The proposed plans will incorporate the Greyrock parcel into the overall site with a small 2-story (plus basement) garage addition that will connect directly to the existing garage levels and include an accessible landscaped roof deck. The garage will provide space for a total of up to 48 vehicles in a valet parking system. No additional units or changes to the rest of the building are proposed.

To facilitate the proposed improvements, the Applicant is submitting the following applications:

- A. Text Change relating to Building Coverage and setbacks of structures not exceeding 20' in height within the P-D District.
- B. Zoning Map Change The proposed map change will bring the Greyrock parcel into the P-D District, consistent with the overall site and surrounding areas.
- C. Special Permit Pursuant to §12.D.1.g the Applicant requests a modification of the dimension of circulation aisle to permit a 12' wide 2-way access to the proposed spaces on each level.
- D. General Development Plan to amend the prior GDP approval (204-14) to include the additional land area and proposed garage addition.
- E. Final Site & Architectural Plans & Requested Uses for the proposed garage addition.

#### 2. Surrounding Area

The surrounding area is predominantly Master Plan Category 11 (Downtown) with areas of Categories 5 (Residential – High Density Multifamily) and 4 (Residential – Medium Density Multifamily) further east across Grove Street. The nearby Zoning Districts are more mixed with predominantly P-D (Planned Development) in the immediate area and R-H (Multiple Family High Density Design), MX-D (Mixed Use Development), C-G (General Commercial), and R-MF (Multiple Family Residence Design) in surrounding areas.



Properties within this area of Downtown are mostly high-density residential with several high-rises (HighGrove, Sofi at 50 Forest, The Classic and others further northwest along Prospect Street) and mid-rise apartments (Parc Grove, Broad/Greyrock under construction). To the north and east of the Site are also smaller scale 2- and 3-story condominium complexes. The Site is within 1 mile of the Stamford Transportation Center and I-95 and less than 1,000 feet from the Stamford Town Center and nearby shops and restaurants on Bedford Street. It is well served by sidewalk connections to the surrounding community.

#### 3. Project Area/Development Site

The Site is approximately 1.15 acres comprised of the HighGrove property and adjoining  $3,000\pm$  sf residential parcel on Greyrock. HighGrove is a 17-story, 170' tall residential building containing 93 large 2- and 3-bedroom luxury rental apartments. Primary resident and vehicle access is on Forest Stret. The multi-level garage operates as a full valet system with a vehicle elevator to access basement and upper levels. There are no floor-to-floor ramps.

The original development, approved in 2004 and completed in 2011, was conceived as a condo project. At the time the pre-sale units were the highest price per square foot Stamford had ever seen, and served as a catalyst for the Downtown housing boom over the last 10-15 years. Units in the building differ from most downtown apartments. With average sizes of over 2,600 sf, the units are larger than many single-family homes. As such, they serve a different clientele, with larger household sizes and/or residents transitioning from a suburban setting and therefore maintaining ownership of multiple vehicles.

While the typical peak demand for a Downtown apartment building is closer to 0.85 spaces per unit on average, HighGrove residents average nearly 1.5 vehicles per unit, or 138 cars in total. The building is truly an outlier when compared to typical multi-family buildings – in terms of both bedroom count and overall unit sizes. An accompanying parking comparison provides some perspective on the building in relation to other recently approved multi-family buildings.

The approved garage demonstrated capacity for up to 258 vehicles with an aggressive valet stacking plan. The existing building, however, was constructed differently (including the removal a 4<sup>th</sup> level of parking and areas of limited clear height due to mechanical equipment) such that the valet system cannot operate efficiently with more than 130 vehicles onsite. This number generally meets the applicable parking requirement, but cannot appropriately serve the building's tenants.

#### 4. Proposed Development

The proposed garage addition will add space for up to 36 vehicles. The basement and second levels can accommodate approximately 12 cars each. The ground floor will either house another 12 cars as part of the valet operation, or 8 self-park spaces to be separately accessed from the Greyrock entrance. Each floor of the new garage will be accessible from the existing garage and use the existing Forest Street driveway as the means of ingress and egress. The Greyrock driveway will only be used for emergency purposes, or to serve up to 8 assigned self-park spaces for specific residents should the ground level be used that way.



The proposed garage addition is 2 above-grade stories, roughly 17' in height, with an accessible landscaped rooftop. All facades will be clad in brick to match the existing building. The new addition will include open metal grate windows to give the structure a more residential look and feel. The windows can also be fully enclosed, where appropriate, and/or include an inset metal mesh screen.

The landscaping plan includes evergreen trees along both the eastern and northern building face. Pursuant to Section 12.K.3.e. of the Regulations, the existing 5' wide concrete sidewalk along the Greyrock frontage will be replaced in kind. The landscaped roof deck will also include evergreen plantings along both the west and east sides to serve as a privacy buffer for both the building's residents and neighbors. The accessible portions of the terrace will provide passive outdoor space for residents.

While there is no change to the required number of spaces, since up to 36 additional spaces are proposed, the Applicant is also proposing to include at least 3 new EV charging stations within the garage.

#### 5. Action Items

To facilitate potential addition, the Applicant has submitted the following applications.

- **Text Change** The Applicant requests a modification Section 9.B P-D (Planned Development District) as follows:
  - 9.B.4.e Amend building coverage from 55% to 60% (for all structures) to accommodate the 2-story garage addition. The P-D Zone includes several complicated building coverage allowances for different portions of the building depending on their respective heights. Total building coverage can already reach up to 70% in certain scenarios.
  - 9.B.4.r Amend the ZB permission of reduced setbacks for structures under 20' in height to include side yards and include landscaped parking structures. The regulation already permits reduced front yard setbacks for certain types of structures under 20' in height. The proposed change is similar to the way accessory structures are treated in other zones.
- **Zone Change** The Applicant requests a zone change from R-H to P-D to put the additional parcel in the same zone as the main parcel (into which it is being consolidated).
- Special Permit Pursuant to §12.D.1.g applicant requests a modification of the dimension of circulation aisle to permit a 12' wide 2-way access to the proposed spaces on each level. With a valet-only operation and only 8-12 spaces being accessed at each level, the proposed dimension is more than adequate for safe maneuvering. It is worth noting that a 10'wide drive aisle is permitted for 2-way traffic accessing 10 or fewer spaces. This situation is only 2 additional spaces at most, and exclusively managed by the valet operation.
- Amend GDP 204-14 To facilitate the garage addition, the Applicant is proposing to amend the prior GDP to include the Greyrock parcel, to be consolidated into a single parcel. No other changes to the approved multi-family building are proposed.



• **Final Site & Architectural Plans** – The Applicant requests approval of the proposed garage addition, including proposed location, height, coverage, relationships with buildings and property lines, building materials, landscaping, parking, vehicular access, and streetscapes.

#### 6. Conclusions

The proposed changes will solve an ongoing operational issue for one of Stamford's premier Downtown apartment buildings, while making practical use of a small vacant lot. The modest low-profile addition will improve the streetscape and site landscaping, while helping to activate the frontage with passive rooftop amenity space that can be enjoyed by residents.

#### 7. Statement of Findings

- I. The above referenced specific Special Permit is specific to the proposed vehicular access width to the additional spaces. The Applicant submits that all applicable criteria contained in Stamford Zoning Regulations Article V, §19.C.2 are either met, or not applicable, for the following specific reasons:
- a. 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 addition is only 2 stories and less than 20' in height. Its scale and configuration are appropriate for the surroundings and serves as only a minor appendage to the 170' main building.
- 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.
  - There is no changed to the intensity of use, as no traffic generating additions are being made. There are no anticipated objectionable impacts or potential disturbances to nearby properties.
- 3) the resulting traffic patterns, the adequacy of existing streets to accommodate the traffic associated with the proposed use, the adequacy of proposed off-street parking and loading, and the extent to which proposed driveways may cause a safety hazard, or traffic nuisance.
  - Traffic can be safely and adequately accommodated on the surrounding streets; and onsite parking capacity is being improved.
- 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 addition does not impact or impair present or future development of surrounding areas.

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

Category 11 (Downtown) of the Master Plan is intended "to provide for and protect an intensive, pedestrian-oriented mixed-use district. Intended is a full array of retail, office, cultural, recreation and residential uses serviced by mass transportation and integrated pedestrian access systems, always at-grade, enhanced by up-to-date lighting, seating, planting, signage, etc., to assure a desirable mixing and interaction of people and activities. A variety of scale and design in new construction is to be encouraged." The proposed development fits within this category and fulfills the policy goals of the neighborhood.

The proposed changes will solve an ongoing operational issue for one of Stamford's premier Downtown apartment buildings, while making practical use of a small vacant lot. The modest low-profile addition will improve the streetscape and site landscaping, while helping to activate the frontage with passive rooftop amenity space that can be enjoyed by residents. For all of the reasons state, the Applicant submits that the proposal and the associated Special Permit request are in accord with the public convenience and welfare.

II. Pursuant to Section 19.D.4 Standards for Review the applicant submits that all applicable criteria are met for the following reasons:

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 existing multi-family building and its parking, drives, and pedestrian access will remain generally unchanged. The garage addition will simply add to the capacity fo the existing valet operation, with the potential for up to 8 parking spaces to access the site via Greyrock Place in a similar location as the previously existing driveway.



(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.

The number and general location of vehicle access drives is being maintained. The proposed garage access on Greyrock Place is provided in accordance with the Geometric Highway Design Standards of the Connecticut Department of Transportation (the "DOT").

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

There is no proposed change to the traffic demand of the site as no additional residential units or any other traffic generating uses are being proposed.

- (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 landscaping, in concert with the building design, is appropriate and adequately screens the parking. Such landscaping is thoughtful of abutting uses and enhances the public streetscape.

(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 is enhancing open spaces by providing an accessible landscaped rooftop on the proposed addition, as well as at-grade landscaping improvements.

(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.

A comprehensive Sedimentation and Erosion Control Plan has been prepared by Redniss and Mead, which ensures that the standards and procedures of Section 15-B of the Regulations are satisfied. A copy of this plan is enclosed herewith.



- (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.
  - The redevelopment area is in an urban setting with a comprehensive planting plan including new deciduous and evergreen trees.
- (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.
  - All artificial lighting and site generated noise and other disturbance shall be controlled and will not interfere with the use and enjoyment of the neighboring properties. Furthermore, the location, height, design and arrangement of outside lighting shall be consistent with safety to avoid glare on any other lot and to avoid hazards to traffic on adjacent roadways.
- (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.
  - A comprehensive drainage plan and statement have been prepared by Redniss and Mead, and are submitted with the enclosed materials. The plans illustrate the adequacy and availability of public utilities for the site.
- (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 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.
  - At only 2 stories and less than 20' in height, the proposed addition is relatively small in scale, particularly in comparison to the existing 170' tower to which it will connect. The proposed materials are intended to match the existing building.
- (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 setbacks and open space for the accessory garage addition are similar to neighboring properties with enhanced open space and landscaping.

- (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, consistent with the engineering materials provided herein.

(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 prior to the issuance of a Certificate of Occupancy.



#### <u>Text Change</u> §9.B P-D Planned Development District

#### Amend 9.B.4.e to read as follows:

e. The total area occupied by principal *Structures* in the P-D PLANNED DEVELOPMENT DISTRICT may not exceed forty percent (40%) of the site. *Accessory Structures* may occupy an additional forty percent (40%) of the site, provided that site coverage of all *Structures* shall not exceed seventy percent (70%) and that accessory parking *Structures* do not exceed twenty feet (20') in height above the average grade excluding parapet walls, and include a landscaped roof with direct *Structured* access for the benefit of the residents of the *Development* as *Usable Open Space*. Notwithstanding the above, where the total area occupied by all *Structures* including accessory parking *Structures* does not exceed 5560% and all parking floors are suitably screened from sensitive public views, the Zoning Board may authorize increased height of accessory parking *Structures* not to exceed thirty-five (35) feet, may exempt the coverage of one-*Story* porches, porte cocheres, and balconies not to exceed three percent (3%), and may, on the roof of accessory parking *Structures*, approve the location of one-*Story* active recreation *Structures* which shall be exempt from height limitations.

#### Amend 9.B.4.f as follows:

f. The restrictions of the R-MF Multiple Family Residence District, pertaining to *Front Yards*, *Side Yards* and *Rear Yards*, shall apply, provided that the Zoning Board may authorize a reduction in *Front Yard* and *Side Yard* setbacks for porches, porte cocheres, landscaped parking structures, balconies and similar architectural features not exceeding a height of twenty feet above finished grade measured at the foundation.

#### 70 Forest Street & 251 Greyrock Place Special Permit and Site & Architectural Plans

#### **Zoning Data Chart - P-D (Planned Development District)**

Standard	Permitted P-D Zone	Existing/ Approved	Proposed	Notes
Min Lot Area	30,000	47,150	50,143	Complies. Assumes zone change and consolidation of 251 Greyrock Place.
Max Building Height	170'	170'	No Change	Complies.
Max Building Coverage	*60%	54%	58%	Complies. Text Change (from 55%-60%).
Max Dwelling Units	124 (108 DU/Acre)	93	No Change	Complies.
Primary Setbacks			•	
Front	15'	17.5' (Forest St.)	No Change	Complies
Side	15'	15.1' (west)	No Change	Complies.
Accessory Setbacks				
Front	*by ZB	8.6' (Forest St)	5' (Greyrock Pl)	Complies.  Tout Change to include garage atmost was (less than 20) in height) in
Side	*by ZB	15.0' (west)	0' (west)	Text Change to include garage structures (less than 20' in height) in permitted setback reductions.

#### **Parking**

Unit Type		Required	Existing	Proposed	Notes	
1-BR (1.0/du)	1	1				
2-BR (1.25/du)	40	50			Complies.	
3-BR (1.5/du)	52	78			Total parking assumes up to an additional 36 spaces depending on final layout of parking within the proposed 3-level garage addition.	
Total	93	129	130±	166±		

#### **Notes**



<sup>\*</sup>Pursuant to companion Text Change application.

**High Grove** 

#### **Comparative Parking Data**

	Parking Spaces	Un (space	i <b>its</b> es/unit)		ooms* bedroom)	<b>Unit Flo</b> (spaces/		Notes	
High Grove (existing)	130	93	(1.40)	237	(0.55)	245,009	(0.53)	Proposed changes bring the parking more in line with the	
High Grove (proposed)	166	93	(1.78)	237	(0.70)	245,009	(0.68)	bedroom and floor area ratios of other nearby projects	
777 Summer	289	356	(0.81)	430	(0.67)	263,796	(1.10)	under construction	
The Smyth	445	414	(1.07)	655	(0.68)	393,300	(1.13)	under construction	
RMS Broad	238	228	(1.04)	306	(0.78)	180,804	(1.32)	under construction	
Walton Place	262	224	(1.17)	334	(0.78)	245,220	(1.07)	approved	

<sup>\*</sup>studios included as having one bedroom





# General Property Description 70 Forest Street and 251 Greyrock Place Text Change, Zone Map Change, Special Permit, GDP, and Site and Architectural Plan Applications

Block #: 203

Area:  $1.15 \pm \text{Acres}$ 

All that parcel of land referred to as 70 Forest Street (004-5379) & 251 Greyrock Place (004-5379) and commonly known as High Grove, located in the City of Stamford and is generally bounded by the following:

Beginning at a point at the northerly side of Forest Street and the southwesterly corner of 82 Forest Street, running in the following directions:

Southerly: 204'± by the northerly side of Forest Street;

Westerly:  $328' \pm \text{ by land n/f of Forestbroad LLC};$ 

Northerly:  $50'\pm$  by the southerly side of Greyrock Place;

Easterly: 60'± by land n/f of Splendor Condominium (Various Unit Owners);

Northerly: 188'± by said land n/f of Splendor Condominium (Various Unit

Owners);

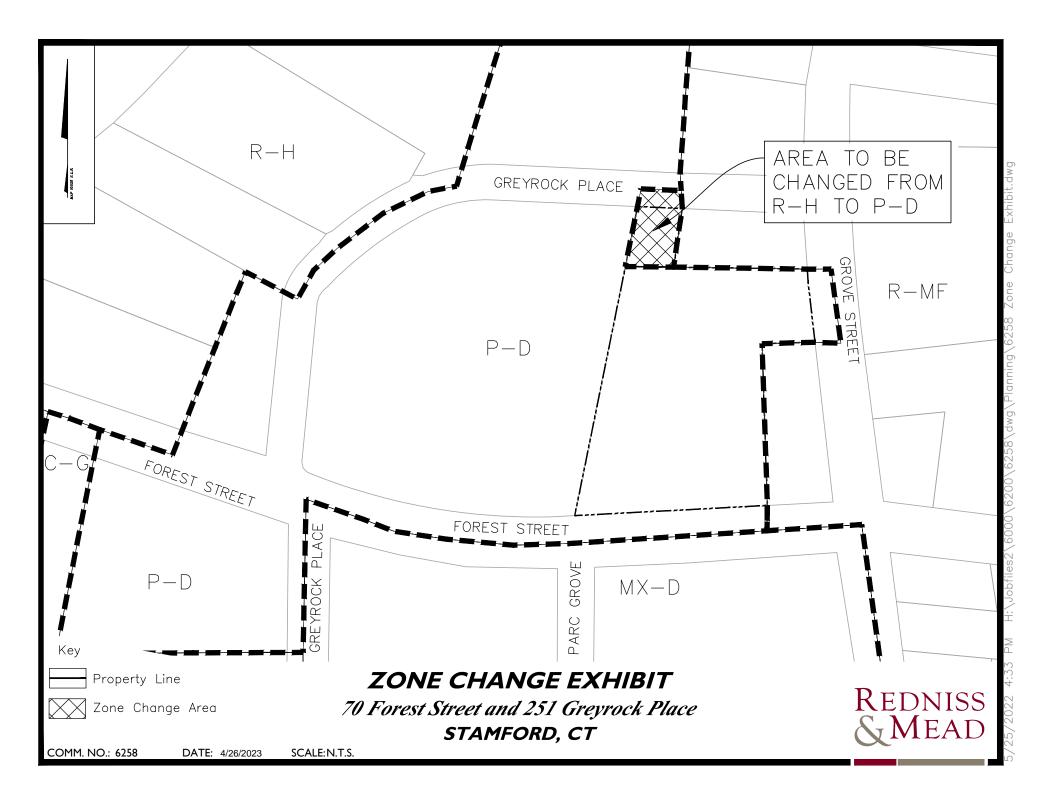
Easterly:  $74' \pm \text{ by the westerly side of Grove Street}$ ;

Southerly:  $56' \pm \text{ by land n/f of Forest Grove Condominium (Various Unit)}$ 

Owners);

Easterly: 170'± by said land n/f of Forest Grove Condominium (Various Unit

Owners) to the point of beginning.



# Zone Change Description 70 Forest Street and 251 Greyrock Place Text Change, Zone Map Change, Special Permit, GDP, and Site and Architectural Plan Applications May 9, 2023

Block #: 203

Area: 3,831 SF ± (includes 826sf of portion of Greyrock Place right-of-way along site

frontage)

### <u>DESCRIPTION OF AREA OF ZONE CHANGE FROM R-H (MULTIPLE FAMILY DISTRICTS, HIGH DENSITY) TO P-D (PLANNED DEVELOPMENT DISTRICTS):</u>

Including land commonly known as 70 Forest Street (004-5379); located in the City of Stamford, and generally described as follows:

Beginning at the midpoint of Greyrock Place said land is bounded as follows:

Easterly: 80' ± through Greyrock Place and land n/f of Spelndor Condominium

(Various unit Owners), each in part;

Southerly:  $49' \pm \text{ by land n/f of 70 Forest Street LLC};$ 

Westerly: 80'± by land n/f of Forestbroad LLC to the midpoint of Greyrock

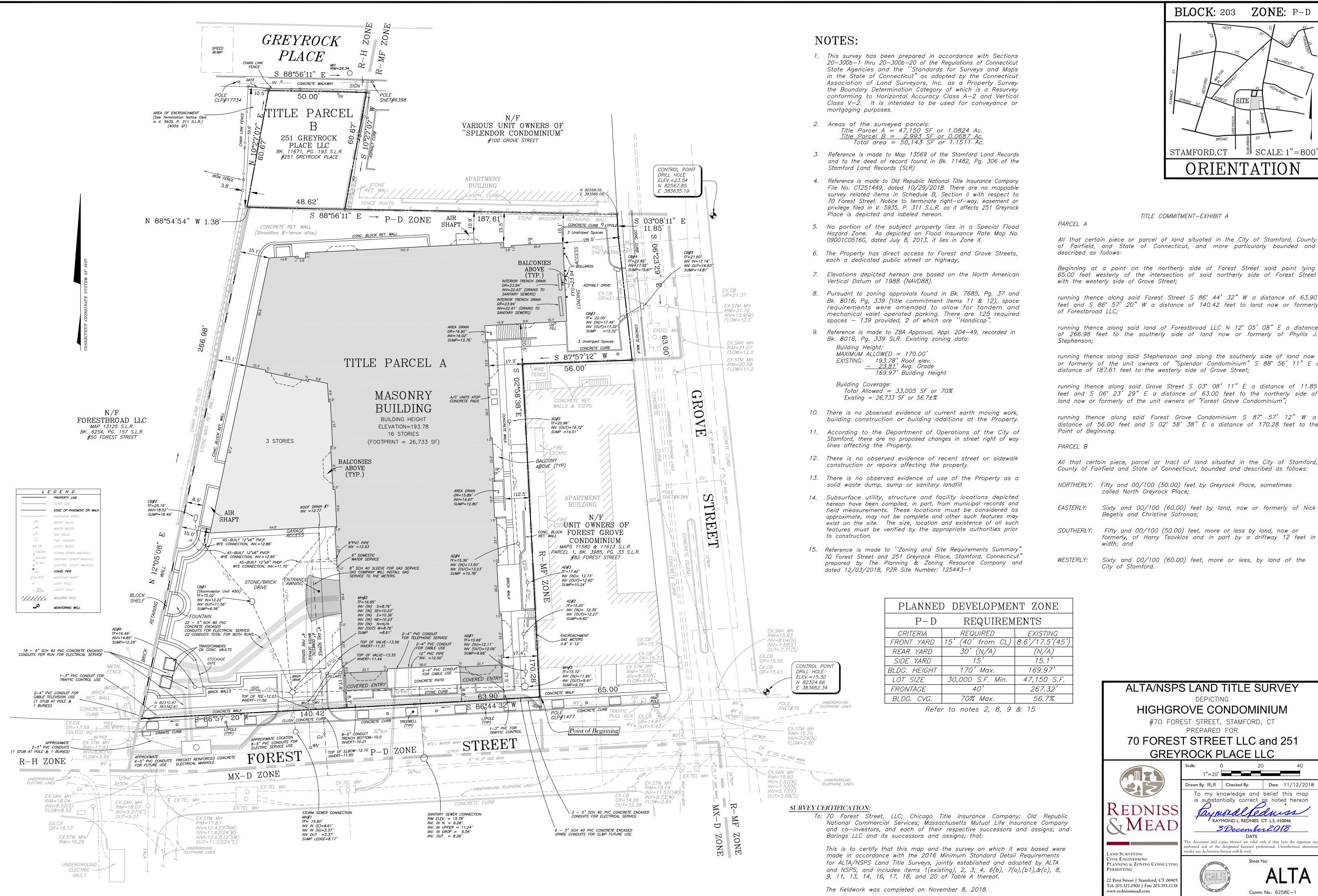
Place;

Northerly:  $42'\pm$  by the centerline of Greyrock Place to the point of beginning.



#### **Drawing List** 70 Forest Street and 251 Greyrock Place Text Change, Zone Map Change, Special Permit, GDP, and Final **Site and Architectural Plan Applications** May 10, 2023

Sheet #	Title/Description	Prepared by	<b>Date</b>
Civil			
ALTA	ALTA/NSPS Land Title Survey	Redniss & Mead	12/3/2018
GDP	General Development Plan	Redniss & Mead	5/9/2023
SE-1	Site Development Plan	Redniss & Mead	5/9/2023
SE-2	Sediment & Erosion Control Plan	Redniss & Mead	5/9/2023
SE-3	Notes & Details	Redniss & Mead	5/9/2023
Architectural			
	Cover Page	Beinfield Architecture	5/9/2023
A1.00	Basement	Beinfield Architecture	5/9/2023
A1.01	Level 1	Beinfield Architecture	5/9/2023
A1.02	Level 2	Beinfield Architecture	5/9/2023
A1.04	Bldg Roof	Beinfield Architecture	5/9/2023
A2.03	Section @ Condo Building	Beinfield Architecture	5/9/2023
A2.04	Section	Beinfield Architecture	5/9/2023
<b>Landscape</b>			
LP.1	Landscape Plan	Environmental Land Solutions, LLC	8/3/2022



# BLOCK: 203 ZONE: P-D SCALE: 1"=800 STAMFORD, CT

TITLE COMMITMENT-EXHIBIT A

All that certain piece or parcel of land situated in the City of Stamford, County of Fairfield, and State of Connecticut, and more particularly bounded and described as follows:

Beginning at a point on the northerly side of Forest Street said point lying 65.00 feet westerly of the intersection of said northerly side of Forest Street with the westerly side of Grove Street;

running thence along said Forest Street S 86° 44' 32" W a distance of 63.90 feet and S 86° 57' 20" W a distance of 140.42 feet to land now or formerly of Forestbroad LLC;

running thence along said land of Forestbroad LLC N 12° 05' 08" E a distance of 266.98 feet to the southerly side of land now or formerly of Phyllis J.

running thence along said Stephenson and along the southerly side of land now or formerly of the unit owners of "Splendor Condominium" S 88° 56' 11" E distance of 187.61 feet to the westerly side of Grove Street;

feet and S 06° 23' 29" E a distance of 63.00 feet to the northerly side of land now or formerly of the unit owners of "Forest Grove Condominium";

running thence along said Forest Grove Condominium S 87° 57' 12" W a distance of 56.00 feet and S 02° 58' 38" E a distance of 170.28 feet to the Point of Beginning.

All that certain piece, parcel or tract of land situated in the City of Stamford, County of Fairfield and State of Connecticut, bounded and described as follows

NORTHERLY: Fifty and 00/100 (50.00) feet by Greyrock Place, sometimes called North Greyrock Place;

Sixty and 00/100 (60.00) feet by land, now or formerly of Nick

Begetis and Christine Sofronas;

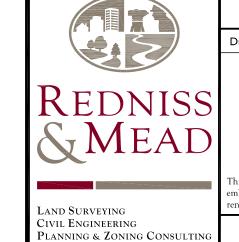
SOUTHERLY: Fifty and 00/100 (50.00) feet, more or less by land, now or formerly, of Harry Tsovklos and in part by a driftway 12 feet in width; and

Sixty and 00/100 (60.00) feet, more or less, by land of the City of Stamford.



HIGHGROVE CONDOMINIUM #70 FOREST STREET, STAMFORD, CT

PREPARED FOR 70 FOREST STREET LLC and 251 **GREYROCK PLACE LLC** 



22 First Street | Stamford, CT 06909 Tel: 203.327.0500 | Fax: 203.357.1118

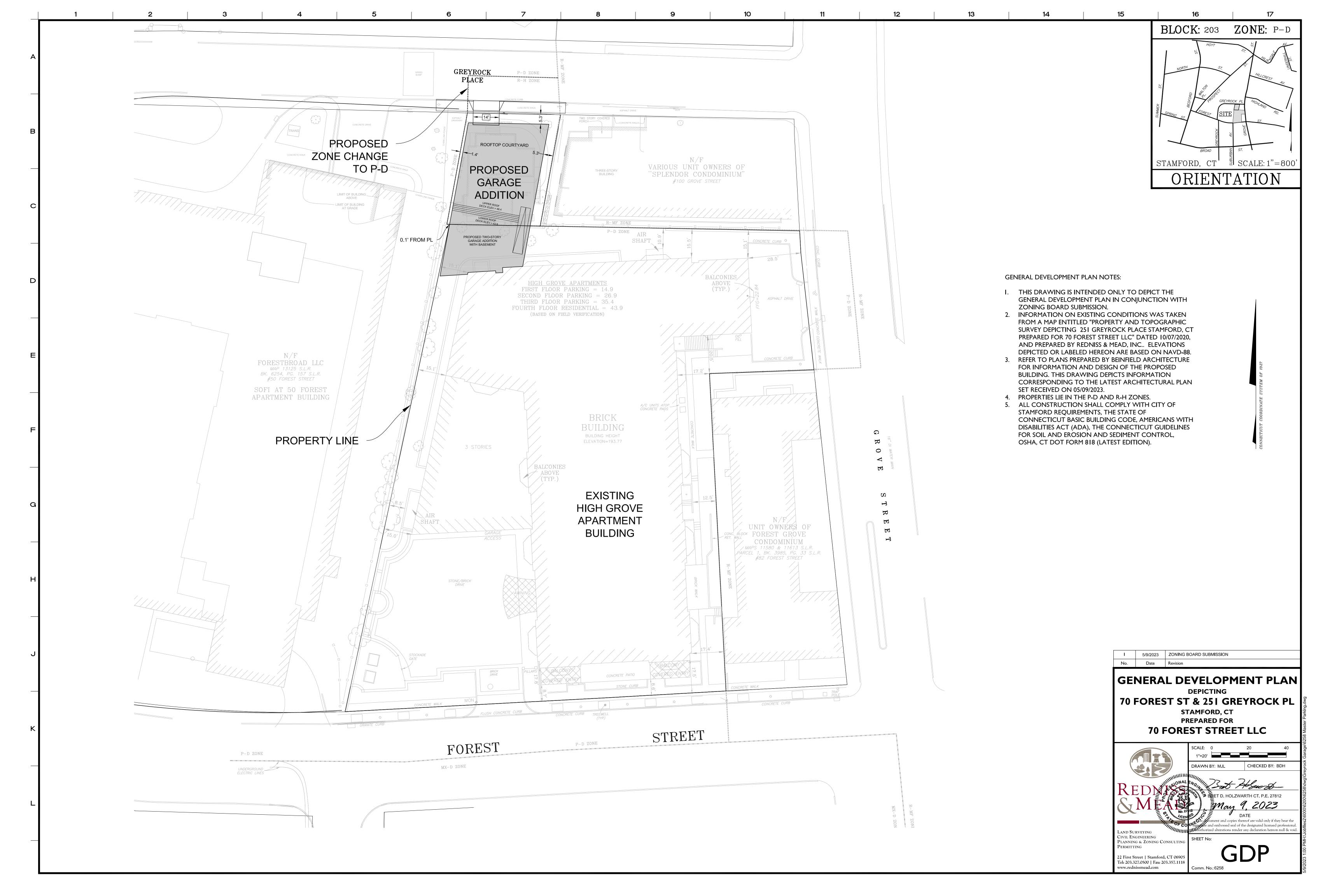
PERMITTING

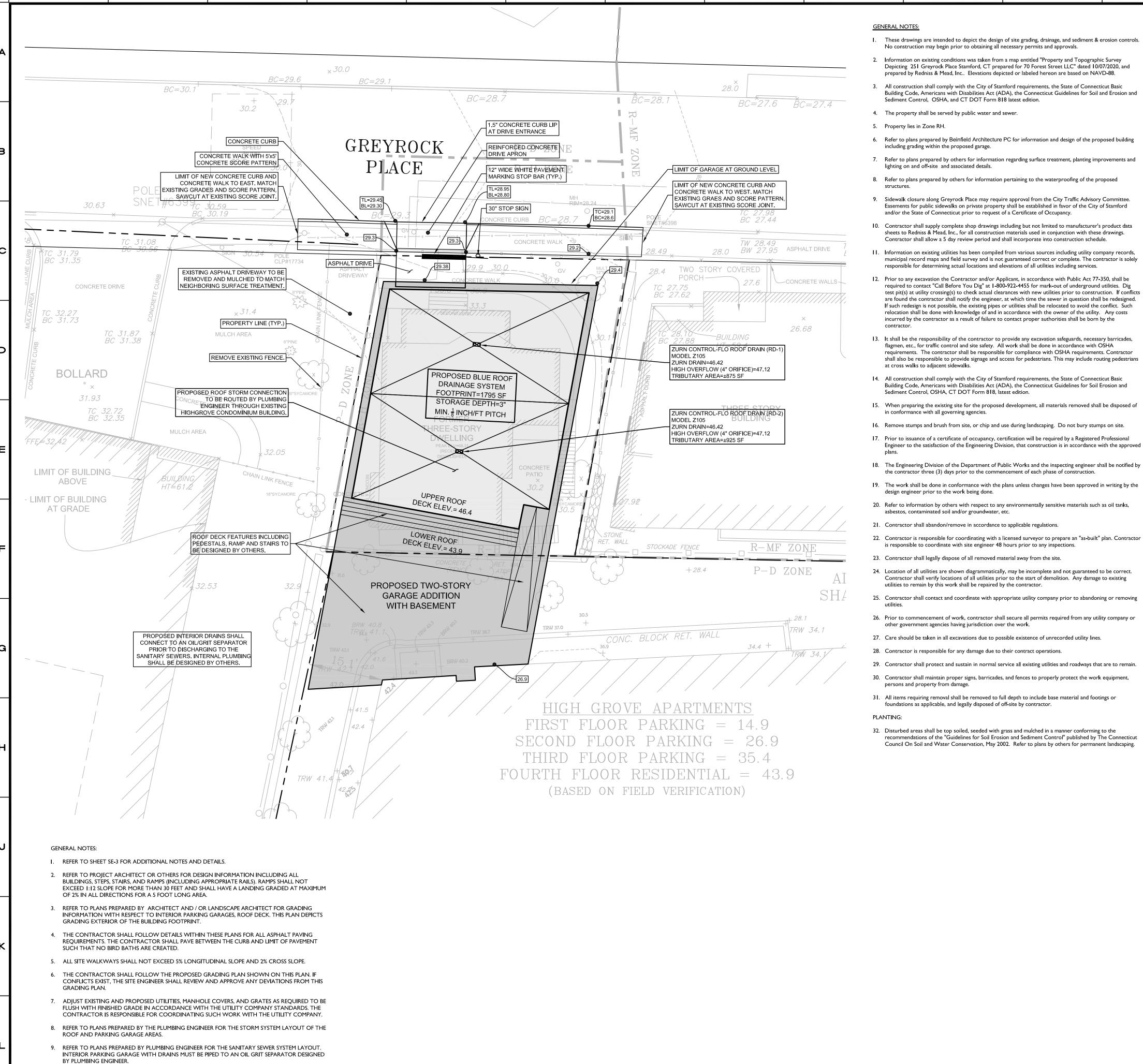
www.rednissmead.com

1"=20' Prawn By: RLR | Checked By: | Date: 11/12/2018 To my knowledge and belief this map is substantially correct as noted hereor RAYMOND L. REDNISS CT. L.S. #10046 s document and copies thereof are valid only if they bear the signature at

bossed seal of the designated licensed professional. Unauthorized alteration nder any declaration hereon null & void.







10. THE CONTRACTOR SHALL COORDINATE ALL LANE CLOSURES WITH THE CITY OF STAMFORD.

- These drawings are intended to depict the design of site grading, drainage, and sediment & erosion controls. No construction may begin prior to obtaining all necessary permits and approvals.
- Information on existing conditions was taken from a map entitled "Property and Topographic Survey Depicting 251 Greyrock Place Stamford, CT prepared for 70 Forest Street LLC" dated 10/07/2020, and
- prepared by Redniss & Mead, Inc.. Elevations depicted or labeled hereon are based on NAVD-88. 3. All construction shall comply with the City of Stamford requirements, the State of Connecticut Basic Building Code, Americans with Disabilities Act (ADA), the Connecticut Guidelines for Soil and Erosion and
- 4. The property shall be served by public water and sewer.
- 6. Refer to plans prepared by Beinfield Architecture PC for information and design of the proposed building including grading within the proposed garage.
- 7. Refer to plans prepared by others for information regarding surface treatment, planting improvements and lighting on and off-site and associated details.
- 8. Refer to plans prepared by others for information pertaining to the waterproofing of the proposed
- 9. Sidewalk closure along Greyrock Place may require approval from the City Traffic Advisory Committee. Easements for public sidewalks on private property shall be established in favor of the City of Stamford
- 10. Contractor shall supply complete shop drawings including but not limited to manufacturer's product data sheets to Redniss & Mead, Inc., for all construction materials used in conjunction with these drawings.
- 11. Information on existing utilities has been compiled from various sources including utility company records, municipal record maps and field survey and is not guaranteed correct or complete. The contractor is solely
- 12. Prior to any excavation the Contractor and/or Applicant, 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. Dig test pit(s) at utility crossing(s) to check actual clearances with new utilities prior to construction. If conflicts are found the contractor shall notify the engineer, at which time the sewer in question shall be redesigned. If such redesign is not possible, the existing pipes or utilities shall be relocated to avoid the conflict. Such relocation shall be done with knowledge of and in accordance with the owner of the utility. Any costs incurred by the contractor as a result of failure to contact proper authorities shall be born by the
- 13. It shall be the responsibility of the contractor to provide any excavation safeguards, necessary barricades, flagmen, etc., for traffic control and site safety. All work shall be done in accordance with OSHA requirements. The contractor shall be responsible for compliance with OSHA requirements. Contractor shall also be responsible to provide signage and access for pedestrians. This may include routing pedestrians at cross walks to adjacent sidewalks.
- 14. All construction shall comply with the City of Stamford requirements, the State of Connecticut Basic Building Code, Americans with Disabilities Act (ADA), the Connecticut Guidelines for Soil Erosion and Sediment Control, OSHA, CT DOT Form 818, latest edition.
- 15. When preparing the existing site for the proposed development, all materials removed shall be disposed of in conformance with all governing agencies.
- 16. Remove stumps and brush from site, or chip and use during landscaping. Do not bury stumps on site.
- 17. Prior to issuance of a certificate of occupancy, certification will be required by a Registered Professional
- 18. The Engineering Division of the Department of Public Works and the inspecting engineer shall be notified by
- 19. The work shall be done in conformance with the plans unless changes have been approved in writing by the
- 20. Refer to information by others with respect to any environmentally sensitive materials such as oil tanks,
- asbestos, contaminated soil and/or groundwater, etc.
- Contractor shall abandon/remove in accordance to applicable regulations
- 22. Contractor is responsible for coordinating with a licensed surveyor to prepare an "as-built" plan. Contractor is responsible to coordinate with site engineer 48 hours prior to any inspections.
- 23. Contractor shall legally dispose of all removed material away from the site.
- 24. Location of all utilities are shown diagrammatically, may be incomplete and not guaranteed to be correct. Contractor shall verify locations of all utilities prior to the start of demolition. Any damage to existing utilities to remain by this work shall be repaired by the contractor.
- 25. Contractor shall contact and coordinate with appropriate utility company prior to abandoning or removing
- 26. Prior to commencement of work, contractor shall secure all permits required from any utility company or other government agencies having jurisdiction over the work.
- 27. Care should be taken in all excavations due to possible existence of unrecorded utility lines.
- 29. Contractor shall protect and sustain in normal service all existing utilities and roadways that are to remain.
- 30. Contractor shall maintain proper signs, barricades, and fences to properly protect the work equipment, persons and property from damage.
- 31. All items requiring removal shall be removed to full depth to include base material and footings or foundations as applicable, and legally disposed of off-site by contractor.
- 32. Disturbed areas shall be top soiled, seeded with grass and mulched in a manner conforming to the recommendations of the "Guidelines for Soil Erosion and Sediment Control" published by The Connecticut Council On Soil and Water Conservation, May 2002. Refer to plans by others for permanent landscaping.

#### **EARTHWORK & GRADING:**

- 33. Sheet SE-I represents grading plan in conjunction with the development.
  - 34. The contractor shall follow details within these plans for all asphalt paving requirements. The contractor shall pave between the curb and limit of pavement such that no bird baths are created.
  - 35. The contractor is responsible to inform the site engineer of any grading situation which will result in a curb or sidewalk placed higher or lower than existing surroundings. The contractor at no cost to the owner may need to replace said sidewalks or curbs if installed to cause nuisance to existing surroundings.
  - 36. All walkways shall be graded at a maximum of 5% longitudinal slope and 2% cross slope.
  - 37. Grade away from building walls at 2% minimum (typical).
  - 38. Earth slopes shall be no steeper than 2:I (horz.:vert.).
  - 39. The contractor shall follow the proposed grading plan shown on this plan. If conflicts exist between the architect/landscaping grading plans, the site engineer shall review and approve any deviations from this grading plan.
  - 40. After the areas to be topsoiled have been brought to grade, the subgrade shall be loosened by scarifying to a depth of at least 2" to ensure bonding of the topsoil and subsoil.
  - 41. Topsoil shall be friable and loamy with high organic content. It shall be free of debris, rocks larger than 2" and roots. Topsoil shall have at least 1.5 percent by weight of fine textured stable organic material and no greater than 6 percent. Topsoil shall not have less than 20% fine textured material (passing the No, 200 sieve) and not more than 15% clay. pH range shall be 6.0-7.5 and soluble salts shall not exceed 500ppm.
  - 42. Fill or topsoil shall not be placed nor compacted while in a frozen or muddy condition or while subgrade is
  - 43. All excess materials shall be removed from the site and disposed of legally.
  - 44. Special attention of the contractor is called to the required compaction of backfill specified on these drawings and in the Geotechnical Report. The requirement for compaction will be strictly enforced.
  - 45. During the excavation, it is anticipated that existing utilities and sewers may be exposed. The contractor shall provide protection and support of these facilities and repair any damage caused by the work in a manner satisfactory to the owner. The condition of the existing facilities shall be observed by the owner's representative who shall determine if the facilities shall be replaced. Replacement of the facilities shall be done in a manner satisfactory to the owner and in compliance with applicable Codes.
  - 46. Dig test pits at utility and sewer crossings to check actual clearances with these facilities prior to construction. Dig test pits at the connection points to existing sanitary sewer pipes to confirm that the elevation of the proposed gravity sewer is appropriate. If conflicts are found the contractor shall notify the engineer at which time the sewer in question shall be redesigned. If such redesign is not possible, the existing pipes or utilities shall be relocated to avoid conflict.
  - 47. General fill beyond paved areas shall be free of brush rubbish, stumps and stones larger than 8". Fill shall be placed in compacted layers not to exceed 8" in thickness. The dry density after compaction shall no be less than 95% of the Standard Proctor Test and done in accordance with the requirements of ASTM D698. After compacting, the fill shall be 4" below the required grade as shown on plans. Contractor shall follow geotechnical guidelines including fill material.
  - 48. Subgrade and fill shall be uniformly compacted by the use of equipment manufactured for that purpose. Rollers shall deliver a ground pressure of not less than 300 pounds per linear inch of contact width and weigh not less than 10 tons. Vibratory units shall have a static weight of not less than 4 tons. The amount of compactive effort shall be as directed by the Engineer, but in no case shall be less than 4 complete passes of the compacting equipment being used.
  - 49. After the areas to be topsoiled have been brought to grade, the subgrade shall be loosened by scarifying to a depth of at least 2" to ensure bonding of the topsoil and subsoil.
  - 50. Special attention of the contractor is called to the required compaction of backfill specified on these
  - 51. All existing and proposed catch basins, manhole rims and utility facilities shall be raised or lowered to be flush with finished grade.
  - 52. Thicknesses of all layers shown are after compaction. Compact all layers to 95% maximum dry density per ASTM D 1557 (Modified Proctor Method). 53. A preconstruction meeting shall be held with the Owner, Architect and Engineer to review the scope of site
  - 54. Disturbed areas shall be top soiled, seeded with grass and mulched in a manner conforming to the recommendations of the "Guidelines for Soil and Sediment Control" published by The Connecticut Council

On Soil and Water Conservation, unless other plantings are specified on other pertinent drawings.

55. Geotechnical engineer to provide field monitoring services, as required, for the foundation and earthwork phases of construction and to make on site design modifications in the event unexpected conditions are

construction. Contractor shall be responsible to coordinate the preconstruction meeting.

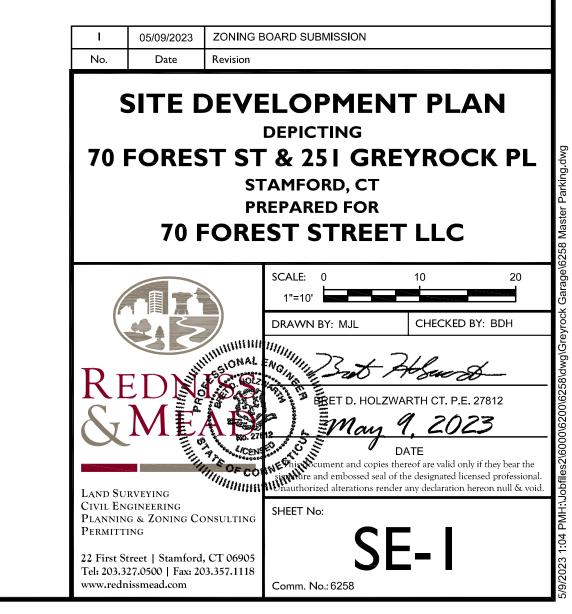
#### PAVEMENT NOTES:

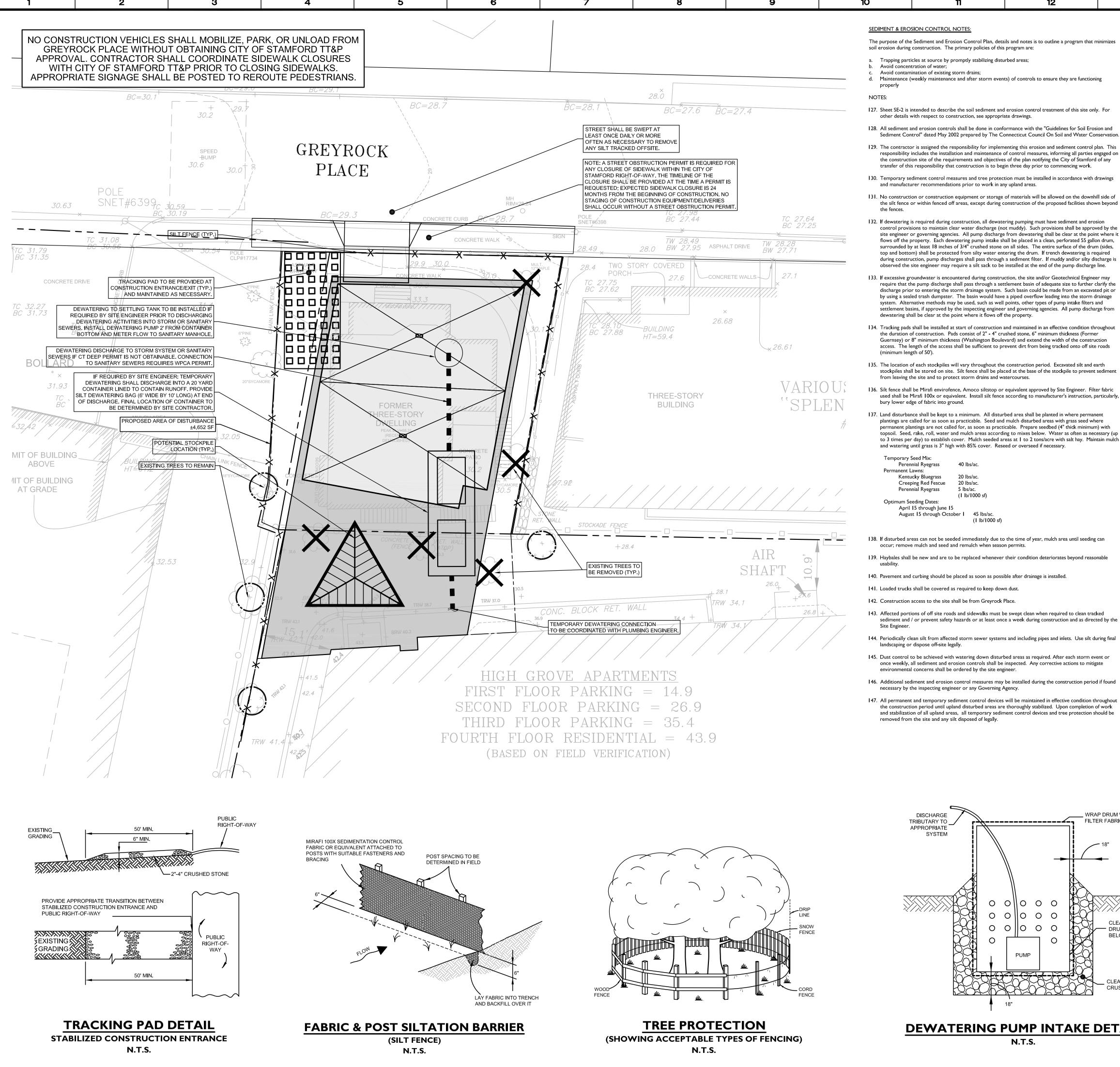
encountered

- 56. Areas of asphalt payement that are disturbed by the construction of this project shall be replaced in accordance with the asphalt pavement repair detail. The finished grade of asphalt paving shall blend to
- 57. Existing features such as but not limited to walks, curbs, and pavement damaged by construction activities shall be repaired at not additional cost to the owner.

existing grade and the edge of the concrete pavement smoothly with no slopes exceeding 4%.

- 58. Saw cut perimeter of area to be excavated. Saw cut shall be straight and vertical.
- 59. Contractor is responsible to place the hot-mix asphalt mix as required in the drawings, details and the applicable Section of the CT DOT FORM 818, latest edition.
- 60. Compaction shall be constructed as specified in the CT DOT FORM 818, 4.06 specification section, the drawings and the details. Testing lab shall verify compaction of each course of pavement as directed by the
- 61. A site plan shall be used to delineate low or ponding areas and this plan shall be signed by the Owner's
- Representative and the Contractor, after all acceptable repairs are accomplished.
- 62. Finished paving shall be free of "bird baths" and be smooth at the slopes specified on the plans.
- 63. Finished grade shall be within 1/8 inch of that noted on the drawings.
- 64. The pavement shall be protected from vehicular traffic of any kind with the use of barricades, etc. for a minimum period of 24 hours after final rolling. Maintain and protect asphalt surface from scrapes, sears, spills, hydraulic leaks, and any other construction damage for the remainder of construction until Owner's Representative acceptance. Contractor is responsible for clearing, repairing, seal coating, patching, and restripintriping as necessary to obtain Owner's Representative's final approval/acceptance. Seal Coat Product Type: Guardtop/Jennite NJ-S2 by Neyra. All asphalt pavement shall be sealed with two coats of Guardtop/Jennite with surface preparation and application to conform to manufacturer's recommendations. Thicknesses of all layers shown are after compaction. Compact all layers to 95 per ASTM D 1557 (Modified Proctor Method).g as necessary to obtain Owner's Representative's final approval/acceptance.
- 65. Thicknesses of all layers shown are after compaction. Compact all layers to 95 per ASTM D 1557 (Modified Proctor Method).





#### **SEDIMENT & EROSION CONTROL NOTES:**

The purpose of the Sediment and Erosion Control Plan, details and notes is to outline a program that minimizes soil erosion during construction. The primary policies of this program are:

- a. Trapping particles at source by promptly stabilizing disturbed areas;
- Avoid concentration of water;
- Maintenance (weekly maintenance and after storm events) of controls to ensure they are functioning
- 127. Sheet SE-2 is intended to describe the soil sediment and erosion control treatment of this site only. For
- other details with respect to construction, see appropriate drawings
- 128. All sediment and erosion controls shall be done in conformance with the "Guidelines for Soil Erosion and
- 129. The contractor is assigned the responsibility for implementing this erosion and sediment control plan. This responsibility includes the installation and maintenance of control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan notifying the City of Stamford of any
- 130. Temporary sediment control measures and tree protection must be installed in accordance with drawings and manufacturer recommendations prior to work in any upland areas.
- 131. No construction or construction equipment or storage of materials will be allowed on the downhill side of the silt fence or within fenced off areas, except during construction of the proposed facilities shown beyond
- 132. If dewatering is required during construction, all dewatering pumping must have sediment and erosion control provisions to maintain clear water discharge (not muddy). Such provisions shall be approved by the site engineer or governing agencies. All pump discharge from dewatering shall be clear at the point where it flows off the property. Each dewatering pump intake shall be placed in a clean, perforated 55 gallon drum, surrounded by at least 18 inches of 3/4" crushed stone on all sides. The entire surface of the drum (sides. top and bottom) shall be protected from silty water entering the drum. If trench dewatering is required during construction, pump discharges shall pass through a sediment filter. If muddy and/or silty discharge is observed the site engineer may require a silt sack to be installed at the end of the pump discharge line.
- 133. If excessive groundwater is encountered during construction, the site and/or Geotechnical Engineer may require that the pump discharge shall pass through a settlement basin of adequate size to further clarify the discharge prior to entering the storm drainage system. Such basin could be made from an excavated pit or by using a sealed trash dumpster. The basin would have a piped overflow leading into the storm drainage system. Alternative methods may be used, such as well points, other types of pump intake filters and settlement basins, if approved by the inspecting engineer and governing agencies. All pump discharge from dewatering shall be clear at the point where it flows off the property.
- 134. Tracking pads shall be installed at start of construction and maintained in an effective condition throughout the duration of construction. Pads consist of 2" - 4" crushed stone, 6" minimum thickness (Former Guernsey) or 8" minimum thickness (Washington Boulevard) and extend the width of the construction access. The length of the access shall be sufficient to prevent dirt from being tracked onto off site roads (minimum length of 50').
- 135. The location of each stockpiles will vary throughout the construction period. Excavated silt and earth stockpiles shall be stored on site. Silt fence shall be placed at the base of the stockpile to prevent sediment from leaving the site and to protect storm drains and watercourses.
- 136. Silt fence shall be Mirafi envirofence, Amoco siltstop or equivalent approved by Site Engineer. Filter fabric used shall be Mirafi 100x or equivalent. Install silt fence according to manufacturer's instruction, particularly, bury lower edge of fabric into ground.
- 137. Land disturbance shall be kept to a minimum. All disturbed area shall be planted in where permanent plantings are called for as soon as practicable. Seed and mulch disturbed areas with grass seed where permanent plantings are not called for, as soon as practicable. Prepare seedbed (4" thick minimum) with topsoil. Seed, rake, roll, water and mulch areas according to mixes below. Water as often as necessary (up to 3 times per day) to establish cover. Mulch seeded areas at 1 to 2 tons/acre with salt hay. Maintain mulch and watering until grass is 3" high with 85% cover. Reseed or overseed if necessary.

Temporary Seed Mix: Perennial Ryegrass Permanent Lawns: Kentucky Bluegrass Creeping Red Fescue 20 lbs/ac Perennial Ryegrass (1 lb/1000 sf Optimum Seeding Dates: April 15 through June 15 August 15 through October I 45 lbs/ac. (1 lb/1000 sf)

- 138. If disturbed areas can not be seeded immediately due to the time of year, mulch area until seeding can occur; remove mulch and seed and remulch when season permits.
- 139. Haybales shall be new and are to be replaced whenever their condition deteriorates beyond reasonable
- 140. Pavement and curbing should be placed as soon as possible after drainage is installed.
- 141. Loaded trucks shall be covered as required to keep down dust
- 142. Construction access to the site shall be from Greyrock Place.
- 143. Affected portions of off site roads and sidewalks must be swept clean when required to clean tracked sediment and / or prevent safety hazards or at least once a week during construction and as directed by the
- 144. Periodically clean silt from affected storm sewer systems and including pipes and inlets. Use silt during final landscaping or dispose off-site legally.
- 145. Dust control to be achieved with watering down disturbed areas as required. After each storm event or once weekly, all sediment and erosion controls shall be inspected. Any corrective actions to mitigate environmental concerns shall be ordered by the site engineer.
- 146. Additional sediment and erosion control measures may be installed during the construction period if found necessary by the inspecting engineer or any Governing Agency.
- 147. All permanent and temporary sediment control devices will be maintained in effective condition throughout the construction period until upland disturbed areas are thoroughly stabilized. Upon completion of work and stabilization of all upland areas, all temporary sediment control devices and tree protection should be removed from the site and any silt disposed of legally.

#### CONSTRUCTION PHASING:

The following description of construction phasing is intended to demonstrate a feasible sequence of construction. The actual sequence may vary due to field conditions if approved by the inspecting engineer. Refer to the Construction & Logistics Narrative prepared by Lessard Design, Inc. for additional information.

- A. The inspecting engineer shall meet with the contractor and owner to review the Sediment and Erosion Control (S&E) Plan and discuss any modifications to construction sequence or S&E Plan.
- B. Establish staging area with trailers and temporary utilities.
- C. Install tracking pads for construction access.
- D. Site removals, cut trees to be removed, and grub areas to be cleared.
- E. General earthwork. Excavate and install building foundation. Install construction dewatering and temporary filtering system at the appropriate stage in excavation.
- F. Install sediment and erosion controls associated with drainage structures.

G. Construct the building and backfill the foundation as soon as possible.

- H. Install blue roof system and any other utility connections as depicted on the plans prepared by the project
- Final grading and paving.

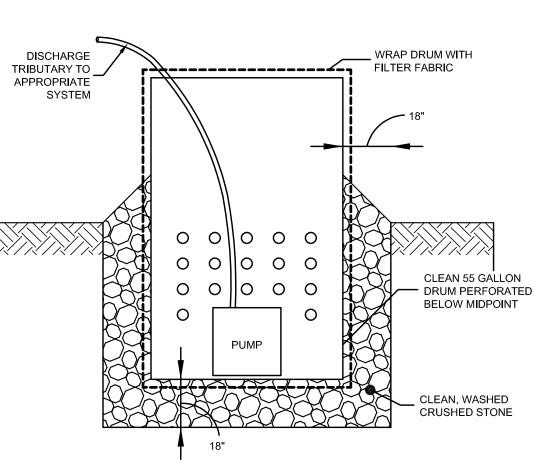
PHASE 2: CONSTRUCTION

- J. Seed & mulch disturbed areas and install landscaping as soon as possible.
- K. Maintain all sediment and erosion controls in an effective condition during the construction period.

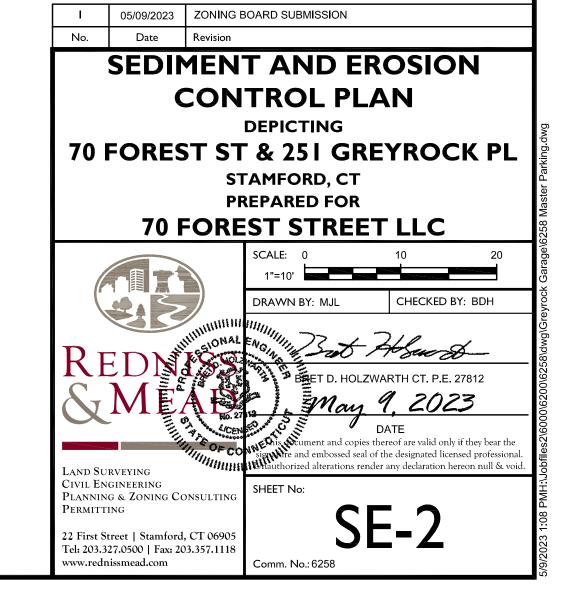
#### PHASE 3: CLEAN UP AFTER ALL AREAS ARE STABILIZED

- L. Clean effected portion of on & off site roads and driveways.
- M. Remove accumulated silt and debris from catch basin sumps & pipes of affected on & off storm drains.
- N. Remove accumulated sediment from effected areas and dispose of legally.
- O. Remove temporary sediment and erosion controls.
- P. Make any necessary repairs to permanent sediment and erosion controls such as plantings

APPLICANT SHALL MAKE BEST EFFORTS TO KEEP THE PROPERTY IN GOOD CONDITION UP UNTIL AND DURING THE CONSTRUCTION PROCESS. EXISTING LAWN AREAS SHALL BE MOWED AND MAINTAINED AND CONSTRUCTION DEBRIS SHALL BE KEPT TO A REASONABLE MINIMUM.



**DEWATERING PUMP INTAKE DETAIL** N.T.S.



#### STANDARD CITY OF STAMFORD NOTES:

- 150. A Street Opening Permit is required for all work within the City of Stamford Right-of-Way.
- 151. 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
- 152. The Engineering Bureau of the City of Stamford shall be notified three days prior to any commencement of construction work within the City of Stamford Right-of-Way.
- 153. Trees within the City of Stamford Right-of-Way to be removed shall be posted in accordance with the Tree
- 154. 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 our of underground utilities.
- 155. 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
- 156. 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.
- 157. A Final Improvement Location Survey will be required by a professional land surveyor licensed in the State
- 158. Connection to a city-owned storm sewer shall required the Waver Covering Storm Connection to be filed with the City of Stamford Engineering Bureau.
- 159. 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.
- 160. Sediment and erosion controls shall be maintained and repaired as necessary throughout construction until the site is stabilized.
- 161. 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).

½" JOINT FILLER

REFER TO DETAIL OF

CONCRETE SIDEWALK

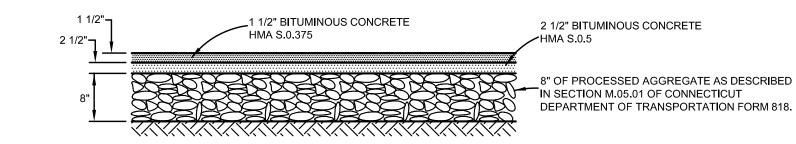
CLASS "F"

N.T.S.

CONCRETE

Best Management Practices	Action/Activity	Frequency	
Outdoor Litter and Waste Management	Inspect grounds for residual litter and properly remove. Inspect grounds for spilled liquids, and properly contain and clean-up  Ensure FOG recycling and/or, non-recycling units; and, dumpster are closed at all times and properly maintained.	Monthly	
Sweeping Impervious Areas	Inspect impervious areas; sweep and remove sediment	Monthly; as needed with signs of sediment build-up	
Roof Run-off Management	Using appropriate safety measures/procedures, inspect roof areas and drainage connections; make necessary repairs; and, properly remove bird fecal matter, sediment, litter and/or debris.	April & October	
Winter Sanding/De-icing Agents	Properly calibrate application equipment to ensure uniform coverage; stockpiling materials onsite require proper cover and containment.	Each use	
Snow Removal	Snow removal shall occur as necessary to maintain safe passage.	As necessary	
Maintaining Street Trees and Plantings	<ul> <li>Inspect and replace damaged, dead and diseased plant material. Plant shapes and branching patterns should remain natural looking. Maintain plant size according to the presence of structure limits, i.e. sidewalks, buildings, and/or plant maturity size.</li> <li>Remove fallen plant biomass materials, i.e. leaves, twigs, branches, etc.</li> </ul>	Once per year As needed	

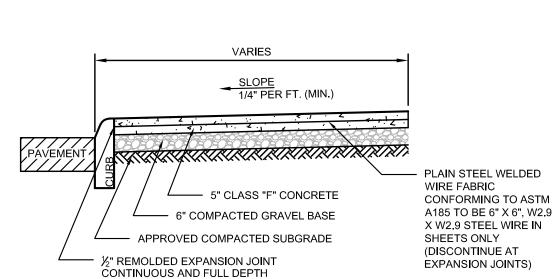
### **STORM SYSTEM MAINTENANCE**



- REFER TO PLANS PREPARED BY OTHERS FOR ALL ON-SITE PAVEMENT/PAVER DESIGNS AND DETAILS.
  PRIOR TO ANY FILL PLACEMENT, ALL EXPOSED SUBGRADES SHALL BE COMPACTED WITH AT LEAST FIVE PASSES OF A 1-TON
- WALK-BEHIND ROLLER. 3. ALL IMPORTED FILL SHALL CONSIST OF WELL-GRADED SAND AND GRAVEL HAVING NOT MORE THAN 10% BY DRY WEIGHT PASSING THE No. 200 SIEVE AND SHALL BE CERTIFIED CLEAN MATERIAL PER THE REQUIREMENTS OF THE STATE OF CONNECTICUT. THE MAXIMUM PARTICLE
- SIZE SHALL BE 4 INCHES. 4. CONTROLLED FILL SHALL BE PLACED IN UNIFORM 12-INCH-THICK LOOSE LIFTS AND COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY UNIT WEIGHT AS SPECIFIED BY ASTM D1557-93. IN RESTRICTED AREAS WHERE ONLY HAND-OPERATED COMPACTORS CAN BE USED, THE
- MAXIMUM LIFT THICKNESS SHOULD BE LIMITED TO 8-INCHES.
- 5. SITE CIVIL ENGINEER SHALL TAKE SAMPLES TO OBTAIN SIEVE ANALYSIS AND CONFIRM MATERIAL MEETS SPECIFICATION. CONTRACTOR SHALL ALLOW 5 DAYS FOR MATERIAL TESTING. ANY CORRECTIVE MEASURES SHALL BE DONE AT NO COST TO THE OWNER.

  6. A REPUTABLE TESTING LAB SHALL PERFORM COMPACTION TESTING AS REQUIRED BY THE SITE ENGINEER PRIOR TO THE PLACEMENT OF
- PAVEMENT. COMPACTION TESTING SHALL OCCUR AT THE SUBBASE, BASE AND EACH LAYER OF PAVEMENT. ALL THICKNESSES SHOWN ARE AFTER COMPACTION. 8. EXISTING SUB-BASE MUST BE PROOF-ROLLED WITH HEAVY VIBRATORY ROLLER UNDER THE OBSERVATION OF A GEOTECHNICAL ENGINEER.
- ANY EXISTING FILL THAT PUMPS OR HEAVES UNDER THE INFLUENCE OF THE ROLLER MUST BE REMOVED AND REPLACED WITH 9. SPECIAL ATTENTION OF THE CONTRACTOR IS CALLED TO FOR THE REMOVAL OF UNSUITABLE MATERIAL. REPLACEMENT FILL MATERIAL AND
- COMPACTION SHALL FOLLOW GEOTECHNICAL ENGINEERING REQUIREMENTS. THESE REQUIREMENTS WILL BE STRICTLY ENFORCED. 10. REFER TO PROJECT WRITTEN SPECIFICATIONS FOR FURTHER INFORMATION.

#### **ASPHALT PAVEMENT DETAIL**

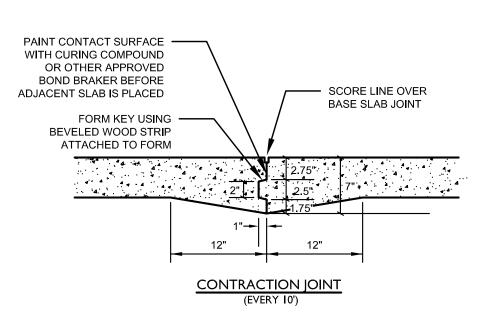


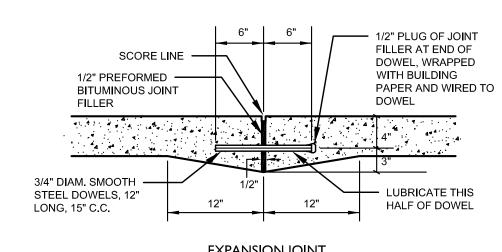
- CONCRETE TO BE CLASS 'F' CONFORMING TO CT DOT FORM 818 SECTION M.03.02
- GRAVEL BASE SHALL CONFORM TO GRADATION A AS DEFINED IN ConnDOT FORM 818 SECTION M. 02.01. INSTALL AS PER THE AMERICAN CONCRETE INSTITUTE CODE.
- . THE AREA SHALL BE COMPACTED TO AT LEAST 95% OF THE DRY DENSITY ACHIEVED BY
- CONTRACTION JOINTS PLACED IN A SQUARE PATTERN AS PER DETAIL. . DRAW A SOFT BRISTLED BROOM ACROSS FLOAT-FINISHED CONCRETE SURFACE PERPENDICULAR TO LINE OF TRAFFIC TO PROVIDE A UNIFORM, FINE LINE TEXTURE.

### **CONCRETE SIDEWALK** N.T.S.

NOTE: FINAL BLUE ROOF MATERIALS AND

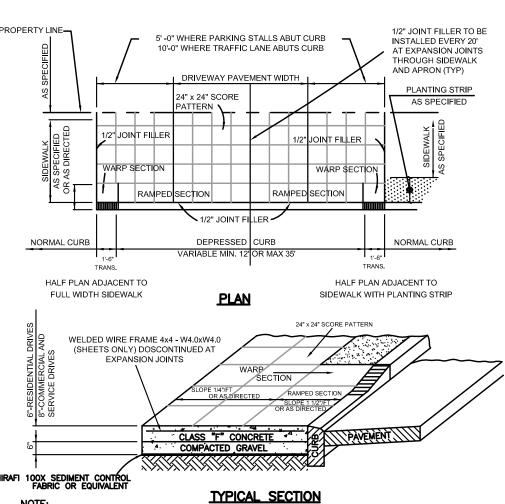
DESIGN TO BE COORDINATED WITH THE ARCHITECT, LANDSCAPE ARCHITECT





## **CONCRETE SIDEWALK JOINT DETAILS**

N.T.S.



1. PROVIDE EXPANSION JOINTS EVERY 20' AND CONTRACTION JOINTS EVERY 10' PURSUANT TO THE DETAIL.

2. REFER TO PLANS BY LANDSCAPE ARCHITECT FOR INFORMATION REGARDING SCORE PATTERN AND EXPANSION JOINTS.

> REINFORCED CONCRETE **DRIVEWAY ENTRANCE**

# **CONCRETE CURB** N.T.S.

---- ROUND TO 1" RADIUS

PAVEMENT (SEE DETAIL)

NOTE: A 1/8" STEEL DIVISION PLATE SHALL

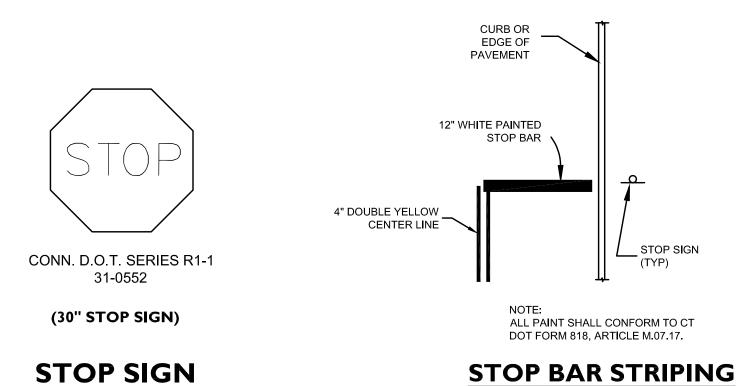
BE PLACED AT EVERY 10 FEET OF

CURBING AND REMOVED AFTER

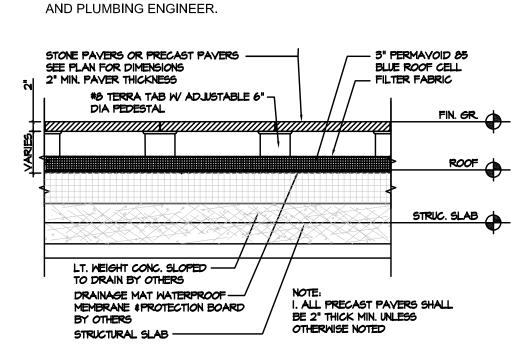
THE CONCRETE HAS SET. A 1/2"

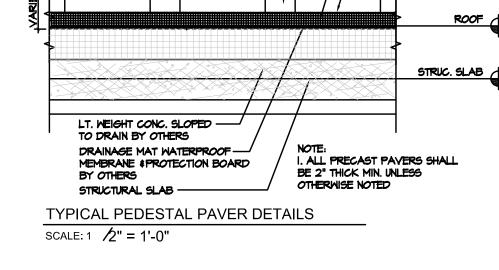
SHALL BE PLACED EVERY 20 FEET.

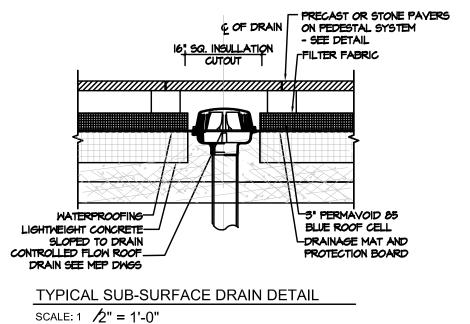
APPROVED BITUMINOUS JOINT

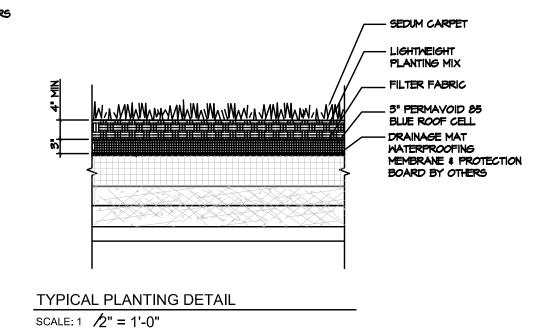


N.T.S.









**ZURN Z105 CONTROL-FLO ROOF DRAIN** (BLUE ROOF DETAILS) N.T.S.

05/09/2023 ZONING BOARD SUBMISSION Date Revision **NOTES & DETAILS DEPICTING** 70 FOREST ST & 251 GREYROCK PL STAMFORD, CT PREPARED FOR 70 FOREST STREET LLC N.T.S. CHECKED BY: BDH LAND SURVEYING Civil Engineering LANNING & ZONING CONSULTIN 22 First Street | Stamford, CT 06905 Tel: 203.327.0500 | Fax: 203.357.1118 www.rednissmead.com Comm. No.: 6258

# HIGHGROVE PARKING

# BEINFIELD ARCHITECTURE

05/09/2023

*ZONE* RH

<u>HEIGHT ALLOWED</u>

< 3 STORES/35'

> 5 STORIES/75'

JJECT

PROJECT
HIGHGROVE PARKING

**PROGRESS** 

ADDRESS
251 GREYROCK PLACE

DWG TITLE
BASEMEN

OB NO.
Project Number
ATE

SCALE

1/8" = 1'-0"

DRAWN BY

Author

A1.00

1 01 Grade 1/8" = 1'-0"

PROGRESS

PROJECT
HIGHGROVE PARKING

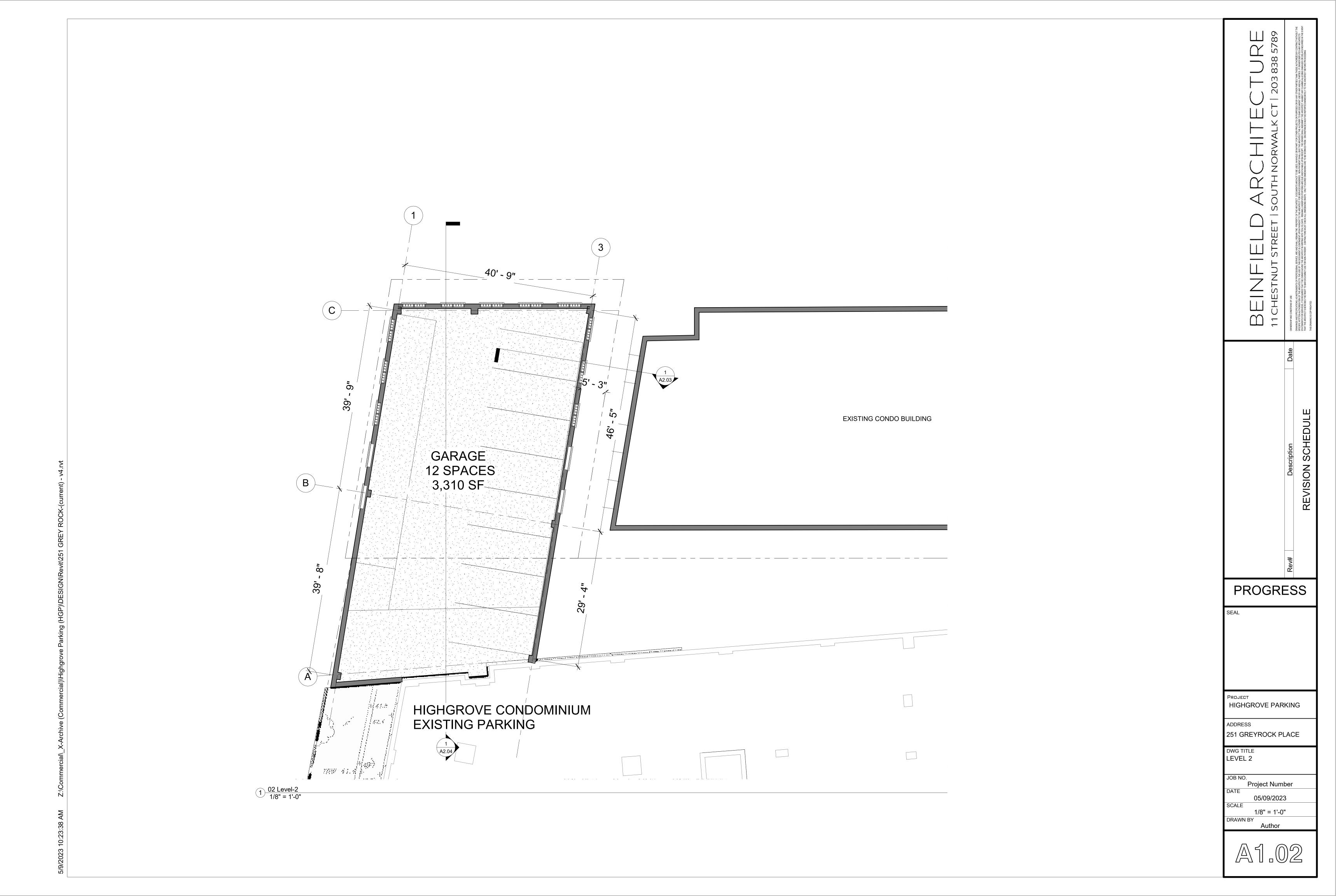
ADDRESS
251 GREYROCK PLACE

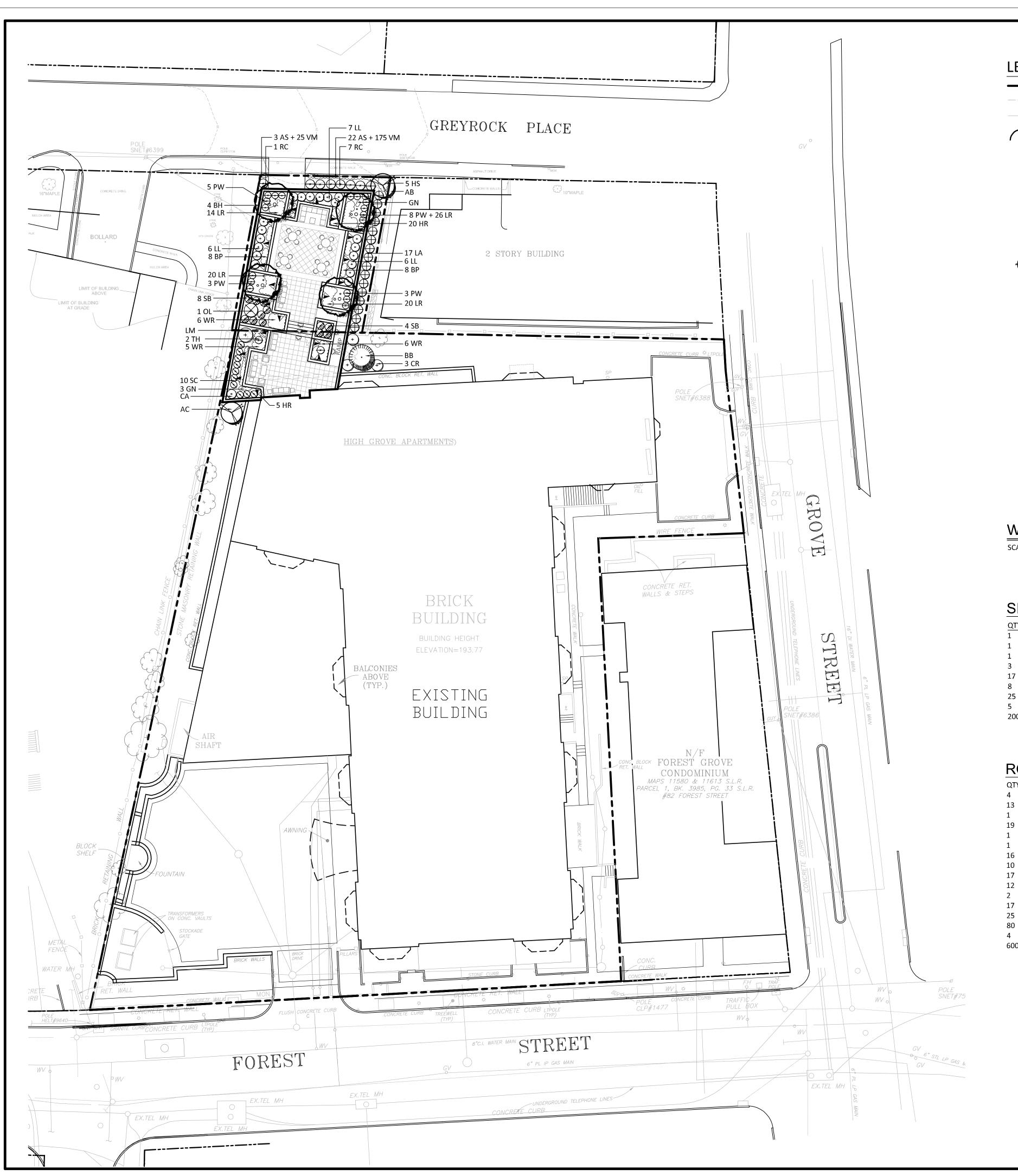
DWG TITLE

Project Number
DATE
05/09/2023

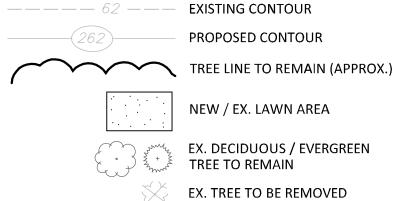
Author

A1.01





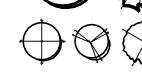
## LEGEND



PROPERTY LINE



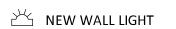
NEW DECIDUOUS SHADE TREE

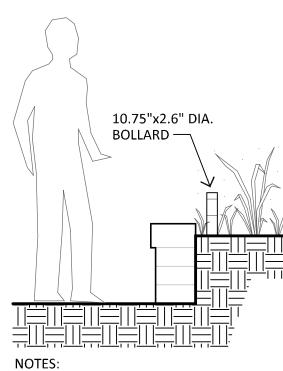


NEW DECIDUOUS SMALL TREE



NEW GARDEN LIGHT

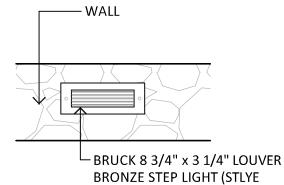




 BOLLARD SHALL BE BEGA 55 005 (2700K).
 INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

## **GARDEN LIGHT**

SCALE: NOT TO SCALE



#11P70) WITH 3200k LIGHT

## WALL LIGHT (TYP.)

SCALE: NOT TO SCALE

## NOTES:

- 1. EXISTING AND PROPOSED SITE INFORMATION TAKEN FROM A DIGITAL AUTOCADD SITE PLAN SUPPLIED BY REDNISS & MEAD.
- 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. ALL 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. ROOFTOP LANDSCAPE LAYOUT IS CONCEPTUAL AND MAY VARY FROM PLAN.

## SITE PLANT LIST

QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS	PLANTING HT.	MATURE HT.
1	AB	AMELANCHIER 'AUTUMN BRILLANCE'	AUTUMN BRILLANCE SHAD	5-6' HT.	B&B	3 STEMS	5-6' HT.	18-20' HT.
1	AC	AMELANCHIER CANADENSIS	SHAD	5-6' HT.	B&B	MULTI-STEM	5-6' HT.	18-20' HT.
1	ВВ	MAGNOLIA GRANDIFLORA 'BRACKEN'S BEAUTY'	BRACKEN'S BEAUTY MAGNOLIA	6-7' HT.	B&B	EVERGREEN	6-7' HT.	15-20' HT.
3	CR	CLETHRA ALNIFOLIA 'RUBY SPICE'	RUBY SPICE CLETHRA	3-4' HT.	CONT.	FRAGERANT		6-7' HT.
17	LA	LEUCOTHOE AXILLARIS 'GREENSPRITE'	GREENSPRITE LEUCOTHOE	2-3' HT.	CONT.	EVERGREEN		
8	RC	RHODODENDRON 'CHIONOIDES'	CHIONOIDES RHODODENDRON	36-42" HT.	B&B	WHITE	3-4' HT.	5-6' HT.
25	AS	ASTILBE 'VISION IN WHITE'	WHITE ASTILBE		1 GAL.	PERENNIAL		
5	HS	HOSTA 'JUNE'	VARIEGATED HOSTA		1 GAL.	PERENNIAL		
200	VM	VINCA MINOR	VINCA		BR			

## ROOF PLANT LIST (TYPICAL)

	<u> </u>						
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS	
4	ВН	BETULA NIGRA 'HERITAGE'	HERITAGE BIRCH	9-10' HT.	B&B	3 STEMS	
13	PW	AZALEA 'PLEASANT WHITE'	PLEASANT WHITE AZALEA	18-24" HT.	CONT.		
1	CA	CLETHRA 'COMPACTA'	DWARF SUMMERSWEET	36-42" HT.	CONT.		
19	LL	HYDRANGEA PANICULATA 'LITTLE LIME'	LITTLE LIME HYDRANGEA	2-3' HT.	CONT.		
1	LM	HYDRANGEA PANICULATA 'LIME LIGHT'	LIMELIGHT HYDRANGEA	4-5' HT.	CONT.		
1	OL	HYDRANGEA QUERCIFOLIA	OAKLAEF HYDRANGEA	3-4' HT.	CONT.		
16	BP	JUNIPERUS CONFERTA 'BLUE PACIFIC'	BLUE PACIFIC JUNIPER	2-3' SPR.	CONT.		
10	SC	LEUCOTHOE AXILLARIS 'SARAH'S CHOICE'	SARAH'S CHOICE LEUCOTHOE	2-3' HT.	CONT.		
17	WR	ROSA 'WHITE MEIDILAND'	WHITE MEIDILAND ROSE	2-3' SPR.	CONT.		
12	SB	SPIRAEA 'SHIROBANA'	SHIROBANA SPIREA	24-30" HT.	CONT.		
2	TH	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE	36-42" HT.	CONT.		
17	AS	ASTILBE 'VISION IN WHITE'	WHITE ASTILBE		1 GAL.		
25	HR	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY		1 GAL.		
80	LR	LIRIOPE MUSCARI 'MONROE WHITE'	MONROE WHITE LIRIOPE		1 QT.		
4	GN	LYSIMACHIA CLETHROIDES	GOOSENECK LOOSESTRIFE		1 GAL.		
600	VM	VINCA MINOR	VINCA		BR	FIELD LOCATE	





LANDSCAPE PLAN 70 FOREST STREET LLC 70 FOREST STREET & 251 GREYROCK PLACE STAMFORD, CONNECTICUT LANDSCAPE DENVIRONMENTAL LAND SOLUTIONS, LLC 8.3.22

8 KNIGHT STREET, SUITE 203 NORWALK, CONNECTICUT 06851

info@elsllc.net www.elsllc.net



DRAWING NO .:

LP.1

1"=30'

## SITE ENGINEERING REPORT

70 Forest Street & 25 I Greyrock Place Highgrove Parking Garage

## **Prepared For**

70 Forest Street LLC Stamford, CT

## Prepared by

Redniss & Mead, Inc. 22 First Street Stamford, CT (203) 327-0500

> Issued on May 9, 2023

> > Bret Holzwarth, P.E. CT #27812



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PLANNING & ZONING CONSULTING
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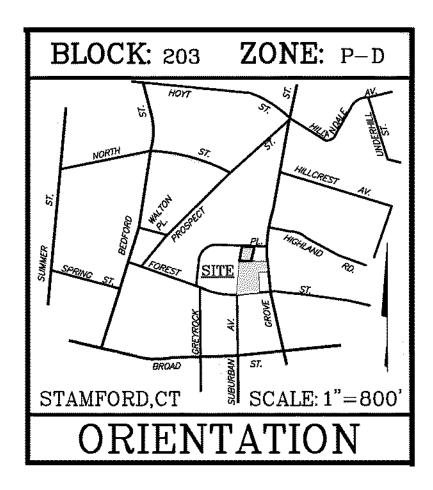
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www.rednissmead.com



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## **Narrative**

## **Project Description:**

The applicant is seeking approval to construct a three-story parking garage and roof deck with a connection to the existing Highgrove condominium building to the south and other related ancillary improvements at 70 Forest Street & 25 I Greyrock Place in Stamford, CT. The parcel is approximately 2,985 Sq. Ft. and is located on the south side of Greyrock Place. The property is zoned as RH and abuts the existing Highgrove Condominium building. The property is served by public water and city sewers. Reference is made to site drawings (SP-I, SE-I through SE-3) prepared by this office dated May 9, 2023.

## **Existing Conditions:**

The property was formerly developed with a recently demolished existing three-story dwelling and associated stairs, walks driveway and retaining walls. The total onsite impervious coverage is 2,503 Sq. Ft. (58.8%). The remainder of the property, 1,756 Sq. Ft. (41.2%), is lawn/plantings. There is no existing drainage system on site, and stormwater generally runs off the site to the northeast. Refer to the drainage basin maps in Appendix B for more detailed information. Site elevations range from elevation 33± at the southwest corner of the property to elevation 30± at the existing retaining along the east side of the property. The property does not lie within the Coastal Boundaries or the drinking water supply watershed. The property lies within Zone X of the regulatory 100-year floodplain as established by the Federal Emergency Management Agency (FEMA) on "Flood Insurance Rate Maps" (FIRM) for Fairfield County, Community No. 09001C0516G, Panel 516 of 626, effective date July 08, 2013.

## **Drainage Patterns & Conveyance Systems**

The proposed disturbance area of the site is approximately 4,650 sf. The site runoff is tributary to a catch basin on the southwest corner of Greyrock Place and Grove Street. Then it flows within the drainage system that eventually discharges into the East Branch of Stamford Harbor.

### Soils

The USDA Natural Resources Conservation Service's Websoil Survey indicates the soils on the subject parcel is Urban land within Hydrologic Soils Group D.

## **Proposed Conditions:**

The project includes the construction of an approximate 3,310 SF footprint parking garage with a connection to the existing Highgrove Condominiums to the south and other related ancillary improvements such as a blue roof and sidewalk improvements. The proposed improvements shall increase impervious coverage onsite by approximately 1,012± sf. This increase in impervious coverage is incorporated into the drainage design and is shown on the proposed drainage basin map.

### Stormwater Management System

The Stormwater Management system is comprised of a blue roof system located on the northern portion of the proposed parking garage deck. The rooftop patio will be elevated on pedistals with sloping rooftop below. Runoff will be collected, stored and discharged via controlled flow roof drains. The system will have a maximum storage depth of 3" before it hits the high overflow drains. Stormwater collected and stored on the roof will be released by roof drains controlling the flow at 5 GPM per inch of head above the roof drain. The Zurn Z105 Control-Flo Roof Drain was used for design modelling purposes, and it is noted that final roof drain specification should be consistent with this selection. Controlled rooftop runoff is routed internally to the existing Highgrove Condominium connection that discharges to the city system to the south in Forest Street.

## Methodology & General Design Criteria

The drainage system has been designed for Type III, 24-hour storm events. The project site is south of the Merritt Parkway and therefore has been designed to adequately accommodate peak runoff for all storms up to and including the 50-year design storm. The 24-hour design storm rainfall amounts, and distributions were obtained from the latest NOAA Atlas 14 Point Precipitation Frequency Estimates and storm distributions (Appendix A).

### **Project Classification**

The proposed development is classified as a <u>redevelopment project</u> with less than  $\frac{1}{2}$  an acre of disturbance and greater than 400 square feet of new impervious coverage, therefore must comply with Standards 2 through 5 of the Stamford Drainage Manual utilizing the "Lite" checklist.

### Hydrologic Analysis of Peak Rates of Runoff

Hydrologic models have been prepared utilizing the SCS Runoff Curve Number Method from NRCS TR-55 to analyze the pre- and post-development rainfall runoff rates and volumes. Watershed areas, curve numbers (CN), and times of concentration (TC) were calculated for the onsite area. The pre-development drainage basin boundaries and the post-development drainage basin boundaries are shown in Appendix B. The results of the HydroCad model used to analyze the pre- and post-development watershed conditions are presented in Appendix B.

A comparison of the pre- and post-development peak discharge rates is provided in Table I below.

Table 1. Existing V.S. Proposed Peak Flows Onsite

Return Period (years)	Existing Peak Flow Rate (cfs)	Proposed Peak Flow Rate (cfs)	Change (cfs)	Percent Change (%)
1	0.26	0.20	-0.06	23.1%
2	0.33	0.25	-0.08	24.2%
5	0.45	0.33	-0.12	26.7%
10	0.54	0.40	-0.14	25.9%
25	0.68	0.50	-0.18	26.5%
50	0.77	0.57	-0.20	26.0%

Comparison of the peak discharge rates for pre- and post-development watershed conditions demonstrates that the peak rate of runoff from the proposed development will be decreased. Therefore, the proposed development will not adversely impact the downstream or adjacent properties or receiving water bodies or courses.

## **Compliance with Stormwater Management Standards**

The project site will be designed to meet the Stamford Stormwater Management Standards to the maximum extent practicable as summarized below:

#### Standard 2. Peak Flow Control

- A. Stream channel protection is not required for this project.
- B. The proposed stormwater system is designed to adequately pass flows leading to, from and through it up to and including the 50-year design storm event as required in Section 3 of the drainage manual. Refer to the HydroCAD model found in <u>Appendix B</u>.
- C. The post-development peak flow rates from the 1-year, 2-year, 5-year, 10-year, 25-year and 50-year, 24-hour storms are controlled to the corresponding pre-development peak discharge rates. Reference is made to the HydroCAD report found in <u>Appendix B</u>.
- D. The blue roof is equipped with high-bypass "emergency outlet" (overflow roof drains) sized to safely pass the post-development peak runoff from the 100-year, 24-hour storm event.
- E. No on-site detention is proposed as an end of pipe system, although the portion of the roof deck that utilizes the blue roof system will be fitted with outlet control roof drains as a part of the overall roof design.

### **Standard 3: Construction Erosion and Sediment Control**

A. Site plan sheet SE-2 depicts erosion control measures to be implemented to control construction related impacts. Sediment and erosion controls such as silt fencing, stone tracking pads at

construction zone entrance/exit points, hay bale & filter fabric catch basin protection, and tree protection are proposed.

## **Standard 4: Operation and Maintenance**

- A. A Standard City of Stamford Drainage Maintenance Agreement will be executed with the Environmental Protection Board at the completion of construction. A draft maintenance agreement has been prepared and is included in Appendix D.
- B. The construction plans will include notes describing the long-term maintenance requirements for the site-specific drainage system(s) including routine and non-route inspection and maintenance tasks to be undertaken after construction is completed as well as the schedule for implementing these tasks. This information is indicated on sheet SE-3.

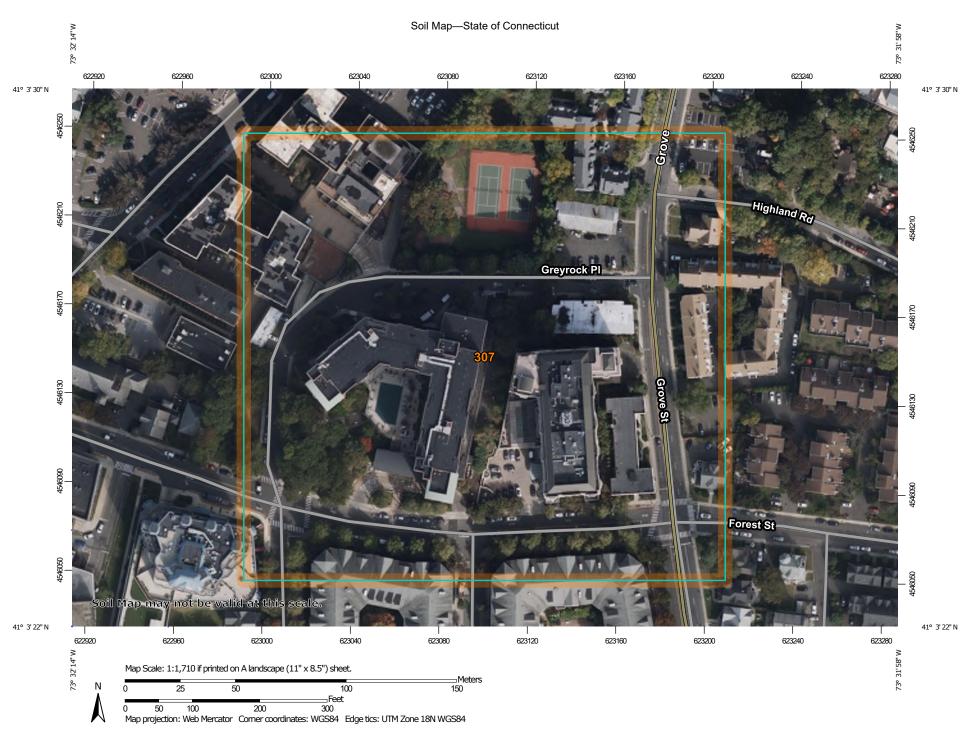
## **Standard 5: Stormwater Management Report**

- A. This document and its associated appendices serve as the required Stormwater Management Report.
- B. (See below)

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.

## Appendix A

NRCS Websoil Survey NOAA Atlas 14 Volume 10 – Precipitation Frequency FEMA Flood Insurance Map



#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Points

#### Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

.. Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

्रह्य Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

-\- Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

## =<u>∌</u> Spoil Area

Stony Spot

Ys Very Stony Spot

Wet Spot

∧ Other

Special Line Features

#### Water Features

Streams and Canals

#### Transportation

Rails

Interstate Highways

~

US Routes

Major Roads
..... Local Roads

#### Background

1

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 21, Sep 7, 2021

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.

## **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
307	Urban land	10.9	100.0%	
Totals for Area of Interest		10.9	100.0%	



NOAA Atlas 14, Volume 10, Version 3 Location name: Stamford, Connecticut, USA\* Latitude: 41.0574°, Longitude: -73.5348° Elevation: 28.72 ft\*\*

ngitude: -73.5348°
8.72 ft\*\*
Il Maps

\* 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) <sup>1</sup>										
Duration Average recurrence interval (years)										
Duration	1	2	5	10	25	50	100	200	500	1000
5-min	<b>0.365</b> (0.282-0.464)	<b>0.425</b> (0.328-0.541)	<b>0.523</b> (0.402-0.668)	<b>0.605</b> (0.462-0.776)	<b>0.717</b> (0.531-0.952)	<b>0.802</b> (0.582-1.08)	<b>0.889</b> (0.627-1.24)	<b>0.984</b> (0.662-1.40)	<b>1.12</b> (0.724-1.64)	<b>1.23</b> (0.775-1.83)
10-min	<b>0.517</b> (0.399-0.658)	<b>0.602</b> (0.464-0.767)	<b>0.741</b> (0.569-0.947)	<b>0.856</b> (0.654-1.10)	<b>1.01</b> (0.752-1.35)	<b>1.14</b> (0.824-1.53)	<b>1.26</b> (0.888-1.75)	<b>1.40</b> (0.938-1.98)	<b>1.58</b> (1.03-2.32)	<b>1.74</b> (1.10-2.59)
15-min	<b>0.608</b> (0.469-0.774)	<b>0.708</b> (0.546-0.902)	<b>0.872</b> (0.670-1.11)	<b>1.01</b> (0.769-1.29)	<b>1.19</b> (0.885-1.59)	<b>1.34</b> (0.969-1.81)	<b>1.48</b> (1.05-2.06)	<b>1.64</b> (1.10-2.33)	<b>1.86</b> (1.21-2.73)	<b>2.04</b> (1.29-3.04)
30-min	<b>0.851</b> (0.656-1.08)	<b>0.992</b> (0.764-1.26)	<b>1.22</b> (0.939-1.56)	<b>1.41</b> (1.08-1.81)	<b>1.68</b> (1.24-2.22)	<b>1.88</b> (1.36-2.53)	<b>2.08</b> (1.46-2.89)	<b>2.30</b> (1.55-3.27)	<b>2.60</b> (1.69-3.81)	<b>2.84</b> (1.80-4.23)
60-min	<b>1.09</b> (0.843-1.39)	<b>1.27</b> (0.983-1.62)	<b>1.57</b> (1.21-2.01)	<b>1.82</b> (1.39-2.33)	<b>2.16</b> (1.60-2.86)	<b>2.42</b> (1.75-3.26)	<b>2.68</b> (1.88-3.72)	<b>2.96</b> (1.99-4.21)	<b>3.34</b> (2.16-4.89)	<b>3.63</b> (2.30-5.41)
2-hr	<b>1.41</b> (1.10-1.79)	<b>1.66</b> (1.29-2.11)	<b>2.07</b> (1.60-2.63)	<b>2.41</b> (1.86-3.08)	<b>2.88</b> (2.15-3.80)	<b>3.24</b> (2.36-4.34)	<b>3.60</b> (2.55-4.98)	<b>4.00</b> (2.70-5.65)	<b>4.56</b> (2.96-6.63)	<b>5.00</b> (3.18-7.41)
3-hr	<b>1.63</b> (1.27-2.05)	<b>1.93</b> (1.50-2.43)	<b>2.42</b> (1.87-3.05)	<b>2.82</b> (2.18-3.58)	<b>3.38</b> (2.52-4.44)	<b>3.80</b> (2.78-5.09)	<b>4.23</b> (3.01-5.85)	<b>4.72</b> (3.19-6.64)	<b>5.40</b> (3.52-7.83)	<b>5.96</b> (3.79-8.79)
6-hr	<b>2.05</b> (1.61-2.57)	<b>2.44</b> (1.92-3.06)	<b>3.08</b> (2.41-3.87)	<b>3.61</b> (2.81-4.56)	<b>4.34</b> (3.27-5.69)	<b>4.89</b> (3.61-6.52)	<b>5.47</b> (3.92-7.52)	<b>6.12</b> (4.15-8.56)	<b>7.05</b> (4.61-10.2)	<b>7.82</b> (4.99-11.5)
12-hr	<b>2.53</b> (2.00-3.15)	<b>3.03</b> (2.39-3.77)	<b>3.84</b> (3.02-4.80)	<b>4.52</b> (3.53-5.66)	<b>5.44</b> (4.12-7.09)	<b>6.14</b> (4.56-8.14)	<b>6.87</b> (4.96-9.42)	<b>7.72</b> (5.26-10.7)	<b>8.95</b> (5.86-12.8)	<b>9.97</b> (6.38-14.5)
24-hr	<b>2.97</b> (2.36-3.66)	<b>3.59</b> (2.85-4.44)	<b>4.61</b> (3.65-5.71)	<b>5.45</b> (4.29-6.79)	<b>6.61</b> (5.04-8.57)	<b>7.48</b> (5.59-9.88)	<b>8.40</b> (6.11-11.5)	<b>9.49</b> (6.49-13.1)	<b>11.1</b> (7.30-15.8)	<b>12.5</b> (8.01-18.0)
2-day	<b>3.31</b> (2.65-4.07)	<b>4.08</b> (3.26-5.01)	<b>5.32</b> (4.24-6.56)	<b>6.36</b> (5.04-7.87)	<b>7.78</b> (5.98-10.0)	<b>8.84</b> (6.65-11.6)	<b>9.98</b> (7.32-13.6)	<b>11.4</b> (7.79-15.6)	<b>13.4</b> (8.86-19.0)	<b>15.2</b> (9.81-21.9)
3-day	<b>3.58</b> (2.88-4.37)	<b>4.42</b> (3.54-5.40)	<b>5.78</b> (4.62-7.09)	<b>6.92</b> (5.50-8.52)	<b>8.48</b> (6.53-10.9)	<b>9.63</b> (7.28-12.6)	<b>10.9</b> (8.01-14.8)	<b>12.4</b> (8.52-16.9)	<b>14.7</b> (9.71-20.7)	<b>16.7</b> (10.8-23.8)
4-day	<b>3.83</b> (3.09-4.67)	<b>4.71</b> (3.79-5.75)	<b>6.15</b> (4.93-7.52)	<b>7.35</b> (5.86-9.03)	<b>8.99</b> (6.94-11.5)	<b>10.2</b> (7.73-13.3)	<b>11.5</b> (8.49-15.6)	<b>13.1</b> (9.03-17.9)	<b>15.5</b> (10.3-21.8)	<b>17.6</b> (11.4-25.1)
7-day	<b>4.57</b> (3.70-5.54)	<b>5.53</b> (4.47-6.70)	<b>7.09</b> (5.71-8.62)	<b>8.39</b> (6.72-10.2)	<b>10.2</b> (7.88-12.9)	<b>11.5</b> (8.73-14.9)	<b>12.9</b> (9.53-17.4)	<b>14.6</b> (10.1-19.8)	<b>17.1</b> (11.4-23.9)	<b>19.3</b> (12.5-27.3)
10-day	<b>5.29</b> (4.30-6.39)	<b>6.30</b> (5.11-7.61)	<b>7.94</b> (6.43-9.63)	<b>9.31</b> (7.48-11.3)	<b>11.2</b> (8.69-14.1)	<b>12.6</b> (9.57-16.2)	<b>14.1</b> (10.4-18.8)	<b>15.8</b> (11.0-21.3)	<b>18.3</b> (12.2-25.5)	<b>20.4</b> (13.2-28.9)
20-day	<b>7.47</b> (6.11-8.95)	<b>8.60</b> (7.03-10.3)	<b>10.4</b> (8.50-12.6)	<b>12.0</b> (9.69-14.5)	<b>14.1</b> (11.0-17.6)	<b>15.7</b> (11.9-19.9)	<b>17.3</b> (12.7-22.7)	<b>19.1</b> (13.3-25.6)	<b>21.5</b> (14.4-29.7)	<b>23.5</b> (15.3-32.9)
30-day	<b>9.26</b> (7.61-11.1)	<b>10.5</b> (8.60-12.5)	<b>12.5</b> (10.2-15.0)	<b>14.1</b> (11.5-17.0)	<b>16.4</b> (12.8-20.4)	<b>18.2</b> (13.9-22.9)	<b>19.9</b> (14.6-25.8)	<b>21.7</b> (15.2-28.9)	<b>24.1</b> (16.2-33.1)	<b>25.9</b> (16.9-36.2)
45-day	<b>11.5</b> (9.46-13.6)	<b>12.8</b> (10.5-15.2)	<b>15.0</b> (12.3-17.9)	<b>16.8</b> (13.7-20.1)	<b>19.2</b> (15.1-23.7)	<b>21.2</b> (16.2-26.5)	<b>23.1</b> (16.9-29.6)	<b>24.9</b> (17.5-33.0)	<b>27.2</b> (18.3-37.2)	<b>29.0</b> (18.9-40.3)
60-day	<b>13.3</b> (11.0-15.8)	<b>14.7</b> (12.2-17.5)	<b>17.0</b> (14.0-20.3)	<b>18.9</b> (15.5-22.6)	<b>21.6</b> (16.9-26.5)	<b>23.6</b> (18.1-29.5)	<b>25.6</b> (18.8-32.7)	<b>27.5</b> (19.4-36.4)	<b>29.9</b> (20.1-40.7)	<b>31.5</b> (20.6-43.7)

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

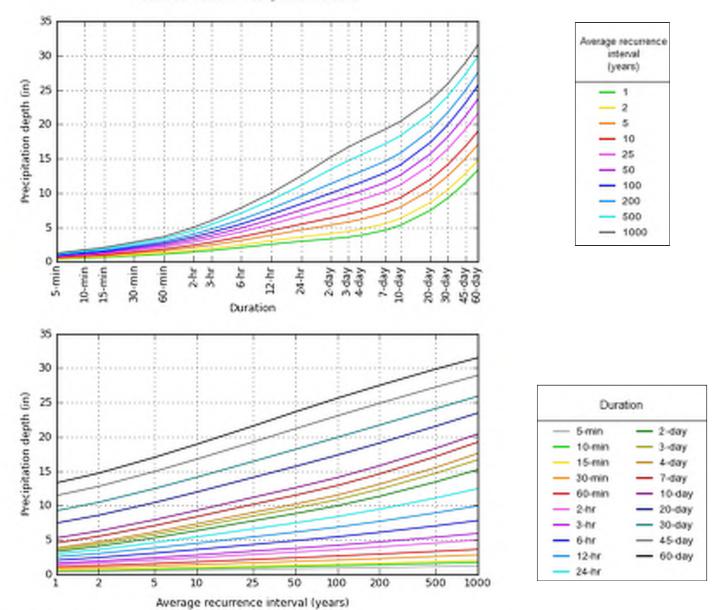
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper 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: 41.0574°, Longitude: -73.5348°



NOAA Atlas 14, Volume 10, Version 3

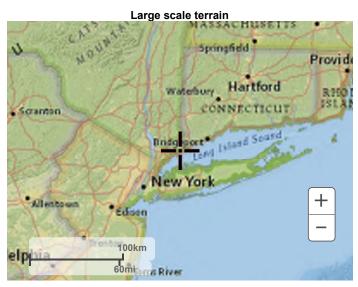
Created (GMT): Tue May 3 04:14:18 2022

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## Maps & aerials

Small scale terrain







Large scale aerial



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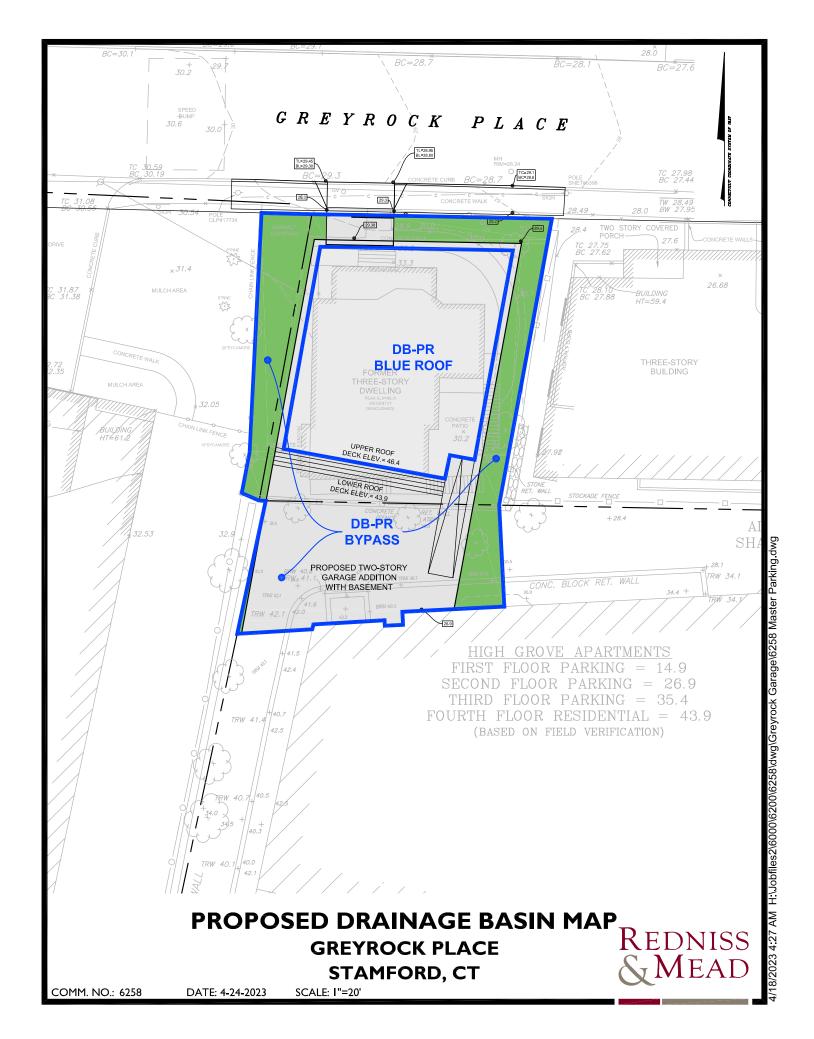
US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East Weather Service MD 20040

Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

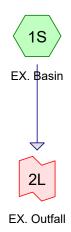
**Disclaimer** 

## Appendix B

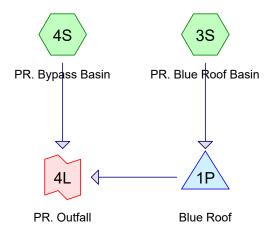
Existing On-Site Drainage Basin Map Proposed On-Site Drainage Basin Map HydroCAD Report Zurn Control-Flo Roof Drain Detail



# **EXISTING CONDITIONS**



# PROPOSED CONDITIONS











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Type III 24-hr 1-Year Rainfall=2.97"

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EX. Basin Runoff Area=4,652 sf 59.76% Impervious Runoff Depth>2.02"

Tc=5.0 min CN=90.76 Runoff=0.26 cfs 783 cf

Subcatchment3S: PR. Blue Roof Basin Runoff Area=1,795 sf 100.00% Impervious Runoff Depth>2.74"

Tc=5.0 min CN=98.00 Runoff=0.12 cfs 409 cf

Subcatchment4S: PR. Bypass Basin Runoff Area=2,857 sf 60.17% Impervious Runoff Depth>2.03"

Tc=5.0 min CN=90.83 Runoff=0.16 cfs 483 cf

Pond 1P: Blue Roof Peak Elev=46.52' Storage=92 cf Inflow=0.12 cfs 409 cf

Outflow=0.05 cfs 407 cf

Link 2L: EX. Outfall Inflow=0.26 cfs 783 cf

Primary=0.26 cfs 783 cf

Link 4L: PR. Outfall Inflow=0.20 cfs 890 cf

Primary=0.20 cfs 890 cf

Total Runoff Area = 9,304 sf Runoff Volume = 1,675 cf Average Runoff Depth = 2.16" 32.35% Pervious = 3,010 sf 67.65% Impervious = 6,294 sf

Type III 24-hr 2-Year Rainfall=3.59"

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EX. Basin Runoff Area=4,652 sf 59.76% Impervious Runoff Depth>2.60"

Tc=5.0 min CN=90.76 Runoff=0.33 cfs 1,009 cf

Subcatchment3S: PR. Blue Roof Basin Runoff Area=1,795 sf 100.00% Impervious Runoff Depth>3.35"

Tc=5.0 min CN=98.00 Runoff=0.15 cfs 502 cf

Subcatchment4S: PR. Bypass Basin Runoff Area=2,857 sf 60.17% Impervious Runoff Depth>2.61"

Tc=5.0 min CN=90.83 Runoff=0.20 cfs 621 cf

Pond 1P: Blue Roof Peak Elev=46.55' Storage=113 cf Inflow=0.15 cfs 502 cf

Outflow=0.06 cfs 499 cf

Link 2L: EX. Outfall Inflow=0.33 cfs 1,009 cf

Primary=0.33 cfs 1,009 cf

Link 4L: PR. Outfall Inflow=0.25 cfs 1,120 cf

Primary=0.25 cfs 1,120 cf

Total Runoff Area = 9,304 sf Runoff Volume = 2,131 cf Average Runoff Depth = 2.75" 32.35% Pervious = 3,010 sf 67.65% Impervious = 6,294 sf

Type III 24-hr 5-Year Rainfall=4.61" Printed 4/18/2023

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EX. Basin Runoff Area=4,652 sf 59.76% Impervious Runoff Depth>3.58"

Tc=5.0 min CN=90.76 Runoff=0.45 cfs 1,387 cf

Runoff Area=1,795 sf 100.00% Impervious Runoff Depth>4.37" Subcatchment3S: PR. Blue Roof Basin

Tc=5.0 min CN=98.00 Runoff=0.19 cfs 654 cf

Runoff Area=2,857 sf 60.17% Impervious Runoff Depth>3.58" Subcatchment4S: PR. Bypass Basin

Tc=5.0 min CN=90.83 Runoff=0.28 cfs 853 cf

Pond 1P: Blue Roof Peak Elev=46.58' Storage=146 cf Inflow=0.19 cfs 654 cf

Outflow=0.08 cfs 651 cf

Link 2L: EX. Outfall Inflow=0.45 cfs 1,387 cf

Primary=0.45 cfs 1,387 cf

Link 4L: PR. Outfall Inflow=0.33 cfs 1.504 cf

Primary=0.33 cfs 1,504 cf

Total Runoff Area = 9,304 sf Runoff Volume = 2,894 cf Average Runoff Depth = 3.73" 32.35% Pervious = 3,010 sf 67.65% Impervious = 6,294 sf

Type III 24-hr 10-Year Rainfall=5.45"

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EX. Basin Runoff Area=4,652 sf 59.76% Impervious Runoff Depth>4.39"

Tc=5.0 min CN=90.76 Runoff=0.54 cfs 1,702 cf

Subcatchment3S: PR. Blue Roof Basin Runoff Area=1,795 sf 100.00% Impervious Runoff Depth>5.21"

Tc=5.0 min CN=98.00 Runoff=0.23 cfs 779 cf

**Subcatchment4S: PR. Bypass Basin** Runoff Area=2,857 sf 60.17% Impervious Runoff Depth>4.40"

Tc=5.0 min CN=90.83 Runoff=0.33 cfs 1,047 cf

Pond 1P: Blue Roof Peak Elev=46.61' Storage=174 cf Inflow=0.23 cfs 779 cf

Outflow=0.09 cfs 775 cf

Link 2L: EX. Outfall Inflow=0.54 cfs 1,702 cf

Primary=0.54 cfs 1,702 cf

Link 4L: PR. Outfall Inflow=0.40 cfs 1,823 cf

Primary=0.40 cfs 1,823 cf

Total Runoff Area = 9,304 sf Runoff Volume = 3,528 cf Average Runoff Depth = 4.55" 32.35% Pervious = 3,010 sf 67.65% Impervious = 6,294 sf

Type III 24-hr 25-Year Rainfall=6.61"

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EX. Basin Runoff Area=4,652 sf 59.76% Impervious Runoff Depth>5.52"

Tc=5.0 min CN=90.76 Runoff=0.68 cfs 2,141 cf

Subcatchment3S: PR. Blue Roof Basin Runoff Area=1,795 sf 100.00% Impervious Runoff Depth>6.37"

Tc=5.0 min CN=98.00 Runoff=0.28 cfs 952 cf

Subcatchment4S: PR. Bypass Basin Runoff Area=2,857 sf 60.17% Impervious Runoff Depth>5.53"

Tc=5.0 min CN=90.83 Runoff=0.41 cfs 1,317 cf

Pond 1P: Blue Roof Peak Elev=46.65' Storage=211 cf Inflow=0.28 cfs 952 cf

Outflow=0.11 cfs 948 cf

Link 2L: EX. Outfall Inflow=0.68 cfs 2,141 cf

Primary=0.68 cfs 2,141 cf

Link 4L: PR. Outfall Inflow=0.50 cfs 2,265 cf

Primary=0.50 cfs 2,265 cf

Total Runoff Area = 9,304 sf Runoff Volume = 4,411 cf Average Runoff Depth = 5.69" 32.35% Pervious = 3,010 sf 67.65% Impervious = 6,294 sf

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## **Summary for Subcatchment 1S: EX. Basin**

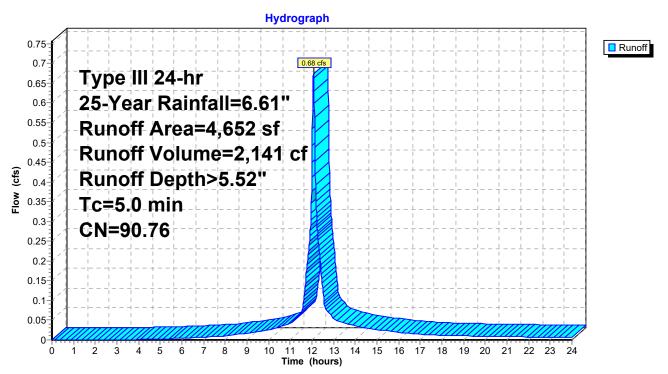
Runoff = 0.68 cfs @ 12.07 hrs, Volume= 2,141 cf, Depth> 5.52"

Routed to Link 2L: EX. Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs Type III 24-hr 25-Year Rainfall=6.61"

A	rea (sf)	CN	Descript	on					
	2,503	98.00	Roofs, H	SG D					
	1,756	80.00	>75% G	ass cover,	Good, HSG D				
	277	98.00	Offsite -	Offsite - Paved parking, HSG D					
	116	80.00	Offsite -	Offsite - >75% Grass cover, Good, HSG D					
	4,652	90.76	Weighted Average						
	1,872		40.24% Pervious Area						
	2,780		59.76% Impervious Area						
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
5.0					Direct Entry,				

## Subcatchment 1S: EX. Basin



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## Summary for Subcatchment 3S: PR. Blue Roof Basin

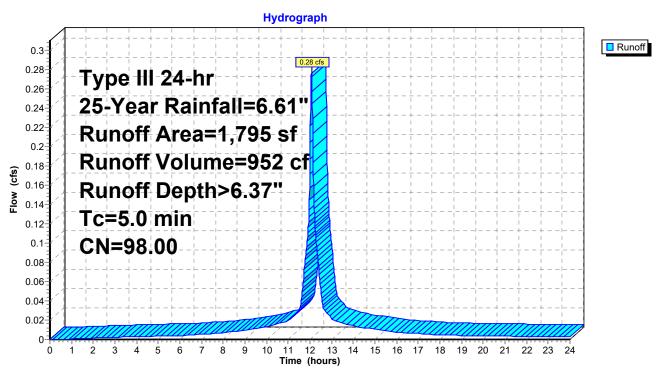
Runoff = 0.28 cfs @ 12.07 hrs, Volume= 952 cf, Depth> 6.37"

Routed to Pond 1P: Blue Roof

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs Type III 24-hr 25-Year Rainfall=6.61"

_	Α	rea (sf)	CN	Descript	ion					
*		1,795	98.00	Pedesta	Pedestal Rooftop					
		1,795		100.00%	100.00% Impervious Area					
	Тс	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	5.0					Direct Entry				

### Subcatchment 3S: PR. Blue Roof Basin



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## Summary for Subcatchment 4S: PR. Bypass Basin

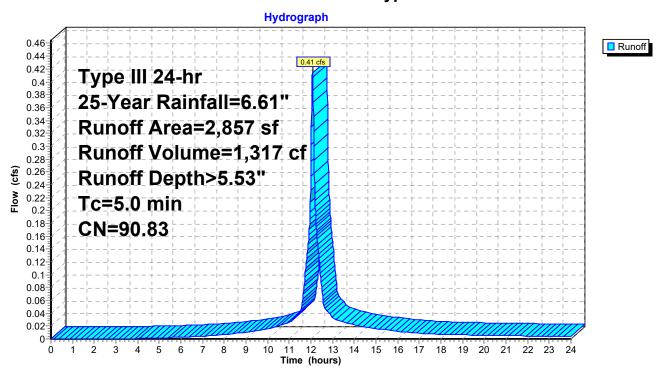
Runoff = 0.41 cfs @ 12.07 hrs, Volume= 1,317 cf, Depth> 5.53"

Routed to Link 4L: PR. Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs Type III 24-hr 25-Year Rainfall=6.61"

A	rea (sf)	CN	Descript	on					
	74	98.00	Paved pa	arking, HS0	G D				
	745	80.00	>75% G	ass cover,	Good, HSG D				
	393	80.00	Offsite -	Offsite - >75% Grass cover, Good, HSG D					
	1,645	98.00	Roofs, H	Roofs, HSG D					
	2,857	90.83	Weighted Average						
	1,138		39.83% Pervious Area						
	1,719		60.17%	mpervious	Area				
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
5.0					Direct Entry,				

## Subcatchment 4S: PR. Bypass Basin



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## **Summary for Pond 1P: Blue Roof**

Inflow Area = 1,795 sf,100.00% Impervious, Inflow Depth > 6.37" for 25-Year event

Inflow 0.28 cfs @ 12.07 hrs, Volume= 952 cf

0.11 cfs @ 12.26 hrs, Volume= 0.11 cfs @ 12.26 hrs, Volume= Outflow 948 cf, Atten= 59%, Lag= 11.2 min

Primary 948 cf

Routed to Link 4L: PR. Outfall

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs / 2 Peak Elev= 46.65' @ 12.26 hrs Surf.Area= 1,686 sf Storage= 211 cf

Plug-Flow detention time= 30.5 min calculated for 948 cf (99% of inflow)

Center-of-Mass det. time= 27.2 min ( 769.6 - 742.4 )

Volume	Inv	ert Avail.Sto	rage Storage	e Description			
#1	46.4	42' 1,5	75 cf Custon	m Stage Data (Prismatic)Listed below x 2			
Elevation		Surf.Area	Inc.Store	Cum.Store			
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)			
46.4	12	0	0	0			
46.6	67	900	113	113			
47.4	12	900	675	788			
Device	Routing	Invert	Outlet Device	es			
#0	Primary	47.42'	Automatic S	Storage Overflow (Discharged without head)			
#1	Primary	47.12'		High Overflow X 2.00 C= 0.600			
	•		Limited to we	eir flow at low heads			
#2	Primary	46.42'	Control Flov	ntrol Flow Roof Drain X 2.00			
	·		Head (feet)	0.00 0.08 0.17 0.25 0.33 0.42 0.50			
			Disch. (cfs) (	0.000 0.020 0.040 0.060 0.080 0.100 0.120			

**Primary OutFlow** Max=0.11 cfs @ 12.26 hrs HW=46.65' (Free Discharge)

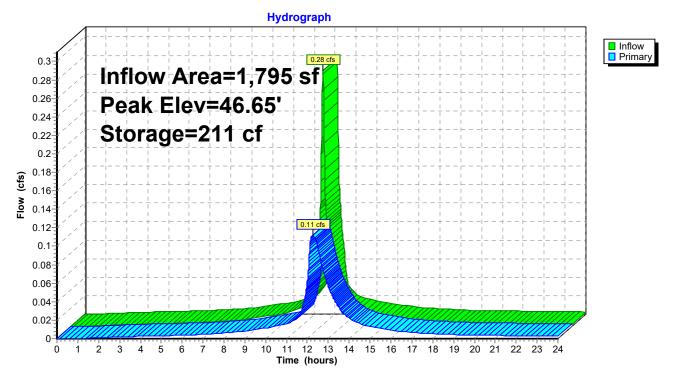
-1=High Overflow (Controls 0.00 cfs)

**—2=Control Flow Roof Drain** (Custom Controls 0.11 cfs)

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Pond 1P: Blue Roof



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## Stage-Area-Storage for Pond 1P: Blue Roof

Elevation	Surface	Storage	Elevation	Surface	Storage
(feet)	(sq-ft)	(cubic-feet)	(feet)	(sq-ft)	(cubic-feet)
46.42	Ó	0	46.94	1,800	711
46.43	72	9	46.95	1,800	729
46.44	144	18	46.96	1,800	747
46.45	216	27	46.97	1,800	765
46.46	288	36	46.98	1,800	783
46.47	360	45	46.99	1,800	801
46.48	432	54	47.00	1,800	819
46.49	504	63	47.01	1,800	837
46.50	576	72	47.02	1,800	855
46.51	648	81	47.03	1,800	873
46.52	720	90	47.04	1,800	891
46.53	792	99	47.05	1,800	909
46.54	864	108	47.06	1,800	927
46.55	936	117	47.07	1,800	945
46.56	1,008	126	47.08	1,800	963
46.57	1,080	135	47.09	1,800	981
46.58	1,152	144	47.10	1,800	999
46.59	1,224	153	47.11	1,800	1,017
46.60	1,296	162	47.12	1,800	1,035
46.61	1,368	171	47.13	1,800	1,053
46.62	1,440	180	47.14	1,800	1,071
46.63	1,512	189	47.15	1,800	1,089
46.64	1,584	198	47.16	1,800	1,107
46.65	1,656	207	47.17	1,800	1,125
46.66 46.67	1,728	216	47.18 47.10	1,800	1,143
46.67	<b>1,800</b> 1,800	225 243	47.19 47.20	1,800	1,161 1,179
46.68 46.69	1,800	243 261	47.20 47.21	1,800 1,800	1,179
46.70	1,800	279	47.21 47.22	1,800	1,197
46.71	1,800	297	47.22	1,800	1,213
46.72	1,800	315	47.23 47.24	1,800	1,251
46.73	1,800	333	47.25	1,800	1,269
46.74	1,800	351	47.26	1,800	1,287
46.75	1,800	369	47.27	1,800	1,305
46.76	1,800	387	47.28	1,800	1,323
46.77	1,800	405	47.29	1,800	1,341
46.78	1,800	423	47.30	1,800	1,359
46.79	1,800	441	47.31	1,800	1,377
46.80	1,800	459	47.32	1,800	1,395
46.81	1,800	477	47.33	1,800	1,413
46.82	1,800	495	47.34	1,800	1,431
46.83	1,800	513	47.35	1,800	1,449
46.84	1,800	531	47.36	1,800	1,467
46.85	1,800	549	47.37	1,800	1,485
46.86	1,800	567	47.38	1,800	1,503
46.87	1,800	585	47.39	1,800	1,521
46.88	1,800	603	47.40	1,800	1,539
46.89	1,800	621	47.41	1,800	1,557
46.90	1,800	639 657	47.42	1,800	1,575
46.91	1,800	657			
46.92	1,800 1,800	675			
46.93	1,800	693			
			I		

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### Summary for Link 2L: EX. Outfall

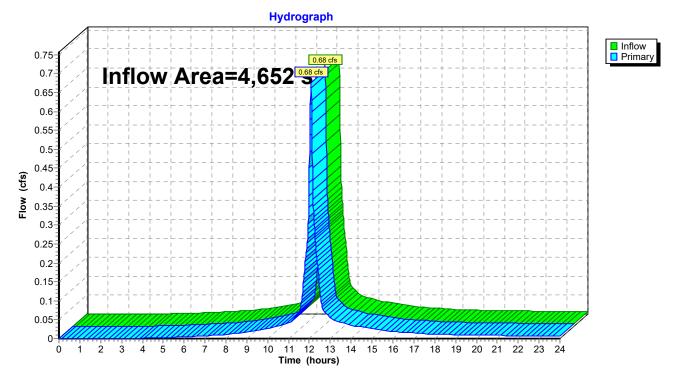
Inflow Area = 4,652 sf, 59.76% Impervious, Inflow Depth > 5.52" for 25-Year event

Inflow = 0.68 cfs @ 12.07 hrs, Volume= 2,141 cf

Primary = 0.68 cfs @ 12.07 hrs, Volume= 2,141 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

#### Link 2L: EX. Outfall



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## **Summary for Link 4L: PR. Outfall**

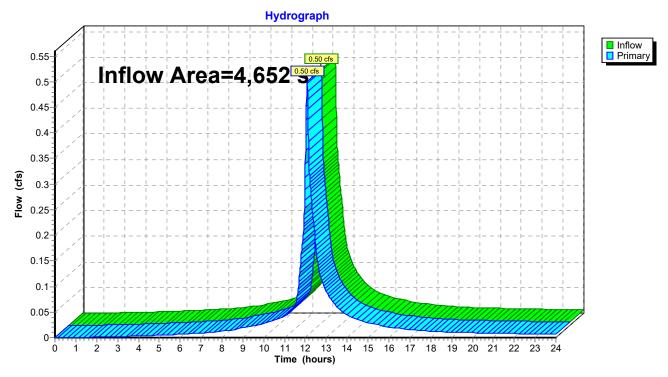
Inflow Area = 4,652 sf, 75.54% Impervious, Inflow Depth > 5.84" for 25-Year event

Inflow 0.50 cfs @ 12.08 hrs, Volume= 2.265 cf

0.50 cfs @ 12.08 hrs, Volume= Primary 2,265 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

#### Link 4L: PR. Outfall



#### 6258 Garage HydroCAD for ZB

Type III 24-hr 50-Year Rainfall=7.48"

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EX. Basin Runoff Area=4,652 sf 59.76% Impervious Runoff Depth>6.38"

Tc=5.0 min CN=90.76 Runoff=0.77 cfs 2,473 cf

Subcatchment3S: PR. Blue Roof Basin Runoff Area=1,795 sf 100.00% Impervious Runoff Depth>7.24"

Tc=5.0 min CN=98.00 Runoff=0.31 cfs 1,082 cf

Subcatchment4S: PR. Bypass Basin Runoff Area=2,857 sf 60.17% Impervious Runoff Depth>6.39"

Tc=5.0 min CN=90.83 Runoff=0.48 cfs 1,521 cf

Pond 1P: Blue Roof Peak Elev=46.68' Storage=240 cf Inflow=0.31 cfs 1,082 cf

Outflow=0.12 cfs 1,077 cf

Link 2L: EX. Outfall Inflow=0.77 cfs 2,473 cf

Primary=0.77 cfs 2,473 cf

Link 4L: PR. Outfall Inflow=0.57 cfs 2,598 cf

Primary=0.57 cfs 2,598 cf

Total Runoff Area = 9,304 sf Runoff Volume = 5,076 cf Average Runoff Depth = 6.55" 32.35% Pervious = 3,010 sf 67.65% Impervious = 6,294 sf

#### 6258 Garage HydroCAD for ZB

Type III 24-hr 100-Year Rainfall=8.40"

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Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: EX. Basin Runoff Area=4,652 sf 59.76% Impervious Runoff Depth>7.29"

Tc=5.0 min CN=90.76 Runoff=0.88 cfs 2,824 cf

Subcatchment3S: PR. Blue Roof Basin Runoff Area=1,795 sf 100.00% Impervious Runoff Depth>8.15"

Tc=5.0 min CN=98.00 Runoff=0.35 cfs 1,220 cf

Subcatchment4S: PR. Bypass Basin Runoff Area=2,857 sf 60.17% Impervious Runoff Depth>7.29"

Tc=5.0 min CN=90.83 Runoff=0.54 cfs 1,737 cf

Pond 1P: Blue Roof Peak Elev=46.70' Storage=273 cf Inflow=0.35 cfs 1,220 cf

Outflow=0.13 cfs 1,214 cf

Link 2L: EX. Outfall Inflow=0.88 cfs 2,824 cf

Primary=0.88 cfs 2,824 cf

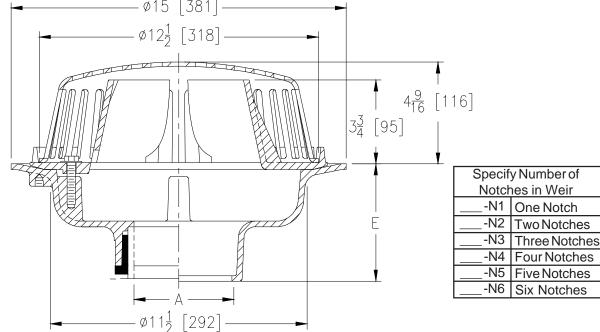
Link 4L: PR. Outfall Inflow=0.65 cfs 2,951 cf

Primary=0.65 cfs 2,951 cf

Total Runoff Area = 9,304 sf Runoff Volume = 5,781 cf Average Runoff Depth = 7.46" 32.35% Pervious = 3,010 sf 67.65% Impervious = 6,294 sf

TAG

Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice - ø15 [381] -



A- Pipe Size In.[mm]	Approx. Wt. Lbs. [kg]	Dome Open Area Sq. In. [cm <sup>2</sup> ]
2,3,4[51,76,102]	34 [15]	103 [665]

**OPTIONS** (Check/specify appropriate options)

# **ENGINEERING SPECIFICATION: ZURN Z105**

15" [381mm] Diameter Control-Flo roof drain for dead-level roof construction, Dura-Coated cast iron body, Control-Flo weir shall be linear functioning with integral membrane flashing clamp/gravel guard and Poly-Dome. All data shall be verified proportional to flow rates. Each notch will allow 10 GPM [LPM] of flow per 1" [25mm] of rain water build up above the drain.

	up above	tile dialii.	
<b>PIPE SIZE</b> 3, 4 [76, 102] 2, 3, 4 [51, 76, 102] 2, 3, 4 [51, 76, 102]	(Specify size IC NH NL	/type) <b>OUTLET</b> Inside Caulk No-Hub Neo-Loc	<b>E BODY HT. DIM.</b> 5-1/4 [133] 5-1/4 [133] 4-9/16 [116]
PREFIXES Z D.C.C.I. Body with Poly-Dome*ZA D.C.C.I. Body with Aluminum DomeZC D.C.C.I. Body with Cast Iron Dome			
SUFFIXES C	(Specify Ht.)		

Regularly furnished unless otherwise specified. Zurn Industries, LLC | Specification Drainage Operation

# Appendix C

Draft Drainage Maintenance Agreement

#### AGREEMENT COVENANT

AGREEMENT made this day of by and between
of 70 Forest Street LLCin
the City of Stamford, County of Fairfield and State of Connecticut
(hereinafter referred to as "Owner"); and the CITY OF STAMFORD, a municipal
corporation lying within the County of Fairfield and State of Connecticut,
acting herein by its duly authorized Mayor, David R. Martin (hereinafter
referred to as the "CITY"), the ENVIRONMENTAL PROTECTION BOARD OF THE CITY
OF STAMFORD, acting herein by its duly authorized Chairman, Gary H. Stone
(hereinafter referred to as the "EPB").
WITNESSETH
WHEREAS, OWNER has commenced the planning and construction of a new
parking garage addition, driveway, and sidewalk improvements on
land owned by it and as more particularly described on Schedule "A" annexed
hereto and made of part hereof (hereinafter referred to as the "Property");
and
WHEREAS, certain drainage facilities ("Drainage Facilities"), including
but not limited to a blue roof system with controlled flow roof drains as
more particularly described on Schedule "B" attached (the "Construction
Plans") shall be installed in connection with the aforesaid construction and
in accordance with the Construction Plans andPermit
Noissued by theBoard of the City
of Stamford () issued

therefore, ("Permit") and;

WHEREAS, OWNER, the CITY and EPB share a joint concern that the Drainage Facilities be maintained in a functioning condition so as to avoid pollution of surface and groundwaters, flooding and/or improper drainage.

NOW, THEREFORE, in consideration of ten dollars and other good and valuable consideration receipt of which is hereby acknowledged by the OWNER, it is hereby agreed as follows:

- 1) OWNER shall clean the drainage facilities or cause such facilities to be cleaned by periodic removal of accumulated sediment and debris in a good and workman-like manner, at least two (2) times during every twelve (12) month period, which times shall be in the period between April and June and between October and December and more often as the City may determine to be necessary.
- 2) OWNER shall sweep, or cause to be swept, garage facilities, driveways and roadway surfaces located on the Property at least once per calendar quarter.
- 3) OWNER shall utilize only sand or calcium chloride in connection with the de-icing of areas within the Property meaning and intending that road salt (Sodium Chloride) shall not be used for said purpose.
- 4) OWNER shall repair or replace any defects or defective drainage

facilities so as to maintain the drainage facilities, at all times, in a fully functional capacity.

- 5) OWNER shall file as-built drainage plans with the EPB immediately upon the completion of work. Said plans shall be prepared by a professional engineer/surveyor registered in the State of Connecticut.
- OWNER grants the CITY and/or EPB, its agents, and employees, the right to enter the Property at all reasonable times upon twenty-four (24) hours notice to the OWNER for the purpose of inspecting the Property to determine if OWNER is complying with the requirements hereunder. A representative of the Owner shall have the right to accompany the City and/or EPB on their inspection of the Property.
- 7) If, after an inspection is made pursuant to Paragraph Six (6) hereof, the CITY and/or EPB determines that the owner has failed to comply with the aforesaid undertakings, then the CITY and/or EPB shall give written notice of said determination to the then OWNER of the Property which notice shall also specify the said failure. Said notice shall be sent by registered or certified mail to the last known address of said Owner. If the Owner disputes the claim, he shall give written notice thereof to City and/or EPB within ten (10) days of receipt of said notice, and the EPB shall hold a hearing as promptly as possible to decide the merits of the disputed claim. If the claim is not disputed within

said ten (10) days, the OWNER shall have thirty (30) days from the receipt of said notice to correct said failure, unless it is impossible to cure said defect within said time, in which case, the necessary repairs shall be immediately commenced and diligently pursued to completion within a reasonable time.

- 8) If the said failure is not remedied within the time frame herein stated, the CITY and/or EPB may proceed to cure the same and charge the actual cost thereof to the OWNER of the Property.
- 9) OWNER agrees to reimburse the CITY and/or EPB for reasonable legal fees and court costs if it becomes necessary for the CITY and/or EPB to sue for reimbursement of sums expended by the CITY and/or EPB in performance of OWNER'S obligation.
- 10) OWNER agrees and covenants to indemnify and save harmless the CITY and the EPB against any and all claims, suits, actions or judgments arising out of the delay in the performance of any of their obligations pursuant to this Agreement.
- 11) OWNER agrees that this covenant and restriction shall apply to and run with the land. It shall be binding on all future owners, administrators, executors, successors and assigns.
- 12) The OWNER hereby represents to the CITY and EPB that he/she is the owner, in fee simple, of all of the property described in "Schedule A" attached hereto and made a part hereof.

13) OWNER agrees that this Agreement and restrictive covenant upon execution of the same, shall be recorded on the land records at the OWNER'S expense at the time that a permit is issued for the Property herein and while the OWNER is in title.

14) OWNER agrees not to assert the invalidity of this document.

15) OWNER agrees that nothing herein shall be construed to be a limitation upon the right of the EPB to assert and enforce any rights it may have under federal, state or City statute, ordinance or regulation.

16) This agreement shall be governed by the laws of the State of Connecticut.

IN WITNESS WHEREOF, the said parties hereto have hereunto set their hands and seals, the day and year first above written.
WITNESSED:

THE CITY OF STAMFORD	
BY:	
David R. Martin Its duly authorized Mayor	

(ACKNOWLEDGEMENT ON THE FOLLOWING PAGE)

	THE ENVIRONMENTAL PROTECTION BOARD
	BY:Gary H. Stone
	Its duly authorized Chairman  OWNER
	BY:
	OWNER
	BY:
STATE OF CONNECTICUT }	Date:
signer and sealer of the foregoing i	Martin, Mayor of the City of Stamford, nstrument, and acknowledged the same to act and deed of said City, before me.
	Commissioner of the Superior Court or Notary Public

STATE OF CONNECTICUT}    ss: STAMFORD     COUNTY OF FAIRFIELD	Date:
Protection Board of the City of Stamfo	cone, Chairman of the Environmental rd, signer and sealer of the foregoing to be his free act and deed and the before me.
	Commissioner of the Superior Court or Notary Public
STATE OF CONNECTICUT } } ss: STAMFORD COUNTY OF FAIRFIELD }	
Personally appeared foregoing instrument, and acknowledge deed, before me.	, signer and sealer of the the same to be free act and
	Commissioner of the Superior Court

# Appendix D

DCIA Tracking Spreadsheet Checklist for Stormwater Management Report



# Note to user: complete all cells of this color only

Part 1: General Information		
Project Name	Highgrove Parking Garage	
Project Address	70 Forest Street & 251 Greyrock Place	
Project Applicant	70 Forest Street LLC, c/o Redniss & Mead	
Date of Submittal	4/24/2023	
Tax Account Number	004-5379 & 001-5158	

Part 2: Project Details		
1. What type of development is this? (choose from dropdown)	Redevelopment	
2. What is the total area of the project site?	4,258	ft <sup>2</sup>
3. What is the total area of land disturbance for this project?	4,258	ft <sup>2</sup>
4. Does project site drain to High Quality Waters, a Direct Waterfront, or within 500 ft. of Tidal Wetlands? (Yes/No)	No	
5. What is the <u>current</u> <b>DCIA</b> for the site?	2,502	ft <sup>2</sup>
6. Will the proposed development increase <b>DCIA</b> (without consideration of proposed stormwater management)? (Yes/No)	Yes	
7. What is the <u>proposed-development</u> <b>total impervious area</b> for the site?	3,515	ft <sup>2</sup>

Part 3: Water Quality Target Total		
Does Standard 1 apply based on information above?	No, Skip to Part 4	
Water Quality Volume (WQV)	N/A	ft <sup>3</sup>
Standard 1 requirement	N/A	
Required treatment/retention volume	N/A	ft <sup>3</sup>
Provided treatment/retention volume for proposed development		ft <sup>3</sup>

Part 4: Proposed DCIA Tracking		
Pre-development total impervious area	2,502	ft <sup>2</sup>
Current DCIA	2,502	ft <sup>2</sup>
Proposed-development total impervious area	3,515	ft <sup>2</sup>
Proposed-development DCIA (after stormwater management)	3,515	ft <sup>2</sup>
Net change in <b>DCIA</b> from <u>pre-development</u> to <u>proposed-development</u>	1,013	ft <sup>2</sup>

Part 5: Post-Development (As-Built Certified) DCIA Tracking			
Post-development (per as-built) total impervious area	ft <sup>2</sup>		
Post-development (per as-built) DCIA (after stormwater management)	ft <sup>2</sup>		
Net change in <b>DCIA</b> from <u>pre-development</u> to <u>post-development</u>	ft <sup>2</sup>		

#### **Certification Statement**

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

Engineer's Signature 3/09/2023

Engineer's Seal



Project Name: \_\_\_

# **CHECKLISTS**

Project Address
Property Owner(s)
Tax Account Number(s)
Tax Account Number(s)
All checklists must be completed and submitted. Provide a brief explanation for any items not provided. Check boxes as completed or N/A as not applicable.
Existing Conditions Plan
Stormwater Management Report
Stormwater Management Plan / Construction Plan
Certificate of Occupancy
Checklist for Existing Conditions Plan  General Information
Site address
Orientation, block, zone, City, street name
Applicant name and legal address
Surveyor name, address, contact information
North arrow, bar scale, horizontal and vertical datum
24" x 36" sheet size unless otherwise approved
Existing conditions survey shall be prepared in accordance with the Minimum Standards for Surveys and Maps in the State of Connecticut. The class of survey shall be A-2 and T-2 and shall be represented as such on the map. The base map shall be sealed and signed by a Professional Land Surveyor licensed in the State of Connecticut.
Drawing scale shall be set at 1" = 20' or 1" = 40' when possible



### II. Existing Conditions Plan Elements

Show and label all property boundaries with linear bearing / distances and curve information
Required zoning setbacks
Show and label monument information
Show and label at least one permanent benchmark on the parcel with northing, easting and elevation
Label adjacent property ownership information
Existing contours based on NAVD 88 (no exceptions) at 2 foot contour interval or 1 foot contour interval when slope is flatter than 2 percent at a minimum of 20 ft. beyond the property boundaries of the subject parcel
Show spot elevations at low points, high points, and where topography is flatter than 2 percent
All buildings and structures (label current use and finished floor elevations)
All pavement, parking, driveways, property access points
All roadways, streets, and rights-of-way. Label streets as public or private with street name
All patios, decks, walkways, sidewalks, curb ramps (both adjacent to and opposite and existing roadways or intersections)
Show and label (size, material, inverts) all existing utilities (overhead and underground) within the right-of-way and the project site (label ownership) including but not limited to water, gas and electrical services, wells, storm sewers, sanitary sewers and subsurface sewerage disposal systems.
Show and label existing conveyance systems (swales, ditches, storm drains) including dimensions, elevations, sizes, slopes, and direction of flow
Show and label boundaries of all easements, both public and private, with type, owner, and width
Show and label all other existing features and improvements (e.g. light poles, mature trees of 8" (dbh) diameter or greater, vegetation, walls with top and bottom elevations, fences, pavement markings)

#### III. Resource Areas

N/A	Show and label limits of inland wetlands, tidal wetlands and any associated setbacks.
N/A	Show and label existing natural site features including tree canopy, outcroppings, permanent and intermittent watercourses, waterbodies, streams
N/A	Show and label limits of floodplain and floodway along with FIRM references (Community Number, Panel, Suffix, and Date) including any effective Letters of Map Revision/Amendment, zone designation and elevation.
N/A	Show and label any Conservation Easement Areas
N/A	Show and label Connecticut Coastal Jurisdiction Line (CJL)
N/A	Show and label existing steep slopes (25% and greater)



## **Checklist for Stormwater Management Report**

#### I. Project Report

_	A.	Applicant / Site Information
-		Applicant name, legal address, contact information (email & phone)
		Engineers name, legal address, contact information (email & phone)
-		Site address and legal description
		Current / proposed zoning and land use
		Site vicinity map (8.5" x 11")
_	В.	Project Description and Purpose
		Project description including proposed project elements and anticipated construction schedule
г	C.	Existing Conditions Description
		Site area, ground cover, vegetation, features (roads, buildings, utilities, etc.)
		Site topography, slopes, drainage patterns, conveyances systems (swales, storm drains, etc.), stormwater discharge locations
=		Receiving waterbody information including stormwater impairments and TMDL information (See the most recent State of Connecticut Integrated Water Quality Report)
-		Site soils information including soil types, hydrologic soil group, bedrock / outcroppings, groundwater elevation, significant geologic features
-		Provide NRCS Soils Mapping
N/A		Resource protection areas (wetlands, streams, lakes, etc.), buffers, floodplains, floodways
F	D.	Summary of Applicable General Design Criteria
		Methodology, design storm frequency
_		Hydrologic design criteria
_		Hydraulic design criteria
		Flood hazard areas
		Applying under "Lite" Stormwater Management: Skip to Section I (Refer to Flow Chart on page vii of the City of Stamford Stormwater Drainage Manual)
_	E.	Project Type in Accordance with Standard 1 Definitions
		Area of disturbance, receiving waterbody classification (High Quality, Tidal Wetlands, Direct Waterfront)
		Project type (development, redevelopment, linear development)
		Pollutant reduction standard per flowchart Section 2.4



ı	F.	Summary of LID Site Constraints
N/A		Description of sensitive areas for protection
		Mature tree inventory, which shall include 8-inch (dbh) diameter trees or greater
		Steep slopes
		Ledge and bedrock depth
		Seasonal high groundwater elevation
N/A		Pollutant hotspots
		Summary of infiltration rates
	G.	Summary of Proposed Stormwater Treatment Practices
	0.	Proposed LID controls (i.e. minimize impervious, minimize DCIA, minimize disturbance, increase time of concentrations, other LID controls and strategies)
		Location, size, types
		Design criteria and references
		Stormwater treatment practice, drainage area characteristics / details
	Н.	Summary of Compliance with Standards 1
		Required pollutant reduction criteria
N/A		Provided pollutant reduction (WQV) by stormwater treatment practice
		Summary of compliance with Standard 1
	I.	Summary of Compliance with Standards 2, 3, and 4
		Description of proposed stormwater management system
		Pre-development site hydrology with delineation of each watershed area and sub-basin
		Post-development site hydrology with delineation of each watershed area and sub-basin
		Comparison table of pre- and post-development hydrology, peak flow, volume, and percent difference
		Summary table of watershed areas and sub-basin areas, time of concentration and runoff coefficients  Summary table demonstrating the 2-year, 24-hour post development peak flow rate is less than or equal to the
N/A		lowest of either: - The pre-development 1-year, 24-hour storm peak flow rate
		- 50 percent of the pre-development 2-year, 24-hour storm peak flow rate
		Conveyance protection, emergency outlet sizing
N/A		Hydraulic grade line summary and tail water elevation used in analysis
		Construction erosion and sediment control description, Standard 3
		Operation and Maintenance, maintenance tasks and schedule on construction plans per Standard 4



	J.	Summary of Compliance with Applicable Drainage Facility Design Requirements
		Description of applicable design requirements and compliance
		Description of proposed drainage facilities and compliance
	K.	Stormwater Management Report
		Signed and stamped by professional engineer licensed in the State of Connecticut
		Drainage impact statement in accordance with Standard 5B.
	П.	Supporting Calculations (as appendix to Project Report)
		Applying under "Lite" Stormwater Management: Skip to Section N
	L.	Water Quality Volume / Water Quality Flow Calculations
N/A		Calculations demonstrating the total Water Quality Volume generated by the post-development site and the required retention/treatment volume per Standard 1 in cubic feet.
N/A		Calculations demonstrating the total Water Quality Volume retained/treated by each stormwater treatment practice and the total Water Quality Volume generated by the post-development contributing drainage area to each stormwater treatment practice
	M.	Stormwater Treatment Practice Sizing Calculations
N/A		Calculations demonstrating how each stormwater treatment practice has been designed and sized in accordance with the Structural Stormwater BMP Design references in Appendix B. Calculations will vary by stormwater treatment practice, but a minimum, applicants shall provide calculations in accordance with design criteria from the Connecticut Stormwater Quality Manual.
	N.	Hydrologic and Hydraulic Design Calculations
N/A		Stream channel protection, Standard 2A
		Conveyance protection, Standard 2B
		Peak flow control (1-year, 2-year, 5-year, 10-year, 25-year, and 50-year storms), Standard 2C
N/A		Inlet analysis
N/A		Gutter flow (Site by site basis as requested by Engineering Bureau)
N/A		Storm sewers and culverts (velocities, capacity, hydraulics)
N/A		Hydraulic grade line required when pipe is flowing at full capacity  o Provide existing and proposed summary table o Provide existing and proposed mapping, label structures
N/A		Detention facilities (outlet structure, stage/storage, freeboard)
		Emergency outlet sizing, safely pass the 100 year storm, Standard 2D
N/A		Outlet protection calculations, based on conveyance protection (i.e. ripran, energy dissipater)



	O.	<u>Hydrologic and Hydraulic Model, Existing and Proposed</u>
		Drainage routing diagram
		Summary
		Storage pond input
	Р.	Downstream analysis (Site by site basis as required by the Engineering Bureau)
N/A		Downstream analysis, Standard 2E
	Ш	. Supporting Mapping (as appendix to Project Report)
ī	Q.	Pre-Development Drainage Basin Area Mapping
		11" x 17" or 8.5" x 11" sheet size
		Topography, drainage patterns, drainage area boundaries and sub basins, flow paths, times of concentration
		Locations of existing stormwater discharges
N/A		Perennial and intermittent streams, wetlands, and floodplain / floodways
		NRCS soil types, locations, boring locations, infiltration testing locations
		Vegetation and groundcover  Existing roads, buildings, driveways, parking areas, walks, patios, pools and other impervious surfaces, decks and other structures
		Location, size, type of existing structural stormwater controls, facilities and conveyance systems
	R.	Post-Development Drainage Basin Area Mapping
		11" x 17" or 8.5" x 11" sheet size
		Topography, drainage patterns, drainage area boundaries and sub basins, flow paths, times of concentration
		Locations of proposed stormwater discharges
N/A		Perennial and intermittent streams, wetlands, and floodplain / floodways
		NRCS soil types, locations, boring locations, infiltration testing locations
		Vegetation, ground cover and proposed limits of clearing/disturbance  Proposed, roads, buildings, driveways, parking areas, walks, patios, pools and other impervious surfaces, decks and other structures
		Location, size, type of proposed structural stormwater controls, facilities and conveyance systems
	IV.	DCIA Tracking Worksheet (as appendix to Project Report)

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DCIA Tracking Worksheet (Use form found in Appendix E)



#### V. Proposed LID Review Map

	Applying under "Lite" Stormwater Management - Proposed LID Review Map NOT required.
Α.	General
	Site address
	Applicant name, legal address, contact information
	Engineers name, address, contact information
	North arrow, bar scale, horizontal and vertical datum
	Drawing scale shall be set at 1"=20' or 1"=40' when possible
	Signed and stamped by a Licensed Professional Engineer in the State of Connecticut
	11" x 17" or 24" x 36" sheet size unless otherwise approved
	Existing and proposed contours based on NAVD 88 at 2 foot contour interval or 1 foot contour interval when slope is flatter than 2 percent
	Locations of existing stormwater discharges  Roads, buildings, driveways, parking areas, walks, patios, pools and other impervious surfaces, and decks and
	other structures  Location, size, ownership of stormwater conveyance systems (swales, pipes, etc.)
В.	LID Constraints:
	Boring / test pit locations
	Infiltration testing locations and results
	Vegetation and proposed limits of clearing / disturbance
	NRCS soils mapping
	Steep slopes
	Surface waters / Perennial and intermittent streams
	Resource protection areas and buffers, wetlands, floodplain / floodways
	Existing vegetation and mature trees, which shall include 8-inch (dbh) diameter trees or greater
	Poor soils (HSG C & D)
	Shallow bedrock / ledge
	Seasonal high groundwater elevation
	Other site constraints (e.g. brownfield caps)
C.	Proposed Stormwater Treatment Measures:
	Location, size, type, limits, and WQV provided by each proposed stormwater treatment practices
	Drainage area to each proposed stormwater treatment practice (total area, impervious area, WQV)
D.	Site Summary Table:
	Total site area, disturbed area, pre- and post-development impervious areas
	Required pollutant reduction volume (retention or detention)
	Provided pollutant reduction volume (retention or detention)



# **Checklist for Stormwater Management Plan / Construction Plans**

Α.	<u>General</u>
	Site orientation, address and legal description
	Applicant name, legal address, contact information
	Engineers name, address, contact information
	North arrow, bar scale, horizontal and vertical datum
	Drawing scale shall be set at 1"=20' or 1"=40' when possible
	Stamped by a Licensed Professional Engineer in the State of Connecticut
	24" x 36" sheet size unless otherwise approved

B. Site Development Plans

В.	Site Development Plans
	City of Stamford Standard Notes
	As required by the Drainage Maintenance Agreement, provide a written narrative describing the nature of the proposed development activity and the program for operation and maintenance of drainage facilities and control measures throughout the life of the project.
	Existing and proposed contours based on NAVD 88 at 2 foot contour interval or 1 foot contour interval when slope is flatter than 2 percent
	All required spot elevations to clearly depict positive pitch
	Top and bottom elevation of all walls
	Roads, buildings, driveways, parking areas, walks, patios, pools and other impervious surfaces, and decks and other structures
	All utilities and easements
	Location, size, maintenance access, type of proposed structural stormwater controls and facilities with elevations and inverts
	Location, size, maintenance access, type of proposed non-structural stormwater controls and facilities with elevations and inverts
	Location, size, type of proposed stormwater infrastructure, inlets, manholes, infiltration and detentions systems, control structures with elevations and inverts
	Location, size, ownership of stormwater conveyance systems (swales, pipes, etc.) with elevations and inverts
	Identify roof leaders, curtain drains and foundation drains with elevations and inverts
	Proposed water quality treatment systems, size and model type
	Final stabilization measures which may include slope stabilization

C. <u>Erosion and Sedimentation Control Plan</u>

Phasing and schedule
Construction access and staging and stock pile areas
Operation and maintenance of erosion and sedimentation controls
Tree protection
Downstream protection such as location of silt fencing
Limit of disturbance
Construction fencing



Construction Details
Standard City of Stamford details
Infiltration system details
Control structure details
Water quality treatment details
Infiltration testing results

## **Checklist for Certificate of Occupancy**

Final Improvement Location Survey
Stormwater Management Certification Form
Final DCIA Tracking Worksheet
Standard City of Stamford Drainage Maintenance Agreement (Agreement Covenant)

#### Other Certifications at the discretion of the Engineering Bureau and/or EPB

Wall Certification
Landscape Certification
Landscape Maintenance Agreement
Waiver Covering Storm Sewer Connection
Waiver Covering Granite Block, Depressed Curb, and Driveway Aprons
Flood Certification

May 4, 2023

City of Stamford Planning & Zoning Boards c/o Ralph Blessing, Land Use Bureau Chief 888 Washington Boulevard Stamford, CT 06901

Re: 70 Forest Street and 251 Greyrock Place - Stamford, CT

Dear Mr. Blessing and Board Members:

This letter serves to authorize Redniss & Mead, with offices at 22 First Street in Stamford, CT, to act as our agent in connection with the preparing, filing, and processing of any and all applications required for Planning and Zoning approvals relating to the above referenced properties.

Thank you for your acknowledgement of said authority.

Sincerely,

70 FOREST STREET LLC