

5. THE PLAN



Illustrative Master Plan (see enlargement on pages 30-31).

As described in Chapter 2, creating a more attractive, greener environment, with better access to the beach and Reservation, and more amenities for visitors, are key goals of this master plan. The plan is designed to provide visitors with a great day at the Reservation from arrival to departure, while aiding the DCR in operating and maintaining the Reservation and supporting the Town's economic development goals. The recommendations described below were developed to achieve that vision, and respond to DCR's needs and concerns, as well as the concerns that were expressed by the community and the Citizens Advisory Committee throughout the master plan process.

Although it is anticipated that the peak season at the Reservation will continue to be the summer, when the beach is most heavily used, the Reservation has year-round visitors. The recommended improvements

are designed to encourage visitation during the off-season through expanded opportunities for an array of activities and improved connections between the Reservation and adjacent commercial districts.

As described in the introduction, this master plan was developed in conjunction with the Nantasket Beach Seawall Repair Project. Recommendations (both design and phasing) have been coordinated with the remaining unfinished elements of that Project, including:

- Installation of a stone revetment to stabilize the existing seawall segment from the Mary Jeanette Murray Bath House north to Water Street (by the U.S. Army Corps of Engineers).
- Rehabilitation of the revetment at the northern end of the Reservation, near the David Cook Comfort Station (by the Hull Redevelopment Authority).

Recommendations are divided into the following categories:

- The Promenade/Boardwalk
- Open Space and Recreational Amenities
- Landscaping and Green Space
- Operations and Maintenance Area
- Vehicle and Pedestrian Access and Circulation
- Year-round Operations
- Interpretive Opportunities
- Wayfinding and Signage
- Phasing.

This Master Plan includes conceptual plans for recommended improvements. As individual recommendations are implemented, design will be taken to a much greater level of detail and a public review process will be conducted. All facilities will be designed to meet ADA accessibility standards, and layouts for new facilities (including the boardwalk, bike path and parking) were developed to accommodate those requirements. Specific modifications to existing facilities are noted in the text.

The Town of Hull has expressed an interest in using the redesign of portions of the Reservation as an opportunity to address ongoing flooding issues near

the Reservation. As part of the design process, DCR is open to discussions with the Town regarding the specific causes and effects of flooding near the Reservation and the potential for design options to help mitigate the flooding.

Nantasket Avenue and Hull Shore Drive are listed on the National Register of Historic Places as part of the Greater Boston Metropolitan Park System National Register District. Changes to the alignment and streetscape will need to be reviewed by the Massachusetts Historic Commission during future design phases.

The Promenade/Boardwalk

Most visitors to the Reservation walk along the beachfront promenade, whether to access the beach, to exercise or to enjoy the view. The promenade also provides a refuge for visitors during high tide, when the beach is underwater.

As with the existing promenade, the redesigned promenade will be continuous along the entire length of the Reservation.

For most of the length of the beach, the promenade is 16 feet wide. It widens to almost 20 feet behind the Mary Jeanette Murray Bath House. At the northern end of the beach, along Hull Shore Drive, it narrows



Above: Existing promenade and adjacent parking lot; rendering of boardwalk with shade structure, landscape buffer and bike path.



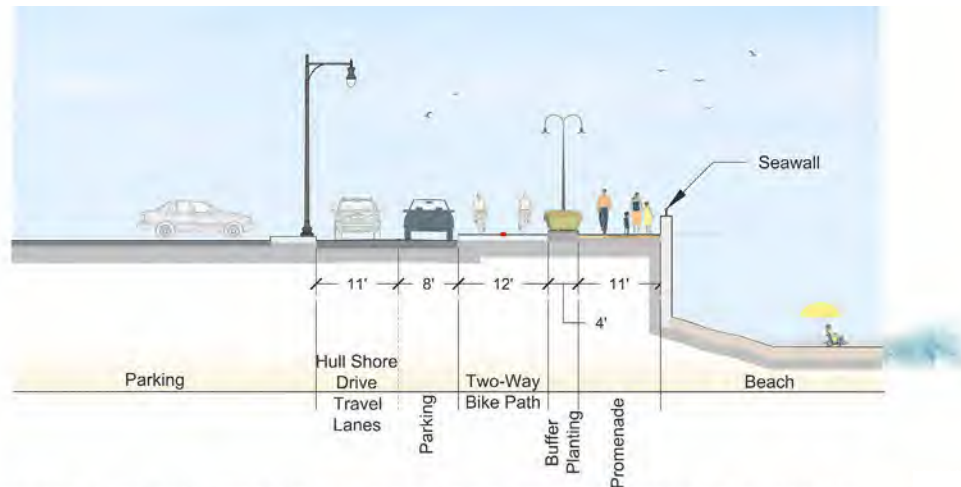
Illustrative drawing of Master Plan recommendations.



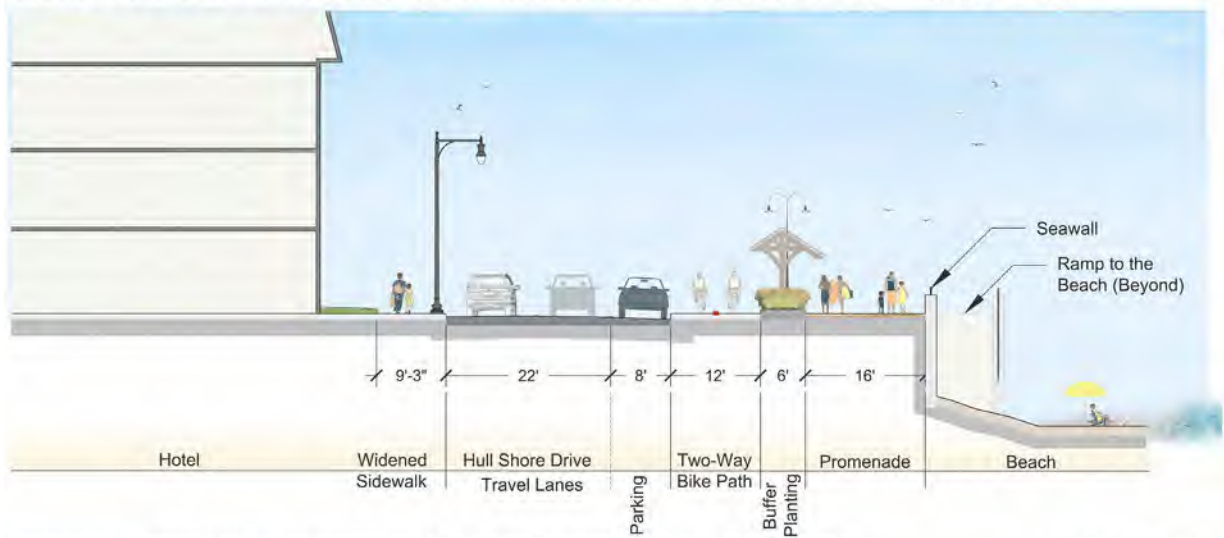
to 10 feet because of the limited land area available between Hull Shore Drive and the seawall. The promenade could be widened to 12 feet in this area if the promenade construction takes place during or after the Town of Hull's proposed roadway widening.

A six-foot wide planting buffer along the landside of the promenade separates the promenade from the bike path (described on page 48). The sides of the planters should be angled inward to avoid conflicts with cyclists. In a few locations, the buffer strip narrows to 4 feet. The exact width and juxtaposition of the boardwalk, planting buffer and sidewalks change as the available space differs over the length of the Reservation. The cross sections (pages 32 through 36) illustrate the different conditions.

Shade structures with benches, as well as locations for artist spaces, are interspersed in the planting strip along the length of the promenade. Artist spaces will provide opportunities for artists to set up easels, as well as to display and sell their work. The boardwalk can become an Arts Walk - strolling the boardwalk to look at art displays will become another activity attracting and engaging visitors during high tide and the off-peak seasons. The Arts Walk also will help to support Hull's strong arts community. Vendor stalls or pavilions to accommodate umbrella, beach chair and/or bicycle rentals are located near the northern and



SECTION 1- 20' TOTAL WIDTH @ HULL SHORE DRIVE, REDUCED BUFFER ZONE WIDTH (4')



SECTION 2- 12' BIKE LANE ALONG PROMENADE, 30' TOTAL WIDTH @ HULL SHORE DRIVE

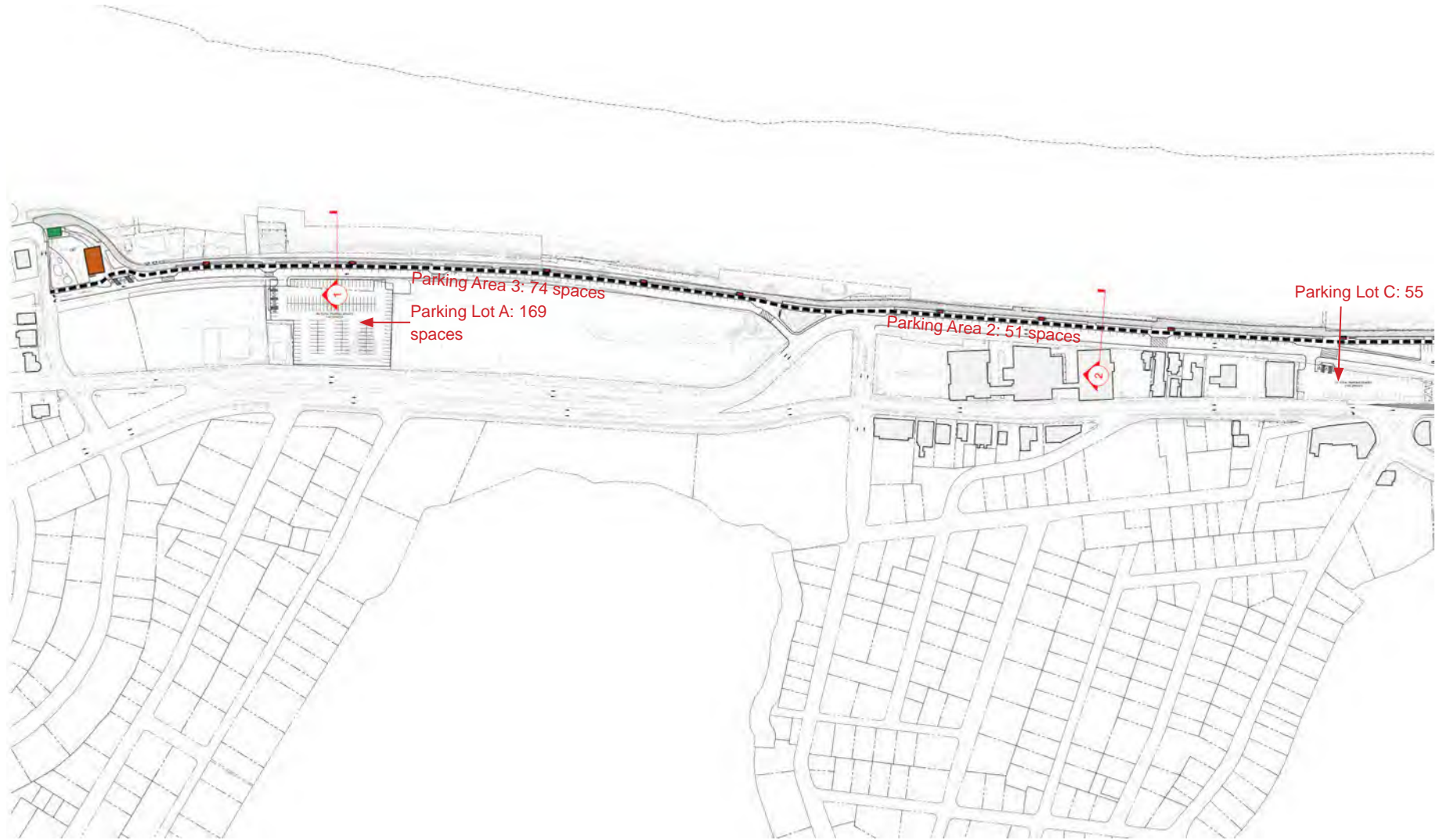
Above and facing page: Cross sections indicating juxtaposition and width of promenade, bike path and other amenities at various locations (cross section locations are shown on pages 34-35).



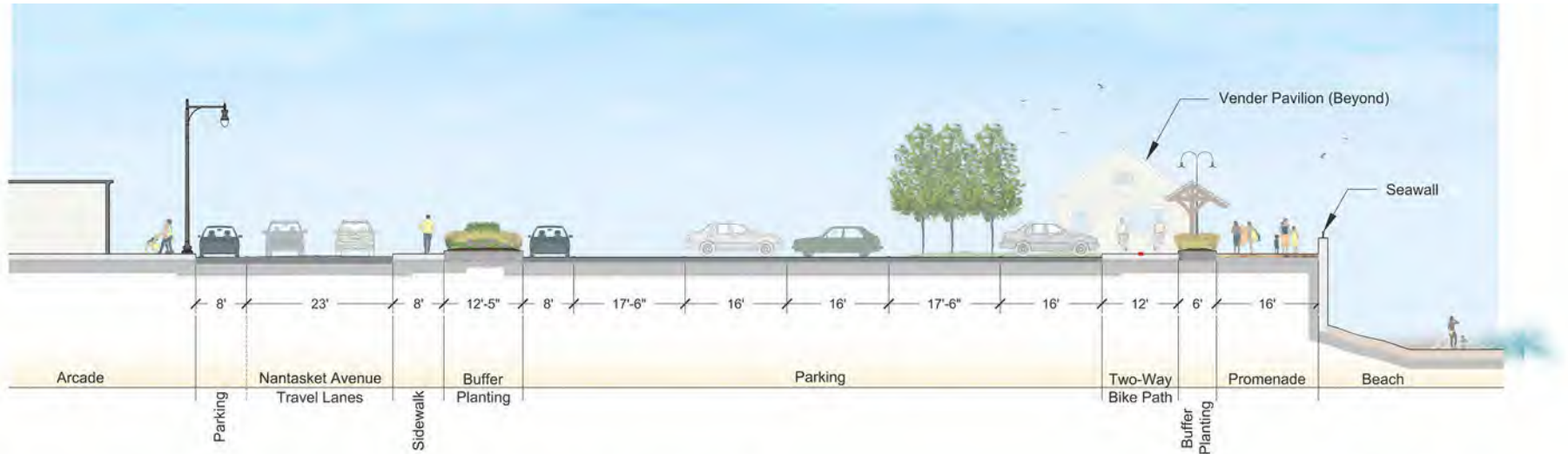
SECTION 3- 12' BIKE LANE ALONG SIDEWALK, 24' TOTAL WIDTH @ NANTASKET AVENUE



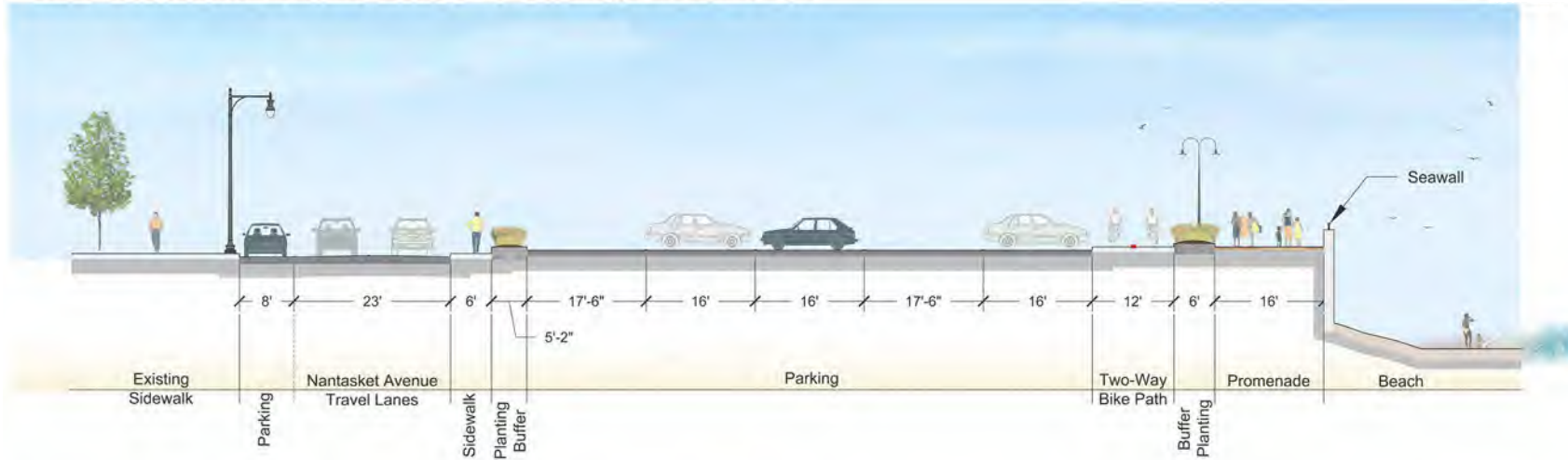
SECTION 4- 12' BIKE LANE ALONG SIDEWALK, 42' TOTAL WIDTH @ NANTASKET AVENUE



Above and facing page: Location of cross sections on pages 32, 33 and 36 and parking facilities discussed on page 48.



SECTION 5- 12' BIKE LANE ALONG PROMENADE, 31' TOTAL WIDTH @ NANTASKET AVENUE



SECTION 6- 12' BIKE LANE ALONG PROMENADE, 31' TOTAL WIDTH @ NANTASKET AVENUE

Cross sections indicating juxtaposition and width of promenade, bike path and other amenities at various locations (cross section locations are shown on Pages 34-35).

southern end of the beach. These stalls could be operated as “branches” of existing beachfront businesses.

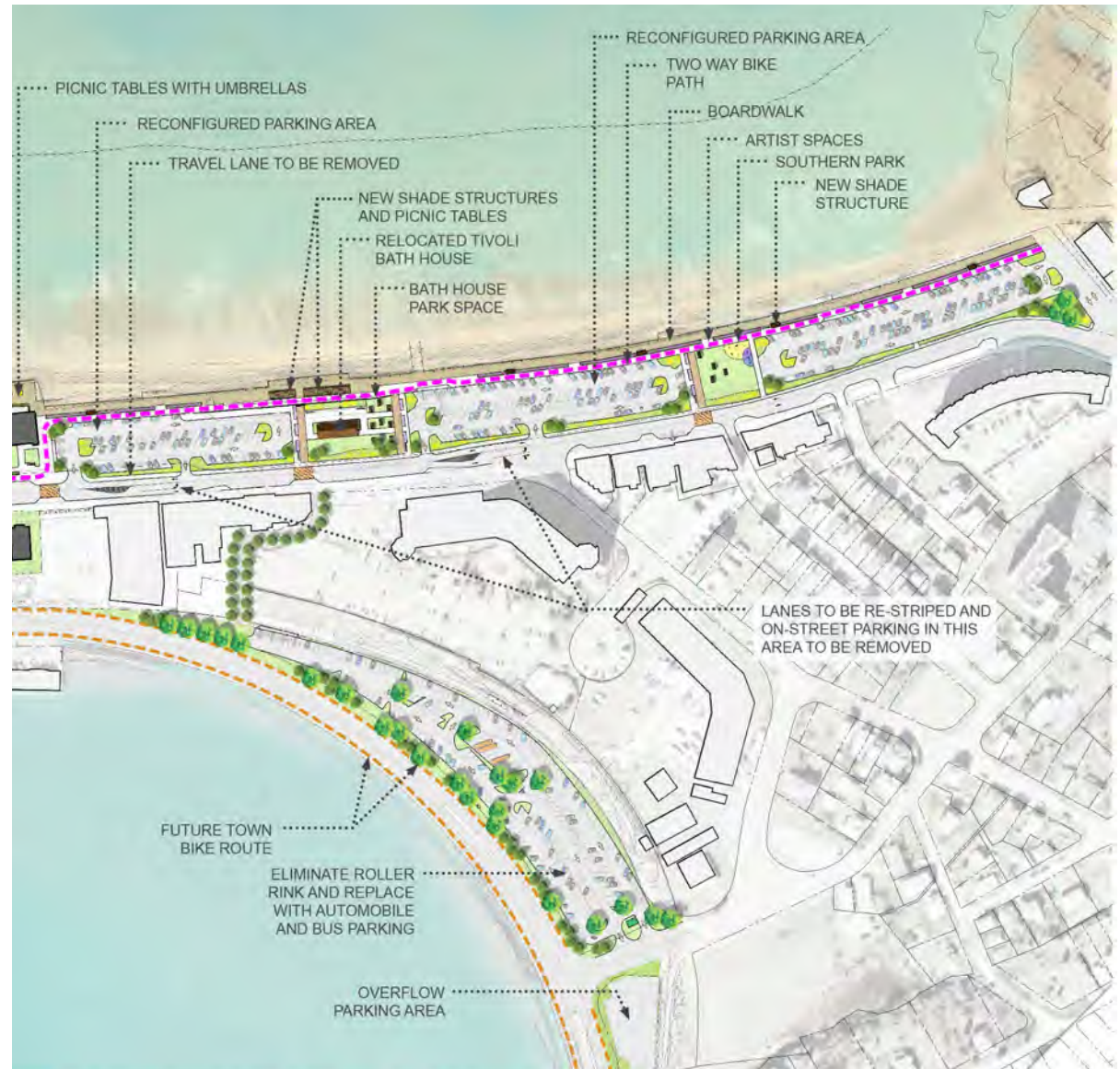
Lighting is incorporated into the design for the promenade and is shown as double pendant lights, similar to those used at other DCR Reservations. Where possible, the lights are placed to illuminate both the promenade and the bike path or adjacent seating areas. Lighting should be energy-efficient; the use of solar-powered lights should be explored during the next design phase.

Open Space & Recreational Amenities

While the beach is, of course, the major recreational amenity and the reason most visitors come to the Reservation, many visitors come for the day and are looking for other opportunities to extend the season, to limit sun exposure, to create a more varied experience and to “wait out” the loss of the beach during high tide. The recommendations on the following pages are designed to provide a range of amenities and activities for visitors.

South Area

Recommended changes to the southern portion of the Reservation are designed to “break up” the existing large parking area that extends from the



Close-up of the South Area.

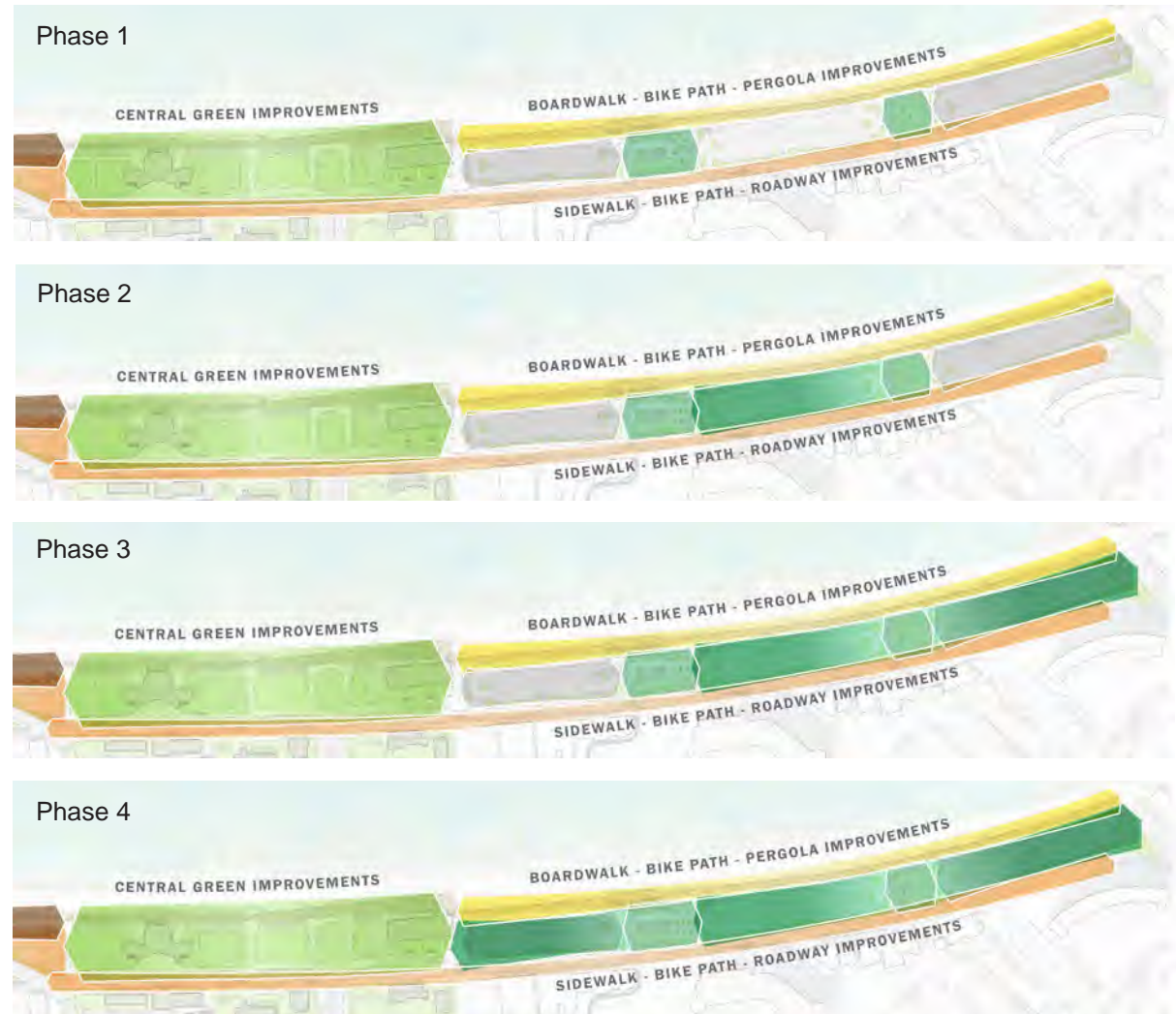
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Bernie King Pavilion to the southern end of Nantasket Reservation. Two new open spaces will create additional locations for visitors who want to be near the ocean but not necessarily on the beach, as well as provide more attractive views from the retail establishments and restaurants on the west side of Nantasket Avenue. The size of the two parks is dependent upon the need for parking in this location – it is anticipated that the parks will be expanded over time as transit service improves and fewer visitors arrive by car.

The northerly park connects to the wide portion of the boardwalk and is linked via a crosswalk to the pedestrian path leading to the parking lots on George Washington Boulevard. The conceptual design includes picnic tables, a plaza area and bike racks. The Tivoli Bath House is relocated further back from the beach to provide more protection from wave damage. The design of the new bath house should include an analysis of the potential for including solar powered hot water heaters.

The second park connects to the crosswalk at Berkley Road. This park could be designed to resemble an upland beach with a large sandy area and a splash pad play area. Picnic tables are also shown in this park.

Long term, the two southern parking lots could become open space if there is not demand for the



The diagrams above illustrate potential phasing for converting the southern parking lots into parks as parking demand decreases. Phase 1: two small parks with three large parking lots; Phase 2: the central lot becomes a park; Phase 3: the southernmost lot becomes a park; Phase 4: the northernmost lot becomes a park.



Playful windbreak structures.



Elevated beach zone.

Diagrams and photographs illustrate potential design features to be used when and if the southern parking lots are converted to park use. The two-way bike path and boardwalk/promenade would be built prior to any conversion.



Planted buffer zone.



Connections from Nantasket Avenue to the beach.

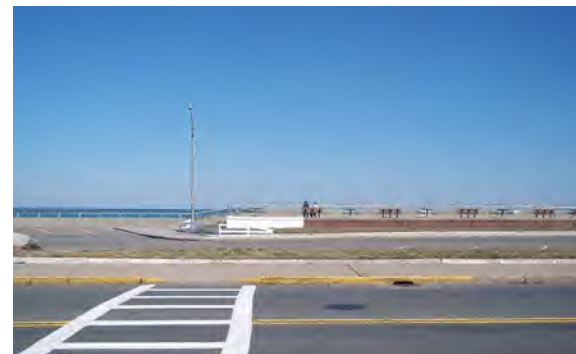
Diagrams and photographs illustrate potential design features to be used when and if the southern parking lots are converted to park use. The two-way bike path and boardwalk/promenade would be built prior to any conversion.

parking. The northern parking lot, shown as parkland in Phase 4, will most likely remain to provide accessible parking for events at the Bernie King Pavilion, the Mary Jeanette Murray Bath House, Nantasket Green, the Carousel and businesses along Nantasket Avenue. DCR should re-evaluate the need for parking on an approximately five-year schedule. The parks should be designed so that they can easily be expanded as parking demand decreases.

At the existing plaza between the south side of the Bernie King Pavilion and the Tivoli Bath House, new shade structures are added.

Accessibility: The promenade in this location will require regrading to eliminate the steep slopes at either end of the plaza.

Many people expressed an interest in accommodating sidewalk cafes in front of restaurants on this section of Nantasket Avenue. The existing sidewalk is 12 feet wide from the Clocktower Building to the southern end of the adjacent commercial strip, and 16 feet wide in front of the commercial strip from Park Avenue south to Atherton Road. Both widths will accommodate outdoor seating. Parking is limited to the southbound (west) side of the street, to provide unobstructed views to the parks and beach.



Top: locations where sidewalk cafes could be accommodated. Left: existing view from sidewalk cafe location. Right: Rendering of potential view from same location, with sidewalk cafe and new small park in the southern parking lot.

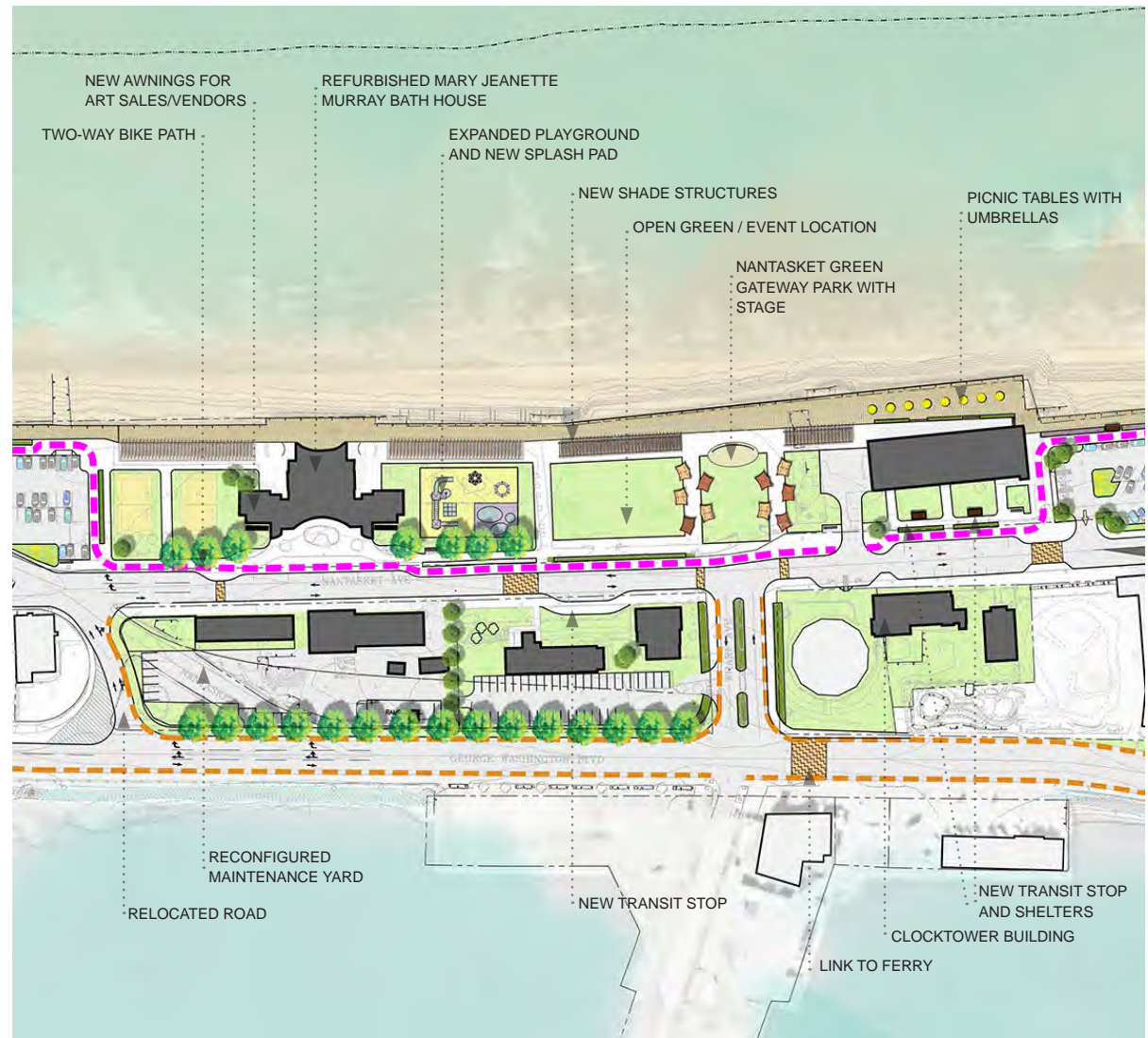
Central Area

The area from the MJM Bath House to the Tivoli Bath House encompasses many of the existing key visitor amenities and gathering spots, including the MJM Bath House, a playground and the Bernie King Pavilion. This area is located close to much of the parking and is very visible for visitors arriving via Wharf Avenue. It also is directly across Nantasket Avenue from the Carousel and Clocktower Buildings, as well as the DCR operations and maintenance yard. A number of improvements are recommended for this area.

Nantasket Green

Just to the south of the MJM Bath House and directly across from Wharf Avenue, a key feature will be Nantasket Green, a new gateway that will welcome visitors to the Reservation.

Nantasket Green replaces the existing parking lot and creates an attractive gateway to the Reservation. More importantly, replacing the parking lot with parkland in this location will create a centrally located, continuous open space from just north of the MJM Bath House to south of the Bernie King Pavilion. The space will be able to accommodate a variety of large events such as the 24-hour Cape Relay, arts fairs, the Polar Plunge, Endless Summer, radio station/ band broadcasts, car shows, Swim Across America,



Close-up of the Central Area.

triathalons, and kite festivals - some of which take place already but could be accommodated more effectively, and some of which have chosen not to come to Nantasket Beach because of limited space.

Combined with the MJM Bath House, Nantasket Green will be able to host events requiring a mix of indoor and outdoor space. Event participants will be able to use the restrooms at the MJM Bath House, rather than setting up port-a-johns, making this a very desirable location for event planners. The large gathering space may also eliminate the need to close down Nantasket Avenue for large events such as the car show and Endless Summer. Creating a centralized focal point for events will help to attract more events, bringing visitors to local businesses and reflecting the spirit of the original destination Paragon Park.

Nantasket Green also will be able to host smaller, community oriented events such as farmers markets, yoga/tai chi classes, volleyball tournaments, community concerts, and outdoor movies. The event space could provide opportunities for additional community gatherings and more programming partnerships between DCR, the Town and local schools. Clustering the major facilities also helps to simplify operations from a DCR management perspective.

Nantasket Green will serve as a “front yard” for the reuse of the Dormitory Building and Former Police



At left: Examples of community events that could be hosted on Nantucket Green, including outdoor movies, yoga classes and the staging area for the Polar Plunge. Above: larger events such as the Cape Cod Relay could be hosted on the Green without closing Nantasket Avenue.



Existing conditions photo and rendered view of Nantasket Green, with stage and shade structures, from Wharf Avenue.

Station, enhancing the potential reuse of those two buildings. Increased activity in this portion of the Reservation will bring more visitors to the Carousel, helping to support that facility as well as new and existing businesses along Nantasket Avenue. The area will be served by existing parking lots to the north and south, as well as transit stops along Nantasket Avenue.

The conceptual design for Nantasket Green includes a gateway park with a stage that could be used for a

variety of performances and events. The structure, as shown in rendering, reflects the shape of the former Paragon Park roller coaster; smaller shade structures provide a sculptural element to the park. A large open lawn will provide space for picnics, Frisbee throwing, etc. and can accommodate a tent for larger gatherings and events. Long shade structures are shown parallel to the boardwalk. Community members liked the idea of open lattice roofs so that the benches are not in full shade. Benches are shown along the sides of the large lawn area.

Bernie King Pavilion

On the ocean side plaza adjacent to the Bernie King Pavilion, new plantings and picnic tables with permanent umbrellas will provide a more attractive and better protected picnic area adjacent to the beach. The design and installation of these umbrellas will need to allow for potential removal during strong storm conditions. The planters and tables will help to better define the picnic area which currently feels somewhat open and desolate. The exact location and size of these planters and tables will be studied during the design phase to avoid interference with those visitors viewing and/or participating in the dances at the pavilion.

A transit stop with shelters is located along Nantasket Avenue in front of the pavilion.



Existing conditions photo and rendering of recommended improvements to plaza behind the Bernie King Pavilion.

Accessibility: The existing promenade is widened at the southwest corner of the Bernie King Pavilion, by the stairs to the beach, to eliminate the pinch point in that location.

Mary Jeanette Murray Bath House

As discussed in Chapter 2, the Mary Jeanette Murray Bath House is underutilized, with the main space being closed for much of the time. While no maintenance repairs are needed at the MJM Bath House, a number of changes were suggested for the near future:

- Hang historical pieces and artwork in the open meeting space to create a more inviting atmosphere.
- Improve acoustics for more inviting meeting space.
- Open the doors and invite the public in during normal operating hours, rather than just during special events.
- Create a station in the open meeting space to sell DCR parking permits during the summer; this will require a phone line for credit card transactions.
- Add windows to the utility rooms in each wing of the building to create office space for the rangers and the lifeguard supervisor.
- Reconfigure the currently empty room in the women's wing with the large door to the outside to be a break room for the lifeguards. The inside door will need to be secured to prevent access

to the women's room – lifeguards will be allowed access through the large outer door. The room has a large door that opens directly to the beach and a number of lockers that could be used for storage. This layout will allow the rangers and lifeguards to stay closer to the beachfront to serve visitors.

- Repurpose the Manager's office for storage of materials that are currently located in the utility rooms proposed for other uses (see above).
- Provide awnings along the front of the MJM Bath House for artists/vendors.
- Assess the potential for installing solar powered hot water heaters.

The plan includes expanding the existing playground on the south side of the MJM Bath House to accommodate more children and includes a new splash pad that would be visually attractive and provide a popular play/cooling off spot during high tide. Play structures should be designed for a variety of ages.



From top: Existing views of the Mary Jeanette Murray Bath House and adjacent playground.

Bay Street to Water Street

North of the Mary Jeanette Murray Bath House, between Bay and Water Streets, the narrow width of the Reservation limits facilities to the promenade, buffer strip and bike path.

As part of the ongoing Seawall Stabilization Program, a stone revetment is planned to be constructed between the MJM Bath House and Water Street. Recommendations for this area should not be constructed until after the revetment is in place.



Close-up of the Bay Street to Water Street area.

North Area

Changes at the northern end of the Reservation at Phipps Street are designed to make this area more attractive and user-friendly. Currently, amenities and opportunities for purchasing food and drink are very limited at this end of the Reservation.

It is recommended that Manomet Avenue, which separates the beach from adjacent Reservation property, be closed to create a larger area contiguous to the boardwalk. The expanded area includes a new playground as well as a vendor pavilion for selling food, beverages and other beach items, or for bicycle rental. A right-turn only lane for drivers turning from Hull Shore Drive onto Phipps Street would help to prevent Hull residents heading north from being impacted by beach traffic turning left onto Phipps Street to head back south.

A portion of the revetment needs to be rehabilitated in this area. It is recommended that the David Cook Comfort Station be relocated to the land side of the boardwalk to allow for dune reclamation, and that this area serve as an early pilot project for the beach nourishment program. As with the Tivoli Bath House, the use of solar powered hot water heaters should be evaluated.



Close-up of the North Area.



It is recommended that the David Cook Comfort Station be relocated to the landside of the boardwalk.

An accessible route down to the beach and a ramp to accommodate both DCR and Town-owned beach maintenance vehicles will need to be built in this location.

Landscaping & Green Space

A key concern expressed during this project was the overall lack of green space throughout the Reservation. In addition to the landscape buffer and new open spaces described in this chapter, recommendations include:

- Planting a row of trees along George Washington Boulevard to help screen the Operation and Maintenance area.

- Adding landscaping to parking lots.
- Enhancing plantings at entry points, such as along Wharf Avenue.

It has been DCR's experience at Nantasket Beach that the harsh beachfront environment makes it difficult for trees to flourish. With the exception of the trees noted above, it is recommended that landscaping include primarily shorter, hardy plants that can withstand the strong winds and sea spray.

Operation & Maintenance Area

Recommendations for the Operation and Maintenance area are described in detail in Chapter 4.

Vehicular & Pedestrian Access & Circulation

Pedestrian Access

Pedestrian access to and through the Reservation is provided via the sidewalks and promenade described above. Buffer planting will provide a more attractive pedestrian environment. Twenty six crosswalks provide access to the beach. The plan includes the introduction of bump-outs at a number of the crosswalk

locations to shorten the crossing. It is recommended that temporary raised crosswalks be used to slow traffic during the summer. The temporary raised crosswalks can be removed between the fall and spring to provide good traffic flow and to avoid conflicts with snow plows.

Recommendations for push-button activated flashing beacons and warning signs are discussed in Chapter 4.

A wide crosswalk on George Washington Boulevard (outside of the Reservation) will provide a safe pedestrian crossing, should ferry service to the Town Pier be established.

Bicycles

Nantasket Beach is popular with cyclists and this master plan greatly improves cycling amenities. As shown on the plan on pages 30 and 31, and the sections on pages 32 through 36, a two-way 12-foot wide bike path runs the entire length of the Reservation. For most of that length, it is at the same height as the boardwalk and sited to allow cyclists to ride close to the beach, separated from the boardwalk/promenade by the planted buffer strip. The 12-foot width provides adequate width for a curb/bumper between the bike path and on-street parking. The bike path moves to the street in front of the MJM Bath House

and the Bernie King Pavilion, where beach side access is limited by the buildings. The bike path will connect with the Town's proposed bike lanes at either end of the Reservation, and with the George Washington Boulevard bike lane at Wharf Avenue.

The bike path is designed to provide a protected and attractive beach side route for families and other recreational riders. It is likely that some cyclists, particularly commuters and others traveling long distances, will continue to ride in the street.

Bicycle racks are provided throughout the Reservation and vendor pavilions near the north and south ends could be designed to accommodate bicycle rentals.

Transit

The plan is designed to accommodate transit access to the Reservation, and it is recommended that DCR work with the MBTA to coordinate ferry, train and bus schedules to allow for easy transfers between modes. It is also recommended that a consolidated schedule be developed each summer so that potential visitors can easily plan a transit route to and from the Reservation.

Recommended transit-related improvements include:

- On Nantasket Avenue, new pull-outs are provided for buses and trolleys in front of the

Bernie King Pavilion (on the northbound side) and the Dormitory Building (on the southbound side), in addition to the existing pull-out in front of the MJM Bath House. Covered waiting areas have been included in front of the Bernie King Pavilion.

- Parking at the George Washington Boulevard lot (Lot G) has been reconfigured to accommodate 10 buses (see plan on pages 34 and 37).
- A wide crosswalk has been added on George Washington Boulevard near Wharf Avenue (outside of the Reservation) to provide a safe pedestrian crossing should ferry service to the Town Pier be established, as stated above.

As the north and south areas of the beach become popular destinations and transit use increases, on-street parking spaces can easily be converted to transit stops.

Parking

While much attention has been paid to bicycle, pedestrian and transit access, it is likely that the majority of visitors will continue to arrive by car for a number of years. The following recommendations are intended to improve the efficiency of parking operations:

- **Installation of an intelligent parking system utilizing Variable Message Signs.** The system should count entering and exiting vehicles from each DCR lot and report the "Percentage Full" to each message board. Message board displays should feature a map of the Reservation as well as Lot designations and the number of available spaces or, if the lot is full, the word "CLOSED". If placed at each major entrance roadway these signs will allow patrons to proceed directly to a lot with capacity and avoid circling which will in turn alleviate traffic delays within the immediate region. Particularly important will be the addition of a sign just south of the entrance to the George Washington Boulevard lots (Lots G and H). Drawing visitors into those lots will reduce traffic on Nantasket Avenue and Hull Shore Drive. Similarly, a sign on Route 228/Nantasket Avenue, south of Rockland Road, will direct drivers to open lots and keep them off of Nantasket Avenue when the lots there are full. A sign in this location will be more difficult to implement because it will not be on DCR property. Signage indicating the letter designation of each lot also should be installed.
- **Introduction of an on-line and/or radio broadcast service to provide real-time parking information.** The system would allow potential

visitors to check on parking availability prior to beginning their trip or while enroute. Information provided should include updates on current parking availability and, when parking is at capacity, when parking is likely to be available. On days when parking demand exceeds capacity (see the discussion below) it is only for a portion of the day and is dependent on time of day, weather, and the timing of high tide.

- **Introduction of a “Park and Pay” system, in which drivers park their cars and purchase a ticket from a vending machine to place on their windshield.** This type of system will eliminate queuing to get into the parking lots and will eliminate or reduce the need for parking attendants.

As discussed earlier, the new park areas adjacent to the southern lots on Nantasket Avenue could be expanded over time as the demand for parking decreases. Currently, income from parking is used to support ongoing maintenance and operations for the Reservation. If parking revenues are reduced as a result of a decrease in the number of spaces, the lost revenue will need to be made up through another revenue source.

During the summer of 2015, DCR and Louis Berger conducted a parking study to determine the feasibility of reducing the number of parking spaces at Nantasket

Beach in the immediate future and to provide goals to determine the number of spaces that could be removed in years to come as travel patterns and private vehicle usage patterns change. Daily data were collected from June 15 through September 7, and a site visit was conducted by the Louis Berger team on Saturday, July 11 to observe parking operations. The day was a prime summer beach day - 90°F and sunny, low tide at 1:00, and the Reservation was hosting an event, allowing the team to witness operations on a very high parking demand day.

The following observations were recorded during the summer, both by DCR staff and during the Louis Berger site visit (see following page for lot locations):

- Existing parking includes 1,003 spaces in DCR lots, 200 on-street spaces and 900 spaces in Hull Redevelopment Authority lots (2,103 total)
- Lot C is utilized by the nearby businesses and parking there is free. It was generally at capacity throughout “Beach Days” (defined as sunny and over 70°F, or humid and/or overcast and over 80°F) and turnover was high due to the enforced two-hour limit.
- On-street parking is free and was generally at capacity throughout Beach Days.
- Lots B and D are centrally located. These lots were the first of the staffed DCR lots to reach

capacity. The combined 147 spaces at these two lots reached capacity by 9 AM on Beach Days. The lots generally started to have open spaces around mid-afternoon

- Lot A is located in the northern part of the Reservation. The beach is wider at high tide in this location than it is to the south, which is attractive to beachgoers. Lot A has 122 spaces and generally reached capacity by 10 AM on Beach Days. The lot also generally started to have open spaces around mid-afternoon.
- Lot E/F contains the majority of the DCR capacity with 428 spaces. This lot generally reached capacity around noon on Beach Days and started to have open spaces again by mid-afternoon.
- Lots G and H are removed from the beachfront and considered by patrons to be the least desirable of the DCR lots. A “Pay and Display” machine allows for these lots to be unstaffed a majority of the time. Data from these lots is limited but records show that they reached capacity on at least five summer days. Lots G and H have a combined 251 spaces.
- The HRA lots in the northern region of the Reservation add 900 spaces of capacity for Nantasket Beach patrons. The fee for parking at these

lots is variable and dependent on demand.

Generally, these lots reached capacity at the same time of day as Lot E/F on Beach Days.

- The demand met or exceeded capacity at some point in the day during 19 of the 85 summer days studied, or 22 percent of the summer. By considering only days that met the “Beach Day” conditions during any time of the week, the percentage of days during which the demand met or exceeded capacity increased to 37 percent. By considering only Beach Days on weekends, the percentage of days when demand met or exceeded capacity at some point during the day was 62 percent of the days.

The master plan includes reconfiguring a number of the DCR lots to accommodate the boardwalk, bike path and landscape buffer, as well as to provide more efficient layouts. Landscaping has been added to most of the parking lots. Parking locations and counts are indicated on the drawing on pages 34 and 35 and in Table 2. Location-specific changes include the following:

- George Washington Boulevard lot north of Rockland Circle (Lot G): The skating rink has been removed and the lot is reconfigured to accommodate bus parking. DCR should continue to negotiate with the private property



Existing parking lot locations.

owner to allow completion of the pedestrian path adjacent to the north edge of the Horizons Condominiums parking lot. This path will provide a direct link from the DCR parking lots to the beach, which will increase the attractiveness of these underutilized lots. This parking lot is designed to accommodate covered parking with solar panels that can be used to supply power to the Reservation. The cover also will shade parked vehicles, increasing the desirability of the parking lot. The layout shown for this lot is similar to the one developed by the Town's consultant Nelson\Nygaard Consulting Associates. However, the layout shown in this master plan was designed to accommodate parking for ten buses, as well as internal bus circulation. Providing adequate lane width and area for cars and buses to turn around eliminates a row of cars at the northern end of the lot and two rows of cars in the central portion of the lot, reducing the number of parking spaces from the 360 shown in the Nelson/Nygaard plan to 286.

- George Washington Boulevard lot south of Rockland Circle (Lot H): The lot will continue to be used for overflow parking on busy days.
- South of the Bernie King Pavilion (Lots E and F): The lots have been reconfigured as three separate lots, as described earlier on page 38.

| Location | Existing Spaces | Future Spaces (including Accessible Spaces) |
|--|-----------------|---|
| Parking Lots | | |
| Lots E & F: Nantasket Ave., south of Tivoli Bath House to Bernie King Pavilion | 428 | 402 |
| Lot D: Nantasket Ave., Bernie King Pavilion to MJM Bath House | 81 | 0 (open space) |
| Lot C: Between Nantasket Ave. and Hull Shore Drive, south of Red Parrot Restaurant | 55 | 55 |
| Lot B: Nantasket Ave., North of MJM Bath House | 66 | 57 |
| Lot A: Between Hull Shore Drive and Nantasket Ave., south of Quincy Street | 122 | 169 |
| Subtotal Parking Lots | 752 | 683 |
| Remote Lots | | |
| Lot G: George Washington Boulevard, north of Rockland Circle | 193 | 256 (includes 10 bus spaces) |
| Lot H: George Washington Boulevard, south of Rockland Circle | 58 | 58 |
| Subtotal Remote Lots | 251 | 314 |
| On-Street Parking Areas | | |
| Area 1: Nantasket Avenue south of Bernie King Pavilion | 66 | 55 |
| Area 2: Hull Shore Drive south of Water Street | 89 | 51 |
| Area 3: Hull Shore Drive extension | 50 | 74 |
| Subtotal Parking Areas | 205 | 180 |
| TOTAL | 1,208 | 1,177 |

Table 2: Existing and future parking availability (see plan on pages 34 and 35 for parking locations).

** Number of spaces may change due to ongoing streetscape improvements by Town of Hull.*



Example of covered parking lot with solar panels.

One or more of these lots could be converted to open space over time as the demand for parking declines.

- South of the MJM Bath House (Lot D): The lot is eliminated to accommodate the Nantasket Green open space.
- North of the MJM Bath House (Lot B): The lot is reconfigured to accommodate roadway changes and additional landscaping.

On-street parking is also modified, as shown on Table 2. In particular, parking on Hull Shore Drive Extension has been changed from angled to parallel parking to allow sufficient width for a bike path.

These changes result in a total of 2,022 spaces (942 spaces in DCR lots, 180 on-street spaces and 900 spaces in the HRA owned lots).

Using the summer 2015 demand and assuming that Lot H will be staffed on Beach Days, the impact of this change will result in no additional days per summer when demand will be greater than capacity.

The Town of Hull is currently soliciting bids to develop both HRA lots. Development of the lots will result in a net decrease of 900 spaces. If this change had been implemented during the summer of 2015, demand would have exceeded capacity during an additional 17 summer days, nearly doubling the percentage of days with such exceedance from 22 percent to 42 percent. In addition to increasing the number of days when demand exceeds capacity, the loss of the HRA lots will also substantially increase the demand in comparison to capacity. For instance, on a day during the summer of 2015 when the DCR lots were at 100 percent capacity it was assumed that the HRA lots were also completely full. If this same situation were to occur once the HRA lots were removed, the result will be 900 additional vehicles circling the Reservation in need of a parking space.

The DCR mission statement reads, in part, that “The health and happiness of people across Massachusetts depend on the accessibility and quality of our green infrastructure - our natural resources, recreational facilities, and great historic landscapes.” Removing parking capacity prior to reducing private vehicle

demand will directly contradict this statement by limiting accessibility. Additionally, excess demand creates traffic congestion and corresponding vehicle emissions on the Reservation. Thus, milestones should be considered to balance available parking capacity as demand changes, without limiting the number of beachgoers. Potential changes to demand will result from changes in the modes of transportation beachgoers use to access the Reservation - away from private vehicles and towards mass transit, bicycles, and ferries. These changes require shifts in both the public mindset and in the attractiveness of transit options, both of which will take time to develop. Trends should be monitored and recorded annually to understand the percentage of demand versus capacity on Beach Days.

It is recommended that the Town of Hull and DCR consider and discuss additional decreases in parking capacity once the following milestones are met during a summer time period:

1. Demand exceeds capacity during fewer than 25 percent of Beach Days during any day of the week (one in every four Beach Days a patron will be turned away until spaces become available), or
2. Demand exceeds capacity during fewer than 50 percent of Beach Day weekend days (one

in every two weekend Beach Days a patron will be turned away until space becomes available). Ideally, the transportation programs implemented will work well and this number could be lowered over time to 25 percent.

These milestones may be modified as additional traffic and parking data and information become available from further monitoring and analysis.

Traffic Circulation

Changes in traffic circulation related to the realignment of the George Washington Boulevard/Nantasket Avenue intersection are described in Chapter 4.

Year-Round Operation

The busiest time of year at Nantasket Beach Reservation is between Memorial Day and Labor Day when warm weather draws a lot of beachgoers. However, the Reservation also is utilized during the other nine months of the year by visitors walking along the beach and enjoying the view. Improvements proposed in the master plan are designed to benefit visitors during all seasons through the introduction of more upland areas and opportunities for larger events on Nantasket Green. The improved promenade and the new

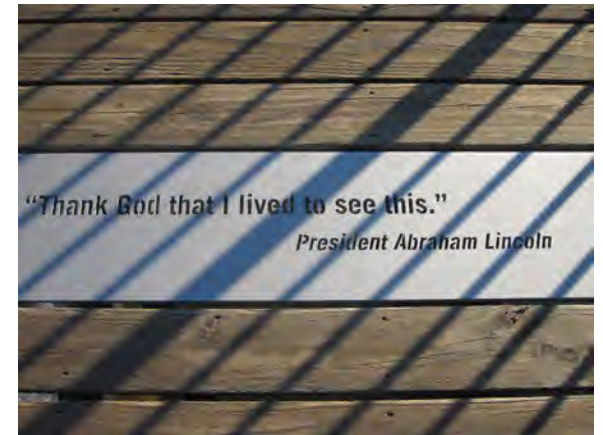
bike path can be used year-round. Potential new uses discussed for the Dormitory, Clocktower and Police Station Buildings, as well as interpretive exhibits in the Mary Jeanette Murray Bath House, are designed to encourage year-round activity. The use of hardy plants and sturdy weather-proof materials will enhance the year-round use of the Reservation.

Wind breaks proposed for the parks south of the Bernie King Pavilion will help to protect visitors from ocean spray during cooler weather.

Interpretive Opportunities

Interpretive opportunities at Nantasket Reservation include both historic and natural resources. Key elements could include the former Paragon Park, former uses of the buildings within the operations and maintenance facility, as well as an explanation of the evolution of the beachfront from a natural seashore to a constructed seawall. The former Police Station, Clocktower Building and MJM Bath House all provide opportunities for displaying historic photos and artifacts.

Potential outdoor interpretive signage locations include the plaza behind the Bernie King Pavilion, the new parks between the southern parking lots on Nantasket Avenue and the new park at the northern end



Examples of interpretive elements inserted in boardwalks and embedded in pavement.

of the Reservation. The northern end, in particular, will provide a prime location for explaining sand dunes and natural wave action.



At left and above: Examples of interpretive elements attached to railings and low walls, and free standing.

Above: Examples of interpretive elements attached to indoor building walls and within shade shelters; typical DCR wayfinding signage.

Wayfinding & Signage

A wayfinding and signage program will help visitors to navigate the Reservation and the important destinations scattered throughout. Maps in key locations, including arrival spots such as parking lots and transit stops, will better enable visitors to plan their visit. Signage should clearly identify bath houses, picnic areas, vendor pavilions and the Carousel. Signage should also identify the location for pass sales.

Phasing

It is anticipated that full implementation of the master plan recommendations, including beach nourishment, could take more than 20 years. However, as shown on Table 3, it is recommended that much of the design work take place during the next three years, with construction of many of the visitor amenities taking place in Years three to five.

The schedule is laid out to ensure that the design and construction of related and/or adjacent elements can happen in a coordinated and cost-effective manner, and that design and construction packages have realistic budgets based on potential DCR funding availability.

| Year | Activity | Description |
|------|--------------------|---|
| 1-3 | Design | Nantasket Green Boardwalk, shade structures, planting buffer, lighting Seating area behind Bernie King Pavilion Open Space and expanded playgrounds Bike lane Relocated bath houses (Cook and Tivoli) Vendor pavilions Nantasket Avenue Transit stops Parking lots |
| | Design & Construct | Parking signage program Bike lane striping on Wharf Avenue Seawall stabilization north of Mary Jeanette Murray Bath House Early improvements to operations/maintenance area and MJM Bath House Renovations to Upper Garage, Dormitory and Police Buildings |
| | Other | Continue monitoring parking demand Work with transit agencies to improve service & route timing |
| 3-5 | Design & Construct | Pedestrian link from George Washington Blvd. to Nantasket Avenue Continue improvements to operations/maintenance area Renovate/remodel MJM Bath House and Clocktower Building Traffic alternative and expanded operation and maintenance area |
| | Construct | Nantasket Green Expanded playground at MJM Bath House South, Central & Water Street Areas, including boardwalk, shade structures, planting buffer, lighting, bike path Relocated Tivoli Bath House |

Table 3: Phasing Schedule



| Year | Activity | Description |
|-------|--------------------|--|
| 5-10+ | Construct | North of Water Street area, including boardwalk, shade structures, planting buffer, lighting, bike path Relocated Cook Comfort Station Vendor pavilion Nantasket Avenue and remote parking lot improvements Southern parking lot and 2 parks Beach Park 1 |
| | Design & Construct | Beach Parks 2 and 3 Beach renourishment |

Table 3: Phasing Schedule (continued)