

Project Information:

Project Title: *SHAPED BY WIND + WATER*

Location: Jamestown, RI USA

Completed Year: 2022

Project size: 4.6 acres

Budget for design + construction: 1.5 million

Submitter's Role: Lead designer + Project manager

Summary Statement:

This peaceful contemporary landscape design is influenced by the site's unique coastal character, sustainable practices and the clients' love of the sea and open spaces. Located on the breezy, sloping east side of Conanicut Island's north end, this 4.6-acre site came with many challenges unique to Rhode Island coastal properties. The long graceful downhill to the bay required a designed management solution for stormwater runoff and erosion control. Exposure to windy coastal marine conditions and the spectacular view of Narragansett Bay dictated careful thought to how spaces and sight lines were defined. Sensitive coastal buffer areas, water management, and existing upland groves of mature trees predicated a planting plan dominated by native species. Over half an acre of resilient trees, shrubs, perennials and grasses were installed. Mowed lawn areas were minimized in favor of low mow meadows and no mow grasses. The results is a durable landscape construction that addresses the site's challenges with sustainable practices and enhances the site's virtues with elegant design.

Narrative:

Design intention

Blending naturally into the existing coastal landscape, both aesthetically and functionally, was the design intention of this project. The 4.6-acre property is on the north end of Jamestown in a rural, residential setting. It is a long (815 ft), proportionately narrow (240 ft) property that slopes east from East Shore Road, down 56 feet in elevation, to the high tide line of Narragansett Bay's East Passage.

Site Challenges

The property, being a slope to the water's edge, required significant attention to on-site water management. Coastal conditions dictated that the design had to be resilient and durable. Living spaces needed to be designed to provide respite from strong sea breezes and hot summer sun yet still have a view of Narragansett Bay and passing boats.

Client objectives

The owners — who have a passion for sailing and open, wild spaces — split their time between Jamestown, RI and a secluded cattle ranch in the Plains of Montana. Their interests and design priorities were in being able to interact with the properties' outdoor spaces, providing habitat for wildlife, water conservation, creating wide-open spaces, and maintaining view corridors to The Bay.

Landscape design

Entering the property at the natural cedar gate, the drive meanders down hill through the property. Passing by grassy meadows, a croquet court, and a grove of native grey birch, it arrives at the house's gracious Parking Court. The sweeping meadows are scaled and shaped to balance with groves of trees and water views. The views

widen and narrow throughout the landscape leading down to the native planting buffer before the rocky tidal edge. A mown walking path weaves through trees and high grasses connecting with the road to create an engaging loop throughout the property. Around the house, granite walls with bluestone paved terraces and walkways are reflexively tuned to the residence's traditional formal architecture and are designed to provide spaces for privacy and entertaining. The Ocean terrace is a walk out from the lower level of the house and nestled within swaths of native grasses on either side. It is a place to watch the sailing races and gives a feel of being on the water. The Guest terrace, hidden on the northwest side of the house, captures views of the Bay in the distance but has a sense of seclusion and escape. The planted areas in and around the paved walkways and terraces are informal with soft structure and movement that responds to the wind. From the house, views of the landscape and Narragansett Bay are designed to include meadows, large native planting beds, and carefully placed evergreen trees that frame views and screen neighboring properties.

Water Management

While the design emphasizes the Island's sylvan vernacular, and the sea views it also had to address the sensitivity of the site's proximity to Narragansett Bay. The scale and slope of the property necessitated significant consideration designing for water conservation, holding water on-site, and minimizing erosion. Methods of conserving and managing water were implemented to recharge groundwater and minimize impacts to the coastal buffer. Porous paving and rain gardens; drought tolerant native plant selections; reducing lawn areas; stone swales to slow water flow and reduce soil erosion; these techniques combined resulted an estimated 90% capture of water and reduction of sediment entering the bay.

Narrative:

The Parking Court with 4,600 sf of permeable paving captures roof runoff from the building's architecture and stormwater from the courtyard itself. The design's permeable pavers are set on a 30" depth of layered crushed stone with a piped drainage system capturing excessive water and diverting it away from the house via the stone swale on the south side to 2 planted rain gardens.

Totalling approximately 1300 sf, the planted rain gardens work in concert with the site drainage system to capture water and sediment. Aesthetically, they are tuned into the landscape — barely visible from house and through view corridors.

Planting

Preserving valuable existing mature trees set a foundation for the landscape design. The many existing native trees which were preserved are Tupelo, Red Maple, Black Cherry, Oak, White Spruce, Eastern Red Cedar while understory invasive species were removed. The client's interest in wildlife and grasslands made establishing a robust community of native planted areas and large swaths of grassy meadows priorities.

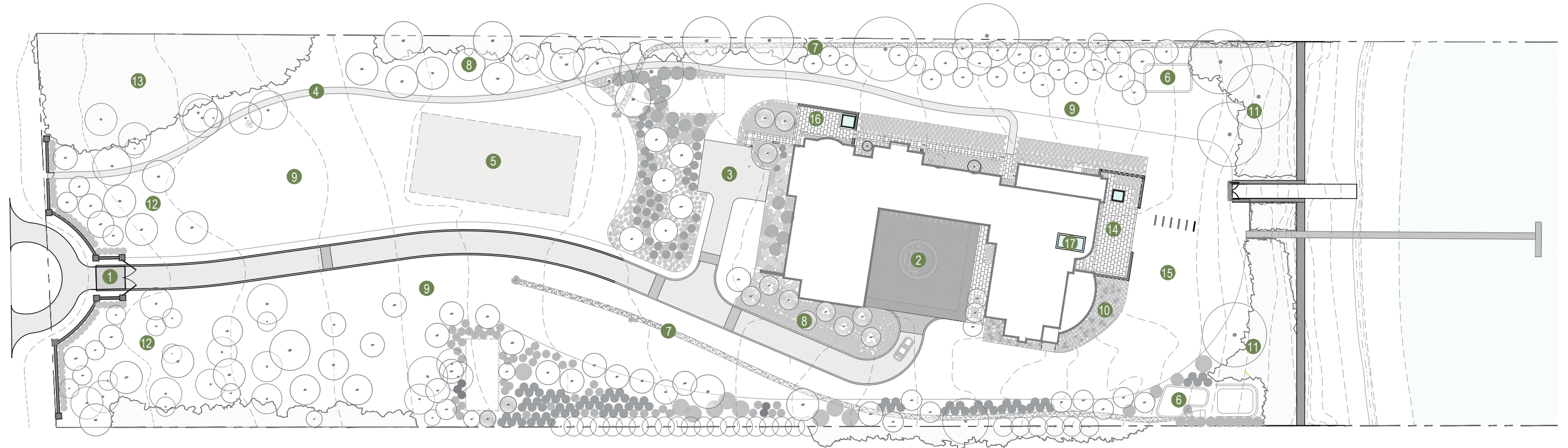
To support and enhance the existing groves of coastal native trees, over 100 evergreen and deciduous trees were added. Size of trees ranged from 8/10' up to 14/16' specimen and a minimum of 4" caliper. The size of the trees were important given the scale of the property and to ensure the future of the hardwood groves. A pallet of mixed evergreen trees strategically were added in key areas to slow wind, provide shelter for birds and animals, screen for privacy and frame views.

Native species of evergreen trees included Eastern Red Cedar, American Holly, White Spruce, Eastern White Pine, and American Arborvitae. Plants throughout the property were chosen for their suitability to the site's coastal conditions and environmental benefits. Approximately half an acre of the property and over 2,300 native shrubs, grasses and perennials were installed in large planting areas creating rich habitat for coastal birds and pollinators. The restorative native buffer planting, which include highbush blueberry, arrowwood, red twig dogwood, and bayberry, is visually rich in textures and color. By installing a plant community that mimics naturally vegetated shoreline areas, the design increases and improves wildlife habitat, pollutant attenuation, and erosion control on the site.

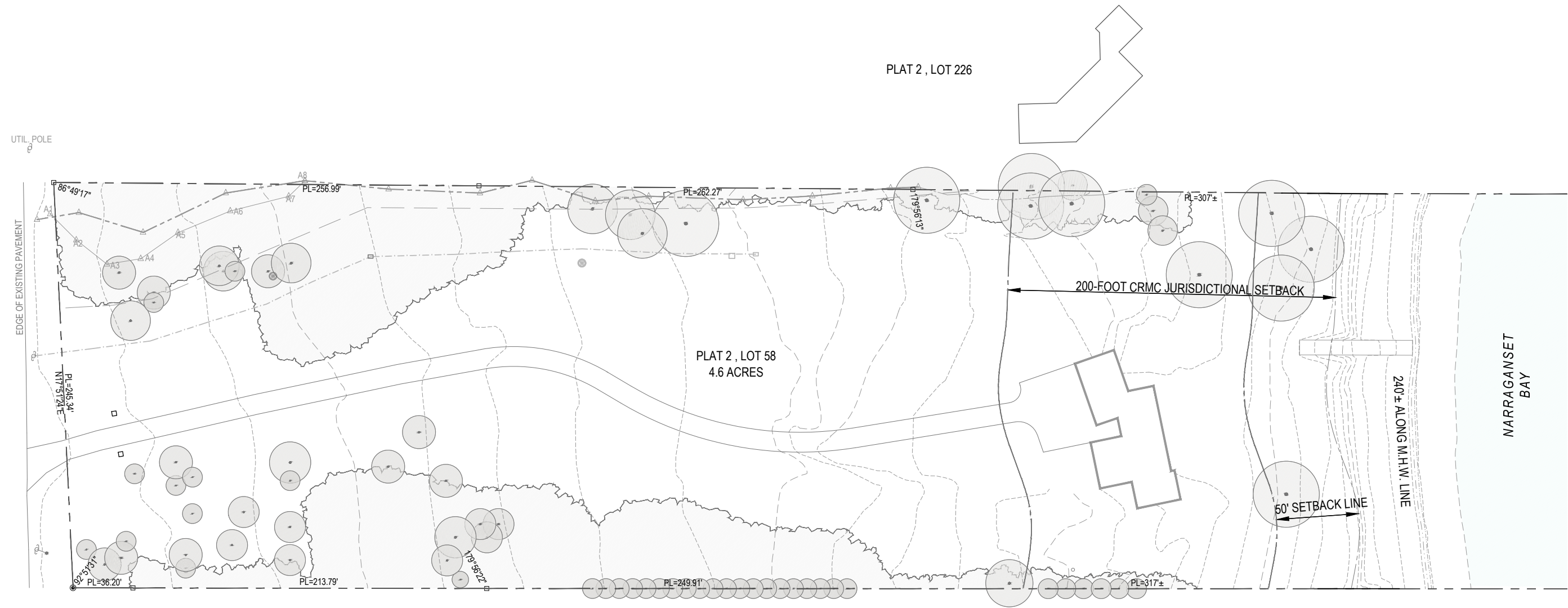
The low mow meadows were seeded with a blend of bunch-forming and creeping fescues derived from species that are native to the northeast. The grasses are drought resistant and are mowed less frequently than a traditional lawn at approximately 3x's during the growing season. There is over 1.4 acres of grass meadows that were formerly a traditional, resource intensive and poor water retaining, mown lawn. Dominant species of grasses are little bluestem, switchgrass, prairie drop seed, autumn moor grasses.

Summary

This property represents examples of current sustainable landscape practices, elegant and informal design, and the client's desire for a peaceful and enjoyable home on the water. Over time, this island hillside landscape will mature into itself and blend naturally into the surrounding rural landscape. It will continue to provide a comfortable place for its inhabitants and support the native habitat, flora and fauna, which was the design intent.



1. ENTRY GATE
2. PARKING COURT
3. SERVICE COURT
4. DOG WALKING PATH
5. CROQUET COURT
6. RAIN GARDENS
7. STONE SWALE
8. BIRCH GROVES
9. LOW MOW MEADOW
10. BLUESTEM MEADOW
11. COASTAL BUFFER - NATIVE PLANTING
12. NATIVE TREE GROVE
13. WETLAND
14. OCEAN TERRACE
15. EAST LAWN
16. GUEST TERRACE
17. POOL + SPA

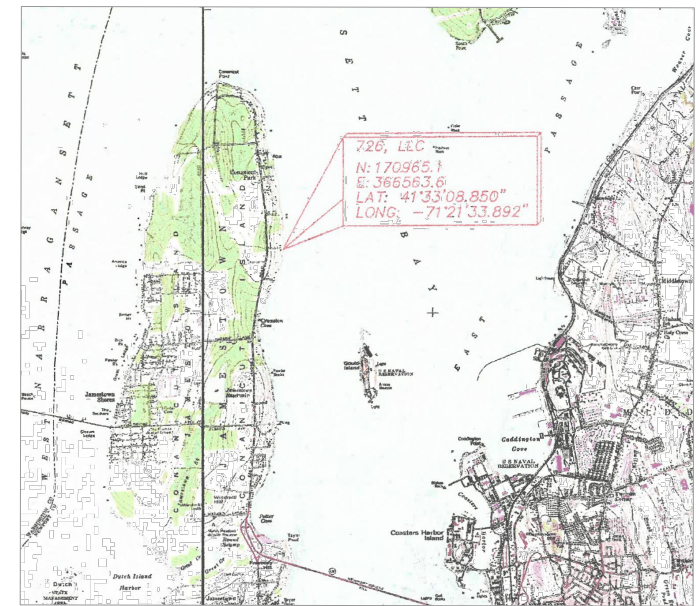
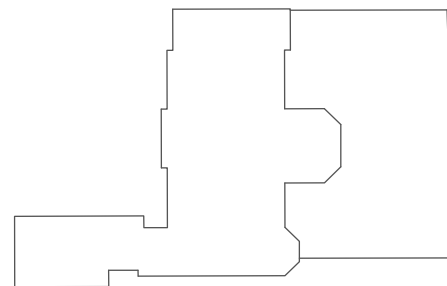


PLAT 2, LOT 226

PLAT 2, LOT 58
4.6 ACRES

NARRAGANSET
BAY

PLAT 2, LOT 227



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Existing Conditions

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Slide 6

Entry Gate

Jamestown, RI USA



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Slide 7

Pedestrian Gate and View Corridor to Narragansett Bay

Jamestown, RI USA



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Slide 8

View to Croquet Court and surrounding low mow meadow

Jamestown, RI USA

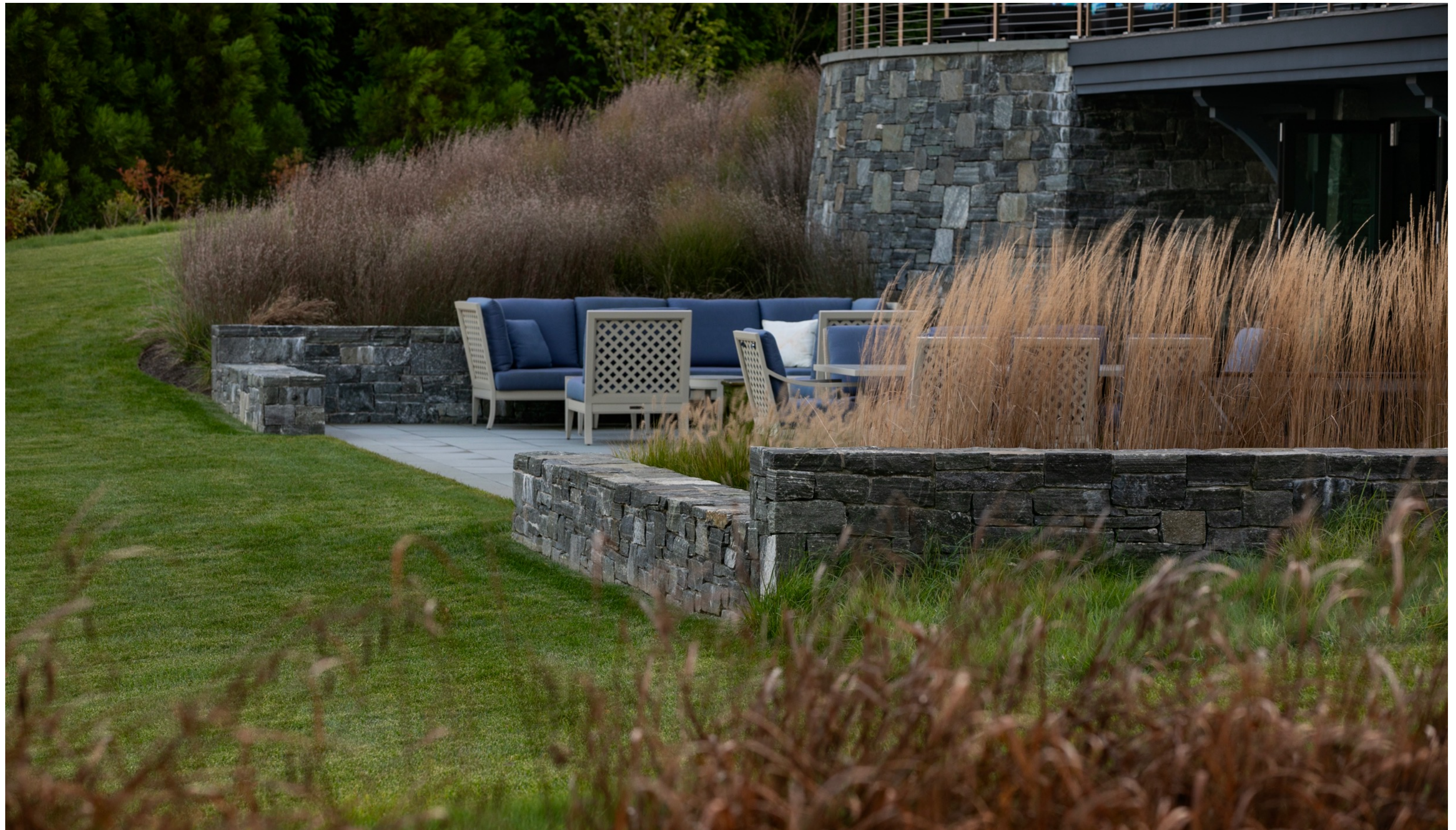


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Ocean Terrace nestled in swaths of grasses

Jamestown, RI USA



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Slide 10

Ocean Terrace

Jamestown, RI USA

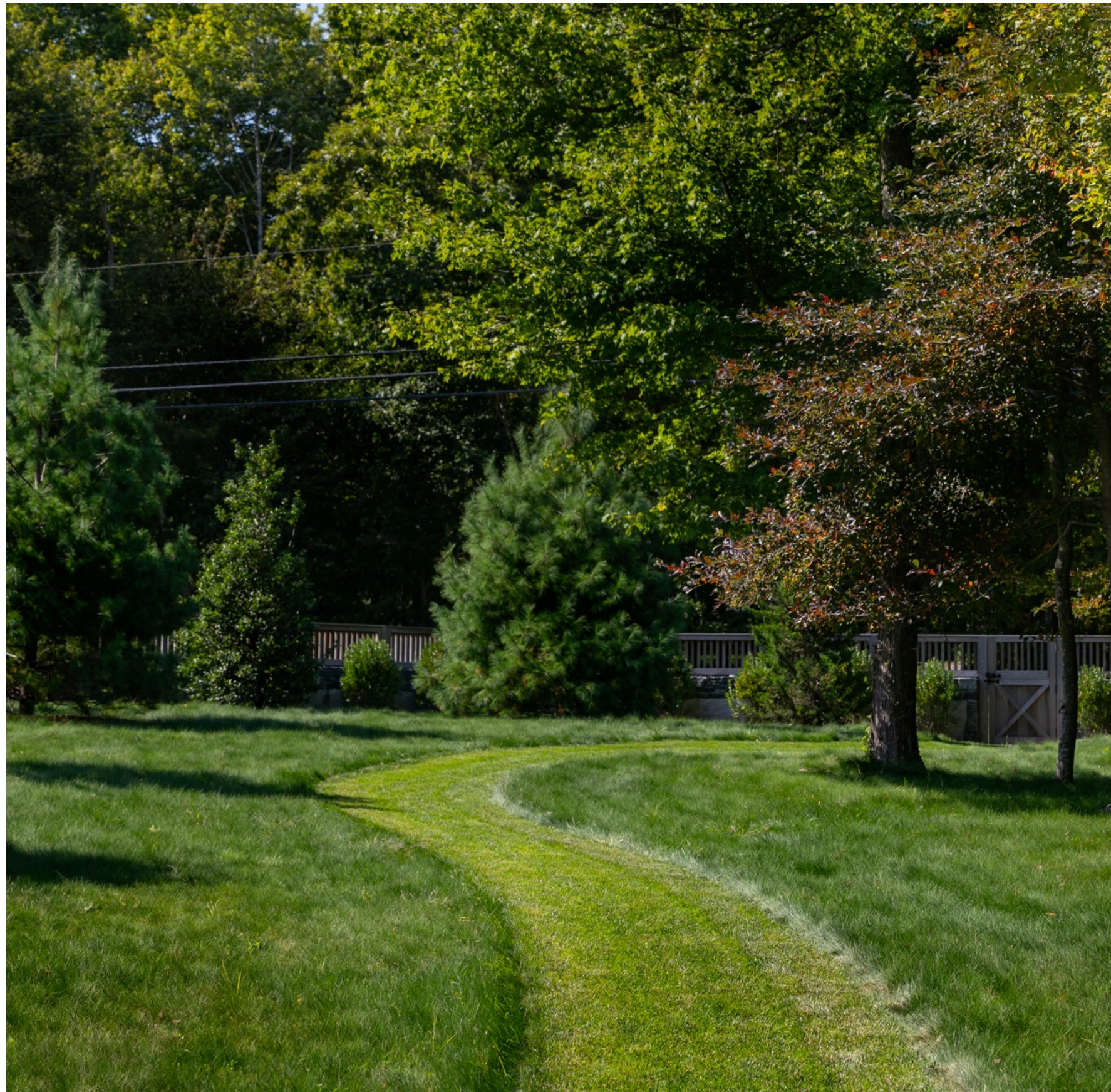


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Ocean Terrace

Jamestown, RI USA



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Mown dog path. Lined with meadows and native trees



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Jamestown, RI USA



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Slide 13

Parking Court entry

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Guest Terrace + entry



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Slide 15

North side of property lined with native grasses and meadow

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Slide 16

Stone pathway lighting

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Slide 17

Permeable Parking Court + Front Entry

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Slide 18

Permeable parking and stone path

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Slide 19

Wall + Fence Detail. Birch Grove along the Croquet Court

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Slide 20

Entry Gate and Lighting

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