

TOWN COUNCIL

Public Input Sessions re:

Beachfront Master Plan

March 29, 2025 @ YMCA Gymnasium, 22257 Parsons Circle, 11AM

April 2, 2025 @ Civic Center, 500 Tazewell Avenue, 5PM

The Town Council held two public input sessions regarding the Beachfront Master Plan.

The first session was held on Saturday, March 29, 2025 in the YMCA Gymnasium located at 22257 Parsons Circle, from 11:00 a.m. until 2:20 p.m. In attendance were Mayor Charney, Vice Mayor Buchholz, Councilmen Butta, Grossman and Newman, and Councilwomen Ashworth and Holloway, Town Manager John Hozey, Town Clerk Libby Hume, and Ricky Wiatt and Doug Mettler from VHB, the Town's consulting firm. 51 members of the public attended the session, and 30 comments were collected from the attendees.

The second session was held on Wednesday, April 2, 2025 in the Civic Center located at 500 Tazewell Avenue, from 5:00 p.m. until 8:20 p.m. In attendance were Mayor Charney, Vice Mayor Buchholz, Councilmen Butta, Grossman and Newman, and Councilwomen Ashworth and Holloway, Town Manager John Hozey, Town Clerk Libby Hume, and Ricky Wiatt and Peyton Roedel from VHB, the Town's consulting firm. 63 members of the public attended the session, and 41 comments were collected from the attendees.

Mayor Charney and members of the Town Council manned the various stations – Master Conceptual Plan, Bay Avenue/Parking, and Sand Dunes, and provided an overview of the plan and answered any questions from the attendees. There was open discussion at each station. All attendees were encouraged to stay informed and provide their input.

Mayor Charney

Town Clerk



Cape Charles Draft Beachfront Master Plan Frequently Asked Questions

Why is the Town interested in upgrading the beachfront?

During all our recent planning efforts (development of our Comprehensive Plan and Community Strategic Plan) the public has consistently supported planning and upgrades to the beachfront. Therefore, that has been listed as a priority in these plans.

The Town is lucky to have four “gems” that set us apart from other communities. These are:

- The Harbor
- The Commercial District (Mason Ave/Main Street)
- Central Park
- The Beach

Over the past 10 to 15 years, major investments and many improvements have been made to all the town gems, except one... the beach. The improvements to our other gems have significantly increased the charm and character of the town, for residents and visitors alike.

It's now time to show our fourth gem a little LOVE too.

What are the goals of the Beachfront Master Plan (BMP)?

To provide:

- Improved/expanded restrooms
- Better accessibility
- More efficient/safe parking
- Easier maintenance and storm protection for local infrastructure
- Enhanced aesthetics and character

(over)

How will beachfront improvements be funded?

A project of the scope being contemplated will not be cheap. It is impractical to think the Town alone (local taxpayers) could pay for it all. It has therefore always been the Town's plan to seek grant funding to cover the majority of the expected costs.

However, getting a project like this started required a little town seed money to hire the needed expertise not available on staff. This included environmental/coastal engineers, regulatory specialists, grant experts, and architectural/civil designers. The Town put out a request for proposals and received five very qualified proposals in response. These proposals ranged in cost from \$99,000 to \$292,000 (with an average cost of \$180,000). The Town contract with VHB for \$99,000, and with their help, we've completed the research and scientific analysis needed to develop initial concepts and to begin pursuing grants.

In fact, the Town has recently applied for a Rural and Tribal Assistance Program Grant (RTA), that could provide up to \$750,000 with NO local match requirement. This grant could fully fund all remaining planning/outreach efforts, development of preliminary designs, and development of all the materials that would be needed to apply for the next grant (money for construction).

What is the timeline for beachfront project improvements?

There is currently no defined timeline to implement approved BMP projects. We are still in the very early stages of developing concept designs. However, once a plan is approved, implementation will be phased, and it would be folded into timing requirements dictated by grant funding opportunities. Grant opportunity cycles can take a year or more. Therefore, even an optimistic projection would place buildout of any plan several years down the road.

Can the plan be adjusted during implementation?

Yes. The plan is expected to be constructed in phases. As each phase is developed, the plan can be adjusted based on what was liked, or disliked, from prior phases.

CAPE CHARLES

Beachfront Master Plan

CONCEPT DEVELOPMENT

The original concept has been improved after much discussion with Cape Charles Town Council and the residents of Cape Charles.



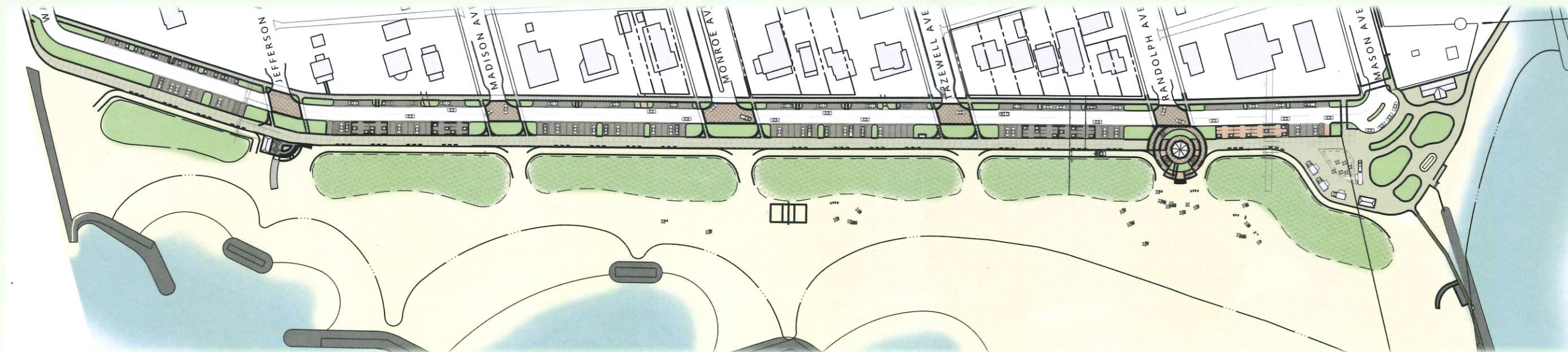
BAY AVENUE IMPROVEMENTS



The previous concept included many plazas at beach entrances, as well as a large plaza at the south end of Bay Avenue and around the existing Gazebo.

Public comments expressed desire for more entrances to be natural, as well as decreased size of plazas at key spaces such as the Gazebo and Mason Avenue Plaza.

PREVIOUS CONCEPT



This concept addresses many comments received from public forums and Town Council. The new design decreases the amount of impervious pavement, and leaves many of the street entrances as natural sand openings between the dunes. The Mason Avenue plaza and Gazebo Plaza both have been reduced in size and programming to accommodate public comments.

This concept is still a work-in-progress, and additional comments are welcome & encouraged.

PROGRESS CONCEPT



CAPE CHARLES

Beachfront Master Plan

MASTER PLAN



EXHIBIT 1



RANDOLPH AVE PLAZA

The historical gazebo on Bay Avenue is a beloved place of gathering for Cape Charles residents. This new plaza expands this gathering space, allowing the gazebo to be at the heart of it all.

- 1 » Abundant seating
- 2 » Flush Curb Intersection
- 3 » Beach access ramp / Stairs
- 4 » Preserved Gazebo
- 5 » Bollards
- 6 » Planting bed

EXHIBIT 2



JEFFERSON AVE PLAZA

This proposed plaza offers amazing sunset views on the north end of the beach adjacent to Jefferson Avenue. A flex use building and eating spaces allows this plaza to be a great place for sunset gatherings.

- 1 » Abundant seating
- 2 » Flexible Use Building
- 3 » Beach access ramp / Stairs
- 4 » Planting bed

EXHIBIT 3



SOUTHERN BAY AVENUE PLAZA

This plan enlargement of the Masterplan concept shows the southern end of Bay Avenue. This space will be the nexus of community activities; food trucks, eating spaces, and expansive green space make this area the heart of Cape Charles beachfront.

- 1 » Covered Dining Pavilion and Outdoor Dining
- 2 » Vehicle Drop Off / Food Trucks
- 3 » American Flag Pole
- 4 » Flexible Use Building
- 5 » Evergreen screening

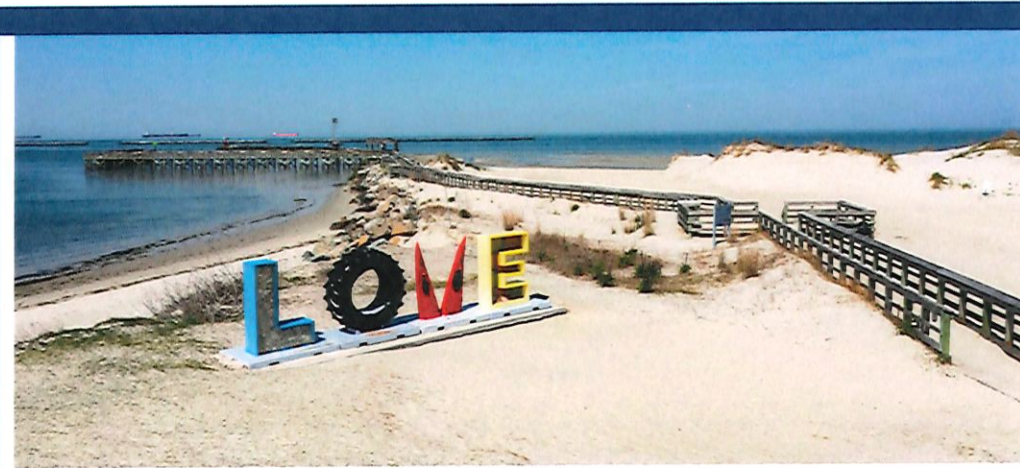


CAPE CHARLES

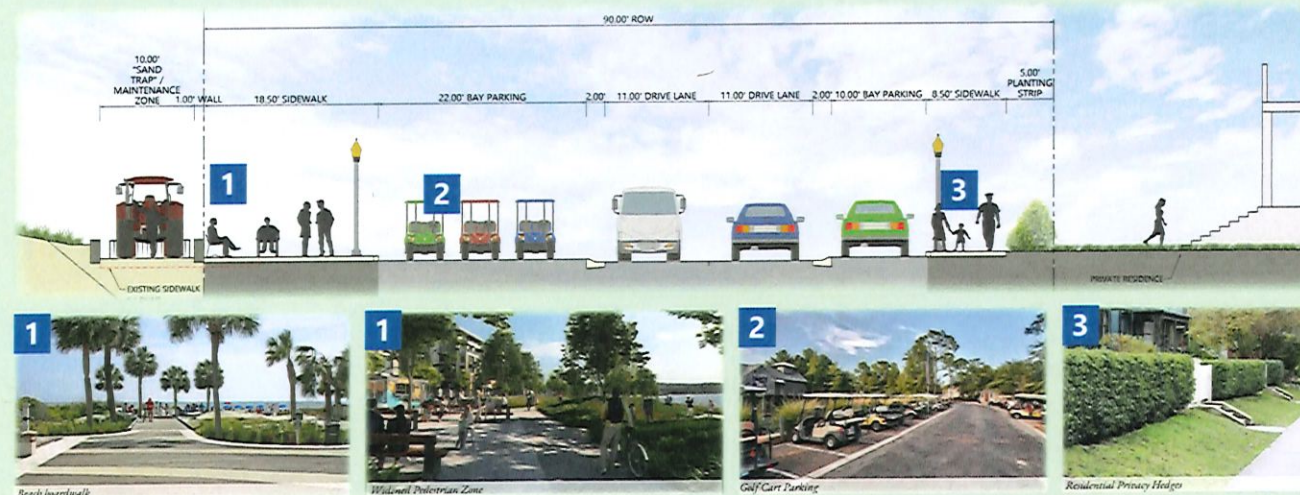
Beachfront Master Plan

BAY AVENUE

The new Bay Avenue parking configuration prioritizes safety, efficiency, and beauty for residents and visitors.



BAY AVENUE IMPROVEMENTS



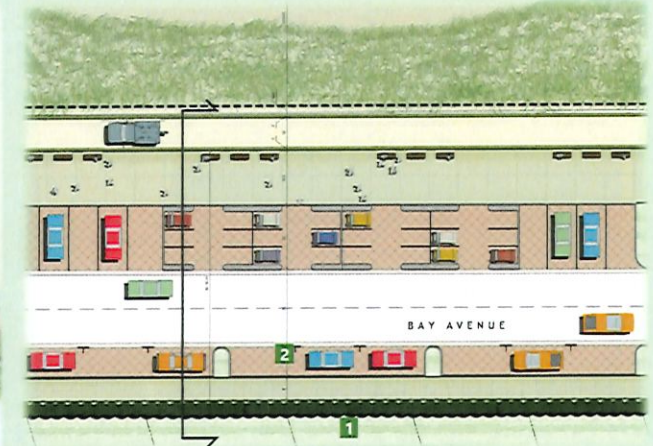
PARKING SECTION

This section depicts the proposed parking concept for Bay Avenue, featuring widened sidewalks, golf cart parking, and improved accessibility.

Historically, 75% of all vehicle parking at Cape Charles beach has been golf carts. Due to the high volume of golf carts in the area, multiple golf-cart-only parking bays have been proposed on the west side of Bay Avenue. By providing dedicated golf cart spaces, golf carts will be less likely to take up car parking in the area; making parking on Bay Avenue much more efficient for all vehicle types.

Dedicated golf cart parking also minimizes the number of children needing to cross Bay Avenue to the beach; since they are parked on the west side, they will not have to cross the road, which increases pedestrian safety. The east side of Bay Avenue has been dedicated to parallel parking spaces to maximize pedestrian friendly spaces as well as maintaining the character of Bay Avenue as it exists today.

For the residents on Bay Avenue, this proposal includes a hedge wall along Bay Avenue to increase privacy, shield residents from headlights, and to provide more protection from windblown sand. The development occurs completely within the Right-Of-Way, so there is no encroachment along property lines along Bay Avenue. Driveways and sidewalks that connect to Bay Avenue are also honored, to make sure that access is guaranteed for all residents.

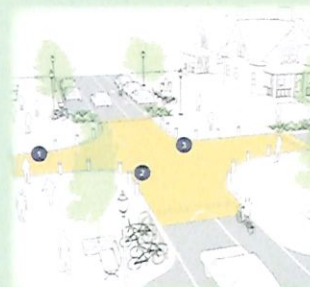


PARKING EXHIBIT

EXISTING:
160 Approx. Car Parallel Spaces

PROPOSED:
106 **1** Golf Cart Spaces
129 **2** Car Bay Spaces

235 PROPOSED SPACES
+47% Increase in Total Spaces



RAISED INTERSECTION

Drawing sourced from NACTO

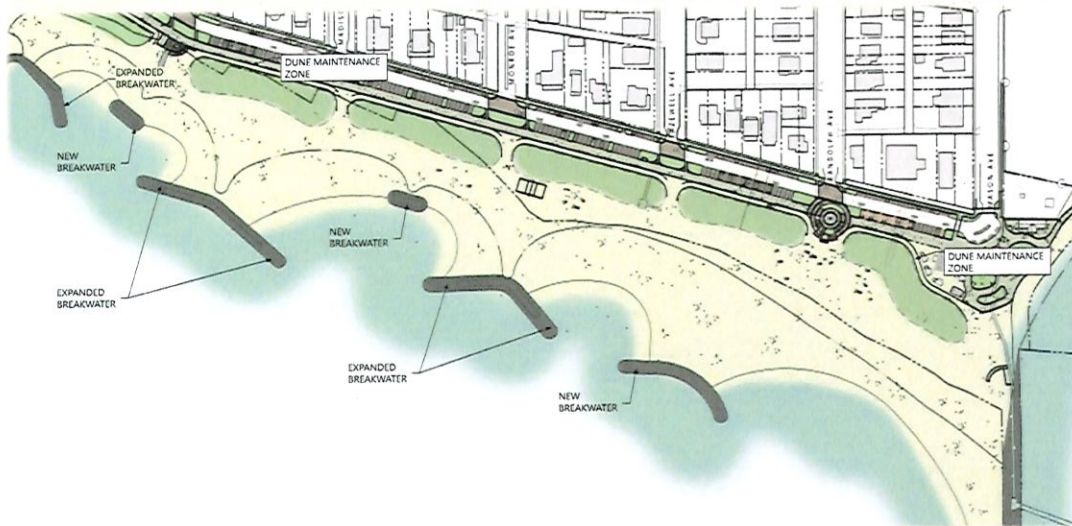
- 1 Raised intersections are flush with the sidewalk and ensure that drivers traverse the crossing slowly.
- 2 Raised intersections with yield control are preferred to signals on low-speed (<20 mph) and low-volume (<3,000 ADT) streets. Raised intersections help reduce vehicle speeds and crash risk while simultaneously reducing unnecessary delay to motorists and bicyclists.
- 3 Bollards along corners keep motorists from crossing into the pedestrian space. Bollards protect pedestrians from errant vehicles.



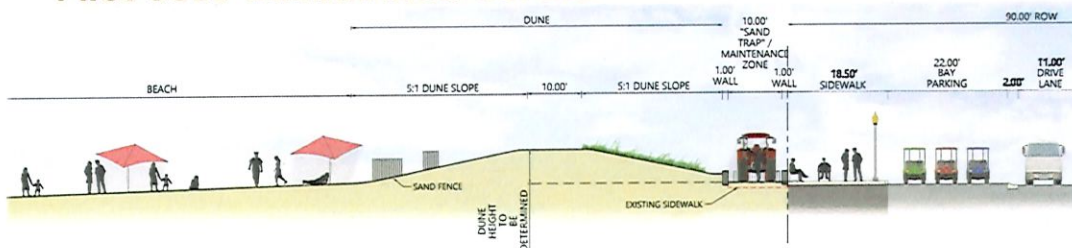
CAPE CHARLES Beachfront Master Plan DUNE MODIFICATIONS

The master plan aims to modify the dunes to provide beautiful sunset views and enhanced wind blown sand trapping for the benefit of Cape Charles residents.

PROPOSED BEACH AND DUNE AREA



PROPOSED BREAKWATER LAYOUT

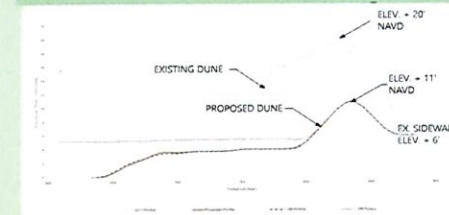


DUNE SECTION VIEW

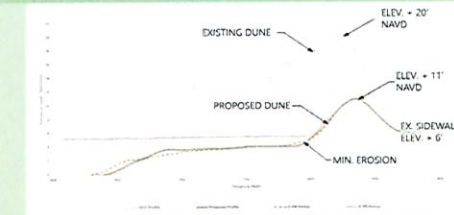


USACE - CSHORE MODELS: 100YR STORM

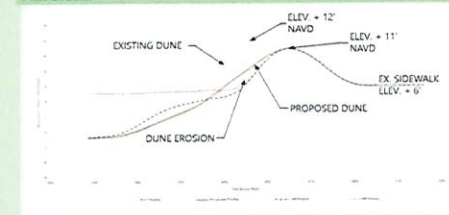
SOUTHERN BEACH 1 HR STORM



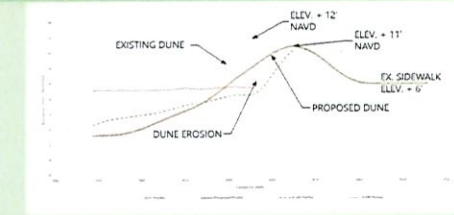
8 HR STORM



NORTHERN BEACH 1 HR STORM



8 HR STORM



CSHORE MODEL FINDINGS

CSHORE Models are 1-Dimensional profile evolution model designed to predict waves, currents, and bed-evolution in the nearshore.

Using the results of the modeling, it is determined that a dune crest elevation of 11' NAVD would provide sufficient elevation to prevent overtopping during the 100-Yr storm across all widths of beach.

Due to the diameter of the sand a dune was prepared with side slips 1:5 and crest (top) width of 10'.

100-YR Conditions:
Water Level - 5.0' NAVd88
Significant Wave Height - 3.6 feet
Peak Wave Period - 6.3 seconds



CAPE CHARLES

Beachfront Master Plan

BEACH HISTORY

Exploring the history of Cape Charles Beach and it's dunes; showing how the town and waterfront have developed and grown together.



TIMELINE



1994

This 1994 aerial image shows the beach before there were breakwaters; the dunes were much smaller and the beachfront much slimmer. Toward the north side of Bay Avenue, the beach was nearly nonexistent!

There were sand dunes existing here, although not to the scale they are today. The fishing pier also did not exist at this point.



2006

Between 1994 and 2006, breakwaters were installed, providing flood protection and expanding the usable beachfront. The fishing pier was also constructed during this time.

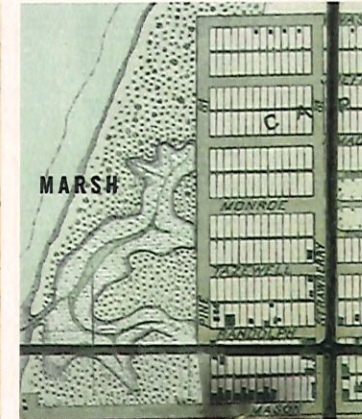
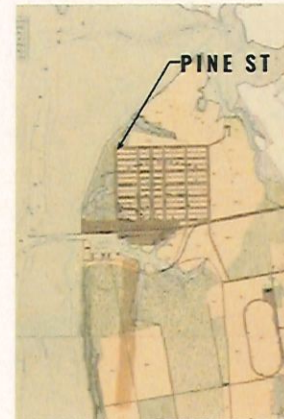
The sand dunes at this point were concentrated on the south end of the beach, closer to the fishing pier and Mason Avenue.



2018

The 2018 image shows how much the man-made dunes have grown, expanding all the way up Bay Avenue and encroaching on usable beach space. The paths between the road and beach have also gotten longer due to this growth.

HISTORY



This 1887 map of Cape Charles shows the city's original development: a grid formation that didn't quite reach the water. The westernmost road at this time was Pine Street.

Before Cape Charles had a waterfront, there was a marshy landscape between the town and the bay. This marsh predates the sand dunes, and provided the town with the natural flood protection that the dunes provide now.

This 1920s image demonstrates what the waterfront looked like in Cape Charles before the construction of the beach. Some of these homes are still existing today, demonstrating Cape Charles's lasting history.



The seawall pictured used to be the only barrier between Bay Avenue and the Chesapeake Bay. This seawall actually still exists; it is currently buried underneath the present-day beach. As more and more sand is poured into the beach, the bigger the dunes grow and the deeper the seawall becomes.



CAPE CHARLES

Beachfront Master Plan

SAND DUNES

The master plan aims to modify the dunes to provide beautiful sunset views and enhanced wind blown sand trapping for the benefit of Cape Charles residents.



RECENT DUNE HISTORY



2005



2013



2019

The beach and dunes have come and gone along Bay Avenue prior to the installation of the breakwater system along the north end of the public beach.

These breakwater structures have helped to stabilize the beach berm, but the fine grain sand is subject to wind transport.

Sand fencing was installed near the existing bulkhead around 1988 to reduce wind blown sand transport into the road and begin to build a line of dunes. The dune line has grown up and beachward over the years with wind blown sand transport and additional sand placed in the dunes during nourishment activities.

The 2021 dune has grown to be 3 times the size of the dune in 2010.

ENVIRONMENT



This photo depicts the windblown sand; the sand from the dunes is migrating past the Gazebo and into the road.



Dunes form along the landward side of a natural beach along the vegetation line. Dunes at man-made beach locations such as Cape Charles are created artificially using sand fencing and construction of dunes during nourishments. Dunes protect the uplands from wave attacks during elevated sea levels and storms. In Cape Charles, the dunes protect the street and sidewalks from storm erosion, but they do not prevent storm surges or flooding due to storm events. The dunes also replenish the beach berm during the storm when sand is eroded from the dunes and deposited on the beach. Vegetated dunes trap wind blown sand in the foliage and help the dune grow larger.

SAFETY



In recent years, the Cape Charles sand dunes' footprint has continually grown. The fine grain sand is blown from the beach berm, and it either accumulates on the dune face, or it is deposited along Bay Avenue or in adjacent lawns. Dune height and width will vary based on regulatory input.

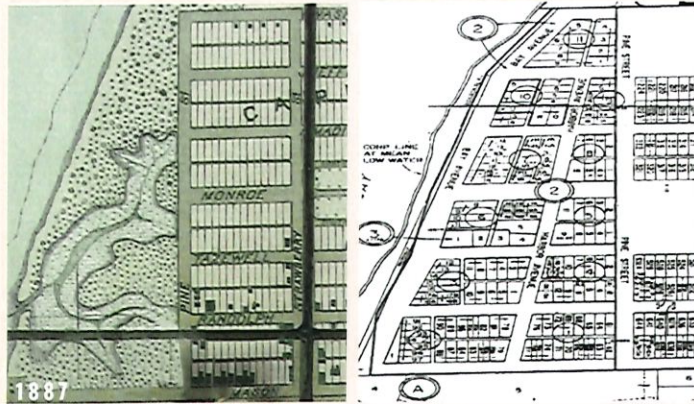


CAPE CHARLES

Beachfront Master Plan BAY AVENUE

Cape Charles' Bay Avenue has a surprising history, as well as being quite beloved by residents of the town.

HISTORY



This 1887 map of Cape Charles depicts the original city plan; a grid formation where Pine Street is the westernmost street.

In fact, before Cape Charles had a waterfront, there was a marshy landscape between the town and the bay.

When Bay Avenue was constructed in 1911, 97 plots were added to Cape Charles, providing opportunity for more residents and businesses to make this town their home.

PRESENT

In the present, Bay Avenue is a beloved part of Cape Charles. It is the center of events and holidays, a cultural anchor with the iconic backdrop of the Chesapeake Bay.

From performances in the historic gazebo, holiday parades down Bay Avenue, and the daily beauty of Chesapeake Bay, Bay Avenue serves the residents of Cape Charles as a cornerstone of culture.

LOVE SIGN

LOVE

CHRISTMAS

FOURTH
OF JULY

THEN & NOW



GAZEBO

BAY AVE

Cape Charles has a unique small town spirit that has remained consistent through much of its lifetime. It's this cozy coastal atmosphere that gives the town its character.

A key part of this is the beautiful architecture on Bay Avenue. Between these postcards from the 1930's and now, many of the beautiful homes on Bay Avenue are still standing, a testament to the times they have weathered. As well as the town's beloved historic gazebo, hosting events for many years.

