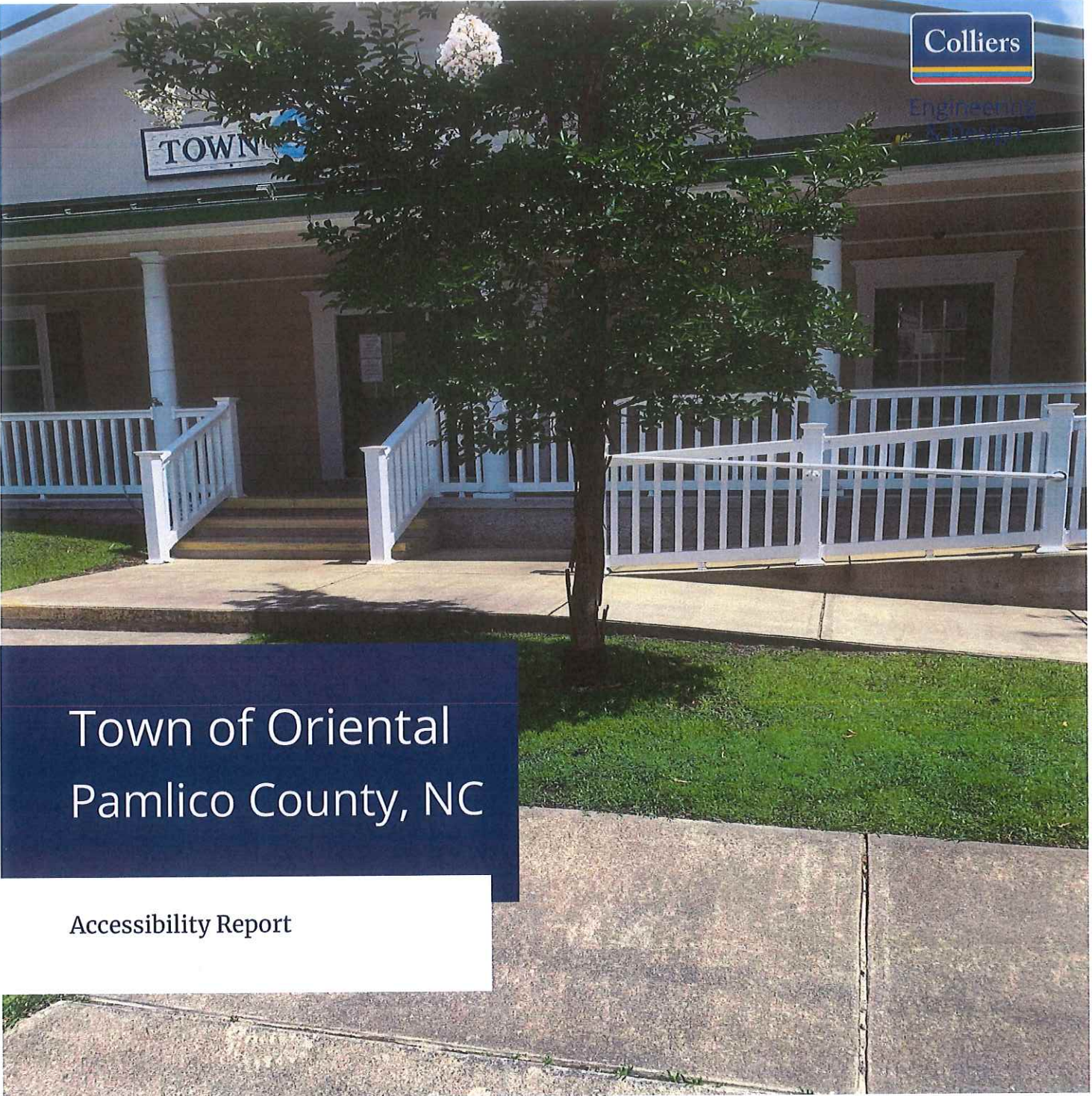


# Tab 5



Engineering & Design

TOWN



# Town of Oriental Pamlico County, NC

## Accessibility Report

October 1, 2021

Revised May 2023

Prepared for:

David Bone, Executive Director  
Eastern Carolina Council of Government  
223 Middle Street, Ste. 300  
P.O. Box 1717  
New Bern, NC 28563

**Colliers Engineering & Design, Inc.**  
2000 Regency Parkway  
Suite 295  
Cary North Carolina 27518  
Main: 877 627 3772  
Colliersengineering.com

Project No. ECC-0004

Maser Consulting is now Colliers Engineering & Design

Accelerating success.

# Table of Contents

Executive Summary ..... 1

## Site Locations - Town of Oriental, Pamlico County, North Carolina

Location 1 - Town Hall..... 3

Location 2 - Water Plant ..... 5

Location 3 - Pavillion-Oriental Recreation Park..... 7

Location 4 - Pavilion-Lupton Mini-Park ..... 9

Location 5 - Public Restroom - Net House Visitor Center ..... 11

Location 6 - Fisher Pier - 700 South Avenue ..... 13

Location 7 - Town Dock # 1 ..... 15

Location 8 - Town Dock # 2 ..... 17

Location 9 - Dinghy Dock..... 19

Location 10 - Small Boat Ramp - End of Midyette Street ..... 21

## Appendices

Appendix A Location 1 Photos

Appendix B Location 2 Photos

Appendix C Location 3 Photos

Appendix D Location 4 Photos

Appendix E Location 5 Photos

Appendix F Location 6 Photos

Appendix G Location 7 Photos

Appendix H Location 9 Photos

Appendix I Location 10 Photos

# Town of Oriental Accessibility Report

## Town of Oriental, Pamlico County, North Carolina

### Executive Summary

This Accessibility Report for the Town of Oriental is a living document that can help a community plan and budget for capital improvements over a multi-year period. This report provides the Town with the accessibility status at each of its public owned facilities. Within this report are various recommendations for improvements and upgrades to comply with current accessibility standards. From this report, a multi-year program that focuses on these accessibility upgrades can be developed. The various improvements to be completed will range from sidewalk and curb ramp improvements, parking improvements, accessibility improvements, parks and recreation upgrades, and facility upgrade projects.

The range of improvements that are deemed accessible within the Right of Way are governed by the Public Right of Way Accessibility Guidelines (PROWAG). This agency is responsible for the oversight of accessibility along pedestrian accessible routes (PAR) within the Right of Way (ROW). Each location has been analyzed so that they will comply with ADAAG and PROWAG.

The Americans with Disabilities Act (ADA) of 1990 is a civil rights law that prohibits discrimination based on disability. Under Title III, all new construction (construction, modification, or alternations) must be fully compliant with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

Further review of the ADAAG lead to the development of the Public Right of Way Accessibility Guidelines (PROWAG) which have yet to be finalized but have been a basis of design for accessibility, even in its draft form, since its latest version in 2014. The latest enforceable standard is the 2010 ADA Standards. From the Federal Highway Administration in 2016, PROWAG offers "recommended best practices, and can be considered the state of the practice that could be followed for areas not fully addressed by the present ADA standards."

The following Accessibility Report has identified various projects and their costs that can be potentially funded over the upcoming years. For each project, we have provided a project need, project description, and estimated costs. These costs should be used for budgetary purposes only and may be subject to change in accordance with the current market for material costs.

The various projects are specified on a Location Plan that will show the various improvements in relation to the existing features at each location.

The locations within Town of Oriental have been listed based on the priorities provided by the Town. From this research, a list of potential projects has been itemized which can be utilized by the Governing Body and other Town Officials to develop a yearly accessibility capital improvement plan.

The following locations that have been reviewed for ADA compliance:

- Location 1 Town Hall - 507 Church Street
- Location 2 Water Plant/Public Services Building - 1300 Gilgo Road
- Location 3 Pavilion-Oriental Recreation Park - 130 Straight Road (behind the Fire Station)
- Location 4 Pavilion-Lupton Park (from Mildred to High Street on 3rd Avenue)
- Location 5 Public Restrooms/Net House Visitor Center (under reconstruction) – 301 South Avenue
- Location 6 Fishing Pier - 700 South Avenue
- Location 7 Town Dock #1 (Across the street from 304 Hodges Street)
- Location 8 Town Dock #2 - 301 South Avenue
- Location 9 Dinghy Dock - 501 S. Water Street
- Location 10 Small Boat Ramp (End of Midyette Street)

## Location 1: Town Hall

Oriental's Town Hall is located at 507 Church Street and is the corner property that intersects Broad Street. The entire property has sidewalk with a grass strip. The roadway of Broad Street and Church Street have a combination curb and gutter system to facilitate gutter flow. There are five (5) ramps associated with this property which have been denoted in the google image below:



Ramp 1 leads from Broad Street to the existing sidewalk. Our field records indicated that the ramp exceeds the maximum slope of a curb ramp, which is 8.3%. Further, the curb at the bottom of the curb ramp is not flush with the gutter section. The curb must be flush with the pavement/gutter section when building a compliant ADA ramp. This ramp will need to be replaced, as well as portions of the connecting sidewalk to meet the landing and turning space requirements. A detectable warning surface will need to be installed along the bottom of the curb ramp. This ramp will need to be reconstructed.

Ramp 2 at the intersection of Church Street and Broad Street appears to have been upgraded recently and has a detectable warning surface, and based on the color of the concrete, these improvements can be considered recent. Unfortunately, the construction was done incorrectly as there is no dedicated 4'x4' landing area for turning. Similar to ramp one, there is a "reveal" or "lip" where the curb at the bottom of the curb ramp meets the pavement/gutter section. This must be flush to be compliant with Public Right of Way Accessibility Guidelines (PROWAG). This ramp will need to be reconstructed.

Ramp 3 leads from Church Street to the existing sidewalk. Our records indicated that the ramp is under the maximum slope of a curb ramp, but the curb at the bottom of the curb ramp is not flush with the gutter section. If the curb was to be made flush, it would cause the ramp to exceed the

maximum slope of 8.3%. The curb must be flush with the pavement/gutter section when building a compliant ADA ramp. This ramp will need to be replaced, as well as portions of the connecting sidewalk to meet the landing and turning space requirements. A detectable warning surface will need to be installed along the bottom of the curb ramp.

Ramp 4 involves multiple ramps from the curb and sidewalk along Broad Street to the building landing. This is a switch back ramp structure used to enter City Hall. The turning area along the sidewalk to enter this ramp is over 2% which will require this section of concrete to be replaced. The ramp from the sidewalk to the first landing area is acceptable in its current form but will need to be replaced as part of the turning area reconstruction. The landing area at the top of the ramp is compliant. The next two sections of this ramp exceed the maximum slope of a ramp, which is 8.3%. The first of these two sections will also require the installation of a handrail since the rise of this section exceeds six inches (6"). All building ramps must be in compliance and should be upgraded.

The building ramp associated with Ramp 5 is in compliance according to our records and will not need to be replaced. All slopes and cross slopes are acceptable.

Please refer to Appendix A of this report for photos of this location.

<b>Estimated Construction Cost:</b>	<b>\$39,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$15,000.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$54,000.00</b>

## Location 2: Water Plant

Oriental's Water Plant is located at the corner of Gilgo Road and Windward Drive. Currently, this building is not considered to be ADA accessible. The current parking lot is all dirt/gravel and there is a requirement of at least three stairs for each entrance. A google image of this location is shown below:



The following, at a minimum, would have to be constructed for this building to be ADA compliant:

- Designate an area of the parking lot, preferably within reasonable distance to the entrance, to be a van accessible ADA complaint parking space.
  - This parking space shall be made of either concrete or asphalt, but cannot be dirt/gravel.
  - This space must have compliant Manual Uniform Traffic Control Device (MUTCD) regulatory and warning signage.
  - This space must also have complaint traffic markings for a van accessible space.
- The sidewalk leading to the entrance of the building must be widened to be minimum 4' wide.
- There must be an ADA accessible switch back ramp with railing developed.
  - This can be similar in design to Ramp A at Town Hall.



- The landing outside the designated entrance must have enough room for a 5'x5' turning area for ADA accessibility.

Once this improvement is made, further evaluation would be needed to understand the ADA accessibility within the water plant.

Please refer to Appendix B of this report for photos of this location.

<b>Estimated Construction Cost:</b>	<b>\$42,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$14,500.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$56,500.00</b>

### Location 3: Pavilion-Oriental Recreation Park

Oriental Recreational Park is along White Farm Road with its driveway entrance on Straight Road. The Town Pavilion is located off the end of the parking area between the athletic fields and adjacent to the mulch playground. The Town Pavilion provides adequate shade to parents and children who are enjoying the park; however, due to its location and surrounding grassed ground cover, the Pavilion is not ADA accessible. An accessible route within and from the parking area to the Pavilion is needed.

The existing gravel parking area seventy-five feet to the south of the playground is not compliant. This parking lot would have to be made ADA compliant, and the Town may want to invest in an additional Canopy Structure that would add to the shaded square footage while bringing this site into compliance. A google image of this location is shown below:



The following, at a minimum, would have to be constructed for this pavilion to be ADA compliant:

- Designate an area of the parking lot, preferably within reasonable distance to the entrance, to be a van accessible ADA complaint parking space.
  - The amount of parking spaces would depend on the usage rate of this park. Given there is a baseball field as well as a soccer field a minimum of four spaces, two of which are van accessible, should be provided. These parking spaces shall be made of either concrete or asphalt, but cannot be dirt/gravel.
  - This space must have compliant MUTCD regulatory and warning signage.
  - This space must also have complaint traffic markings for a van accessible space.

- There must be an ADA accessible pathway, preferably made of sidewalk to control slopes, from the parking lot to the new canopy structure.
  - The pathway should also connect the new structure directly to the mulch playground.
- New ADA accessible tables could be provided for this structure.
- The existing structure can still be used and is serviceable, but not in a capacity to conform to ADA standards.

Please refer to Appendix C of this report for photos of this location.

<b>Estimated Construction Cost:</b>	<b>\$35,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$13,000.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$48,000.00</b>

## Location 4: Pavilion-Lupton Mini-Park

Lupton Mini-Park is located at the corners of 3<sup>rd</sup> Avenue, Mildred Street and High Street. The park currently consists of playgrounds, a tennis court, and a pavilion. The Pavilion provides adequate shade to parents and children who are enjoying the park. In its current state, the pavilion itself is ADA accessible, as the ramp onto the concrete pad is within the guidelines of acceptance. The non-compliance is access to the Pavilion as visitors to the park have to cross along a lengthy passage of grass to get to the pavilion.

The Town can look into establishing a dedicated pathway throughout the mini-park from the pavilion access point to a designated accessible spot along one of the adjacent streets. This would also allow an opportunity to have a pathway provide access to the playground as well as the tennis court. The site amenities could be upgraded to be ADA accessible. A google image of this location is shown below:



The following, at a minimum, would have to be constructed for this pavilion to be ADA compliant:

- Designate an area along one of the adjacent streets, preferably within reasonable distance to the entrance, to be a van accessible ADA complaint parking space.
  - This space must have compliant MUTCD regulatory and warning signage.
  - This space must also have complaint traffic markings for a van accessible space.
- There must be an ADA accessible pathway, preferably made of sidewalk to control slopes, from the van accessible ADA compliant parking space to the new canopy structure.
  - The pathway should also connect the new structure directly to the mulch playgrounds and tennis court.

- New ADA accessible tables could be provided for this structure.

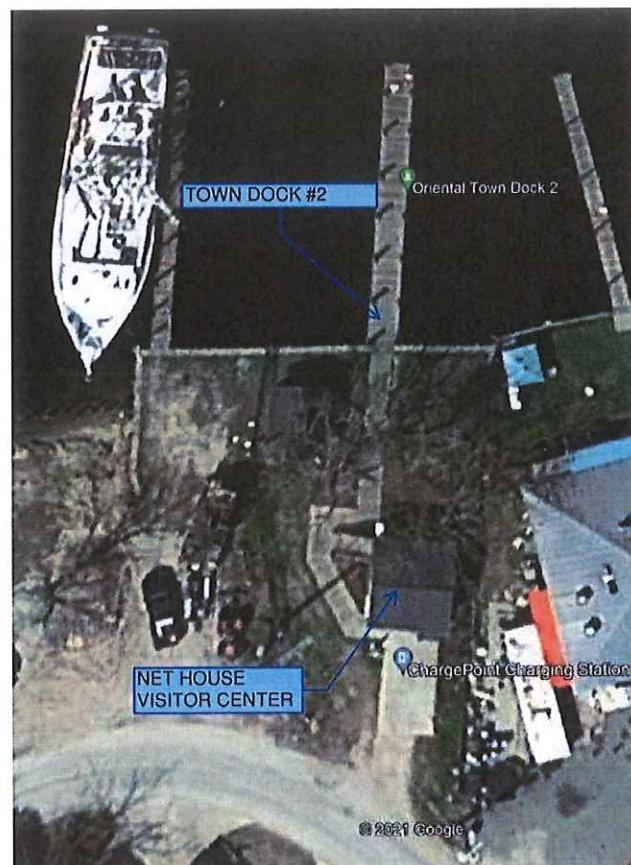
Please refer to Appendix D of this report for photos of this location.

<b>Estimated Construction Cost:</b>	<b>\$34,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$13,000.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$47,000.00</b>

## Location 5: Public Restroom – Net House Visitor Center

The public restroom at the Net House Visitor Center is along South Avenue off of Wall Street. This area of the Town is near Chadwick Point. The building appears to have a elevator that would assist those in need of a wheel chair. Currently, the building entrance leads into a very small vestibule where access to the restrooms requires opening a second door within very limited space. There are no automatic opening systems that are preferred in these situations.

From a site standpoint, there does not appear to be any specific location for accessible parking. A google image of this location is shown below:



The following, at a minimum, would have to be constructed for this site to be ADA compliant:

- Designate an area of South Street or the Net House Visitor Center's parking lot, preferably within reasonable distance to the entrance, to be a van accessible ADA complaint parking space.
  - This space must have compliant MUTCD regulatory and warning signage.
  - This space must also have complaint traffic markings for a van accessible space.
  - This parking space shall be made of either concrete or asphalt but cannot be dirt/gravel.

- An automatic door opening system would need to be installed at the public bathroom entrance.
- Further architectural analysis would be required to establish if these bathrooms are ADA accessible in the interior.
  - If they are not, it may not be worth improving the site and just deem this site as non-accessible with signage showing where an accessible bathroom is located within Town.
  - An Architectural firm can be brought in to further vet out what interior improvements would be required to make this building ADA accessible.
  - For the purposes of this report, architectural improvements have been omitted and the costs below are related to the site improvements.

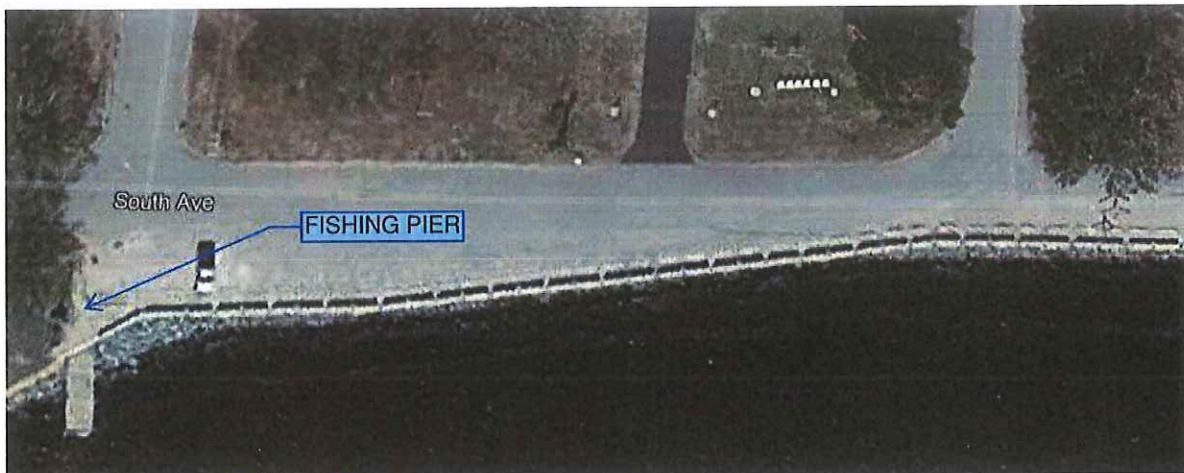
Please refer to Appendix E of this report for photos of this location.

<b>Estimated Construction Cost:</b>	<b>\$41,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$15,000.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$56,000.00</b>

## Location 6: Fishing Pier – 700 South Avenue

The fishing pier is located at 700 South Avenue, at the intersection of Freemason Street. The fishing pier has a parking lot associated with it that should be upgraded to be ADA accessible. The existing conditions are not incorrect in intent, but should be upgraded to current standards. The layout of the accessible pathway should be completed in a way that is more defined for the end-user with ramps and landing areas with consistent grade breaks.

From a site standpoint, there does not appear to have any specific location for accessible parking. A google image of this location is shown below:



The following, at a minimum, would have to be constructed for this site to be ADA compliant:

- Designate an area of the parking lot, preferably within reasonable distance to the entrance, to be a van accessible ADA complaint parking space.
  - The amount of parking spaces would depend on the usage rate of this park. Given the amount of existing spaces, it can be safe to assume that four (4) spaces, two of which are van accessible, should be provided.
  - This space must have compliant MUTCD regulatory and warning signage.
  - This space must also have compliant traffic markings for a van accessible space.
- There must be an ADA accessible pathway, preferably made of sidewalk to control slopes, from the parking lot to the fishing pier.
  - The pathway should comply with all current PROWAG standards for cross slope and ramp slopes.
  - The curb ramps to the parking lot should have detectable warning surfaces embedded in the concrete.



- New ADA accessible tables could be provided at this location for viewing.

Please refer to Appendix F of this report for photos of this location.

<b>Estimated Construction Cost:</b>	<b>\$31,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$13,000.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$44,000.00</b>

## Location 7: Town Dock #1

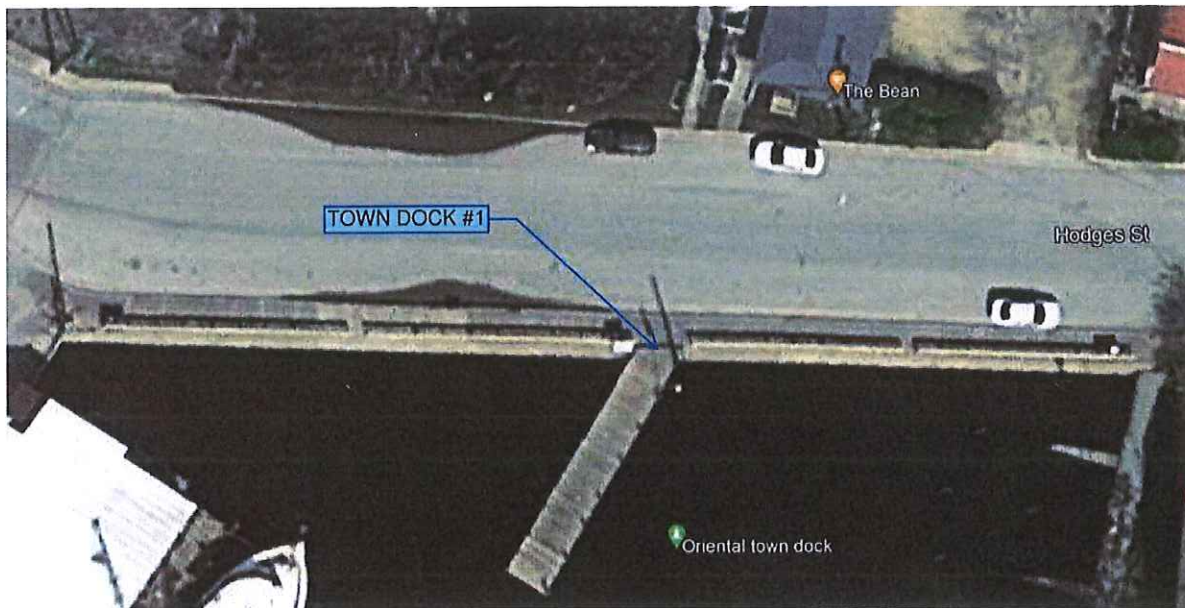
Town Dock #1 is located along Hodges Street. This dock is not ADA compliant in its current form, and the Town will have to determine what extents of accessibility it wants to apply to this dock. The Town could designate a van accessible parking space along Hodges Street, with a curb ramp that leads to the pathway to the dock. This would provide partial compliance.

The dock itself is elevated above the pathway, and it is hard to state based on the current condition if the dock can be deemed ADA compliant once you are on it. The surface of the dock may need to be updated so that it can be deemed accessible, and that analysis has been omitted from this report.

A concrete ramp could be established that extends into the existing dock, though the deck looks to be deteriorating. The ramp would come down onto newly poured concrete sidewalk so that it is accessible in both directions along Hodges Street. New curb and gutter would be poured to improve drainage along Hodges street as it appears there is a ponding issue along the gutter.

The Town may want to discuss if the existing dock would remain should this project move forward.

A google image of this location is shown below:



The following, at a minimum, would have to be constructed for this site to be ADA compliant:

- Designate an area of the parking lot, preferably within reasonable distance to the entrance, to be a van accessible ADA complaint parking space.
  - This space must have compliant MUTCD regulatory and warning signage.
  - This space must also have compliant traffic markings for a van accessible space.

- There must be an ADA accessible curb ramp established near Town Dock #1.
  - The pathway should comply with all current PROWAG standards for cross slope and ramp slopes.
  - The curb ramp to the dock should have detectable warning surfaces embedded in the concrete.
  
- New ADA accessible tables could be provided at this location for viewing.

Please refer to Appendix G of this report for photos of this location.

<b>Estimated Construction Cost:</b>	<b>\$33,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$13,500.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$46,500.00</b>

## Location 8: Town Dock #2

Town Dock #2 is located along South Avenue near the Net House Visitor Center. This dock is not ADA compliant in its current form, and the Town will have to determine what extents of accessibility it wants to apply to this dock. The Town could designate a van accessible parking space along South Avenue, with a curb ramp that leads to a concrete pathway to the dock. This would provide partial compliance.

The dock itself is at elevation with the grass and wooden walkway adjacent to it. It is hard to state based on the current condition if the dock can be deemed ADA compliant once you are on it. Field photos show very large boats anchored and tied onto the Town Dock which would inhibit the public use of this dock. If this dock is used for private boating operations, this dock may be better off not being deemed accessible. The surface of the dock may need to be updated so that it can be deemed accessible, but that has been omitted from this report.

To make this site accessible, a concrete pathway needs to be constructed to provide access from the dock to the designated parking space on South Avenue. A google image of this location is shown below:



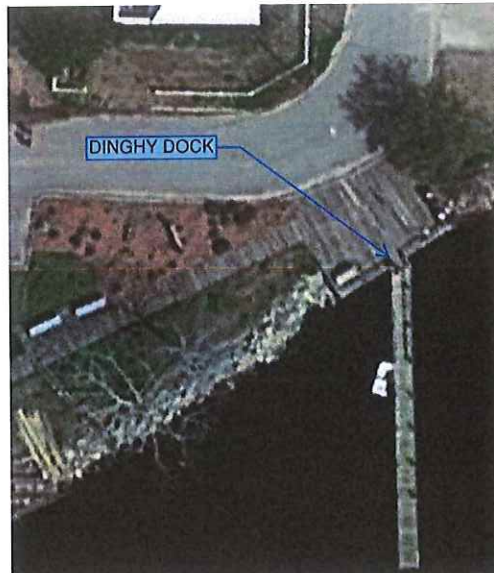
The following, at a minimum, would have to be constructed for this site to be ADA compliant:

- Designate an area of the parking area, preferably within reasonable distance to the entrance, to be a van accessible ADA complaint parking space.
  - This space must have compliant MUTCD regulatory and warning signage.
  - This space must also have complaint traffic markings for a van accessible space.
  - This parking space shall be made of either concrete or asphalt, but cannot be dirt/gravel.
  
- There must be an ADA accessible curb ramp established near the Town Dock #2.
  - The pathway should comply with all current PROWAG standards for cross slope and ramp slopes.
  - A detectable warning surface should be provided at the existing curb ramp that connects to the dock.
  
- New ADA accessible tables could be provided at this location for viewing.

<b>Estimated Construction Cost:</b>	<b>\$50,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$13,500.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$63,500.00</b>

## Location 9: Dinghy Dock

The Dinghy Dock is located at the end of South Water Street. This facility does not appear to be ADA compliant in its current form. The Town should determine the extent of improvements needed at this location. It appears that the existing surface at the dock was recently improved and meets the accessibility surface requirements. An accessible route connecting South Water Street to the dock is recommended. The Town should also consider providing a designated van accessible parking space on South Water Street connecting to the accessible route and dock. ADA accessible tables can be placed at the viewing platform of the dock. A google image of this location is shown below:



The following, at a minimum, would have to be constructed for this site to be ADA compliant:

- Designate an area of the parking lot, preferably within reasonable distance to the entrance, to be a van accessible ADA complaint parking space.
  - This space must have compliant MUTCD regulatory and warning signage.
  - This space must also have complaint traffic markings for a van accessible space.
- There must be an ADA accessible curb ramp established near the Dinghy Dock.
  - The pathway should comply with all current PROWAG standards for cross slope and ramp slopes.
  - The curb ramp to the dock should have detectable warning surfaces embedded in the concrete.
- New ADA accessible tables could be provided at this location for viewing.

- The existing ramp from the deck to the dock exceeds a maximum running slope of 8.3%. If the dock is to be made compliant, it would need to be replaced.

Please refer to Appendix H of this report for photos of this location.

<b>Estimated Construction Cost:</b>	<b>\$47,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$17,500.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$64,500.00</b>

## Location 10: Small Boat Ramp – End of Midyette Street

The dock near the Small Boat Ramp is located at the end of Midyette Street. The ramp connects to a gangway at the bottom of the ramp, connects to a floating dock. This facility does not appear to be ADA compliant. Similar to Dingy Dock, at least one accessible route is required to connect accessible, facilities, elements, and spaces. The Town should determine the extent of improvements needed at this location. A designate van accessible parking space is recommended within the parking lot, adjacent to the ramp, connecting to an accessible route to the ramp.

Access from the parking lot to the dock appears to be compliant and the material and condition of the dock appear to be accessible. The gangway between the ramp and floating dock includes handrails and the existing surface and material appears to be compliant however we were not able to confirm if the gangway is within the maximum slope and rise exceptions.

A concrete sidewalk should be established that connects the Small Boat Ramp and the other docks within this site for connectivity when the lot becomes congested.

A google image of this location is shown below:



The following, at a minimum, would have to be constructed for this site to be ADA compliant:

- Designate an area of the parking lot, preferably within reasonable distance to the entrance, to be a van accessible ADA complaint parking space.
  - This space must have compliant MUTCD regulatory and warning signage.



- This space must also have complaint traffic markings for a van accessible space.
- This parking space shall be made of either concrete or asphalt but cannot be dirt/gravel.
- There must be an ADA accessible pathway to the dock.
- New ADA accessible tables could be provided at this location for viewing.

Please refer to Appendix I of this report for photos of this location.

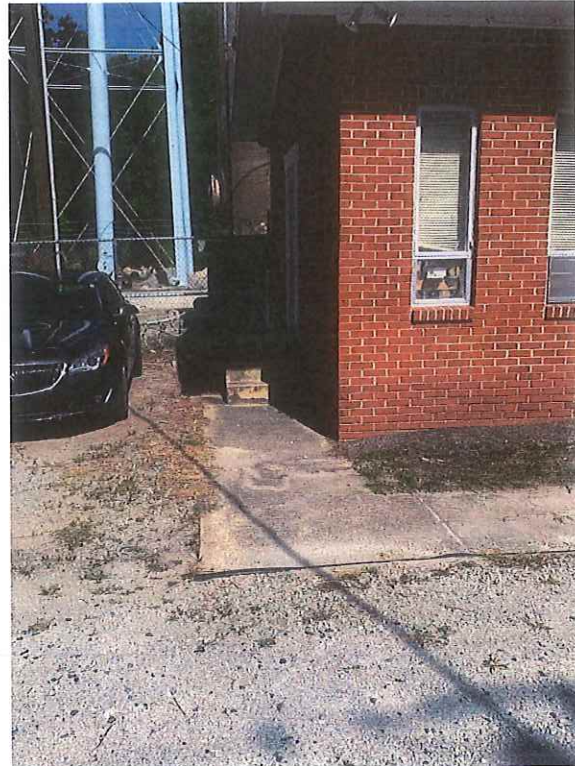
<b>Estimated Construction Cost:</b>	<b>\$60,000.00</b>
<b>Budgetary Soft Costs:</b>	<b>\$15,500.00</b>
<b>Total Estimated Construction Cost:</b>	<b>\$75,500.00</b>

# Appendices

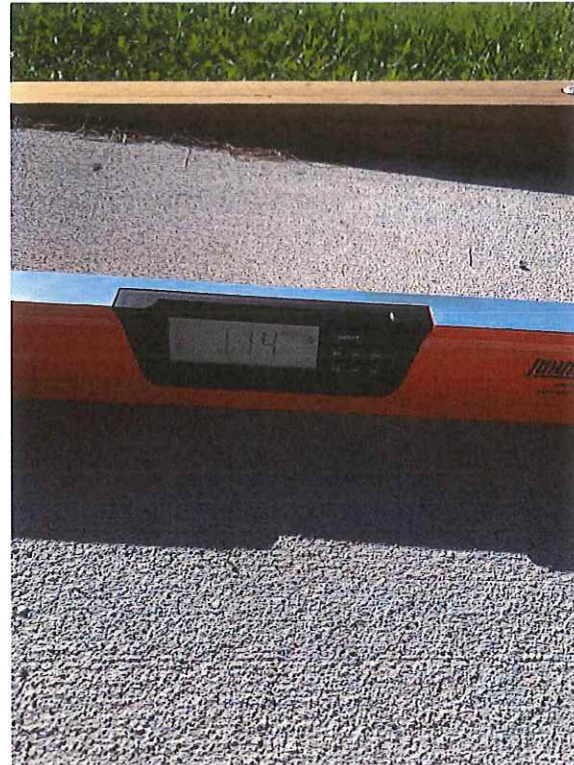
## Appendix A | Location 1 - Town Hall Photos



## Appendix B | Location 2 – Water Plant/Public Services Building Photos



## Appendix C | Location 3 – Pavilion-Oriental Recreation Park Photos



## Appendix D | Location 4 – Pavilion-Lupton Park Photos





## Appendix E | Location 5 – Public Restrooms/Net House Visitor Center Photos



## Appendix F | Location 6 – Fishing Pier Photos

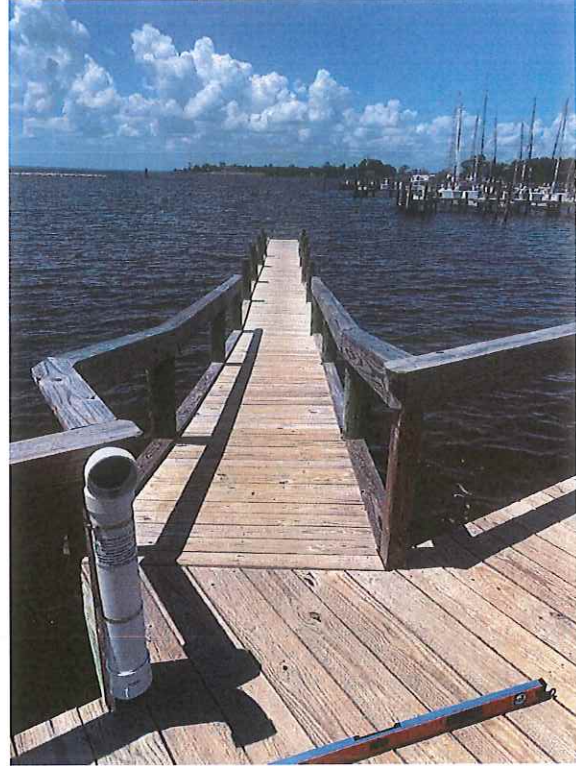
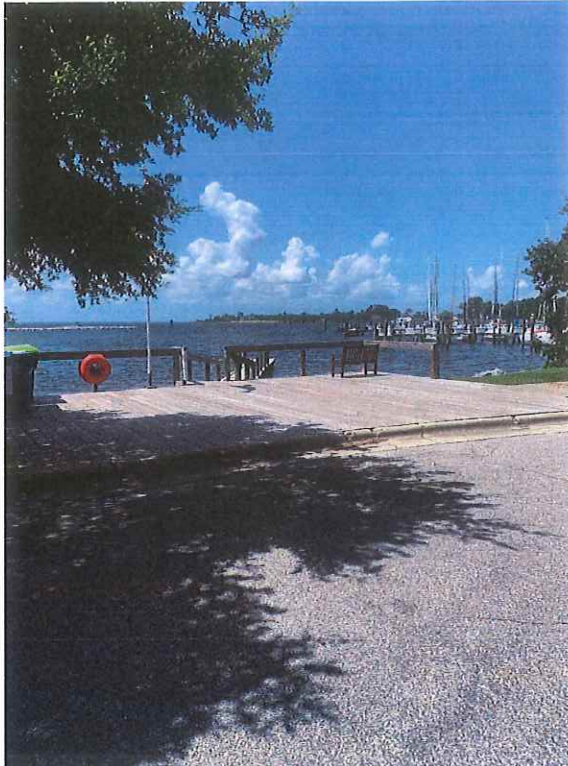


## Appendix G | Location 7 – Town Dock #1 Photos

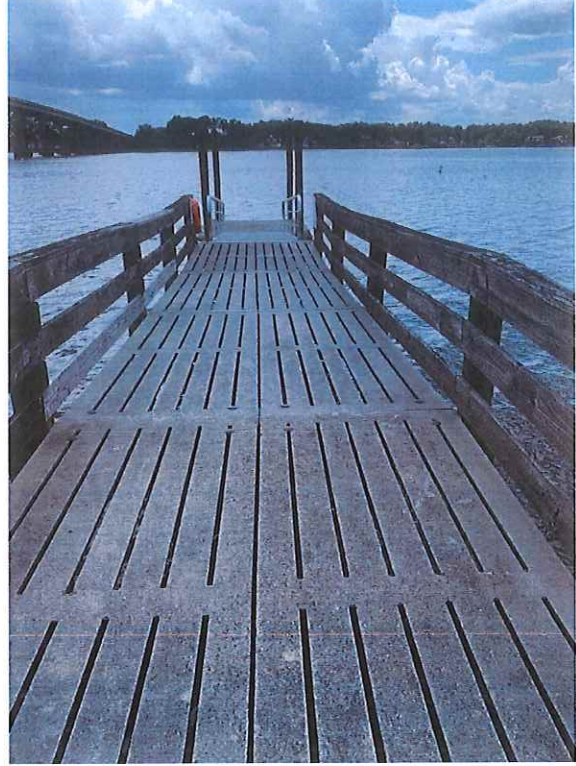


## Appendix H | Location 9 – Dinghy Dock Photos





## Appendix I | Location 10 – Small Boat Ramp Photos





## Engineering & Design

Colliers Engineering & Design is a trusted provider of multi-discipline engineering, design and consulting services providing customized solutions for public and private clients through a network of offices nationwide.

For a full listing of our office locations, please visit [colliersengineering.com](http://colliersengineering.com)

1 877 627 3772



*Civil/Site • Traffic/Transportation • Governmental • Survey/Geospatial  
Infrastructure • Geotechnical/Environmental • Telecommunications • Utilities/Energy*

Accelerating success.