

Green Infrastructure Grant Program Workshop

DEP Green Infrastructure Grant Program:

Website: www.nyc.gov/dep/gigrantprogram

Email: gigrantprogram@dep.nyc.gov



This Presentation

First Half: Introduction

- Green Infrastructure as a Solution
- Green Infrastructure in NYC
- Green Infrastructure Grant Program
- Submitting an Application
- Q&A

Second Half: Grant Application

- Application Templates
- Q&A

Why Green Infrastructure?

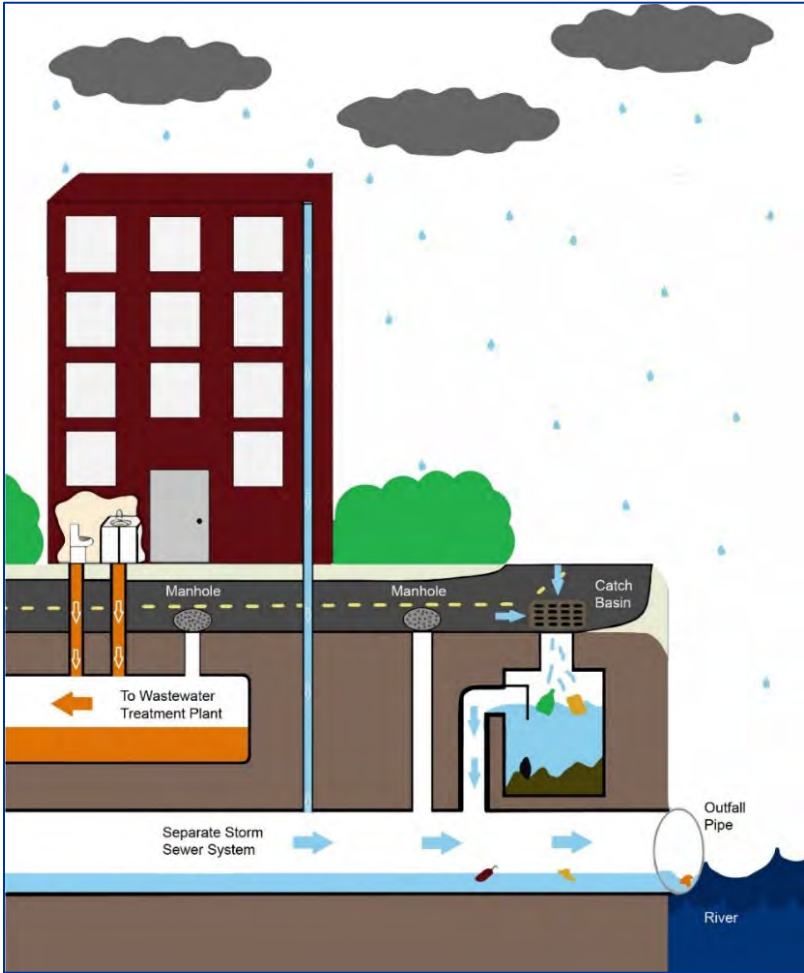


The Problem

Combined Sewer System



Separate Sewer System



Green Infrastructure Technologies





Green Infrastructure in NYC

Green Infrastructure in NYC



City Sidewalks



City Streets



Private Incentives



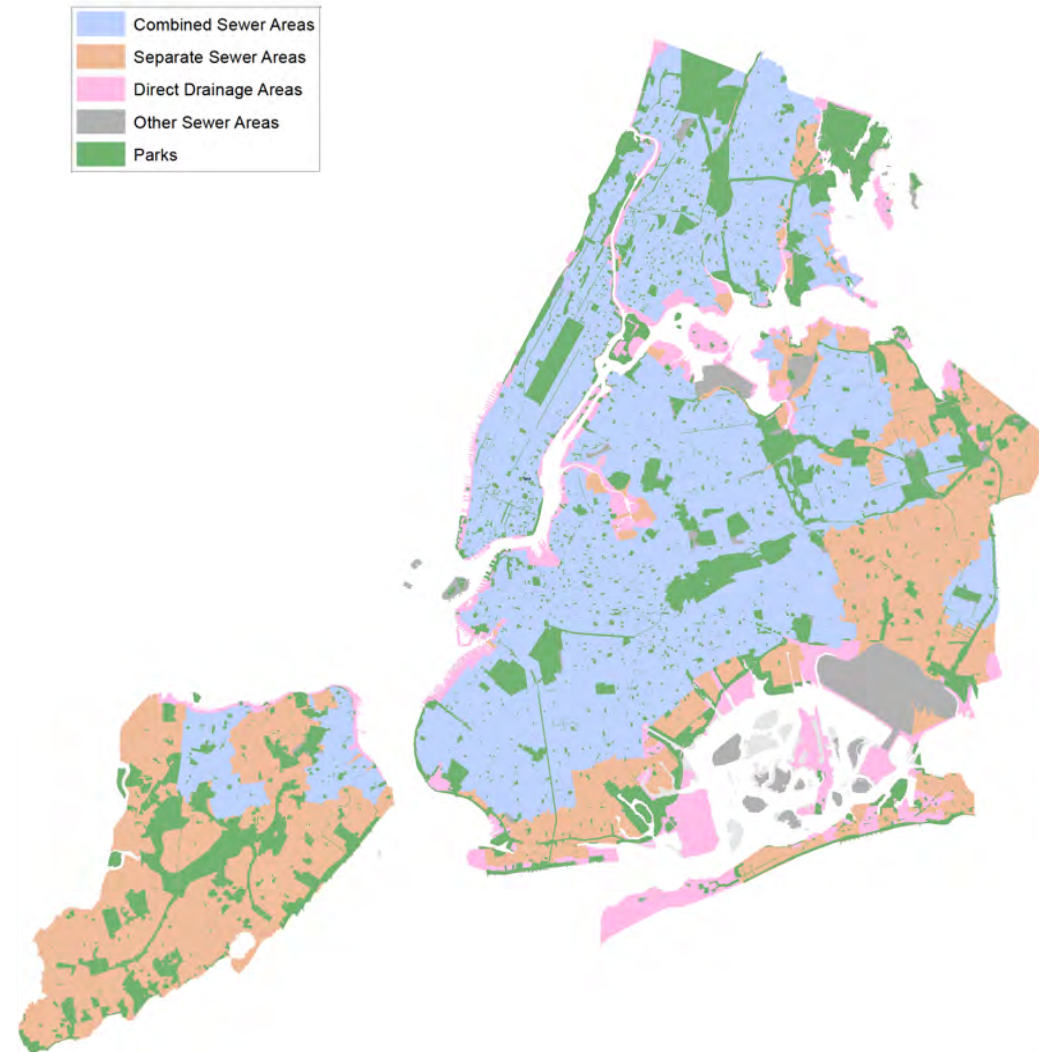
Public Property Retrofits

Green Infrastructure Grant Program



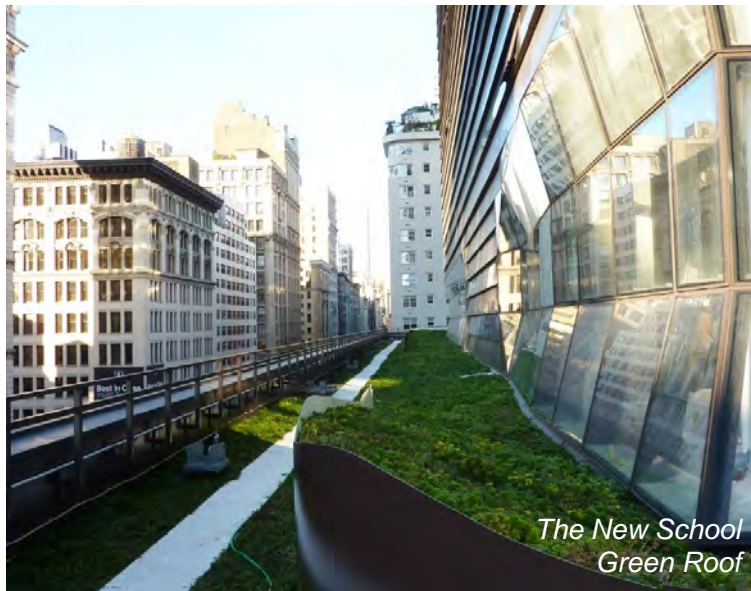
Grant Program Guidelines

- DEP will fund the **design** and **construction** costs for green roof retrofits on private property in New York City.
- Applicants must be able to execute the Program **Funding Agreement** and **Restrictive Covenant as-is**.
- Property owner must schedule a pre-application meeting in order to apply for the grant.



Green Roof Projects

- Green roofs are vegetated systems built on roof tops, designed to capture and manage stormwater runoff before it enters the storm sewer system. All green roofs should contain a root barrier, drainage layer, filter layer, growing media, and vegetation.
- Funding for green roof grants is determined based on green roof area and soil depth. A structural analysis is required with each application.



Maximum Reimbursement Rates (\$/SF) for Green Roof Projects

Soil Depth (in)	5,000-20,000 (SF)
1.5 - 1.99	\$10
2.0 - 2.99	\$15
3.0 - 3.99	\$25
4.0 +	\$30

* The reimbursement rate for SF of planted area over 20,000 SF is calculated using 50% of the rate shown above



Admiral's Row
Intensive Green Roof

An aerial photograph of a white, flat roof. The roof is divided into sections by dark lines, likely gutters or expansion joints. In the center, there are five large, white, rectangular mechanical units, each with a grid of six circular fans. A central rectangular vent is also visible. The roof is surrounded by green roof sections with low-growing plants. Long shadows are cast across the roof, indicating the sun is low in the sky.

399 Sands Street
Sedum Green Roof



Corporate
Commons Three
Green Roof/Rooftop Farm



Things to Note

Ineligible Costs, Projects and Restrictions

- Maintenance and operations
- Non-green roof project components (new roof, benches, lighting, etc.)
- Research not related to the proposed grant project construction
- Legal fees for contract execution
- Also...
 - Grant projects must be in compliance with all local, state and federal laws
 - Grant funding cannot be used to meet any regulatory requirements a property is subject to.
 - The City of New York will have unrestricted rights to use the designs selected for any future project at no additional costs



Encouraged...but not required

- Matching funds/in-kind contributions
- Letters of support from community stakeholders
- Education programming and/or public access
- Supports workforce development
- Community access/involvement

Submitting an Application



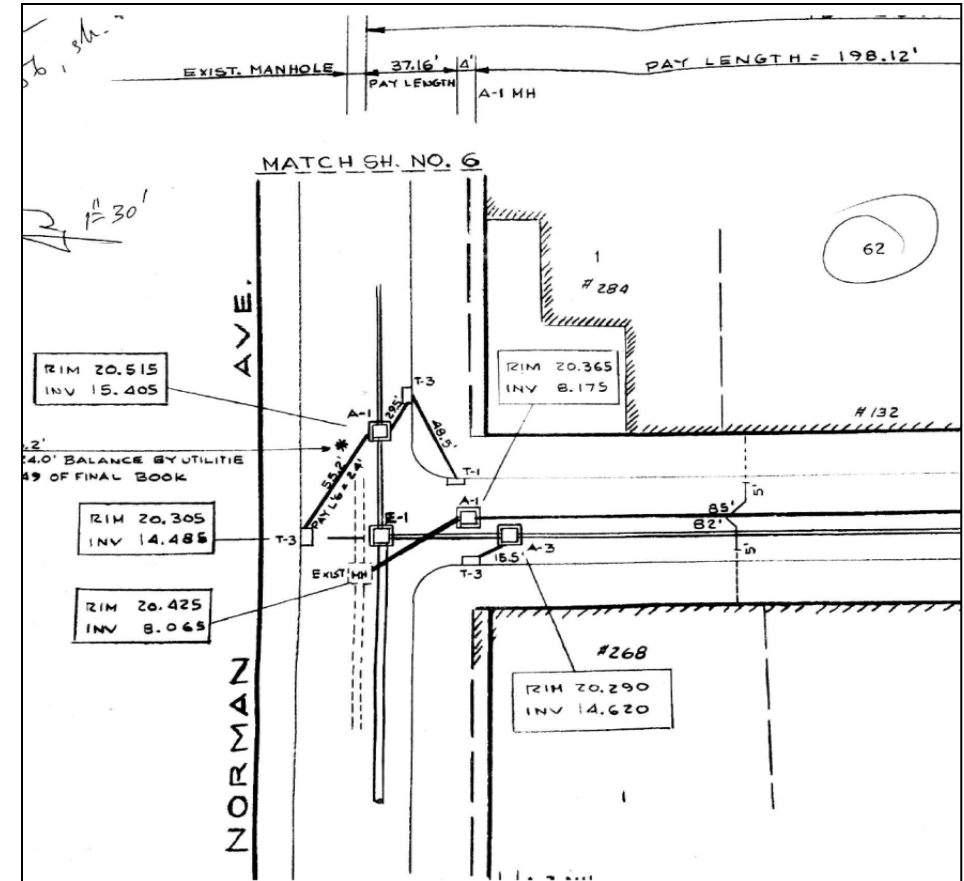
Step 1: Determining Eligibility

Property Eligibility

- Be privately-owned and within NYC
- Have an owner willing to sign the Funding Agreement and Declaration of Restrictive Covenant as-is
- Be completed within one year from the construction start date unless otherwise agreed upon
- Provide 20 years of maintenance
- Be a minimum cost of \$50,000.00

Site Connection

- Documentation indicating existing sewer connections or detention systems



Structural Analysis

- P.E. stamped structural analysis that verifies that the loading capacity of the roof is sufficient for the proposed design. This document must be submitted with the grant application.
- Level of effort depends upon the *knowns* of the building and roof



Step 2: Review Legal Documents and Process

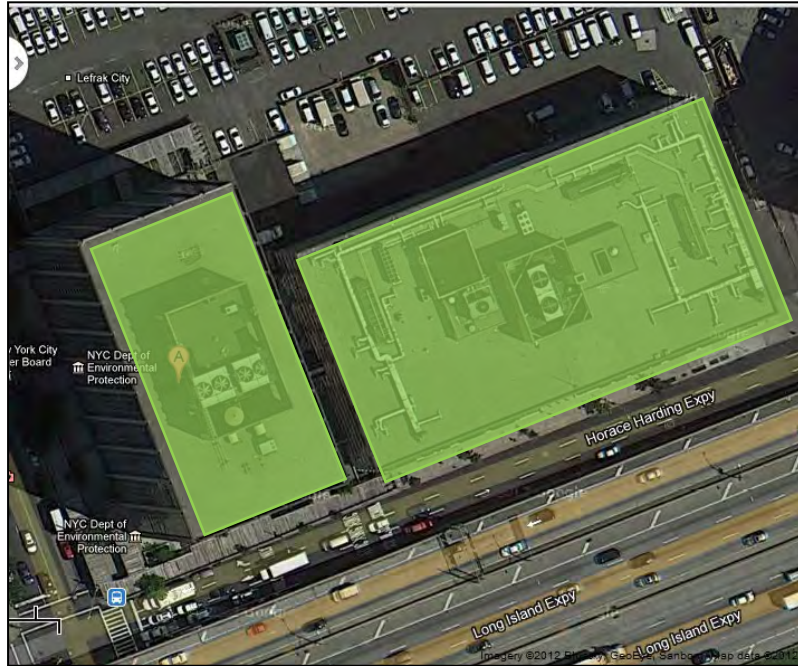
- The Green Infrastructure Grant Program is a **reimbursement** program.
- Documents critical to review prior to application:
 - 1) Funding Agreement
 - 2) Declaration of Restrictive Covenant
- Design review occurs simultaneously with the budget review.
- DEP will reimburse costs once designs/budget are finalized and a Funding Agreement is registered.

Step 3: Project Team and Design Concept

Once the team is assembled, the project scope can be decided, and concept plan can be advanced.

Team Member	Role
Private Property Owner	<ul style="list-style-type: none">• Owns the property• Signs all legal documents• Ultimately responsible for the design, construction, and maintenance of the project
Project Manager (can be owner or design professional)	<ul style="list-style-type: none">• Coordinates project with property owner and DEP
Professional Engineer Registered Architect Registered Landscape Architect	<ul style="list-style-type: none">• Prepares construction documents for the design submittals• Stamps final plans
Contractors	<ul style="list-style-type: none">• Constructs and installs the project
Maintenance Team	<ul style="list-style-type: none">• Maintains the project for its 20 year useful life• May be existing facilities staff

Avoid these Mistakes



Green Roof



Porous Pavement

Design Concept

- Clearly labeled
- Direction of flow
- Location of green roof area
- Important features of the property (i.e. property line, building line)
- Existing drains, mechanical equipment, etc.



Step 4: Begin the Application Process

- Property owner must complete the Pre-Application Form and send to gigrant@dep.nyc.gov.
- DEP will reach out and schedule a pre-application meeting to discuss property eligibility, the proposed project and the project timeline.
- DEP will provide application templates to property owner after the pre-application meeting.

NYC GREEN INFRASTRUCTURE GRANT PROGRAM

Form Submission: Please download and send completed form to gigrantprogram@dep.nyc.gov

APPLICANT CONTACT INFORMATION



Name:

Legal Name of Business/Organization (if applicable):

Address:

City: State: Zip Code:

Email: Confirm Email:

Phone Number:

Applicant Role:

Check if Applicant Contact Information is the same as Property Owner

PROPERTY OWNER INFORMATION

Name:

Legal Name of Business/Organization (if applicable):

Address:

City: State: Zip Code:

Email: Confirm Email:

Phone Number:

PROJECT INFORMATION

Project Name:

Project Address:

Project City: Project State: Project Zip Code:

Borough/Block/Lot:

The property is served by: Property Type:

Total Impervious Area of Roof (SF):

Tips for a Stronger Application

Issue	Example
Overall Design	Is the design sized correctly? Is the project overbuilt or underbuilt?
Feasibility	Is the proposed project feasible? Will it be accepted by DEP, DOB, or the Fire Department?
Replicability	Is the project overly complex? Can it be widely replicated?
Community Development	Does the project have community partners or is it publicly accessible? Is there a workforce development or educational component?

Questions?

- Visit www.nyc.gov/dep/gigrantprogram to
 - access the pre-application form
 - review eligibility criteria
 - review grantee requirements
 - download workshop presentation
 - review press releases with previous winner information
 - find out about upcoming workshops
- Email gigrantprogram@dep.nyc.gov with questions



Application Templates

Templates: Project Estimate

Green Roof Area (SF)	5,000	DEP Soft Costs Not to Exceed	DEP Hard Costs Not to Exceed					
Soil Depth (Inches)	1.5	\$10,000	\$50,000					

Item No.	Hard Costs	Description	Quantity	Unit	Unit Cost	Total Unit Cost	DEP	Matching Funds
	[Enter Material name in each line]							
	Subtotal					\$0	\$0	\$0

Soft Costs	Description	Unit	Unit Cost	Total Unit Cost	DEP	Matching Funds
Design Fee						
Site Investigations						
Permitting						
General Conditions						
Subtotal				\$0	\$0	\$0
Project Subtotal				\$0	\$0	\$0
Allowance*	15%					
Total Project Costs				\$0	\$0	\$0

Enter these fields in the Project Proposal Summary of Online Application		*Allowance funds will be used to address the following construction items, depending upon the specific needs of the project and any unforeseen circumstances.
Enter this number in Total Project Cost	\$0	
Enter this number into Hard Costs	\$0	
Enter this number into Soft Costs	\$0	1 Utility coordination
Enter this number into Total Requested Funds from DEP	\$0	2 Excavation and/or disposal needs
Enter this number into Matching Funds	\$0	3 Additional material and/or equipment needs
		4 Addressing unforeseen hazardous materials

Templates: Stormwater Calculations

Step 1 STORMWATER VOLUME MANAGED: Estimate the total volume managed for the proposed installation. Calculate the volume storage

Green Roof Area

Total Proposed Green Roof Area (SF)	5,000	<i>Enter area of green roof in square feet</i>
-------------------------------------	-------	------------------------------------------------

Growing Media

Depth of Growing Media (Inches)	1.5	<i>Enter total depth of growing media in inches</i>
Porosity of Growing Media (%)	50%	<i>Enter the void space as a percentage of the growing media volume</i>
Volume of Growing Media (CF)	437.5	<i>Enter total volume of growing media in cubic feet</i>
Storage Volume of Growing Media(CF)	218.75	<i>Available void space of planting soil</i>

Storage volume of additional layers (Enter '0' if not applicable or add additional layers if necessary)

Drainage Layer Storage Volume (max CF)		<i>Void space available in drainage layer</i>
Granular Layer Storage Volume (max CF)		<i>Void space available in granular layer</i>
Retention Layer Storage Volume (max CF)		<i>Void space / storage capacity available in retention layer</i>
Storage Volume of other detention devices (max CF)		<i>Void space / storage capacity of other devices</i>

Tributary Area	3,500	<i>If you believe that Tributary Area for your project exceeds Green Roof Area s</i>
Estimated Volume Managed (CF)	218.75	<i>Note that Tributary Area and Volume Managed do not effect reimbursement</i>
Estimated Volume Managed (Gal)*	1,636	

Templates: Maintenance Plan

Green Infrastructure Grant Program Maintenance Plan Template

Grantees are required to maintain their projects for twenty (20) years. Quarterly and Yearly maintenance summaries will be required beginning from the construction end date for three years. Answer the questions below in detail. When complete, upload the template into the Project Details section of the application.

1) Maintenance Tasks and Frequencies

Describe the maintenance activities required to maintain the green infrastructure installation. What specific tasks will be undertaken (e.g. irrigation, hand or chemical weeding, inspection for clogging, removing sediment, standard cleaning and upkeep). How often will these tasks be performed?

2) Maintenance Personnel

Describe the personnel who will be responsible for maintaining the project. How many staff members/hours will be assigned to maintenance? Describe the training process including manuals or protocols that will be used to prepare the responsible staff.

3) Equipment and Materials

Describe the equipment and materials that are required for maintaining the project. How often will the equipment need to be repaired or replaced? Who is responsible for maintaining the equipment and materials?

4) Warranties and Guarantees

Do any of the potential project contractors include warranties or guarantees on their work, materials, or equipment? If so, describe in detail and include terms.

5) Maintenance Costs

What are the anticipated costs for labor and material for the twenty (20) year life of the project? How will maintenance tasks and labor be funded?

Templates: Statement of Agreement

STATEMENT OF AGREEMENT – **SAMPLE**

Instructions: Applicants must complete a Statement of Agreement, signed by the authorized signatory for the property, acknowledging that they have reviewed with their legal counsel both the Funding Agreement and Restrictive Covenant, and if awarded will execute both documents as provided and will comply with all of the eligibility requirements described in the Grant Application.

(On company letterhead)

Date:

New York City Department of Environmental Protection
59-17 Junction Blvd. 11th Floor
Flushing, NY 11373
Attn: Green Infrastructure Grant Program

I **[enter name of authorized signatory for the property]**, have read and thoroughly reviewed both the Funding Agreement and the Declaration of Restrictive Covenant with my legal counsel and agree that, if awarded the grant, I will execute the Funding Agreement and record the Declaration of Restrictive Covenant as provided at the NYC Department of Finance in a timely manner.

Sincerely,

[Authorized Signatory]
[Enter Project Title]
[Enter Address and Borough Block and Lot number]

Questions?

- Visit www.nyc.gov/dep/gigrantprogram to
 - access the pre-application form
 - review eligibility criteria
 - review grantee requirements
 - download workshop presentation
 - review press releases with previous winner information
 - find out about upcoming workshops
- Email gigrantprogram@dep.nyc.gov with questions