



Re: Shoreline Protection Permit for the City of Norfolk's Watershed Properties

Dear Homeowner:

Thank you for your interest in restoring and sustaining the shoreline of the City of Norfolk's reservoir. The reservoir located behind your property is a vital part of the drinking water supply to 800,000 residents of Hampton Roads and it is the responsibility of the Department of Utilities to protect the system.

New Construction or Modification of an existing structure

If you would like to apply for a permit to build or modify an existing structure to protect the shoreline, construct a pier or similar structure or a fence, we have developed minimum standards by which all applicants must comply. You will need to complete the attached application in its entirety, including all applicable drawings and appendices. All structures built on City of Norfolk property require an Erosion and Sediment Control Plan & Narrative (Appendix A) and a Landscape Plan (Appendix B). The Applicant is also required to obtain and keep in force liability insurance as described below.

Existing Structures

If you are a new homeowner and there is an existing structure on City of Norfolk property, such as a bulkhead, riprap revetment, pier or fence, a permit is required to acknowledge responsibility for the maintenance and upkeep of the structure(s). Complete pages 4 through 6 of the application and obtain and keep in force liability insurance as described below. Pending inspection to ensure the structure(s) are in good repair and meet Building Guidelines, a permit will be issued. Any structure not in compliance or in disrepair will need to be brought into compliance or repaired before a permit will be issued.

The property owner must obtain and keep in affect liability insurance in the minimum amount of \$400,000 combined personal injury/property damage per occurrence. The City of Norfolk must be named a named-insured party on the proposed structure. This is normally part of the Homeowners Insurance Policy, not an additional policy. The City shall also receive proof of insurance yearly. This is required for protecting both the City of Norfolk and you as the responsible party and permit holder.

Department of Utilities • Division of Water Production
6040 Waterworks Road • Norfolk, VA 23502
Phone: 757-441-5678 • Fax: 757-441-5742



The insurance policy should read:

City of Norfolk
Department of Utilities
Division of Water Resources
6040 Waterworks Road
Norfolk, Virginia 23502

You are also required to obtain all applicable permits from other local, state and federal agencies.

Please review the attached documentation and contact us if you have any questions. Your cooperation will enhance reservoir water quality and insure a safe and sustainable environment.

Sincerely,

A handwritten signature in black ink that reads "David S. Rosenthal".

David S. Rosenthal, CLM
Reservoir Manager

Local State and Federal Agency
Addresses and Phone Numbers

City of Norfolk
Department of Utilities
6040 Waterworks Road
Norfolk, Virginia 23502
(757) 441-5678

City of Virginia Beach
Permits and Inspections
Operations Building
Room 100 Municipal Center
Virginia Beach, Virginia 23456
(757) 385-4211

City of Norfolk
Development Services Center
City Hall Building, 1st Floor
810 Union Street
Norfolk, Virginia 23502
(757) 664-6565

City of Suffolk
Community Development/Inspections
441 Market St.
Suffolk, Virginia 23434
(757) 514-4150

U.S. Army Corps of Engineers
Norfolk District
803 Front Street
Norfolk, Virginia 23510
(757) 201-7652

Isle of Wight Inspections Department
P.O. Box 80
17140 Monument Cir.
Isle of Wight, Virginia 23397
(757) 365-6215

**BASIC APPLICATION FORM
RESERVOIR SHORELINE PROTECTION PERMIT
CITY OF NORFOLK, VIRGINIA - DEPARTMENT OF UTILITIES**

1a. Applicant's name and complete address:
Mr., Mrs., Ms. (circle one)

Telephone numbers:
Home (A/C___) _____
Work (A/C___) _____
Email: _____

1b. Property Owner's name and complete address:
(if different from above)

Telephone numbers:
Home (A/C___) _____
Work (A/C___) _____
Email: _____

2. Authorized agent's name
and complete address (if applicable):

Telephone numbers:
Home (A/C___) _____
Work (A/C___) _____
Email: _____

3. Have you obtained a contractor for the project? ___Yes ___No. If your answer is "yes" complete the remainder of this question and submit the Applicant's and Contractor's Acknowledgement Form with your application.

Contractor's name and complete address:

Telephone numbers:
Home (A/C___) _____
Work (A/C___) _____
Email: _____

4. Please give the name of the waterbody at the project site, the county or city the project is located in:

Waterbody _____ is located in _____
County/City

5. State the project purpose and provide a brief description of the project

6. a. State the area of City property impacted by project _____ square feet.

b. Will the project impact wetlands?

___ Yes ___ No ___ Uncertain

If your answer is "YES":

Vegetated wetland area(s) to be impacted _____ square feet.

7. Does proposed project involve any existing structures that are on City of Norfolk Property?

___ Yes ___ No If your answer is "Yes", provide the following information:

a. Type of structure: _____

b. Approximate age of structure _____

c. Did the City of Norfolk issue an authorization permit?

Yes _____ No _____ If Yes, date issued _____

d. Date you purchased property: Month _____ Year _____

8. Have you previously had a site visit, applied to, or obtained a permit from any agency (Federal, State, or Local) for any portion of the project described in this application or *any other* project at the site?

___ Yes ___ No If your answer is "Yes", provide the following information:

Name of Representative: _____

<u>Agency</u>	<u>Activity</u>	<u>Application Number</u>	<u>Action Taken</u> (check the appropriate box)
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___ Issued ___ Denied
___ Withdrawn ___ Site Visit

Date Action taken: _____

9. a. Has any work commenced or has any portion of the project for which you are seeking a permit been completed?

___ Yes ___ No

Department of Utilities • Division of Water Production

6040 Waterworks Road • Norfolk, VA 23502

Phone: 757-441-5678 • Fax: 757-441-5742

b. Are you submitting this application at the direction of any state, local or federal agency?
___ Yes ___ No

If your answer to either question above is "Yes", give details below stating when the work was completed, who performed the work, and which agency (if any) directed you to submit the application. (Please clearly differentiate on your application drawings that portion of the work that has been completed from that which is proposed.)

10. Approximately how long will it take to complete the project after all required permits have been issued? _____ months.

11. List the name and complete mailing address of each adjacent property owner to the project.

12. Have you obtained and enclosed a public liability insurance policy with the City of Norfolk as named-insured, in the minimum amount of \$400,000 combined personal injury/property damage per occurrence on the proposed structure? Yes___ No___ . **A permit cannot be issued until insurance is obtained.** If No, please explain:

As an applicant, I/we _____ certify that I/we have read and understand the authorization ordinance (Sec. 46.1-58 et al) and will meet all of its requirements. The applicant(s) also certifies that the residence and ownership requirements stated in Sec 46.1-61 have been met. The applicant(s) declares that in consideration of the City of Norfolk permitting me/us to build and/or maintain a structure on its property subject to the authorization ordinance referred to in this application, hereby, to hold and serve the City of Norfolk harmless as stated in Sec 46.1-62. The applicant(s) certifies that all information contained herein is true, accurate and complete.

APPLICANT'S SIGNATURE

DATE

APPLICANT'S SIGNATURE

DATE

Department of Utilities • Division of Water Production
6040 Waterworks Road • Norfolk, VA 23502
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**APPENDIX A
EROSION AND SEDIMENT CONTROL & NARRATIVE**

All Shoreline Projects require an Erosion and Sediment Control Narrative. Any project with land disturbance in excess of 2,500 square feet will also require a *Land Disturbing Permit* from the appropriate locality in addition to any other required permits.

SAMPLE EROSION CONTROL PLAN NARRATIVE

Homeowners, John and Jane Doe, propose to construct a 400 L.F. riprap revetment along the shoreline of the reservoir to provide erosion control. A 25'x 6' pier will be built from the shore to provide access to the reservoir for recreational fishing and boating. The pier materials to be used will be pressure-treated lumber and all hardware will be hot-dipped galvanized.

The terrain in the area that will be disturbed slopes very gently to the lake. The fall over the area is about 4 feet over the width of land owned by the City of Norfolk. The soil on this slope bears a heavy growth of deciduous trees and shrubs with a dense root system that are native to the area. At the present time, there is evidence in certain areas of moderate to severe bank erosion. The most severe erosion conditions are on the northeast corner of the property.

A construction entrance will be provided for ingress and egress of construction equipment. This will eliminate tracking of on-site materials onto the roadway. Prior to any land disturbing activity, silt fence will be installed along the upper portion of property to prevent any sedimentation into the reservoir by any land disturbance from equipment. A turbidity curtain will be placed in the water the entire length of the proposed revetment to provide sediment protection for the lake from the upslope land disturbance. Tree protection will be provided around all trees that are not to be removed. Upon completion of the revetment and pier construction, the area will be properly graded and native vegetation planted as detailed in the Landscape Plan. The silt fence will remain in place until permanent vegetation is established.

APPENDIX B
LANDSCAPE PLAN
REQUIRED FOR ALL SHORELINE PROTECTION PROJECTS

The City of Norfolk, Division of Water Resources is tasked with protecting 200 miles of shoreline surrounding our drinking water reservoirs. The majority of the shoreline next to City of Norfolk property is bordered by private property owners that would like to enjoy the reservoirs for recreation and visual appeal. As such, the shoreline has been altered over the years by the removal of native vegetation and ground cover which can ultimately degrade the quality of the water in the reservoirs. The City of Norfolk has undertaken an effort to reverse this trend and now requires Landscape Plans for all Shoreline Protection Permits.

For all land disturbing activities, including Shoreline Protection projects, the City of Norfolk requires that adjacent landowners restore an area at a ratio of 1:1 of altered area to native vegetation. If a Shoreline Protection project impacts 100 square feet of City property, 100 square feet of native vegetation will need to be planted. If an adjacent property owner requests to remove undesirable vegetation (briars, etc.) to enhance the view of the reservoir, restoration may also be required.

The area to be restored shall be City of Norfolk property or contiguous area if needed. The restoration should focus on minimizing turf grass and the establishment of natural vegetation for water quality protection of the reservoir.

When determining the proper amount and type of vegetation to be planted, the following guidelines should be used. The number of plants from each category (trees, shrubs and herbaceous plants) depends on the total square footage to be restored. The City of Norfolk's general rule requires replacement of plants of like category based for every 100 square foot of disturbance:

- One (1) sapling, 6-8' tall
- Four (4) shrubs, at least 24" tall
- Ten (10) herbaceous plants, planted in clumps of 2 to 3 OR a native plant seed mix at the recommended coverage rate.
- Mulch will be placed around all plants to minimize turf grass.

All Landscape Plans shall be prepared and stamped by a Registered Landscape Architect, Certified Landscape Designer or Virginia Certified Horticulturist.

**LANDSCAPE PLAN
REQUIRED WITH ALL PLANS**

PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWING MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan View Drawing

- north arrow
- waterway name
- existing structures
- benchmarks showing distances to fixed points of reference
- normal pool elevation
- location of vegetated wetlands at the project site
- shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 100 feet wide, also show the location of the property owner across from the site)
- City of Norfolk property line
- proposed landscaping

Cross Section Drawing

- proposed landscaping
- normal pool elevation
- existing contours of the shoreline and/or bank
- proposed grading of existing bank relative to normal pool elevation
- erosion and sediment control measures (e.g. silt fence)

Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).

**APPENDIX C
PRIVATE PIERS**

PLEASE COMPLETE THE CHECKLIST. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan View Drawing

- ___ north arrow
- ___ waterway name
- ___ existing structures
- ___ benchmarks showing distances to fixed points of reference
- ___ normal pool elevation
- ___ location of vegetated wetlands at the project site
- ___ shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 100 feet wide, also show the location of the property owner across from the site)
- ___ City of Norfolk property line
- ___ distance the proposed structure will be located from the adjoining property lines
- ___ width of the waterway (measuring from normal pool elevation)
- ___ channelward encroachment relative to normal pool elevation
- ___ dimensions of pier and all L/T-head section, platform, or deck

Side View Drawing

- ___ existing contours of the bottom and wetland surface
- ___ normal pool elevation
- ___ height of pier over existing bottom or wetland surface
- ___ erosion and sediment control measures (e.g. silt fence)

___ **Vicinity Map** The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).

1. What portion of the project will be placed on wetlands or subaqueous land?

	Nontidal
Vegetated wetlands	sf
Subaqueous land	sf

2. Total impact to City property: _____ sf.

**APPENDIX D
RIPRAP REVETMENT**

PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWING MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan View Drawing

- north arrow
- waterway name
- existing structures
- benchmarks showing distances to fixed points of reference
- normal pool elevation
- location of vegetated wetlands at the project site
- shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 100 feet wide, also show the location of the property owner across from the site)
- City of Norfolk property line
- channelward encroachment relative to normal pool elevation
- connection with existing bulkhead or riprap structures (if applicable)
- proposed backfill
- proposed landscaping
- length of revetment

Cross Section Drawing

- proposed backfill
- proposed landscaping
- normal pool elevation
- existing contours of the shoreline and/or bank
- dimensions of proposed revetment
- filter cloth
- buried toe or riprap apron
- proposed grading of existing bank relative to normal pool elevation
- erosion and sediment control measures (e.g. silt fence)

Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).

1. What will be the average amount of material placed below the plane of normal pool elevation per linear foot of shoreline? _____ cu.yd(s) per ft. OR _____ ton(s) per ft.
2. What type of material will be used for construction of the riprap revetment (e.g. quarry stone, etc.)?
3. What will be the average weight of the: Core material (bottom layers) _____ pounds per stone
Armor material (top 2 layers) _____ pounds per stone

4. If the revetment will be backfilled, describe the composition of the material to be used (e.g. 80% sand, 15% clay and 5% silt):

5. What is the source of the backfill material?

6. What portion of the project will be placed on wetlands or subaqueous land?

	Nontidal
Vegetated wetlands	sf
Subaqueous land	sf

7. Total impact to City property: _____ sf.

**APPENDIX E
BOAT STORAGE RAMP**

PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWING MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan View Drawing

- north arrow
- waterway name
- existing structures
- benchmarks showing distances to fixed points of reference
- normal pool elevation
- location of vegetated wetlands at the project site
- shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 100 feet wide, also show the location of the property owner across from the site)
- City of Norfolk property line
- channelward encroachment relative to normal pool elevation
- connection with existing structures (if applicable)
- dimensions of boat storage ramp

Cross Section Drawing

- materials to be used for construction
- normal pool elevation
- existing contours of the shoreline and/or bank
- erosion and sediment control measures (e.g. silt fence)

Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).

1. Will any other structures be installed concurrent with the boat storage ramp? Yes No.
If Yes, please include the appropriate information.

2. What portion of the project will be placed on wetlands or subaqueous land?

	Nontidal
Vegetated wetlands	sf
Subaqueous land	sf

3. Total impact to City property: _____ sf.

AGENT CERTIFICATION OF AUTHORIZATION

I, _____, hereby certify that I have authorized _____ to act on my behalf and
(APPLICANT'S NAME) (AGENT'S NAME)
take all actions to the processing, issuance, and acceptance of this permit and any and all standard and special conditions attached.

We hereby certify that the information submitted in this application is true and accurate to the best of our knowledge.

APPLICANT'S SIGNATURE

AGENT'S SIGNATURE

DATE

DATE

Completion of this form will allow the agent to sign all future application correspondence. Also, please provide the name(s) and complete address(es) of all legal property owner(s) as shown on your recorded deed.

ADJACENT PROPERTY OWNER'S ACKNOWLEDGEMENT FORM

I, _____, own land next to or across the water from
(ADJACENT PROPERTY OWNER'S NAME)
the land of _____. I have reviewed the applicant's project drawings dated
(APPLICANT'S NAME)
_____ to be submitted for all necessary Local, State, and Federal permits.
(DATE)

I _____ HAVE NO COMMENT _____ DO NOT OBJECT _____ DO OBJECT to the project.

The applicant has agreed to contact me for additional comments if the proposal changes prior to construction of the project.

(Before signing this form, please be sure you have checked the appropriate box above.)

ADJACENT PROPERTY OWNER'S SIGNATURE

DATE

NOTE: IF YOU OBJECT TO THE PROPOSAL - THE REASONS YOU OPPOSE THE PROJECT MUST BE SUBMITTED TO THE CITY OF NORFOLK IN WRITING. AN OBJECTION WILL NOT NECESSARILY RESULT IN DENIAL OF THE PROJECT, BUT, VALID COMPLAINTS WILL BE GIVEN FULL CONSIDERATION DURING THE PERMIT REVIEW PROCESS.

NOTE: Please photocopy this form if additional copies are needed.

APPLICANT'S AND CONTRACTOR'S ACKNOWLEDGEMENT FORM

I, _____, have contracted _____
(APPLICANT'S NAME) (CONTRACTOR/COMPANY NAME)
to perform the work described in the application signed and dated _____.
(DATE)

We will read and abide by all conditions as set forth in all Local, State, and Federal permits as required for this project. We understand that failure to follow the conditions of the permits may constitute a violation of applicable Local, State, and Federal statutes and that will be liable for any civil and/or criminal penalties imposed by these statutes.

In addition, we agree to make available a copy of any permit to any regulatory representative visiting the project site to ensure permit compliance. If we fail to provide the applicable permit upon request, we understand that the representative will have the option of stopping our operation until it has been determined that we have a properly signed and executed permit and are in full compliance with all terms and conditions.

APPLICANT'S SIGNATURE

DATE

CONTRACTOR'S SIGNATURE AND TITLE

DATE

CONTRACTOR'S NAME OR NAME OF FIRM
(PRINTED/TYPED)

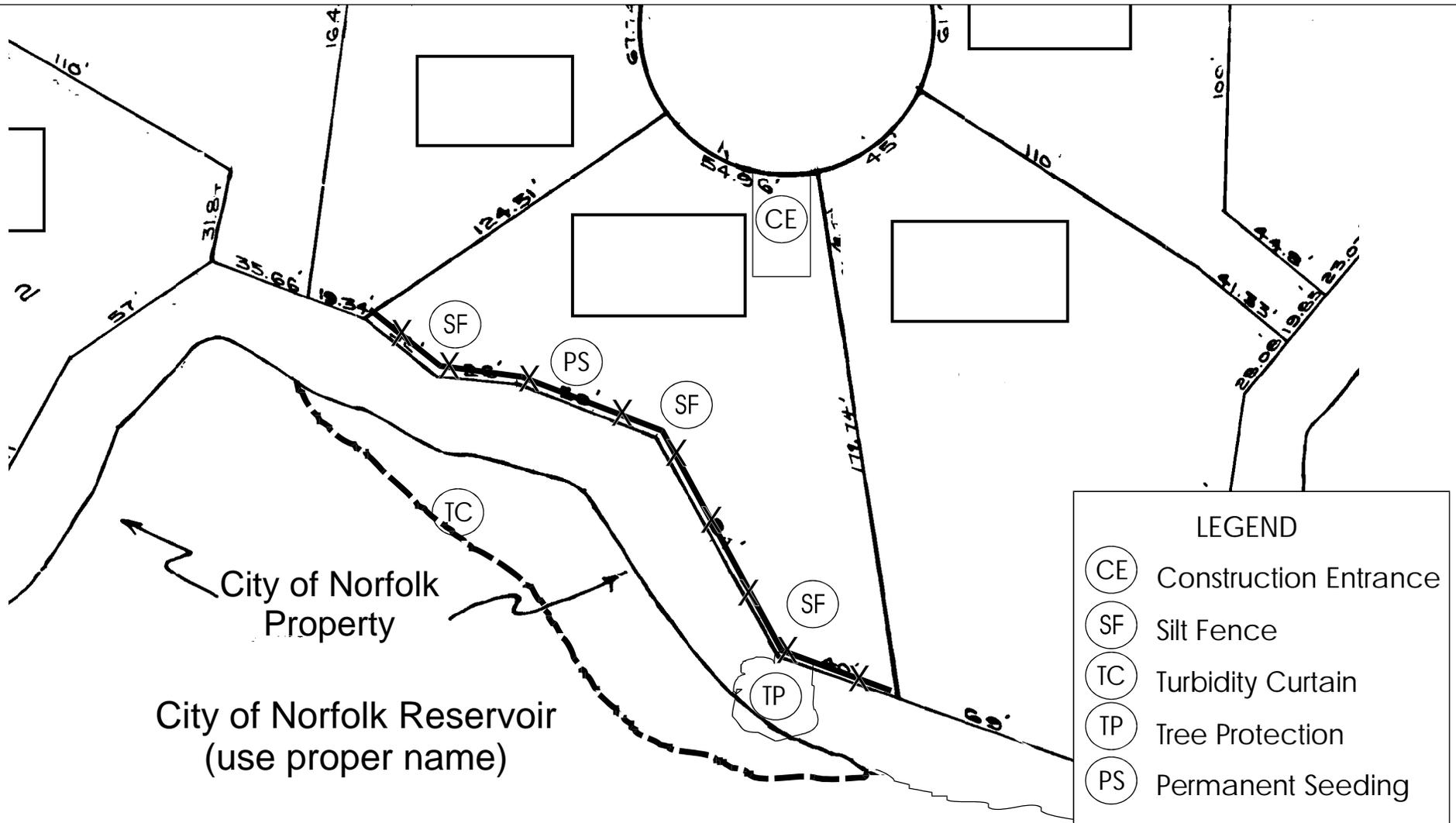
CONTRACTOR'S OR FIRM'S ADDRESS

BUILDING GUIDELINES

The following pages are building guidelines as established by the City of Norfolk for structures that may be allowed on City of Norfolk property surrounding the reservoirs.

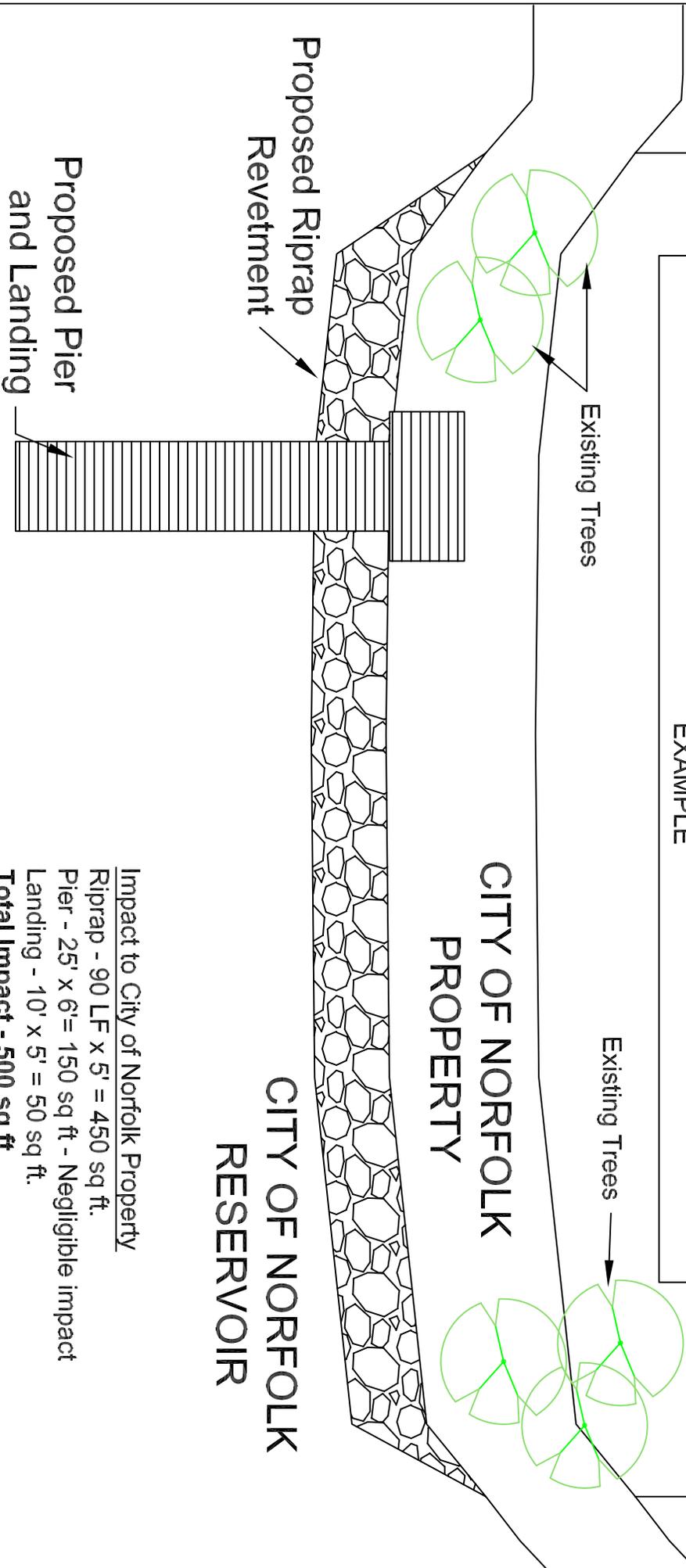
SAMPLE EROSION & SEDIMENT CONTROL PLAN

CITY OF NORFOLK UTILITIES



CITY OF NORFOLK LANDSCAPE PLAN REQUIREMENTS*

EXAMPLE



CITY OF NORFOLK
PROPERTY

CITY OF NORFOLK
RESERVOIR

Impact to City of Norfolk Property

- Riprap - 90 LF x 5' = 450 sq ft.
- Pier - 25' x 6' = 150 sq ft - Negligible impact
- Landing - 10' x 5' = 50 sq ft.
- Total Impact - 500 sq ft.**

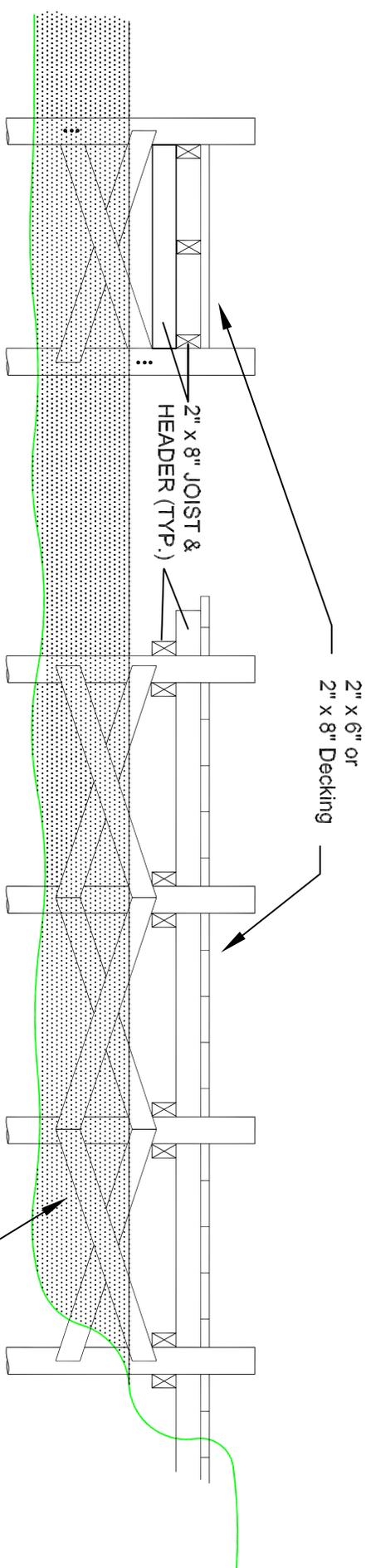
Landscape Plan Minimum

- 1 sapling per 100 sq ft = 5
- 4 shrubs per 100 sq ft = 20
- 10 herbaceous plants per 100 sq ft = 50
- Mulch beds around all plants

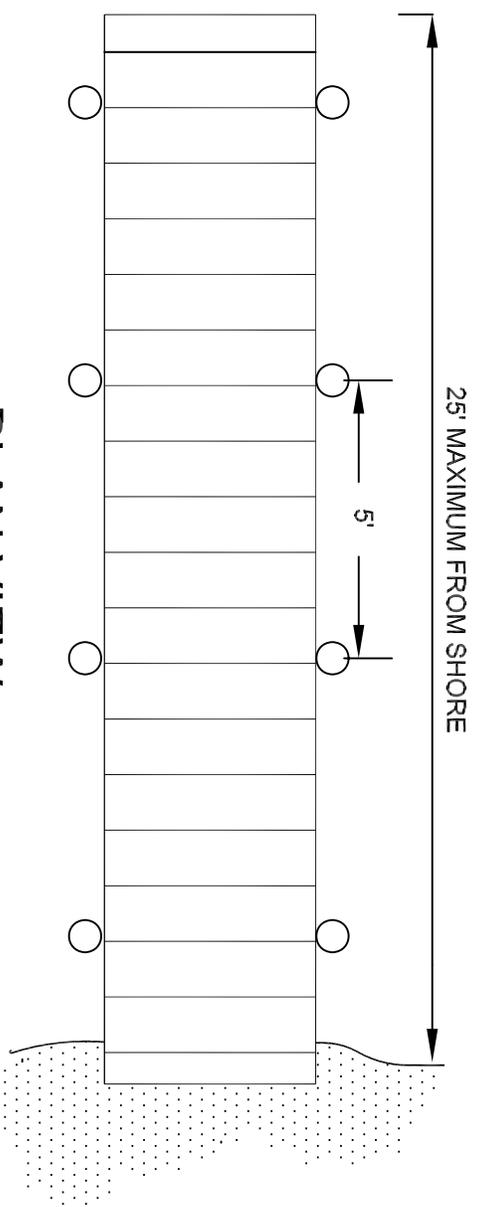
Scale - 1" = 10'

* All Landscape Plans shall be prepared and stamped by a Registered Landscape Architect, Certified Landscape Designer or Virginia Certified Horticulturist.

END VIEW



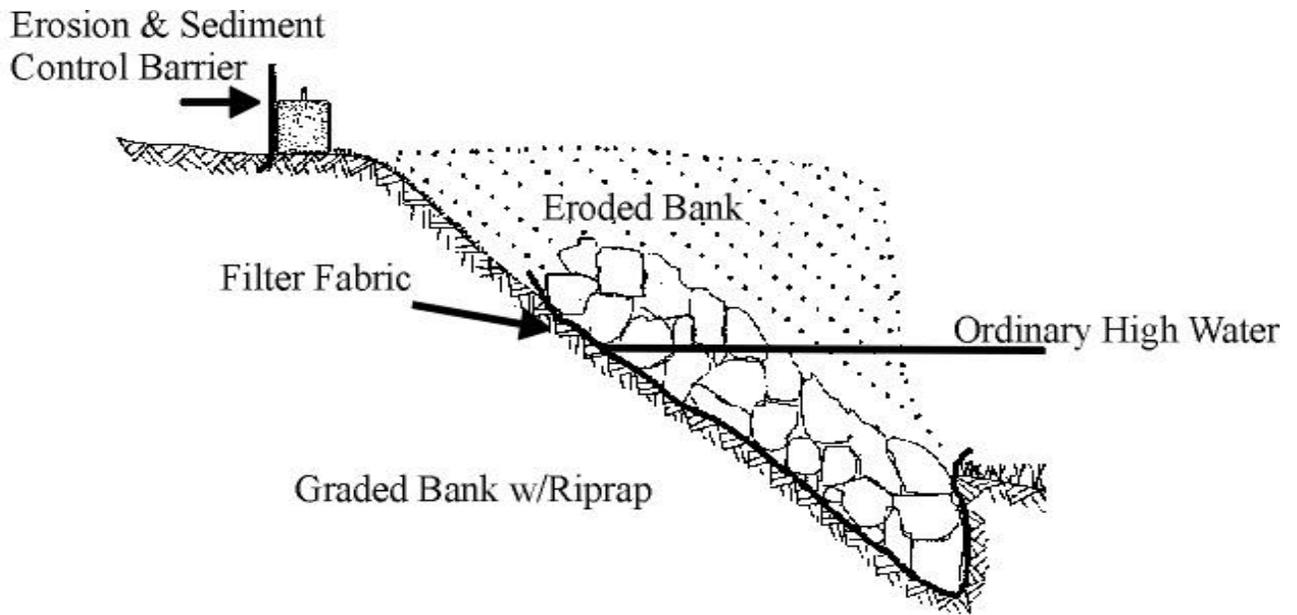
SIDE VIEW



PLAN VIEW

NOTES

1. Materials - Pressure treated timber only.
2. All headers to be fastened with minimum 1/2" hot-dipped galvanized bolts, nuts and washers. Braces and decking may be fastened with nails.
3. 150 square foot maximum.
4. 25 feet maximum distance from shore.
5. Maximum height of decking above normal pool elevation is to be 5.0 feet.
6. Depth of piles to be determined in field.
7. Configuration of pier may vary from this example as long as it does not exceed the above dimensions.



PLAN VIEW

(Not to Scale)

1. Materials -- VDOT Class AI stone ("man-size). Broken concrete and premixed concrete bags are not allowed.
2. All riprap revetments shall be constructed using the proper application of filter fabric.
3. Slope to be 2:1 or 3:1 typical

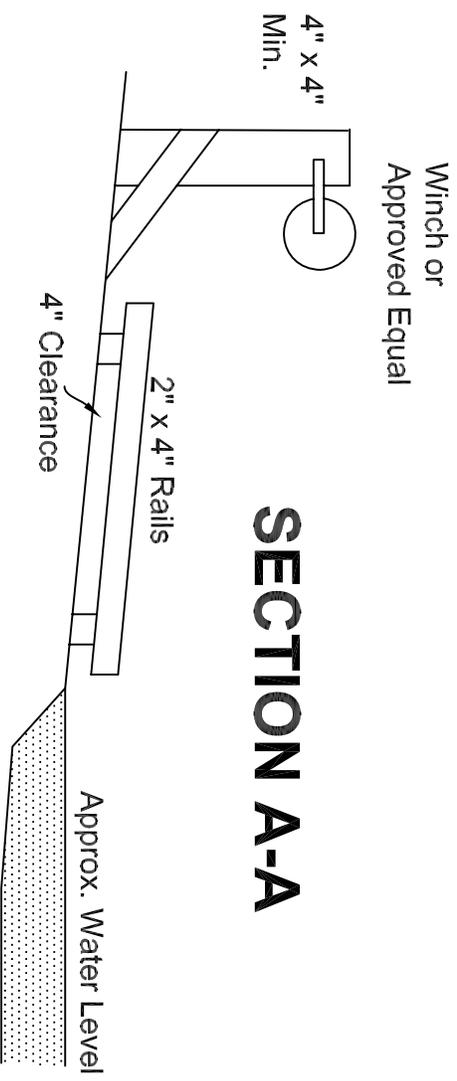
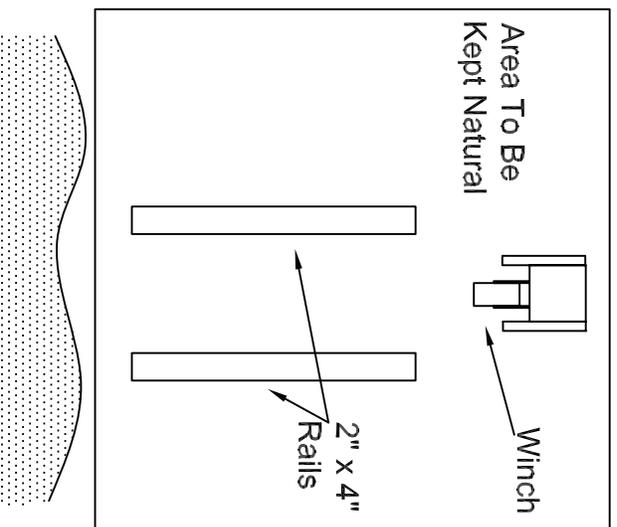
City of Norfolk, Department of Utilities

RIPRAP DETAIL

(Not to Scale)

CITY OF NORFOLK DEPT OF UTILITIES BOAT STORAGE RAMP DETAIL

(NOT TO SCALE)



PLAN VIEW

1. Materials - Pressure treated timber only. A creosote or tar based timber is not allowed.
2. All fasteners to be hot-dipped galvanized.
3. Land under and around the Boat Storage Ramp must be kept in a pervious (natural) state.
4. Boat to be attached to winch by cable or strap.
5. Boat must remain free of standing water