LEED Compliance Report for 1012-1022 Avenue C

INTRODUCTION

This document outlines the LEED Compliance strategy for the proposed new construction of a redevelopment project at 1012-1022 Avenue C in Bayonne, NJ.

The new 40-unit project is located on the properties known as Lots 2 and 3 in Block 64 as shown on the City of Bayonne tax records and with addresses of 1012-1022 Avenue C and 53-57 West 48th Street. The subject property is located within a short three-block walking distance from the NJ Transit Hudson-Bergen Light Rail Transit System 45th Street Station and one block from a central retail shopping district and office district. The redevelopment of this project is consistent with a Redevelopment Plan for the site adopted by the Bayonne Municipal Council on August 19, 2025. The project will contain 24 one-bedroom units, 16 two-bedroom units, a garage containing surface and semi-automated parking for 40 automobiles, 965 sq. ft. of rooftop recreation area, a 2,985 sq. ft. green roof, bicycle parking and other amenities.

The design and construction of the facility will apply sustainable building strategies of the LEEDv4 Building Design & Construction (BD+C) Rating System. The project team has committed to achieving an equivalent LEED Silver level.

The LEEDv4 Rating System was selected as an appropriate method for expressing sustainable design, construction and operational commitment for this building type. This document captures key planning, design, construction, and other features to demonstrate compliance with the Redevelopment Plan requirement at achieve a LEED Silver rating or greater without requiring LEED certification.

Green Building Objectives

Best management practices in green building design and construction include but are not limited to:

- Indoor air quality protection
- Occupant comfort and control
- Reduced energy and water consumption
- Natural daylighting and connection to the outdoors
- Limited site disturbance and integration with the surrounding environment
- Natural landscaping and stormwater management strategies
- Climate resilient and durable building
- Ease of operations
- Desired destination and sense of place in the community

LEED Scorecard

While the LEED Rating System is structured so that achievement of all credits is not possible, the project team can achieve all Prerequisites and a minimum of 50 LEED Credits from the following categories:

1. Location & Linkages
2. Sustainable Sites
3. Water Efficiency
4. Energy & Atmosphere
5. Materials & Resources
6. Indoor Environmental Quality
7. Innovation in Design
8. Regional Priority

A LEED Scorecard (next page) was assembled capturing Credit opportunities for the project. The initial count of 54 points was within the range of 50-59 for LEED Silver. The attached LEED Scorecard and Summary contains a breakdown of Targeted and Not Pursued LEED Credits.

LEED Scorecard

LEED v4 for BD+C: New Construction and Major Renovation
Project Checklist

Project Name: 1012-1022 Avenue C Residential Redevelopment
Date: August 6, 2026

Y	?	N			
0		1	Credit	Integrative Process	1

12	?	4	Location and Transportation		16
1		0	Credit	Sensitive Land Protection	1
0		2	Credit	High Priority Site	2
5		0	Credit	Surrounding Density and Diverse Uses	5
5		0	Credit	Access to Quality Transit	5
0		1	Credit	Bicycle Facilities	1
0		1	Credit	Reduced Parking Footprint	1
1		0	Credit	Green Vehicles	1

8	?	2	Sustainable Sites		10
Y			Prereq	Construction Activity Pollution Protection	Required
1		0	Credit	Site Assessment	1
0		2	Credit	Site Development – Protect or Restore Habitat	2
1		0	Credit	Open Space	1
3		0	Credit	Rainwater Management	3
2		0	Credit	Heat Island Reduction	2
1		0	Credit	Light Pollution Reduction	1

6	?	5	Water Efficiency		11
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
2		0	Credit	Outdoor Water Use Reduction	2
3		3	Credit	Indoor Water Use Reduction	6
0		2	Credit	Cooling Tower Water Use	2
1		0	Credit	Water Metering	1

5	?	28	Energy and Atmosphere		33
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
0		6	Credit	Enhanced Commissioning	6
3		15	Credit	Optimize Energy Performance	18
1		0	Credit	Advanced Energy Metering	1
0		2	Credit	Demand Response	2
0		3	Credit	Renewable Energy Production	3
1		0	Credit	Enhanced Refrigerant Management	1
0		2	Credit	Green Power and Carbon Offsets	2

5	?	8	Materials and Resources		13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
0		5	Credit	Building Life-Cycle Impact Reduction	5
1		1	Credit	Building Product Disclosure and Optimization – Environmental Product Declarations	2
1		1	Credit	Building Product Disclosure and Optimization – Sourcing of Raw Materials	2
1		1	Credit	Building Product Disclosure and Optimization – Material Ingredients	2
2		0	Credit	Construction and Demolition Waste Management	2

13	?	3	Indoor Environmental Quality		16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
1		1	Credit	Enhanced Indoor Air Quality Strategies	2
3		0	Credit	Low-Emitting Materials	3
1		0	Credit	Construction Indoor Air Quality Management Plan	1
2		0	Credit	Indoor Air Quality Assessment	2
1		0	Credit	Thermal Comfort	1
1		1	Credit	Interior Lighting	2
2		1	Credit	Daylight	3
1		0	Credit	Quality Views	1
1		0	Credit	Acoustic Performance	1

2	?	0	Innovation		5
1			Credit	PBT Source Reduction – Lead, Cadmium and Copper	1
1			Credit	Purchased Lamps	1

4	?	0	Regional Priority		4
1			Credit	LT – Surrounding Density and Diverse Uses	1
1			Credit	LT – Access to Quality Transit	1
1			Credit	SS – Rainwater Management	1
1			Credit	WE – Indoor Water Use Reduction	1

55	?	50	TOTALS	Possible Points	109

Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110 Points

LEED Scorecard Summary

An analysis of each achieved LEED Credit is provided to demonstrate the LEED strategy for the project.

LOCATIONS AND TRANSPORTATION

1		0	SENSITIVE LAND PROTECTION

The site conforms with the condition of 'Previously Developed' land.

5		0	SURROUNDING DENSITY AND DIVERSE USES

The site is located within ¼ mile of uses that exceed 12 residential uses per acre and 0.8 non-residential FAR. The project is also located within ½ mile of eight or more diverse uses as outlined in Appendix 1 of LEED v4 BD+C.

5		0	ACCESS TO QUALITY TRANSIT

The site is located within ¼ mile of existing transit services and facilities that exceed 360 weekday trips and 60 weekday/12 weekend trips.

1		0	GREEN VEHICLES

The project provides EVSE in greater than 2% of parking spaces and all spaces are available for use by green vehicles.

SUSTAINABLE SITES

Y			PRE-REQUISITE – CONSTRUCTION ACTIVITY POLLUTION PREVENTION

A Soil Erosion and Sediment Control Plan Certification will be filed for and issued by the Hudson-Essex-Passaic Soil Conservation District prior to the commencement of construction.

1		0	SITE ASSESSMENT

A site assessment of review of site topography, geology, hydrology, climate, vegetation, soils, and adjacent resources and properties and the project's impact was performed.

1		0	OPEN SPACE

The project provides open space greater than 30% of the lot area and more than 25% of that open space is vegetated green roof.

3		0	RAINWATER MANAGEMENT

This urban project with an FAR exceeding 1.5 will reduce rainwater runoff to significantly less than the pre-development runoff utilizing green roof infrastructure as part of its stormwater management operation.

2		0	HEAT ISLAND REDUCTION

Highly reflective roofing material will be utilized on the project. A vegetated roof will also be utilized on the project.

1		0	LIGHT POLLUTION REDUCTION

Site lighting design adheres to night sky protection measures including by meeting up-light and light trespass requirements.

WATER EFFICIENCY

Y			PRE-REQUISITE – OUTDOOR WATER USE REDUCTION

The project does not require a permanent irrigation system.

Y			PRE-REQUISITE – INDOOR WATER USE REDUCTION

The project meets the minimum water consumption limits for fixtures, fittings and appliances.

Y			PRE-REQUISITE - BUILDING LEVEL WATER METERING

Water usage for the building will be measured by a permanent water meter.

2		0	OUTDOOR WATER USE REDUCTION

The landscaping for the project does not require a permanent irrigation system.

3		3	INDOOR WATER USE REDUCTION

The project will further reduce water usage by 35% below the Pre-requisite Indoor Water Usage requirements.

1		0	PERMANENT WATER METERING

Permanent water metering is provided for all water usage on the site.

ENERGY & ATMOSPHERE

Y			PRE-REQUISITE – FUNDAMENTAL COMMISSIONING AND VERIFICATION

Mechanical, electrical, and plumbing systems and assemblies will be commissioned in accordance with ASHRAE Guideline 0-2005 and ASHRAE Guideline 1.1-2007.

Y			PRE-REQUISITE – MINIMUM ENERGY PERFORMANCE

The project complies with the requirement for a 5% reduction below ANSI/ASHRAE/IESNA Standard 90.1-2010.

Y			PRE-REQUISITE – BUILDING-LEVEL ENERGY METERING

The project includes building-level energy meters to measure electric and natural gas consumption.

Y			PRE-REQUISITE – FUNDAMENTAL REFRIGERANT MANAGEMENT

No chlorofluorocarbons (CFC) based refrigerants will be used in the new heating, ventilation and air-conditioning equipment.

3		15	OPTIMIZE ENERGY PERFORMANCE

The preliminary energy performance analyses for the buildings indicate that the project would achieve at least a 10% improvement in whole-building energy performance.

1		0	ADVANCED ENERGY METERING

Individual dwelling unit energy metering for electric and natural gas consumption will be installed. Data from these meters will be collected in a building automation billing system, operated by building management, that can store data for 36 months, and can be remotely accessible.

1		0	ENHANCED REFRIGERANT MANAGEMENT

The project shall utilize only refrigerants with zero Ozone Depleting Potential, and Global Warming Potential of less than 50.

MATERIALS & RESOURCES

Y			PRE-REQUISITE – STORAGE AND COLLECTION OF RECYCLABLES

Accessible, dedicated, and sufficiently sized areas for collection and storage of recyclable materials is provided in each of the proposed building.

Y			PRE-REQUISITE – CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT PLAN

A construction waste management plan establishing goals for the project for diversion of 5 structural and non-structural materials will be prepared. A final report detailing waste streams and diversion rates will be prepared.

1		1	BUILDING PRODUCT DISCLOSURE & OPTIMIZATION: ENVIRONMENTAL PRODUCT DECLARATIONS

The project aims to use at least 20 different permanently installed products from at least 5 different manufacturers, for which an Environmental Product Declaration is available for the product.

1		1	BUILDING PRODUCT DISCLOSURE & OPTIMIZATION: SOURCING OF RAW MATERIALS

Products with raw material source and extraction reports are relatively rare for most materials. As an alternate path, the development team will evaluate feasibility of specifying recycled, regionally-sourced or FSC-certified wood products that account for at least 25% by cost of total value of permanently installed products. Structure and enclosure materials cannot constitute more than 30% of the value of compliant building products.

1		1	BUILDING PRODUCT DISCLOSURE & OPTIMIZATION: MATERIAL INGREDIENTS

Products with compliant chemical inventories, or documented material ingredient optimization reports, or from suppliers with 3rd party documented and robust health, safety and risk management programs, will be targeted.

2		0	CONSTRUCTION & DEMOLITION WASTE MANAGEMENT

The developer will enter into an agreement with a recycler for all construction waste removal and recycling. Diversion of 75% of construction material in the groups of concrete/masonry, corrugated/paper, wood, metal, plastics, and beneficial reuse cover material are expected.

INDOOR ENVIRONMENTAL QUALITY

Y			PRE-REQUISITE – MINIMUM INDOOR AIR QUALITY PERFORMANCE

Ventilation design shall meet the minimum requirements of ASHRAE 62.1-2010 Section 4-7.

Y			PRE-REQUISITE – ENVIRONMENTAL TOBACCO SMOKE CONTROL

Smoking shall be prohibited inside all building common areas. Smoking shall be prohibited outside the building, except in designate smoking areas located at least 25 feet away from all entries, outdoor air intakes, and operable windows. No-Smoking signage shall be posted within 10 feet of all building entrances.

1		1	ENHANCED INDOOR AIR QUALITY STRATEGIES

The project includes permanent entryway systems at all main entrances to remove and prevent contaminants, dirt and particulates from entering the building. The air handling equipment shall be fitted with MERV 13 filters.

3		0	LOW EMITTING MATERIALS

Low-VOC materials shall be selected for the following 5 categories of interior applied products:

1. Paints and coatings
2. Adhesives and sealants
3. Flooring
4. Composite wood
5. Insulation (ceiling, walls, thermal and acoustic)

1		0	CONSTRUCTION INDOOR AIR QUALITY (IAQ) MANAGEMENT PLAN

An IAQ Management Plan shall be developed by the development team and implemented by the General Contractor.

2		0	INDOOR AIR QUALITY ASSESSMENT

The building will be tested for air quality contaminants prior to occupancy.

1		0	THERMAL COMFORT

The project is specified to meet the occupant thermal comfort conditions of ASHRAE 55-2010 (Thermal Comfort Conditions for Human Occupancy).

1		1	INTERIOR LIGHTING

The project will provide 4 of 8 light quality strategies, as follow:

1. Light sources with CRI (color rendition index) of 80 or higher
2. Light sources with rated life of 24,000 hours
3. Glare mitigation
4. Utilizing surface finishes with high LRV (light reflectance value)

2		1	DAYLIGHT

The project will achieve a required illuminance of between 300 lux and 3000 lux over 75% of occupied floor area. Glare-control devices will be provided in occupied spaces.

1		0	QUALITY VIEWS

The project provides a direct line of sight to the outdoors via vision glazing will be achieved for 75% of all regularly occupied floor areas.

1		0	ACOUSTIC PERFORMANCE

For all occupied spaces, requisite HVAC noise thresholds, and residential occupancy STC (sound transmission class) ratings of 55 or better will be achieved.

INNOVATON IN DESIGN

Innovation in Design (ID) credits provide opportunities to achieve exceptional performance above established LEED requirements, apply Credits from other LEED Rating Systems, and showcase progressive performance strategies not addressed by the LEED Rating System. Options to be discussed in future design meetings:

1			PBT SOURCE REDUCTION – LEAD, CADMIUM AND COPPER

The following strategies will be implemented:
Lead: 1) solder and flux for joining copper piping will not be used since plastic piping systems will be used in lieu of copper pipe; 2) lead-free roofing and flashing will be utilized; and 3) electrical wire containing less than 300 ppm of lead will be utilized.
Cadmium: interior and exterior paints containing intentionally added cadmium will not be utilized.
Copper: copper pipe will not be utilized for water intended for human consumption.

1			PURCHASED LAMPS

All lamps used on this project are LED lamps that do not contain mercury, thereby reducing a toxic material source.

REGIONAL PRIORITY

Regional Priority (RP) credits allow teams in unique geographic regions to be recognized for outstanding effort in reducing the impacts of their project in relation to limitations, challenges and environmental priorities specific to that region. Once the base credit is achieved, the corresponding RP credits for that region are automatically awarded. Feasible options were identified:

1			LT – SURROUNDING DENSITY AND DIVERSE USES – 5 POINTS
1			LT – ACCESS TO QUALITY TRANSIT – 5 POINTS
1			SS – RAINWATER MANAGEMENT – 3 POINTS
1			WE – INDOOR WATER USE REDUCTION – 3 POINTS