



FINAL REVIEW

Scenic Hudson's Long Dock Park Pilot Certification Report July 16, 2013

### On Behalf of Our Partners

Congratulations on your certification!

We are delighted you have participated in the Sustainable Sites Initiative™ (SITES™) Pilot Program. The pilot program is establishing the process of certification for sustainable land development practices and your involvement in testing the rating system has been valuable, providing essential feedback that will improve the *Guidelines and Performance Benchmarks 2009* and the system of certification. Thank you for your participation and support of the SITES program!

### **How to Interpret This Report**

This is the final report from the Sustainable Sites Initiative regarding the review of your pilot project. Similar to the Preliminary Review, this report represents the nine sections outlined in the *Guidelines and Performance Benchmarks 2009* including: Site Selection, Pre-Design Assessment and Planning, Site Design—Water, Site Design—Soil and Vegetation, Site Design—Materials Selection, Site Design—Human Health and Well-Being, Construction, Operations and Maintenance, and Monitoring and Innovation.

### **SITES Prerequisites**

Prerequisites must be achieved. No certification may be awarded until prerequisites have been met. An assessment represents the status of each prerequisite as approved or denied, and a narrative describes this decision.

#### **SITES Credits**

Credits identify benchmarks and supporting documentation that projects must meet to achieve the intent of each credit. An assessment represents the status of each credit as approved, denied, or not attempted, and a narrative describes this decision. The point value available per credit is also listed.

#### **Approved**

The project has demonstrated the credit intent has been met through adequate documentation. The point value is reflected along with a narrative describing the basis for the decision.

#### **Denied**

The project has not demonstrated the credit intent has been met.

#### **Not Attempted**

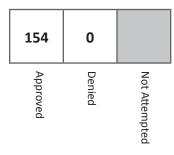
The project has not submitted credit documentation to meet this credit.

### Next Steps

Please look for the forthcoming certification package that includes the following information regarding next steps:

- SITES award letter for project certification
- SITES certificate
- Quick guide to using the SITES mark
- Press release template
- SITES ceremony attendance request form
- Tips for a successful public event

### **GENERAL OVERVIEW**



#### **TOTAL POINT VALUE**

Congratulations on earning SITES certification at the three-star level!

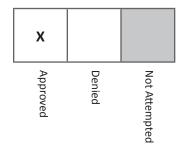
After Final Review, Scenic Hudson's Long Dock Park has achieved all prerequisites and has 154 approved points. For the pilot program, SITES has made innovations (from Credit 9.2) count for bonus points outside the 250-point scale in order to assist pilots and provide incentives for innovation without penalizing projects that do not apply for these credits.

In general, Scenic Hudson's Long Dock Park has demonstrated an outstanding achievement by successfully integrating SITES principles and practices into coastal infill city park. The project was artfully designed and planned, paying special attention to the challenges associated with being located on a tidal coastline and having the existence of a brownfield site with environmental degradation. The project sets a precedent for its regional locale, as well as a great example for future SITES projects in similar contexts.

SITES would like to congratulate Scenic Hudson's Long Dock Park on being among the few certified projects, so far, in the Pilot Program!

### SITE SELECTION

#### 21 possible points





Limit development of soils designated as prime

agricultural conservation or rural conservation zone.

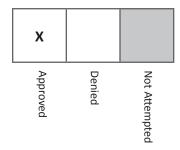
A National Resources Conservation Service (NRCS) Custom Soil Resource

Report and Soil Map demonstrate that the project is not located within prime farmland, unique farmland, or farmland of statewide importance.

The source and designation of the soils imported onto the site are documented by a letter from WeCare Organics. Soils imported onto the site were not mined from prime farmland.

Therefore, prerequisite achievement is approved.

PREREQUISITE 1.1:

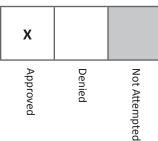


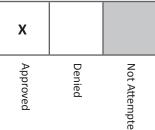
#### PREREQUISITE 1.2: Protect floodplain functions

The SITES submittal template has been provided stating the project is a brownfield and is located within the 100-year floodplain.

The majority of the site is below the 100-year floodplain according to FEMA maps. Site plans showing pre-constructed and constructed floodplain areas have been provided, and the site plan with constructed floodplain areas illustrates areas of below-surface floodplain storage. A narrative states that while the constructed landscape reduces the floodplain area on the surface from 13.5 acres to 12.7 acres, wetlands, water quality basins, and porous asphalt on site increase storage capacity beneath the surface. Documentation for Credit 3.5 verifies that the adequate restoration and stormwater management mitigates the effect of floodplain development.

Therefore, prerequisite achievement is approved.



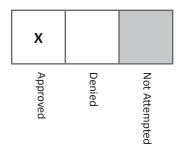


#### PREREQUISITE 1.3: **Preserve wetlands**

The SITES submittal template has been provided stating the project does contain wetlands. A jurisdictional determination by the U.S. Army Corps of Engineers identified 0.58 acres of federal wetlands. A site plan contained on page 42 of the ACOE final report illustrates the locations of wetlands.

A wetland assessment conducted by a qualified professional has been provided in the Natural Resources Site Assessment document, stating that for all wetlands except Wetland D, wetland quality is severely compromised for all measured wetland functions, including hydrologic functioning, vegetation and habitat. An ACOE permit describing required wetland mitigation and a maintenance monitoring plan have also been submitted. A site plan showing the locations of all wetlands and the VSPZ for wetland D has been provided.

Therefore, prerequisite achievement is approved.



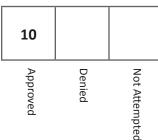
#### PREREQUISITE 1.4: Preserve threatened or endangered species and their habitats

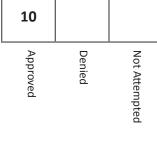
The SITES submittal template has been provided stating that the project avoids development on sites identified as habitat for any plant or animal species classified as either threatened or endangered.

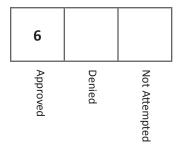
A Natural Resources Site Assessment has been provided which includes lists of flora and fauna found on site, identifies local and regional species under federal and state protection, and describes necessary habitat types for these species.

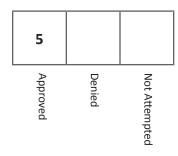
The site map provided shows the boundaries of Wetland D in relation to the boundary of the VSPZ.

Therefore, prerequisite achievement is approved.









#### Select brownfields or greyfields for redevelopment CREDIT 1.5: (5-10 points)

The SITES submittal template has been provided stating the project is a brownfield redevelopment.

A site plan shows the extent of the context of the previously contaminated site and a narrative outlines that the site was a salvage/scrap yard and major oil storage facility resulting in soil and groundwater contamination. The site has been designated a brownfield by the NYS DEC.

Therefore, ten points are approved.

#### **CREDIT 1.6:** Select sites within existing communities (6 points)

The SITES submittal template has been provided stating the project is located within a 0.75 mile walking distance of at least seven basic services.

A site vicinity map shows the location and distance of services relative to one of the project entrances and a table outlines walking distances to each basic service.

Therefore, six points are approved.

#### **CREDIT 1.7:** Select sites that encourage non-motorized transportation and use of public transit (5 points)

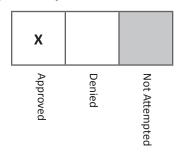
The SITES submittal template has been provided stating the project is located on a site with existing transit service and with one project entrance within walking distance of commuter rail and ferry service.

A site plan shows the existing transit stops for commuter rail and ferry service within 0.5 miles of the entrance of the project. Train and ferry schedules provided confirm that the weekday minimum daily trips are 24 or more and 6 or more on weekends.

Therefore, five points are approved.

### PRE-DESIGN ASSESSMENT AND PLANNING

#### 4 possible points

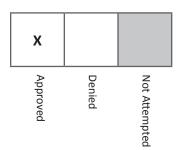


### PREREQUISITE 2.1: Conduct a pre-design site assessment and explore opportunities for site sustainability

The SITES submittal template has been provided stating the integrated design team worked collaboratively to conduct a pre-design site assessment.

A copy of the completed Site Assessment Worksheet is provided which narrates mapping and assessment of existing and reference site conditions relative to climate and energy, hydrology, soils, vegetation, materials, and human use of the site. A brief narrative and relevant site plans and vicinity maps are provided in addition to signatures from each design team member verifying they were participants in the integrated design process.

Therefore, prerequisite achievement is approved.

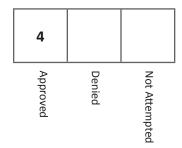


#### PREREQUISITE 2.2: Use an integrated site development process

The SITES submittal template has been provided stating the integrated design team followed a collaborative and iterative design process.

A list of design team members and their respective areas of expertise, a communication protocol, a sustainability principles and goals document, a program plan, a stakeholder engagement plan, a construction oversight plan, and a site maintenance plan have been provided.

Therefore, prerequisite achievement is approved.



# CREDIT 2.3: Engage users and other stakeholders in site design (4 points)

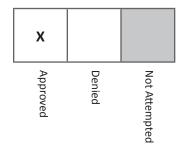
The SITES submittal template has been provided stating users and stakeholders were active participants in the site design process.

A list of stakeholders and their input throughout the design process is outlined during site assessment, schematic design, design development and final design. Advisory committee memos, a narrative describing design development input influencing plan iterations, an early master plan report detailing a community workshop and design charrette, and public meeting newsletters have also been provided.

Therefore, four points are approved.

### SITE DESIGN — WATER

### 44 possible points



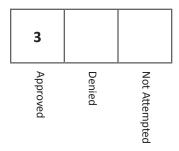


Reduce potable water use for landscape

A narrative within the submittal template indicates that the project uses only native trees, shrubs, plugs, and meadow species. In addition, the narrative explains how City water lines were trenched throughout the site to protected quick couplers for landscape contractors to attach hoses in order to water during the establishment period. Contractors also set up temporary sprinklers for meadow establishment and trees and shrubs were hand watered during dry periods. A planting plan, irrigation plan, and calculations from the EPA WaterSense WaterBudget Tool have been provided demonstrating the project does not require landscape irrigation after plant establishment.

Therefore, prerequisite achievement is approved.

PREREQUISITE 3.1:

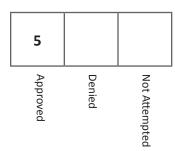


## CREDIT 3.2: Reduce potable water use for landscape irrigation by 50 percent or more from established baseline (2–5 points)

The SITES submittal template has been provided stating no potable water is utilized for landscape irrigation beyond the establishment period and that the project has achieved at least a 75% reduction in potable water use.

The SITES submittal template provided states water use for landscape irrigation has been minimized by 83% from the baseline 1,247,266 gallons per month, through a designed potable water use of 305,483 gallons per month. As stated in documentation provided in Prerequisite 3.1, city water lines were trenched throughout the site to protected quick couplers for landscape contractors to attach hoses in order to water plants during the establishment period, however, no permanent irrigation lines were installed. Temporary sprinklers were installed for meadow establishment and will be removed after one year of planting. A planting plan and irrigation plan have been provided.

Therefore, three points are approved.



### CREDIT 3.3: Protect and restore riparian, wetland, and shoreline buffers (3–8 points)

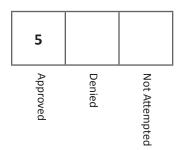
The SITES submittal template has been provided stating the riparian buffer on the site has been restored.

Contour maps show the existing buffer areas and extent of restoration with locations of new plantings which qualify as minimal site disturbance within the buffer. Restoration includes stabilization of shoreline utilizing large boulders with native plants and enlargement of the riparian buffer including meadow areas and constructed wetland areas planted with trees, shrubs, and plugs to stabilize the buffer.

Further, native plant communities including Acer rubrum and Carpinus caroliniana are planted to re-vegetate the buffer of 69 feet average width. Ecological Communities of New York State (Reschke, 1990) and Biodiversity Assessment Manual for the Hudson River Estuary Corridor (Kiviat & Stevens, 2001) demonstrate that the vegetation on site has the same dominant plant species as the new native plant community installed.

As documented in Prerequisite 1.1, a narrative outlines that the Vegetation and Soil Protection Zones will be preserved during construction and the plan will be communicated to the contractor. A site maintenance plan demonstrates the ongoing maintenance of the VSPZ will be conducted throughout the life of the project.

Therefore, five points are approved.



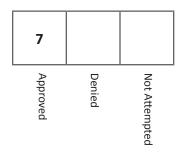
## CREDIT 3.4: Rehabilitate lost streams, wetlands, and shorelines (2–5 points)

The SITES submittal template has been provided stating 90% of the full area of an existing degraded or lost wetland within the property boundary is restored.

Design plans, sections, details, hydrological calculations, specifications, and a narrative are provided to demonstrate the existing wetland has been restored by removing invasive plants and poor soil, importing a new soil mix, and replanting with native vegetation in a profile that will allow for tidal action to occur as well as provide hydric soil for vegetation to thrive.

Historical maps and aerial photos are provided to document existing conditions including invasive plants and poor soil and the historical extent of the wetland.

Therefore, five points are approved.

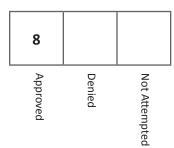


#### CREDIT 3.5: Manage stormwater on site (5–10 points)

The SITES submittal template has been provided stating as a brownfield, a 40% improvement in water storage capacity has been achieved based upon the differential between the initial water storage capacity curve number of 80 and the target water storage capacity curve number of 70. The design water storage capacity curve number is 77.

Calculations for water storage capacities are provided for the Humid East Coast, which were achieved through a combination of adding several water quality basins with a deep soil profile that slowly infiltrate into the water table, constructing a drive made of porous asphalt with a 3-foot deep gravel reservoir subgrade to hold runoff and infiltrate into the ground water, and excavating and rehabilitating existing degraded wetlands. A site map and photos provide context to demonstrate that stormwater is managed on site.

Therefore, seven points are approved.

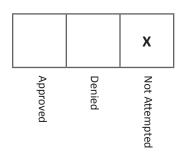


### CREDIT 3.6: Protect and enhance on-site water resources and receiving water quality (3–9 points)

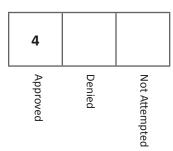
The SITES submittal template has been provided stating a total of 95.2% of average annual volume of runoff discharged from the developed portion of the site receives stormwater treatment for pollutants.

Calculations outline the percentage of annual runoff volume and a narrative describes that off-site volume was minimized by either retaining water at the point of impact, water sheet flowing over gravel or vegetation, or by directing runoff to a water quality basin, wetland, or porous pavement reservoir. The narrative also states the stormwater treatment systems that have demonstrated a discharge concentration of 25mg/liter TSS include the bioretention areas, vegetated buffer strips, and porous pavement areas. To reduce exposure to pollutants, bioretention areas will be regraded and revegetated as necessary and sediments will be removed. Sediment will be removed from permeable paving when storage capacity is reduced by 10% or more. A list of exterior materials utilized on site is provided.

Therefore, eight points are approved.



# CREDIT 3.7: Design rainwater/stormwater features to provide a landscape amenity (1–3 points)



### CREDIT 3.8: Maintain water features to conserve water and other resources (1–4 points)

The SITES submittal template has been provided stating water features utilize 100% of annual make-up water from sustainable water sources.

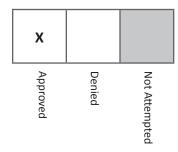
A site plan locates the created water features on site and a narrative states the water source for the water quality basins and the wetlands all come from stormwater or from the tidal influence of the Hudson River, therefore, no potable water is used to fill or replenish the water features. Furthermore, during construction the water features did not adversely affect other water bodies on site or downstream. The site maintenance plan states that the water features are not intended for swimming or wading, therefore, ongoing maintenance is conducted without the use of chlorine, bromine, or other chemicals.

In addition, water features use gravity and tidal influence (Hudson River) and do not require purchased electricity.

Therefore, four points are approved.

### SITE DESIGN — SOIL AND VEGETATION

### 51 possible points

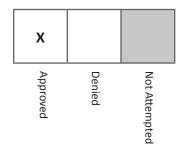


### PREREQUISITE 4.1: Control and manage known invasive plants found on site

The SITES submittal template has been provided stating invasive plant species are controlled and managed on site through integrated pest management strategies such as ranking plants for level of invasiveness and matching control strategies to these rankings, removing most invasive plants with hand tools or mechanically (such as mowing), bagging and removing invasive plants from the site, and adopting practices to reduce potential for introducing new invasive species.

A procedure for identifying and monitoring for additional invasive species includes an annual survey of the entire site by staff. Initial and follow up treatment and long-term control strategies and monitoring, including methods to dispose of invasive plant materials to prevent spread are carried out throughout the duration of the project.

Therefore, prerequisite achievement is approved.

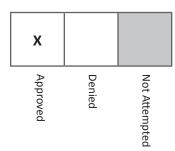


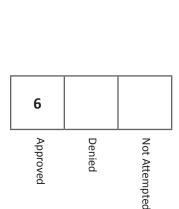
#### PREREQUISITE 4.2: Use appropriate, non-invasive plants

The SITES submittal template has been provided stating appropriate, non-invasive plants are used on site.

A list of plant species is provided and plants added are appropriate for site conditions, as verified by the USDA Natural Resources Conservation Service and the Lady Bird Johnson Wildflower Center. Lists from the federal noxious species list, the NY State invasive species list, and the Invasive Plant Atlas of New England confirm that invasive species on the list will not be brought to the site.

Therefore, prerequisite achievement is approved.





#### PREREQUISITE 4.3: Create a soil management plan

The SITES submittal template has been provided stating the soil management plan limits construction disturbance and aids in soil restoration efforts. A map outlines soil management areas for all site soils and locates the footprint of roads and construction staging, buildings and hardscape.

The SoilSpecs document submitted outlines how areas of restored soils will be protected from compaction, erosion and contamination through erosion netting and soil stabilization fabric until vegetation is established. In addition, the project places barricades to prevent any unnecessary compaction of soils from vehicles, equipment, or pedestrian traffic during construction and vegetation establishment.

Soil treatment for each zone includes scarifying the surface of any compacted sub-grade, removing all organic and coarse fragments greater than one inch in diameter from the topsoil, and amending soil layers with compost where applicable. Communication with contractors of the site drawings, specifications, and the SMP is verified by contractor signatures.

Therefore, prerequisite achievement is approved.

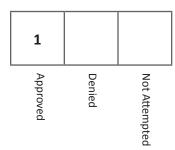
### CREDIT 4.4: Minimize soil disturbance in design and construction (6 points)

The SITES submittal template has been provided stating 100% of soil displacement and disturbance is located within areas that were previously disturbed.

The Soil Management Plan limits construction disturbance and aids in soil restoration efforts. A site plan shows the extent and degree of soils disturbed by previous development as 15 acres, clearly indicating that 100% of the total area of all soils zoned for disturbance are located within the area disturbed by previous development.

As documented in Prerequisite 2.1, a narrative outlines that the Vegetation and Soil Protection Zones will be preserved through tree protection fencing, preventive root-pruning, and air-spading of roots on trees adjacent to stonedust pathways during construction and the plan will be communicated to the contractor. The site maintenance plan demonstrates that ongoing maintenance of the VSPZs will be conducted throughout the life of the project.

Therefore, six points are approved.

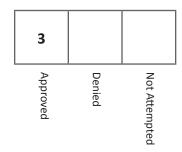




The SITES submittal template has been provided stating that the site does not contain trees and plants designated as special status by a local, state, or federal entity.

A signed statement from a member of the project team describing how the project site does not contain special status vegetation was proved.

Therefore, one point is approved.

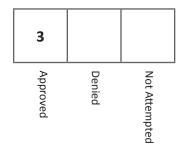


### CREDIT 4.6: Preserve or restore appropriate plant biomass on site (3–8 points)

The SITES submittal template has been provided stating the vegetative biomass on site has been preserved and/or restored relative to the specific site location within the Temperate Broadleaf and Mixed Forests biome.

Calculations demonstrate an improved biomass density from 1.98 to 2.74 and a site map with vegetation zones outline the planned site conditions ten years from installation.

Therefore, three points are approved.

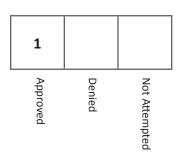


#### CREDIT 4.7: Use native plants (1–4 points)

The SITES submittal template has been provided stating 88% of the site vegetated area is composed of 9.2 acres of native plants, using an estimated vegetated cover within ten years of installation.

A site plan showing all vegetation (including native) areas and calculations demonstrate that native plants are installed. A planting plan, plant list, and specifications have been provided.

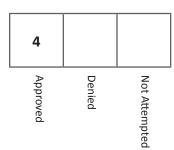
Therefore, three points are approved.



### CREDIT 4.8: Preserve plant communities native to the ecoregion (2–6 points)

A signed statement by a member of the project team describing that the project site did contain existing native plant communities was provided.

Therefore, one point is approved.



### CREDIT 4.9: Restore plant communities native to the ecoregion (1–5 points)

The SITES submittal template has been provided stating native plant communities comprise at least 88% of the site vegetated area.

A list of all restored vegetation species, including Acer rubrum and Carpinus caroliniana, calculations, and a site plan have been provided. Ecological Communities of New York State (Reschke, 1990) and Biodiversity Assessment Manual for the Hudson River Estuary Corridor (Kiviat & Stevens, 2001) are provided demonstrating that the restored vegetation on site is from the same dominant plant species associated with nearby estuarine communities.

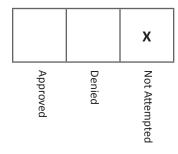
A vicinity map of the site demonstrates off-site habitat corridors connect directly to the native plant communities

Therefore, four points are approved.

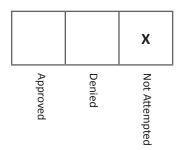


### CREDIT 4.10: Use vegetation to minimize building heating requirements (2–4 points)

No documentation has been submitted for this credit.

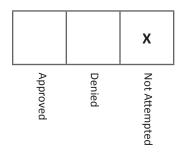


### CREDIT 4.11: Use vegetation to minimize building cooling requirements (2–5 points)



### CREDIT 4.12: Reduce urban heat island effects (3–5 points)

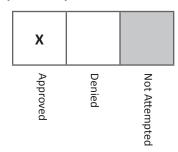
No documentation has been submitted for this credit.



### CREDIT 4.13: Reduce the risk of catastrophic wildfire (3 points)

### SITE DESIGN — MATERIALS SELECTION

#### 36 possible points



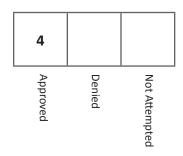
### PREREQUISITE 5.1: Eliminate the use of wood from threatened tree species

The SITES submittal template has been provided stating no wood products purchased are extracted from threatened tree species.

A list of all wood products purchased is provided. Species include Quercus alba, Dipteryx odorata, locally sourced Locust and Southern White Pine, and Cedar.

Although the IUCN and/or CITES classification has not been provided for these species, FSC Chain of Custody documentation and invoices have been provided recognizing the wood species have been certified under a third-party sustainable forestry management certification.

Therefore, prerequisite achievement is approved.

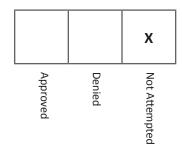


### CREDIT 5.2: Maintain on-site structures, hardscape, and landscape amenities (1–4 points)

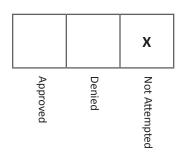
The SITES submittal template has been provided stating 96% by surface area of on-site structures, hardscape, and landscape amenities are preserved including an asphalt drive, eco-pavers, diamond block paving, and floating docks.

Existing and design site plans show the structures, hardscape, and landscape amenities maintained and re-used on site. Photos have also been provided.

Therefore, four points are approved.

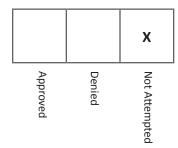


### CREDIT 5.3: Design for deconstruction and disassembly (1–3 points)



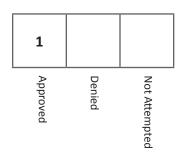
### CREDIT 5.4: Reuse salvaged materials and plants (2–4 points)

No documentation has been submitted for this credit.



### CREDIT 5.5: Use recycled content materials (2–4 points)

No documentation has been submitted for this credit.

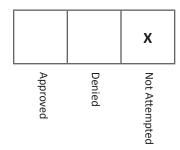


### CREDIT 5.6: Use certified wood (1–4 points)

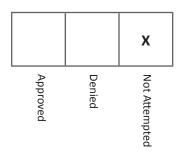
The SITES submittal template provided states FSC certified wood has been purchased as part of the project.

A species list of all wood products purchased is provided, identifying all FSC wood, which includes Dipteryx odorata (Brazilian teak) and white oak. Receipts and vendor invoices for cost of each product, along with the chain of custody (COC) documentation is also provided. The cost of FSC certified wood is \$75,513 for 64% of the \$117,430 total wood-based material costs.

Therefore, one point is achieved.

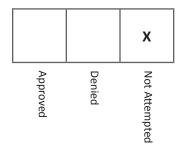


### CREDIT 5.7: Use regional materials (2–6 points)



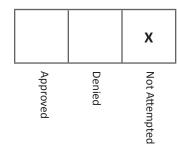
# CREDIT 5.8: Use adhesives, sealants, paints, and coatings with reduced VOC emissions (2 points)

No documentation has been submitted for this credit.



# CREDIT 5.9: Support sustainable practices in plant production (3 points)

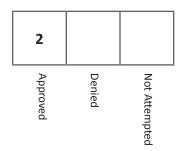
No documentation has been submitted for this credit.



# CREDIT 5.10: Support sustainable practices in materials manufacturing (3–6 points)

### SITE DESIGN — HUMAN HEALTH AND WELL-BEING

### 32 possible points



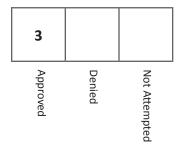
#### CREDIT 6.1: Promote equitable site development (1–3 points)

The SITES submittal template has been provided stating economic and social benefits are provided to the local community during construction.

The project has submitted a prevailing wage schedule for public work projects from the State of New York Department of Labor, a contractor advertisement from the Scenic Hudson Land Trust, living wage calculator information for the county and a sample payroll sheet for project workers with signatures.

In accordance with the State of New York Department of Labor Prevailing Wage Schedule, it is confirmed that a living wage has been provided for 75% minimum of the total workers (50) employed during construction.

Therefore, two points are approved.



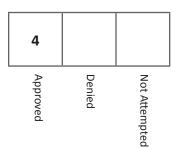
### CREDIT 6.2: Promote equitable site use (1-4 points)

The SITES submittal template has been provided stating the project promotes equitable site use.

Site facilities and amenities include the Red Barn River Center used for special events and an environmentally themed pre-school, a kayak and canoe launching pavilion, an art installation accommodating anglers fishing from the site, and an environmental learning area as outlined in the narrative and shown in the site plan per the needs of the local community groups.

A letter confirming the intent to provide the facility, signed by the property owner and the Mayor of Beacon, NY is provided.

Therefore, three points are approved.

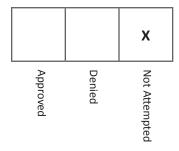


### CREDIT 6.3: Promote sustainability awareness and education (2–4 points)

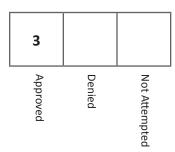
The SITES submittal template has been provided stating interpretive signage, self-guided and guided tours, and an outdoor classroom are designed and constructed to promote an understanding of sustainability relative to on-site features.

A site plan shows the location of interpretive signage, which describes to site users the historical uses of the site and its transformation to a sustainable site. Photos and drawings show the content of interactive elements. 100% of the total number of educational/interpretive elements depict site sustainability features such as constructed wetlands, rain gardens, ecopavers, and invasive species remediation. The narrative and appropriate schedules for guided tours are provided.

Therefore, four points are approved.



## CREDIT 6.4: Protect and maintain unique cultural and historical places (2–4 points)



### CREDIT 6.5: Provide for optimum site accessibility, safety, and wayfinding (3 points)

The SITES submittal template has been provided stating accessibility, safety, and wayfinding are promoted to increase users' ability to understand and safely access outdoor spaces.

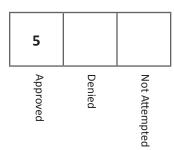
Accessibility strategies include accessible parking spaces at multiple locations, 1.5 miles of accessible stabilized stone dust pathways, benches along pathways, interpretive signage at wheelchair height, and ADA compliant ramps as described in the Credit 6.5 Worksheet.

Safety strategies include clear, defined spaces and access control, natural surveillance with lighting, natural surveillance with entrances and walkways, visibility and sightlines, and a variety of options provided for access.

Wayfinding strategies include clear entrances and gateways, viewpoints and sight lines as vantage points, landmarks, decision points (nodes), hierarchy of pedestrian circulation, distinct areas and regions, orientation devices and systems, and maps and brochures.

In addition, the project has provided a park brochure with map and a site plan indicating the locations of lighting, the viewshed from street, accessible paths, signage, and park entries.

Therefore, three points are approved.



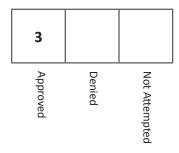
### CREDIT 6.6: Provide opportunities for outdoor physical activity (4–5 points)

The SITES submittal template has been provided stating on-site opportunities for physical activity are provided.

The kayak pavilion and 1.5 miles of trails on site promote physical activity for 240 total site users. User groups include anglers, children in environmental education programs, paddlers, and outdoor recreationalists using trails. Recreationalists also have access to a kayak outfitter on site during the weekends and Wednesday nights in season and an emergency call box at the gate to call police. ADA accessibility and natural surveillance, visibility, and sight lines, and a variety of options for access are documented in the worksheet. Additionally, 20 bike racks are provided within 200 feet of the River Center and the Kayak Pavilion.

Additionally, based on documentation provided in Credit 2.3, it is clear the project team has provided opportunities for participation with at least 20% of the total site users. Narratives provided demonstrate community meetings were held and public input was provided during the design stages, and a news release documents the advertisement of the design workshops.

Therefore, five points are approved.



### CREDIT 6.7: Provide views of vegetation and quiet outdoor spaces for mental restoration (3–4 points)

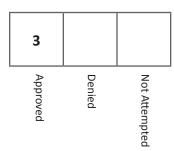
The SITES submittal template has been provided stating visual and physical connections to the outdoors optimize the mental health of site users.

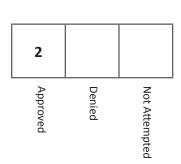
A site plan and photos show the location and character of the outdoor spaces. Quiet, accessible outdoor spaces include a picnic area with tables, kayak deck seating overlooking the river, boulders for sitting along the shore, benches along trails, and seating for 50% of 200 total site users.

The worksheet outlines the use of strategies such as large earthen berms and tree plantings to mitigate noise from trains and provide wind breaks and shade, and a multi-sensory aesthetic experience that includes views to the Hudson River and Hudson Highlands, groves of trees along pathways, and wetlands.

Sound level tests and the local noise ordinance are provided. A narrative explains that while noise levels exceed the requirements in some places, the noise levels were higher due to surrounding factors such as off-site generators and trains passing, which were out of the property owner's control.

Therefore, three points are approved.





### CREDIT 6.8: Provide outdoor spaces for social interaction (3 points)

The SITES submittal template has been provided stating outdoor gathering spaces are provided for 50% of 200 total site users in various sizes and orientations to promote community.

A site plan and photos have been provided showing the location and character of the outdoor spaces. Community oriented outdoor spaces include a 60 foot long concrete bench along the main path, an amphitheater of concrete benches accommodating 90 people, the kayak deck pavilion, and the Klara Saurer trailhead. Seating is located within 200 feet minimum of building entrances.

The worksheet outlines a variety of seating including the concrete benches mentioned above and oak wooden benches along paths and adjacent to the riverfront boardwalk. Microclimate mitigation strategies such as berms and trees along paths provide shade and shelter from wind, visual access to vegetation including wetlands and groves of trees along paths. Other amenities include picnic tables and spaces for local vendors to set up on summer weekends and for festivals.

Therefore, three points are approved.

### **CREDIT 6.9:** Reduce light pollution (2 points)

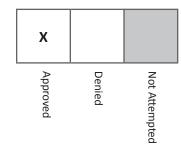
The SITES submittal template has been provided stating light pollution is minimized on site. The project falls within the LZ3-Medium classification and the requirements per IESNA RP-33 are met.

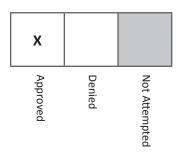
The exterior site lighting design, schedule, and calculations have been provided demonstrating that lighting power densities do not exceed 80% for exterior areas and 50% for buildings facades and landscape features. The percentage of site lamp lumens above 90 degrees from Nadir is 0%.

Therefore, two points are approved.

### CONSTRUCTION

#### 21 possible points





#### PREREQUISITE 7.1: Control and retain construction pollutants

The SITES submittal template has been provided stating construction pollutants are controlled and retained on site.

A copy of the Stormwater Pollution Prevention Plan (SWPPP), prepared and maintained in compliance with the New York State Department of Environmental Conservation SPDES General Permit for Storm Water Discharges from Construction Activity (Permit Number GP-0-10-001), and Erosion Control and Sediment Control Plan provided outline BMPs such as silt fences and sediment traps for soil stabilization, and permeable pavement and bioretention areas for water control. Drawings and a narrative, in addition to the plan, demonstrate that the SPDES is met by the more stringent local erosion and sedimentation control standards and codes.

Therefore, prerequisite achievement is approved.

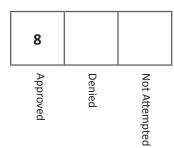
#### PREREQUISITE 7.2: Restore soils disturbed during construction

The SITES submittal template has been provided stating soils disturbed or compacted during construction are restored.

A site plan showing areas of soils disturbed, restored, and re-vegetated during construction has been provided. A narrative within the submittal template explains the characteristics of the existing soils on site as low-value fill material with limited plant potential for productivity. A soil restoration strategy that includes mitigating low organic matter content, low cation exchange capacity, high soil density and a prevalence of anthropic materials has resulted in removal of the majority of anthropic materials within the root zone and the addition of organic matter. In addition, the site plan shows test locations and results for pH, penetrometer readings, and moisture content. Analysis of soil mixes imported to the site show test results for EC, pH, and organic matter. Test results for compost imported to the site have also been submitted. Receipts from the soil supplier are provided.

A narrative describes how the results and strategies of the soil sampling/ testing inform a sustainable approach to restoring soil conditions that were previously infill conditions of the historic Hudson River basin.

Therefore, prerequisite achievement is approved.



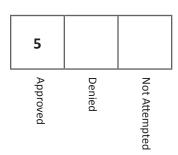
### CREDIT 7.3: Restore soils disturbed by previous construction (2–8 points)

The SITES submittal template has been provided stating soil function has been restored in previously disturbed areas where topsoils and subsoils were disturbed.

Site plans have been provided showing areas and extent of soils severely disturbed by previous development that will be restored and re-vegetated. Soils severely disturbed to be restored and re-vegetated are shown to be 8.9 acres.

A site plan shows test locations and results for pH, penetrometer readings, and moisture content. Analysis of soil mixes imported to the site show test results for EC, pH, and organic matter. Test results for compost imported to the site have also been submitted. Receipts from the soil supplier are provided and a narrative describes how the results and strategy of the soil sampling/testing inform a sustainable approach to restoring soil conditions.

Therefore, eight points are approved.

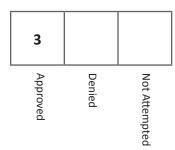


## CREDIT 7.4: Divert construction and demolition materials from disposal (3–5 points)

The SITES submittal template has been provided stating at least 75% of structural materials and 95% of roads/infrastructure materials have been diverted from disposal in a landfill.

A table listing the type of construction and demolition materials, the location of the receiving agent, and the quantity of waste diverted (1,355,706 lbs) has been provided. The materials diverted from disposal include masonry, asphalt, and wood. The construction and demolition plan includes the breaking-up and transport of paving to an asphalt-recycling facility, removing metal reinforcement, anchors and ties from masonry and sorting with other metals, and crushing and screening concrete for use as general fill.

Therefore, five points are approved.

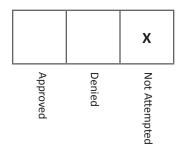


# CREDIT 7.5: Reuse or recycle vegetation, rocks, and soil generated during construction (3–5 points)

The SITES submittal template has been provided stating 100% of vegetation, soils and mineral rock waste have been recycled within 50 miles of the site.

A spreadsheet provided verifies the land clearing materials as vegetation, soils, and mineral/rock waste. The location of the receiving agent has been verified to be within 50 miles of the site, and verification of the quantity of waste diverted (667 tons) has been provided. The Project Manager has signed to verify compliance.

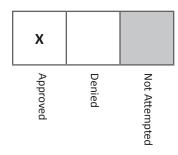
Therefore, three points are approved.



### CREDIT 7.6: Minimize generation of greenhouse gas emissions and exposure to localized air pollutants during construction (1–3 points)

### **OPERATIONS AND MAINTENANCE**

#### 23 possible points



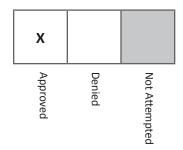
#### PREREQUISITE 8.1: Plan for sustainable site maintenance

The SITES submittal template has been provided stating the project has short and long term sustainable site maintenance strategies.

The completed Site Maintenance Plan worksheet lists maintenance strategies for plant and soils stewardship, invasive species and organic materials management, irrigation and water use, stormwater and water features, snow and ice, materials, landscape maintenance equipment and sensitive site features management. All team members have signed off that they have reviewed and participated in creation of the worksheet

A letter from the project owner states a maintenance contractor has not yet been hired, but will be, and the project owner will communicate the maintenance plan to the contractor, include it as part of the contract, and monitor the contractor's work to ensure compliance.

Therefore, prerequisite achievement is approved.



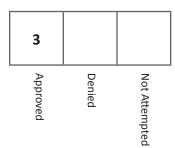
### PREREQUISITE 8.2: Provide for storage and collection of recyclables

The SITES submittal template has been provided stating space is provided for storage and collection of recyclables.

A copy of the waste audit, a site plan showing the location of recycling collection areas, and a narrative describing the recyclables collected, including cans, bottles, paper, and cardboard have been provided. Recyclables are collected by staff and transferred to on site designated recycling dumpsters. These dumpsters are picked up by Royal Carting Service Co. weekly in season and bi-weekly out of season, and a copy of the contract has been provided.

Although it is unclear from the site plan provided which areas are designated as collection and which are designated as storage (designate recycling dumpsters), the narrative provided states the storage areas are located on site and emptied according to the service contract provided.

Therefore, prerequisite achievement is approved.

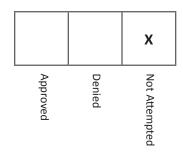


### CREDIT 8.3: Recycle organic matter generated during site operations and maintenance (2–6 points)

The SITES submittal template has been provided stating organic matter generated on site during operations and maintenance is composted.

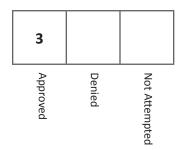
An excerpt from the site maintenance plan describing the project's composting strategy has been provided. At least 50% of vegetation trimmings are composted on site. A narrative has been provided stating that meadow and lawn cuttings will be left in place to decompose to add nutrients into the soil and that other cuttings will be placed in the designated compost area. Site plans verify the composting collection area is located outside the SITES project boundary and is therefore considered off site. However, the approximately 11,000 square feet designated for composting has been determined to be ample space for the site's composting activities and, therefore, a waste audit has not been provided.

Therefore, three points are approved.



## CREDIT 8.4: Reduce outdoor energy consumption for all landscape and exterior operations (1–4 points)

No documentation has been submitted for this credit.

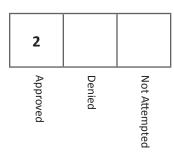


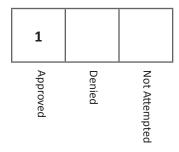
## CREDIT 8.5: Use renewable sources for landscape electricity needs (2–3 points)

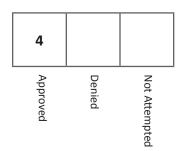
The SITES submittal template has been provided stating renewable energy sources are used for landscape electricity needs.

On-site renewable energy includes a solar array and a Solar PV Program Incentive Application Form has been provided stating the solar array is expected to produce 15,082 kWh. Parking lot lights require 5,518 kwh per year of the total site outdoor electricity. A document provided by Kirchhoff Green Energy verifies 5,518 kWH per year for outdoor lighting is approximately 1/3 of the total site outdoor electricity generated by the solar array, proving the solar array provides more than 100% of the total landscape electricity needs.

Therefore, three points are approved.







# CREDIT 8.6: Minimize exposure to environmental tobacco smoke (1–2 points)

The SITES submittal template has been provided stating exposure to environmental tobacco smoke is minimized on site.

Smoking is prohibited on the entire site and this is stated in the park rules contained in the park brochure and on the park kiosk. A copy of the park brochure has been provided.

Therefore, two points are approved.

# CREDIT 8.7: Minimize generation of greenhouse gases and exposure to localized air pollutants during landscape maintenance activities (1–4 points)

The SITES submittal template has been provided stating landscape maintenance equipment utilized on the project minimizes air pollutants and greenhouse gas emissions.

A short narrative within the submittal template explains that site work is conducted during the week, when park attendance is at its lowest. Additionally, Scenic Hudson park staff will supervise maintenance contractors.

A signed document states that a maintenance contractor has not yet been selected, but once selected the contractor will be required to conform to the Scenic Hudson maintenance plan and a set of guidelines for maintenance will be made part of the contract with the landscape contractor.

Therefore, one point is approved.

### CREDIT 8.8: Reduce emissions and promote the use of fuelefficient vehicles (4 points)

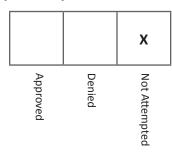
The SITES submittal template has been provided stating infrastructure and shared vehicle support includes designated parking for van/carpools and fuel efficient vehicles.

A site plan showing locations and quantity of preferred parking spaces and a detail for signage signifying these spaces has been provided. Preferred parking for fuel efficient vehicles and van/carpool spaces has been provided for 12% of the total parking capacity - 4 spaces dedicated to fuel efficient cars and 4 spaces dedicated to van/carpool spaces.

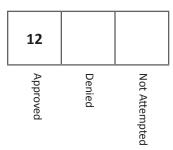
Therefore, four points are approved.

### **MONITORING AND INNOVATION**

### 22 possible points



CREDIT 9.1: Monitor performance of sustainable design practices (10 points)



#### CREDIT 9.2: Innovation in site design (4–12 points)

The SITES submittal template provided proposes four innovation credits by:

1) implementing a voluntary New York State Brownfields Cleanup Program to remediate a brownfield to allow for safe redevelopment of the site for human use, 2) eliminating the use of chemically treated pressurized wood, and 3) by disposing of all non-recyclable construction waste at an county energy-from-waste facility.

The first proposed innovation credit, addressing voluntary brownfield cleanup activities on the site, goes above and beyond SITES' requirements, which state that a project must remediate site contamination such that the controlling public authority approves the protective measures and/ or cleanup. The narrative provided states the property owner was not required by the state to remediate the property, and that the New York State Brownfields Cleanup Program (BCP) is a voluntary cleanup program that provides incentives to remediate contaminated property. However, because the property owner is a not-for-profit organization, they cannot receive the tax incentives. Therefore, there was no financial benefit for the property owner to enroll in the BCP.

A proposed intent, requirements, and quantifiable measures are provided (soil sample tests for PCBs, lead, arsenic, and other contaminants). Site plans showing areas of contamination, photographs documenting the cleanup efforts, and documentation from Ecosystems Strategies outlining brownfield cleanup strategies have been provided and a letter from the New York State DEC verifies brownfield cleanup was completed and approved. This effort is commendable and earns four points for innovation.

The second proposed innovation credit uses safer material alternatives to eliminate the use of chemically treated pressurized wood on the entire site. A proposed intent, requirements, and supporting references are provided (US EPA, Healthy Building Network). In addition to the above references, product information on the alternative material used to replace pressure treated lumber (TimberSil) is provided demonstrating innovation. This effort is likewise, commendable and earns four points.

The third proposed innovation credit disposes of all non-recyclable construction waste at an county energy-from-waste facility, keeping the bulk of these materials out of the landfill. A proposed intent, requirements, and the sustainable methods and measures of the energy-to-waste facility are provided (waste reduced to 10% of its original volume, saves 160,000 barrels of oil per year to power 10,000 homes, and recycles 6,000 tons of ferrous metal per year). The narrative and construction waste chart provided, in addition to the waste manage plan provided for Credit 7.4 demonstrate that the remaining 8% of construction and demolition materials that were used for energy recovery and not sent to the landfill. This effort is commendable and earns four points for innovation.

Therefore, twelve points are approved.