

# **NEW CASTLE COUNTY**

## **PRIORITIZED AREAS REQUIRING ATTENTION**

<b>7<sup>th</sup> St Ramp City of Wilmington</b>	<b>\$975,000.</b>
<b>Churchman Road Ramp</b>	<b>\$135,845.</b>
<b>Ft. Dupont Ramp</b>	<b>\$38,725.</b>
<b>Augustine Beach Ramp</b>	<b>\$775,995.</b>
<b>C&amp;D Canal Piers</b>	<b>\$120,000.</b>
<b>Collins Beach Ramp</b>	<b>\$127,027.</b>
<b>Estimated funds required</b>	<b>2,172,592.</b>

## **OTHER COUNTYWIDE MAINTENANCE REQUIREMENTS**

<b>Estimated funds required</b>	<b>\$51,695.</b>
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**TOTAL FUNDS REQUIRED    \$2,224,287.**

**CITY OF WILMINGTON – 7<sup>TH</sup> Street Boat Ramp**  
**Constructed 1987**

**STATUS:** This boat ramp was closed on July 12, 2004 due to a major structural failure. The failure was a result of heavy stream flows in the Christina River following several major storm events, including a 500 year storm in late June and early July 2004. The facility was determined to be unsafe for use by the citizens of the state and was closed. (See attached documentation). The repairs at this site can be classed as “Reconstruction”.

**RECOMMENDATIONS:**

Employ the professional services of a marine engineering and design firm to evaluate the existing situation, develop a new design suitable to the existing site conditions and capable of withstanding the stream conditions that occur during a major storm event.

**TIME TABLE:**

- Secure funding to complete the redevelopment activities.
- Employ services of a design firm and begin to redesign the new facility.
- Obtain the needed permits.
- Advertise for bid award contract, and rehabilitate the ramp.

**COST BREAK DOWN:**

- |                                      |              |
|--------------------------------------|--------------|
| • Engineering and Design             | \$50,000.00  |
| • Permits and associated activities  | \$5,000.00   |
| • Geotechnical investigations        | \$35,000.00  |
| • Contract administration activities | \$7,500.00   |
| • Construction cost (2004 dollars)   | \$877,500.00 |

**COST ESTIMATE:** **\$975,000.00**

# **CHURCHMAM'S ROAD BOAT RAMP**

**Constructed 1989**

**STATUS:** This facility is now 15 years old and is requiring cyclic maintenance activities. Inadequate subsurface drainage has caused the ingress – egress road system and parking areas to subside and break up. The concrete ramp has minor cracking as does the concrete anchor wedge for the boarding dock system.

## **RECOMMENDATIONS:**

- The deteriorated areas are so wide spread the best action may be to roto-mill the entire paved area and resurface following drainage improvements.
- Install an under drain system along the western perimeter of the entrance road and along the eastern perimeter of the parking area.
- Install feeder laterals from the parking area to each of the two main under drains.
- Install additional graded aggregate base course (GABC) and geo-textile fabric where necessary to improve the structural integrity of the roadway and parking lot.
- Install new striping and symbols where necessary.
- Perform the required concrete repairs to the ramp and anchor wedge.

## **TIME TABLE:**

- Secure professional services for need repairs.
- Obtain needed permits.
- Advertise for bids and complete project.

## **COST BREAKDOWN:**

- |                           |              |
|---------------------------|--------------|
| • Engineering             | \$4,995.00   |
| • Construction            | \$125,575.00 |
| • Contract Administration | \$5,275.00   |

**COST ESTIMATE:** **\$135,845.00**

**NEWPORT BOAT RAMP**  
Constructed 2002

**STATUS:** This facility was awarded the “Outstanding Project Award” in the Midsize Access Category by the States Organization for Boating Access (SOBA) in September 2004. This award is presented to an agency, group or corporation for quality, unique, useful economical or innovative projects. Midsize access area day-use boat launching facilities of 25-75 car and trailer parking capacity, with a single or multiple lane launch ramp. The project was a partnership with the Town of Newport. The maintenance requirements at Newport are primarily “routine”.

**RECOMMENDATIONS FOR FACILITY ENHANCEMENT:**

- Continue to work closely with the Town of Newport.

**TIME TABLE OR BENCH MARK DATE:**

- Parking lot will need to be re-striped.

**COST BREAKDOWN:**

- Estimated re-striping cost \$950.00

**COST ESTIMATE:**

**\$950.00**

**FT. DUPONT BOAT RAMP**  
Constructed 1999

**STATUS:** This ramp was developed under a partnership with the Division of Parks and Recreation. This ramp allows boaters and anglers the opportunity to access the lower portion of the Delaware River with greater ease. The required activities at this site are “Routine”.

**RECOMMENDATIONS:**

- Continue MOA with Division of Parks and Recreation.
- Continue to monitor the fractured fiberglass guide pile.
- Investigate applying an external patch of fiberglass cloth and gel construction.

**TIME TABLE:**

- Parking lot will need to be re-striped.

**COST BREAKDOWN:**

- |                                 |             |
|---------------------------------|-------------|
| • Re-striping cost estimated at | \$1,150.00  |
| • Fiberglass wrap               | \$8,765.00  |
| • Pile replacement              | \$37,575.00 |

**COST ESTIMATE:** \$9,915.00 - \$38,725.00

## **AUGUSTINE BEACH BOAT RAMP and BREAKWATER**

**Original construction 1958+/-; 1988**

**Most recent improvement 1996**

**STATUS:** The entrance road on the north end of the access area has deteriorated beyond repair. The entrance needs surface water drainage improvement. There are numerous areas requiring surface crack repair in the large overflow parking area to the north of the access area. The maintenance requirements at Augustine Beach are “Cyclic”.

There is a serious shoaling issue at the Augustine Boat Ramp. This problem has been present since the completion of the adjacent stone breakwater in 1988. The Division employed the engineering services of Andrews-Miller & Associates in 1989 to investigate this shoaling issue and provide solutions. AMA provided the Division with a report in November 1989 offering six alternative solutions. These alternative solutions and their 1989 construction cost estimates are:

- 1-Channel Dredging \$5,300;**
- 2-Breakwater Modification at the Outer End \$450,000;**
- 3-Breakwater Modification at the Mid-Section \$221,800;**
- 4-Stone Jetty North of the Boat launching Ramp \$198,300;**
- 5-Steel-Sheetpile Jetty North of the Boat Launching Ramp \$600,000;**
- 6-Timber-Sheetpile Jetty North of the Boart Launching Ramp \$539,400;**

The probable construction costs for Alternatives 2-6 are now two to two and one-half times the 1989 cost estimates. Alternative one is no longer an option in as much as the permitting agencies have advised the Division the previous technique of overboard spoiling will not be permitted. The Division elected to implement Alternative 1 because of the cost saving in 1989. The Division secured the required permits to perform the Annual Dredging under a 10 year maintenance dredging permit (1989-1999) from the US Army Corps of Engineers and DNREC. The Division has dredged the entrance channel to the ramp open using hydraulic dredges operated by the Division of Soil and Water and the New Castle County Conservation District. This dredging activity was performed on an annual basis between 1989 -1999 during the period of the approved permit. Since the end of the 1999 blanket maintenance dredging permit dredging has been preformed as needed under a special request for approval basis. The division was notified in 2005 there would be no additional dredging permitted for this site after 2006.

The Division desires to implement “Reconstruction” maintenance action similar to Alternative 3; however the Division does not have the projected funding to complete the engineering design, to obtain permit approval and complete the construction activities at this time (\$600,000. +/-).

**RECOMMENDATIONS:**

- Obtain funding to implement corrective action to reduce shoaling at the boat ramp.
- Establish dialog with Del DOT Canal District in an effort to improve surface drainage at the north entrance area.
- Determine best alternative for repairing the entrance road, roto-mill, improve subsurface base course and repave.
- Select the best method(s) for crack repairs on the overflow parking area and implement.
- Re-stripe and re-symbol as required.

**COST BREAKDOWN:**

- |                            |              |
|----------------------------|--------------|
| • Parking lot improvements | \$105,495.00 |
| • Breakwater modification  | \$600,000.00 |
| • Engineering cost         | \$70,500.00  |

**COST ESTIMATE:** **\$775,995.00**

## **C & D CANAL WILDLIFE AREA FISHING PIERS**

C & D Area was acquired from the US Army Corps of Engineers 1946

**STATUS:** There are eight timber fishing piers located along the C&D Canal. This area experiences a great deal of illegal dumping and vandalism. Enforcement is a problem due to the size of the area and limited enforcement staff. Most of the maintenance needs are “Cyclic” along the C&D Canal piers.

**RECOMMENDATIONS:** Repair and upgrade the facilities so as to lessen opportunity for injury to persons utilizing the facilities. Attempt to make each fishing pier barrier free, or retrofit one pier as totally barrier free. Close off sections of those piers that present a safety hazard to the public. Attempt to increase an enforcement presence along the canal. This will require adding additional officers.

**TIME TABLE:** Attempt to make repairs and upgrades as funds are available.

**COST BREAKDOWN:** Upgrades and repairs may approach \$15,000 per pier.

**COST ESTIMATE:** **\$120,000.00**

## **COLLINS BEACH BOAT RAMP**

**Constructed 1990**

**STATUS:** The Collins Beach facility was developed and constructed as a replacement for the Port Mahon Access Facility, should vehicular access via County Road 89, Port Mahon Road, ever be compromised. This facility is experiencing severe silting at the channelward end of the boat ramp. Division maintenance personnel have attempted to remove the sediment with limited success. The area is one used frequently by many commercial watermen to off load their daily catches. The facility is presently not usable at extreme low tide periods. Most of the activities needed at this site are “Cyclic”.

### **RECOMMENDATIONS:**

- Locate a suitable site for spoil disposal on the Cedar Swamp Wildlife Area and obtain approval from the regulatory agencies to dispose spoil.
- Design and construct a spoil containment site complete with a dewatering control structure.
- Dredge the area in front of the launching ramp and approach to the ramp from the tidal creek.
- Investigate feasibility of installing flow through openings in the timber sheet wall to allow the tidal flows to flush the sediment deposits from the launch ramp area during each tidal change.
- Upgrade the small parking area adjacent to the boat ramp.
- Complete crack repair activities at the overflow parking lot.
- Complete selected routine minor repairs:
  - Repair wash out at parking lot – timber pier interface;
  - Repair “x” brace on the timber pier;
  - Re-stripe parking lot.
  - Repair underground electric service for area lighting.

### **TIME TABLE:**

- Begin work to secure permit approval for spoil disposal site.
- Secure professional design services for proposed improvements.
- Advertise and complete project improvements.

### **COST BREAKDOWN:**

- |                              |             |
|------------------------------|-------------|
| ● Engineering                | \$23,975.00 |
| ● Construction – repair Cost | \$98,500.00 |
| ● Contract Administration    | \$4,595.00  |

### **COST ESTIMATE:**

**127,070.00**

## **APPOQUINIMINK RIVER - ODESSA**

Acquired 1986

**STATUS:** This is an unimproved access area. The existing parking lot on the east side of the river is less than a tenth of an acre in size and the surrounding wetlands do not permit expansion. The Division acquired an additional parcel on the west side of the Appoquinimink River for the purpose of developing a new access site. Development plans were abandoned after the town residents opposed the project. The required activities at these two sites are “Routine”.

**RECOMMENDATION:** Continue to maintain both parcels.

**TIME TABLE:** NONE

**COST ESTIMATE:** \$500.00

## **THE ROCKS**

Acquired 1995

**STATUS:** This facility is operated and maintained as an unimproved boating access site. The area is used primarily by waterfowl hunters and as an additional access area for fisherman and crabbers. The needs at this site are “Routine”.

**RECOMMENDATIONS:** Continue to operate and maintain this facility as an unimproved area. The existing parking area and ingress and egress road is in need of minor grading and pothole repair.

**TIME TABLE:** Complete the proposed repairs.

**COST ESTIMATE:** **\$6,495.00**

## **BECKS POND**

Acquired 1957

**STATUS:** This facility is operated under a lease agreement with the New Castle County Co. Department of Parks and Recreation. The Division completed selected upgrades to the boat ramp and spillway in the winter of 2002. The existing asphalt parking area and roadway system is failing and needs to be repaired and upgraded. The upgrading required at this site are “Cyclic”.

**RECOMMENDATIONS:** Coordinate the required upgrades to the sub-grade base, parking area and repave.

**TIME TABLE:** Secure professional services and permits to complete the proposed improvements.

**COST ESTIMATE:**

**\$43,750.00**