

**Town of South Kingstown  
Route 1 Scenic Roadway Application  
Narrative Sections**

**I. INTRODUCTION**

The Town of South Kingstown is submitting this application to request that U.S. Route 1, for its entire length within the town, be designated as a Rhode Island Scenic Roadway (see Locus Map). U.S. Route 1 traverses the eastern and southern sections of South Kingstown for more than eleven (11) miles, with a brief stretch in the Town of Narragansett for less than one mile (Narragansett section not included in this application).

The area around the intersection of Tower Hill with its famous observation tower, and Route 138 marks the most northern end of Route 1 in South Kingstown. The northern most section of Route 1 in South Kingstown is the most developed commercial area without a visual buffer to Route 1. It passes intermittent residential and commercial areas usually set back from the road behind vegetative buffers. The roadway extends south from this intersection slightly more than 11 miles until it reaches Charlestown.

The predominant view from the roadway in South Kingstown is of open space, agricultural land, marinas and forested areas. A short stretch of the road near the Wakefield cutoff passes through Narragansett; a car dealership and a salt shed are visible there and are not part of this application. The approximately eight miles of roadway south of the Wakefield cutoff takes motorists through tranquil, sparsely populated sections of town. The roadway passes the Salt Pond Region that covers southern parts of South Kingstown, Narragansett, Charlestown and Westerly with a series of estuaries and salt ponds. Several of the ponds are visible from the road. It passes numerous historic sites, farmland, areas of characteristic native plant communities and significant geological features formed at the time of the last glaciations of New England. The southerly stretch of Route 1 in South Kingstown also intersects and parallels with portions of historic Post Road. This stretch of roadway is amongst the more rural and undeveloped portions of the historic Post Road corridor throughout the region.

To the west of the South Kingstown town line, the section of Route 1 from Charlestown to the border of Westerly has been designated as a RI Scenic Roadway. The application to designate the South Kingstown portion of Route 1 as a Scenic Roadway would create an extension of the existing Scenic Roadway in Charlestown and would result in a continuation of designated roadway through the two towns. Additionally, the Town of South Kingstown contains one existing Scenic Roadway designation for Ministerial Road. Ministerial Road does intersect with Route 1 in the southern portion of in South Kingstown. The designation of Route 1 as a Scenic Highway would further support the network of scenic roadways in the area.

The Town's objective in seeking designation as a Scenic Roadway for the entirety of Route 1 in South Kingstown is to guide the growth and development of this corridor to best support the variety of landscapes and settings (both built and natural) that it contains.

## **II. PHYSICAL CRITERIA**

### **A. VEGETATION**

Route 1 in South Kingstown offers motorists a lesson in native habitats and agrarian landscapes. Depending on physical characteristics including soil conditions that can vary from hydric (wet) to mesic (mixed) to xeric (dry), elevation and past use, the vegetation along the road displays diverse plant communities. These include upland deciduous, coniferous and mixed forests, scrub shrub communities and herbaceous species.

The generally low-level elevation, particularly of the coastal plain, allows long vistas across marshes and estuaries and their sedges, rushes and grasses. Coastal hardwood forests support black, red and white oaks, hickories, and black cherry. In the hills and lowlands to the north of the road are oaks, hickories, other hard woods, some hemlock and white pine. Ash and red maples grow in the forested wetlands beside the road. *Rhododendron maxima* – the native rhododendron – laurels, holly, blueberry, huckleberry and spicebush thrive in the understory of forested wetlands.

The Atlantic white cedar shrub bog at Factory Pond with its dwarf tree forms is the only example of this natural community within Rhode Island. Groves of pitch pine flourish at various locations, particularly on the north side of the roadway in the dry sandy/gravelly soils left by the glacier. Wildflowers and grasses grow in the median section of the road.

The area south of the Wakefield cutoff is relatively free of exotics and other invasives, providing a unique opportunity to preserve this natural heritage. The area above the Wakefield cutoff has been less fortunate. Disturbances to the vegetation have allowed invasives and aggressive native vines to get a foothold. Invasives serve as an early warning system of potential threats to a community's ecological integrity and speak to a need for careful landscaping where areas have been disturbed. Exotic plants as well as natives were introduced as part of roadway improvements of the past.

Additionally, several beech trees located in the State right-of-way in proximity to the Hale House were preserved in response to changes in the road alignment of Route 1 at the time. This action demonstrated the type of landscape practices that best support the natural and cultural resources along the Route 1 corridor.

### **B. TOPOGRAPHY**

Because of the past geological activity that has occurred in this region the location of the roadway, in close proximity to the ocean, has resulted in unique topography visible to motorists. Beginning at the more northerly end of town and traveling south along the highway, several distinct hills provide topographic relief from the more level road sections. The first of these is Tower Hill, followed by McSparran and Meetinghouse Hills. The hills occur within a short distance of one another and increase the variety of the landscape for motorists.

The portion of U.S. Route 1 in the eastern area of South Kingstown follows the western edge of the Narragansett Basin. This is a structural basin extending from the mouth of Narragansett Bay to Massachusetts.

The section of roadway in the southern area of town parallels the coastline and provides graphic topographic variations. The terminal moraine edge located on the north side of the roadway was formed by glacial activity during the most recent ice age. It provides the physical structure on which the planning for Route 1 seems to have been at least partially based. Occasional hills associated with glacial outwash interrupt the more gradual topography within the coastal plain, which stretches to the south from the highway (Quinn).

### **C. SURFACE WATER**

U.S. Route 1 is proximal to several bodies of water as it stretches through South Kingstown. The water bodies range from salt water to brackish water to upland fresh water ponds. These features afford motorists scenic views of unique and critical natural habitats within the region.

At Tower Hill motorists can see Narrow River and Narragansett Bay located to the east of Route 1. Conanicut Island (Jamestown) is visible in the foreground as is the Beavertail Light, at the southernmost tip of Jamestown. On clear days Aquidneck Island and the city of Newport can be seen in the distance.

Traveling south on Route 1, travelers have seasonal views of Indian Lake (winter) and the roadway passes directly by Silver Lake just below the Wakefield cutoff. Further south and located immediately past the Narragansett-South Kingstown town boundaries are upper Pt. Judith Pond to the south and Silver Spring Cove to the north. The upper reaches of Pt. Judith Pond house several marinas and the cove provides refuge to many species of waterfowl and wildlife (including an osprey nesting site). During the spring and summer months the cove abounds with the activity of recreational boating enthusiasts.

Mill Pond, just south of Route 1 near Ministerial Road, is a small body of water surrounded by marshes and forested wetlands. This is the site of unique plant communities and has been the subject of studies by the University of Rhode Island. Perch Cove is yet another water body visible from the roadway. The Cove, part of Potter Pond, includes associated vegetative communities that form a fringe around the open water area that present significant displays of autumn foliage.

### **D. AGRICULTURE**

South Kingstown's history as an agrarian community has its roots in the early settlements of Narragansett Indians who first cleared and cultivated the land (RI Historical Preservation and Heritage Commission - RIHPHC). Continued preservation of extant agricultural land is important to retain the town's rural character, to maintain open space, and to provide a sense of place for residents.

This agricultural heritage becomes apparent to motorists as they encounter the many working farms, agricultural parcels, and stone walls located along the highway. The Weeden farmhouse and the surrounding farm - 'Willow Dell', are located just south of U.S. Route 1 just west of Matunuck Beach Road. The farm was once part of a 600 acre tract that extended to the Atlantic Ocean (RIHPHC). 'Willow Dell' was recently designated for listing on the National Register of Historic Places.

Approximately two miles north of 'Willow Dell' is the Whaley Farm produce stand. The stand marks the entrance to Whaley Farm, a 19th Century complex of farm, outbuildings, and fields located just south of Route 1.

Rocky Meadows Farm dates back to the 1750's and is located approximately one-half mile east of Whaley Farm on the south side of the highway. North of Rocky Meadows near the intersection of Post Road lies a property known as Jeremiah Robinson House/Endelar with an agrarian landscape and elaborate Queen Anne dwelling. Shadblow Farm is a preserved farmland approximately 2 miles north of the Wakefield cutoff and contains a historic federal farmhouse. Rocky Meadows Farm, Jeremiah Robinson House/Endelar, and Shadblow Farm are all properties eligible for listing on the National Register. Highland Farm and Clark Farm Nursery are other noteworthy active agricultural properties located along Route 1.

At least ten of the agricultural parcels located along Route 1 are currently in use. Another eight properties are conserved through the town-administered Farm, Forest, and Open Space program that reduces tax assessments on agricultural land for periods of fifteen years (South Kingstown Comprehensive Plan).

## **E. GEOLOGY**

The southern portion of U.S. Route 1 is located at the foot of the Charlestown Moraine, a result of glacial activity that extends from Wakefield to Watch Hill. The moraine, which is 150 to 200 feet in height, is a prime example of end moraine geological activity (RIHPHC). Rt. 1 is located at the juxtaposition of the moraine and associated coastal plain.

South of the Charlestown Moraine and U.S. Route 1 lie outwash plains, extending to the Atlantic Ocean. These plains formed through glacial melt water carrying vast quantities of soil which were deposited in stratified layers. This same glacial outwash, reworked by millennia of storms, tides and dynamic coastal processes formed the surrounding salt ponds and barrier beaches (RIHPHC, CRMC).

As noted by Alonzo W. Quinn: "Route 1, 'scenic route', is on the outwash plain just south of the moraine. As one drives west the 'knob and kettle' moraine is on his right side and the outwash plain slopes gently off to his left."

'Knob and kettle' moraine is a very irregular topography noted by hills of glacial till deposits and kettle ponds caused by large ice blocks melted and left distinct depressions in the landscape.

## **F. STONE WALLS**

Winding throughout South Kingstown are many miles of stonewalls, vestiges of the town's long agrarian history. Approximately four miles of stonewalls parallel U.S. Route 1, with many more miles of wall running perpendicular from the highway and within motorists' views. More than three miles of wall parallel U.S. Route 1 between Tower Hill and the Wakefield cutoff.

It is believed that these walls located south of Tower Hill were constructed by slaves owned by the "Narragansett Planters," a wealthy aristocracy of the 17th and 18th Centuries who built palatial agrarian estates reminiscent of the ante-bellum South. The walls form a border between Route 1 and the western property lines of parcels once part of the large plantations that extended to the Pettaquamscutt (Narrow) River (RIHPHC).

## **G. VISTAS**

Route 1 provides exceptional vistas through its entire length. Pastoral scenes, ocean and pond views, inland water bodies, wetlands and stands of conifer and hardwood trees are among the many splendid scenes afforded motorists. Prime examples are:

- Along the roadway near Tower Hill are panoramic vistas of Narragansett Bay, the Atlantic Ocean, and the bridges that span the western and eastern passages of Narragansett Bay;
- South of this area are seasonal views (winter) from Route 1 west to Indian Lake;
- Further south are stretches of fields, pastures, and farmlands. Rolling hills provide scenic views of the surrounding town and large stretches of woodlands; and
- Upper Pt. Judith Pond, replete with several marinas, a variety of vessels and extensive pristine wildlife habitats is visible just beyond a building that houses the Town's Public Services Department. Adjacent to the marinas is Marina Park - a town facility that provides passive recreation for residents and accommodates seasonal festivals and other activities.

## **H. HISTORIC FEATURES**

The modern roadway follows, in large measure, the Revolutionary road colonists built on the former Indian trails to carry mail and the newspapers that united the colonists from New York to Boston in the ferment that became the revolt against the British. Other parts of the Post Road predominantly in other states have succumbed to the pressures of commercialization, but the section in southern Rhode Island retains more of the roadway's historic character.

Today, a wide-range of historical sites from the 18<sup>th</sup> and 19<sup>th</sup> Centuries can still be found adjacent to Route 1. Several structures have or are eligible for listing on the National Registry of Historic Places. Some of the more distinctive places are listed below.

- The Observation Tower and Hannah Robinson Rock at Route 138 was the site of a historic stone lookout used since about 1739. The current tower was built in 1936.
- The Helme-Torrey Cemetery (South Kingstown Number 26), which dates back to 1746, lies at the corner of Torrey Road and Route 1.
- Two historic markers are found on U.S. Route 1: (1) The “Carter Killed Jackson” monument marks the site of a murder committed in 1751; and (2) The Wager Weeden Watering Place is a stone marker and watering trough at the entrance to Weeden Farm commemorating the arduous task of transporting water faced by 19<sup>th</sup> Century farmers.
- The Jeremiah Robinson House/Endelar with an agrarian landscape and elaborate Queen Anne dwelling which is eligible for listing on the National Register.
- Using hydropower of the Mill Pond is the Samuel E. Perry Grist Mill. Built in 1703 this landmark property is the only water-powered mill still operating in Rhode Island. It has been in continuous service since the 18<sup>th</sup> Century.
- Willow Dell, the Weeden Farm farmhouse, was built in 1793 and is listed on the National Register of Historic Places.
- The Robert Beverly Hale Library, built in 1896, continues to serve as the local library for Perryville and South Shore residents.
- The Edward Everett Hale House, built in the 1870s in the Italianate, second Empire style, has been restored and is now conserved by the Pettaquamscutt Historical Society and open to the public. Edward Everett Hale was an author and clergyman from Roxbury, Massachusetts, who summered in the Matunuck for about 40 years with his house forming the seat of an extensive artist community that also resided in the Matunuck Hills. The Hale House is on the National Register of Historic Places.
- An archeological site referred to as RI 110 that lies just off Route 1 has been identified and will be preserved. The site contains rare evidence of Narragansett Indian Tribe daily life before the arrival of Europeans. The site is unmatched on the Eastern seaboard with most features dating from the year 950 to 1550.
- Much of the U.S. Route 1 corridor follows the historic Post Road the colonists used to carry mail and newspapers. This roadway was initially built on Indian trails that were used by native inhabitants for centuries prior to the colonial era. The corridor itself represents an archeological feature that provided an important means of transportation for the indigenous populations of the region.

## **I. WETLANDS**

Much of U.S. Route 1 is located within the Coastal Resources Management Council's Special Area Management Plan (SAMP) for protection of coastal resources. The entire length of Route 1 north of the Wakefield cut-off forms the western boundary of the Narrow River SAMP region. The region identified in the Salt Pond SAMP requiring particular attention to the natural environment extends from the Atlantic Coast north to Worden Pond and west from Pt. Judith Pond to Ninigret Pond. U.S. Route 1 bisects the entire SAMP region.

U.S. Route 1 crosses several distinct regions of wetlands, particularly in the northern portion. Extensive wetlands are present along the west side of the roadway and are associated with tributaries that feed Indian Run Reservoir. Deciduous forested wetlands dominate this region and are characterized by large stands of red maple as well as birch, ash, willow, and dogwood. An interspersing of shrub swamps in this same area provides for a mix of young trees, shrubs and other woody plants. Common varieties for New England shrub wetlands are alder, blueberry, swamp rose, arrow-wood, and spicebush.

In the southern region, wetland types include marshes, wet meadows, shrub swamps, and coniferous and deciduous forested wetlands. In addition to the trees and shrubs discussed above, the wetlands in the southern region of town also contain communities of hydrophilic grasses, sedges, rushes and other herbaceous plants found within wet meadows and marshes. Most of these wetlands are also associated with open water bodies.

Bogs are wetland areas of high acidity, low temperatures, and restricted drainage. One historic wetland feature known as the "Crying Bog" is located to the west of Route 1 as motorists cross the Route 108 overpass in Narragansett, and is associated with the Pettaquamscutt Cove watershed and Silver Lake. Vegetation unique and almost limited to bogs includes mosses, pitcher plants, leatherleaf, and bog laurel.

In the outlying Mill Pond region are a variety of wetlands types that include wet meadows, shrub swamps, and deciduous forested wetlands. The associated vegetative growth is similar to species aforementioned such as grasses, shrubs, and red maple trees.

## **J. MAN-MADE FEATURES**

In addition to the historic features discussed above, including miles of stone walls visible from roadway, Route 1 hosts a variety of man-made structures that chronicle the Town's past and support its current activities. Some of these significant sites visible from or adjacent to the road are listed below.

- Several 18<sup>th</sup> Century houses including Brookfield, the John Potter house, aka the Great House, built about 1730, and the Rocky Meadows Farm house from 1754.
- Several 19<sup>th</sup> Century houses including Hidden Hearth one of several houses for a community of artists who summered in the Matunuck Hills, and the Jeremiah Robinson house build by Stanford White of McKim, Mead and White.
- Camp Fuller, the second oldest organized youth camp in the world (RIHPHC).
- Clark Nursery, Whaley Farm stand and Highland Farm, examples of green industry that supports the economy of South Kingstown.
- Town Farm Park with baseball fields.
- Marina Park, a town facility along the shores of Upper Pt. Judith Pond, provides passive recreation for residents and accommodates seasonal festivals and other activities (weekly farmer's market in season).
- The South County Hospital and Health Care System Facility.
- The Oliver Steadman Government Center, the Tourism office, the South County Chamber of Commerce and the TSK's Public Services building.

- The Fire Station at Saugatucket Road.
- URI's Sailing Center and its Robert P Arrigan Memorial Sailing Pavilion, the Stone Cove Marina.
- Several housing communities such as Indian Lake Shores, Spartina Cove, and Wakefield Meadows, a community for those over 55.
- Two private schools, Prout and Bradley.
- Several burial grounds, including Helme-Torrey and Perryville Quaker (#65).
- South County Commons, the Route 1 Special Management District.
- Several seasonal farm stands/markets about the roadway including Clark Farms, Whaley Farm, Marina Park (Farmers Market), and Highland Farm.

## **K. CHARACTER OF ROADWAY**

Route 1, particularly the stretch of roadway south of the Narragansett town line, was constructed in such a way as to enhance the sense of the natural topography. To the north lies the terminal moraine and to the south, the outwash coastal plains. Situated between both geologic features, the road curves to follow the topography while providing scenic views.

In some areas the north and southbound lanes are tiered which permits wonderful views of the horizon. A variety of types and cover of medians are present. They range from a short section of concrete barrier to more aesthetically pleasing vegetated medians. Vegetation within medians varies from maintained grass areas to planted areas to naturally vegetated medians. In 2011, RIDOT removed some of the vegetation to install a wire barrier to ensure safety and prevent less attractive options.

## **L. WILDLIFE HABITAT**

The areas bordering U.S. Route 1 provide important habitat for numerous wildlife. The wide variety of ecological systems (i.e. mesic upland, xeric upland, wetland) provides out-standing habitats for fish, bird, mammal, reptile and amphibian populations. Extensive linear edges between upland and wetland areas results in a significant so-called 'edge effect' that wildlife biologists note as having great importance as habitat.

Species observed within the uplands includes a variety of passerine birds (i.e. robins, finch, sparrows, other songbirds), reptiles (i.e. turtles), small mammals (i.e. shrew, vole, foxes, coyotes, and deer) and birds of prey (i.e. turkey vulture, red tailed hawk, osprey). Both the fresh water and salt water wetland systems provide abundant habitat for a myriad of fish, mammals, reptiles, amphibians and water fowl. Empirical data collected identifies a multitude of fur bearing mammals (i.e. raccoon, skunk and opossum) that also utilize the vegetated median areas.

Two Natural Heritage Areas occur along U.S. Route 1 in South Kingstown. Natural Heritage Areas are regions that provide habitat for rare and endangered species as delineated by the Department of Environmental Management. The first of these areas is the Tucker Pond region, which is one of the more unique regions in the state for aquatic vegetative species (Conversation with Rick Enser, RIDEM, May 1996). Most sites for

endangered species in this area occur at Tucker Pond and Long Pond, located north of the highway however the southern border for the entire region under protection is the highway. The second Natural Heritage Area that borders U.S. Route 1 is associated with Factory Pond and Potter Pond. (Conversation with Rick Enser, RIDEM, May, 1996)

### **III. AESTHETIC CRITERIA**

#### **A. UNIQUENESS**

One unique feature of Route 1 is the diversity of landforms. The juxtaposition between the Charlestown Moraine and the outwash plains left by the last glaciers to cover New England provides an outdoor geology display for motorists. Along with diverse topographical features, the road's proximity to bodies of open water of the bay and coastal ponds affords exceptional views in all seasons. As noted above, the Atlantic White Cedar shrub bog at Factory Pond with its dwarf tree forms is the only example of this natural community within Rhode Island.

#### **B. HARMONY OF LANDSCAPE**

For approximately two miles after the Oliver Stedman Government Center there is some commercial and residential development abutting the highway. However, many of these properties are landscaped with a vegetated buffer to shield them from view of the roadway.

Most of the parcels adjacent to Route 1, although zoned for low and medium-density development, are not yet developed. This provides for a feeling of open space and rural character uncommon to many areas in Rhode Island.

#### **C. INTEGRITY OF THE ROADWAY**

Route 1 is a four-lane roadway with a grass and forested median running its entire length, excepting several hundred feet on the Wakefield 'cut-off' overpass.

The roadway is characterized by rolling hills in the northern section and gentle curves in the south which contribute to the roadway and landscape aesthetics. Neither hills nor curves pose hazards for vehicles traveling at designated speeds. Ample shoulder widths allow vehicles to pull safely to the side of the road for emergencies.

Tiered lanes and diversity of vegetation within the medians also serve to enhance the character of the roadway.

#### **D. VIVIDNESS**

The diverse topography, vegetation and land uses located along Route 1 create vivid impressions for motorists. Examples of these include:

- The frequent roadway curves are in concert with glacial deposits;

- Irregular hills in the north and the low hills in the outwash plain provide horizon vistas;
- The diverse types of water bodies - coastal ponds, inland lakes, and Narragansett Bay - provide contrasting views that compliment vegetated areas; and
- The frequency of diverse wetlands along the highway form dense areas of greenery during summer and vivid contrasts of gold, yellow and red in Autumn.

## **E. SUSCEPTIBILITY TO CHANGE**

U.S. Route 1 has maintained its rural and historic character because many of the parcels abutting the roadway have not been developed. The town has attempted to reduce potential adverse impacts through conservative zoning patterns. The vast majority of the land is zoned R40, R80, and R200 (approximately one, two, and five acre lots for residential development).

Route 1 is most heavily traveled during the summer months. The roadway provides access to many public and private beaches including Narragansett, Scarborough, Matunuck, East Matunuck, Moonstone, and Green Hill. Other seasonal recreation and cultural facilities accessed by Route 1 in South Kingstown include Theater by the Sea, the Port of Galilee, Block Island Ferry, Trustom Pond National Wildlife Refuge, and the Hale House.

Because of inclusion within the CRMC SAMP regions, much of the land located along U.S. Route 1 is under more stringent regulations for future development. CRMC has certain authority to regulate types and intensity of development within SAMP regions.

A Groundwater Overlay District, to protect the Town water supply wells near Factory Pond, is located within the South Shore area. This measure restricts the types and intensity of land uses in reservoir and recharge areas.

One of the most pervasive threats to biodiversity is the spread of exotic or invasive species. Route 1 currently has several extraordinary examples of natural communities containing predominately natural species. This is especially true for the portion of the road south of the Wakefield cut off. Above that, disturbance of the land has allowed a foothold to invasives.

## **ADDED BRIDGE DATA**

The following information is provided as supplemental data to application *Section III.b. 6. Bridges.*

There are bridges at the intersection of U.S. Route 1 and the following roadways in South Kingstown: Pond Street, Salt Pond Road, Saugatucket Road, Route 108, Old Tower Hill Road, and the William C. O'Neill Bike Path.

## REFERENCES

- BETA Engineering, Town of South Kingstown Transportation Improvement Plan, April 2000
- Coastal Resources Management Council, Rhode Island's Salt Pond Region: A Special Area Management Plan (Ninigret to Point Judith Ponds), adopted November 27, 1984, published June 1985, as amended
- Coastal Resources Management Council, The Narrow River Special Area Management Plan, adopted December 8, 1986, published May 1987, as amended
- Crossman Engineering, Inc., Draft Design Study Report and Environmental Assessment for the Reconstruction of Route 4 and U.S. 1, April 1996
- Esner, Richard and Julie Lundgren, Natural Communities of Rhode Island, Rhode Island Natural Historical Society, 2006
- Institute of Transportation Engineers, Trip Generation (Third Edition), July 1984
- Pettaquamscutt Historical Society Bulletin, May 8, 2013, Memorandum: Salt Pond Archaeological Site Rt. 110: Site Summary
- Quinn W. Alonzo, Rhode Island Geology for the Non Geologist, The Rhode Island Department of Natural Resources, Providence, 1973
- Rhode Island Historical Preservation Commission, Historic and Architectural Resources of South Kingstown, Rhode Island: A Preliminary Report, Providence, 1984
- Rhode Island Historical Preservation Commission, Native American Archaeology in Rhode Island, 2002
- Town of South Kingstown, Comprehensive Community Plan, April 2014 Update, as amended
- Town of South Kingstown, Harbor Management Plan, September 2010 Update, as amended