



**FAIRFAX COUNTY**

DEPARTMENT OF PUBLIC WORKS  
AND ENVIRONMENTAL SERVICES  
Land Development Services  
Environmental and Site Review Division  
12055 Government Center Parkway, Suite 535  
Fairfax, Virginia 22035-5503  
Phone 703-324-1720 • Fax 703-324-8359 • TTY 703-324-1877

VIRGINIA

August 31, 2004

William E. Nell, P.E.  
Wetland Studies and Solutions, Inc.  
14088-M Sullyfield Circle  
Chantilly, Virginia 20151

Subject: Removal of Existing Farm Pond, Water Quality Impact Assessment for Thompson Road Assemblage, Project #9820-WQ-02-2, Tax Map #035-3-02-0000-B, 0000-C1, 0000-D2, 0000-E1, 0000-F1, 0000-G and 0000-M2, Sully District

Reference: Your Letter Dated August 24, 2004

Dear Mr. Nell:

In response to your request, the Water Quality Impact Assessment (WQIA), for the subject project is generally acceptable and is hereby approved under the following conditions:

1. A revision shall be made to the subdivision plans to exclude the proposed disturbed area from the water quality conservation easement and from the Best Management Practices (BMP) computations. The applicant shall demonstrate in the revision that 50% phosphorous removal is achieved. Please note that for purpose of BMP efficiencies, "open space" in residential areas is defined as perpetually undisturbed Home-Owner Association (or "common") area placed in floodplain or conservation easement (PFM 6-04-2.3).
2. The record plat shall be revised to reflect changes made to the conservation easement. The plat shall also clearly show the limits of the RPA and floodplain.

A copy of the approved WQIA, as conditioned is enclosed for your records.

This approval shall automatically expire, without notice, twenty-four (24) months from the date of this letter, unless work on the associated project has commenced.

William E. Nell, P.E.  
Project #9820-WQ-02-2  
Page 2

Please ensure that a copy of this letter is made part of the subject plan.

If you have any questions or need additional information, please contact Yosif Ibrahim, Stormwater Engineer, Site Review West, Environmental and Site Review Division (ESRD) at 703-324-1720.

Sincerely,

Qayyum Khan  
Chief Stormwater Engineer  
Site Review West

QK/mw

Enclosure

cc: Carl Bouchard, Stormwater Engineer, Site Review West, ESRD, DPWES  
Clinton Abernathy, Chief Site Review Engineer, Site Review West, ESRD, DPWES  
Yosif Ibrahim, Stormwater Engineer, Site Review West, ESRD, DPWES  
Yosif Ibrahim



August 24, 2004

Ms. Michelle Brickner, Director  
Office of Site Development Services  
Department of Public Works and Environmental Services  
12055 Government Center Parkway  
Fairfax, VA 22035-5503

Re: Water Quality Impact Assessment (Revised)  
Thompson Road Assemblage<sup>1</sup>  
Fairfax County Tax Map 35-3-(2) Parcels B, C1, D2, E1, F1, G and M2  
WSSI 5433E

Dear Ms. Brickner:

Wetland Studies and Solutions, Inc. (WSSI) is requesting the "removal" of current RPAE #026817 and Plan Number 9820-WQ-02 and their replacement with the subject Water Quality Impact Assessment, as revised August 24, 2004.

This Water Quality Impact Assessment (WQIA) is submitted in support of a request to redevelop<sup>2</sup> and re-establish the RPA Buffer in an area totaling 0.26 acres by the removal of a small non-jurisdictional<sup>3</sup> farm pond, previously excavated in an "upland area" by a previous property owner, and its replacement with riparian buffer plantings. The subject WQIA demonstrates compliance with the Ordinance and substantiates that water quality will be improved upon the re-establishment of the RPA consisting of a mixture of over-story trees, under-story trees, shrubs and groundcovers at densities required by Ordinance Section 118-3-3(f).

<sup>1</sup> A proposed residential development, including lots for 4-30 single-family homes, internal roads, utilities, stormwater management facilities and other associated infrastructure.  
<sup>2</sup> Per Section 118-2-1: An allowed use within an RPA, subject to compliance with the performance criteria of Article 3 of the Chesapeake Bay Preservation Ordinance.  
<sup>3</sup> As confirmed by the COE in Jurisdictional Determination (JD#03-243), dated May 27, 2003.

Thompson Road Assemblage  
Water Quality Impact Assessment (Revised)  
August 24, 2004  
WSSI #5433E  
Page 2 of 2

Please call our office if you have any questions regarding the processing of this revised WQIA.

Sincerely,

WETLAND STUDIES AND SOLUTIONS, INC.

William E. Nell, P.E.  
Vice President

Enclosures

cc: Marc Chadwick, Winchester (w/enc.)  
Anthony Owens, BC Consultants (w/enc.)

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August 24, 2004

Ms. Michelle Brickner, Director  
Office of Site Development Services  
Department of Public Works and Environmental Services  
12055 Government Center Parkway  
Fairfax, VA 22035-5503

Re: Water Quality Impact Assessment (Revised)<sup>1</sup>  
Thompson Road Assemblage<sup>2</sup>  
Fairfax County Tax Map 35-3-(2) Parcels B, C1, D2, E1, F1, G and M2  
WSSI #5433E

Dear Ms. Brickner:

Wetland Studies and Solutions, Inc. (WSSI) has been engaged by Winchester Homes Inc., the Owner<sup>3</sup> of a residential development known as the Thompson Road Assemblage Property, to prepare and process a Water Quality Impact Assessment (WQIA) in support of a request to redevelop<sup>4</sup> and re-establish the RPA Buffer in an area totaling 0.26 acres by the removal of a small non-jurisdictional<sup>5</sup> farm pond, previously excavated in an "upland area" by a previous property owner, and its replacement with riparian buffer plantings. The subject WQIA demonstrates compliance with the Ordinance and substantiates that water quality will be improved upon the re-establishment of the RPA consisting of a mixture of over-story trees, under-story trees, shrubs and groundcovers at densities required by Ordinance Section 118-3-3(f).

The overall Thompson Road Assemblage is located just west of Route 669 (Thompson Road) in Fairfax County, Virginia, as shown on Exhibit #1. The narrative below addresses each element of consideration for evaluating the subject WQIA:

<sup>1</sup> The subject WQIA (revised August 24, 2004) replaces the "withdrawn" 9820-WQ-02, dated July 29, 2004.  
<sup>2</sup> A proposed residential development, including lots for 230 single-family homes, internal roads, utilities, stormwater management facilities and other associated infrastructure.  
<sup>3</sup> Owner of Parcels B, C1, E1, F1, G and M2 and Contract Purchaser of Parcel D2, currently owned by Scott K. and Patricia A. Meyer, 15042 Thompson Road, Fairfax, Virginia 22038.  
<sup>4</sup> Per Section 118-2-1: An allowed use within an RPA, subject to compliance with the performance criteria of Article 3 of the Chesapeake Bay Preservation Ordinance.  
<sup>5</sup> As confirmed by the COE in Jurisdictional Determination (JD#03-243), dated May 27, 2003.

14088-M Sullyfield Circle, Chantilly, Virginia 20151  
Phone 703.631.5800 Fax 703.631.5804  
Web Page <http://www.wetlandstudies.com> E-mail [contactus@wetlandstudies.com](mailto:contactus@wetlandstudies.com)

Approved with conditions  
noted on our letter dated  
August 21, 2004  
Raymond Chau  
8/31/04  
Chief Stormwater  
Engineer

Thompson Road Assemblage  
Water Quality Impact Assessment (Revised)  
August 24, 2004  
WSSI #5433E  
Page 2 of 2

I. Components of Water Quality Impact Assessment Under Section 118-4-3

A. The RPA Boundary

The RPA boundary was delineated by WSSI with a Preservation Area Plan submitted to and approved on November 20, 2003 by Fairfax County (# 9820-RPA-01-1, Exhibit #2). The subject non-jurisdictional "pond" is also highlighted on Exhibit #2. The location of the approved RPA boundary is also depicted on the Plan View of the Proposed RPA Encroachment/Planting Plan Exhibit, Exhibit #3.

B. RPA Impacts

The 0.26 acre (11,280 sf) area of proposed RPA impact or RPA encroachment equals the area of proposed RPA enhancement as depicted on Proposed RPA Encroachment/Planting Plan Exhibit, Exhibit #3.

This area of RPA encroachment/enhancement will provide for forested restoration areas in the immediate vicinity of an existing farm pond located within the existing RPA. No more land than is necessary to remove the existing farm pond and to complete the enhancement project is proposed to be disturbed.

*(Although not a component of the subject Water Quality Impact assessment, it is noted that the referenced Thompson Road Assemblage has separately processed a WQIA for three proposed stormwater outfalls. For general information only, a copy of the applicable "Stormwater Outfall Location Plan, detailed views of the Stormwater Outfalls and County Approval of the corresponding Water Quality Impact Assessment (Fairfax County Plan 9829-WQ-01-1, dated March 4, 2004) is provided in Exhibit #4.)*

C. Justification

The proposed re-establishment of the RPA buffer from its currently "disturbed" condition to its historical (pre-development) forested condition is justified for several reasons. First, overall water quality will be improved by the forested re-vegetation of the RPA. Specifically, the proposed riparian plantings will replace the subject non-jurisdictional farm pond, previously excavated in an "upland area" by a previous property owner. The proposed restoration will result in a forested riparian buffer (along a tributary to Flatlick Branch) in the immediate subject area equal to 100-foot, having an equivalent pollutant removal rate (40%) dictated by the Regulations for a full 100-foot buffer.

<sup>6</sup> Consisting of small farm pond previously excavated in an "upland" area.

Thompson Road Assemblage  
Water Quality Impact Assessment (Revised)  
August 24, 2004  
WSSI #5433E  
Page 3 of 3

In addition to the significant riparian buffer enhancement benefits, overall public safety within the future residential community will be significantly improved by the removal of the subject pond. Currently, the existing farm pond provides no measurable stormwater detention benefit, does not meet the County's minimum dam design standards for a wet pond and poses a significant safety risk to the future owners (and neighbors) of the proposed residential lot (Lot #8), where the pond currently exists.

Upon completion of the RPA enhancement, the resulting micro-topography (to promote sheet flow conditions) and proposed riparian buffer plantings will form an ideal matrix for forested restoration of the RPA, in an aesthetically pleasing and environmentally sensitive surrounding. The proposed improvements will also enhance the natural storage capacity of the existing floodplain. This storage enhancement occurs because of its proposed "net excavation" within the existing floodplain. Thus, as a direct result of its "net excavation", the proposed riparian buffer enhancement will have no adverse affect on the existing 100-year flood level and/or its corresponding floodplain, as determined by the Thompson Moor Floodplain Study (Fairfax County Plan 9820-FP-01-2, approved 12/16/98).

Given these facts, the proposed RPA encroachment is fully justified.

D. Wetlands and Waters of the United States (WOUS)<sup>7</sup>

No impacts to Jurisdictional Wetlands/WOUS will result from construction of the proposed RPA enhancement project. However, a portion of the overall Thompson Road Assemblage development project does require a wetland permit. Specifically, the previously referenced three (3) stormwater outfalls have been permitted. Copies of the applicable Wetland Impact Location Map and its corresponding permits (including the COE, DEQ and VMRO) are enclosed in Exhibit #5.

E. BMPs

The purpose of the proposed land disturbance within the RPA is to restore the RPA by the removal of a small non-jurisdictional farm pond, previously excavated in an "upland area" by a previous property owner. The buffer area to be re-established (totaling 0.26 acres) shall consist of a mixture of over-story trees, under-story trees, shrubs and groundcovers at densities required by Ordinance Section 118-3-3(f). Native trees and shrubs associated with the proposed enhancement project will be chosen for their wildlife habitat value and appropriate for riparian areas in Northern Virginia. The applicable Vegetation Planting Schedule is enclosed in Exhibit #6. The proposed limits of Planting are depicted on the enclosed RPA Encroachment/Planting Plan, Exhibit #3.

<sup>7</sup> As confirmed by the COE in Jurisdictional Determination (JD#03-243), dated May 27, 2003 (See Attached Copy)

Thompson Road Assemblage  
Water Quality Impact Assessment (Revised)  
August 24, 2004  
WSSI #5433E  
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The proposed restoration results in a forested riparian buffer (along a tributary to Flatlick Branch) in the subject area equal to 100-foot, having an equivalent pollutant removal rate (40%) dictated by the Regulations for a full 100-foot buffer. Thus, no additional BMPs are required for the proposed enhancement project.

F. Compliance with Applicable Performance Criteria

Analysis of compliance relative to Section 118-3-2 of the Ordinance, General Performance Criteria:

- Comply. No more land than is necessary to construct the project is proposed to be disturbed, as depicted in Exhibit #2. The total area of RPA encroachment/restoration is 0.26 acres (11,280 sf).
- Comply. To the maximum practicable, indigenous vegetation is proposed to be protected within the onsite RPA area. In addition, all disturbed areas within the RPA are proposed to be re-planted with native vegetation, as detailed in Exhibit #6.
- Comply. Other than the proposed riparian buffer plantings within the RPA, no additional BMPs are required for the proposed enhancement project. In addition, because of its natural and "open space" type setting, no periodic or scheduled maintenance should be anticipated for the proposed RPA enhancement area.
- Comply. No impervious areas have been proposed as part of the subject RPA enhancement project.
- Comply. The construction plans to be developed for the overall Thompson Road Assemblage project (including the subject RPA enhancement project) will comply with all requirements of Chapter 104 of the Fairfax County Code and Public Facilities Manual.
- Comply. The entire RPA encroachment associated with the subject WQIA is related to the re-establishment of the RPA. The proposed restoration will result in a forested riparian buffer (along a tributary to Flatlick Branch) in the subject area equal to 100-foot, having an equivalent pollutant removal rate (40%) dictated by the Regulations for a full 100-foot buffer. In addition and separate from the proposed RPA re-establishment, the overall Thompson Road Assemblage development projects stormwater runoff will be controlled by the use of best management practices (BMPs) where the project total phosphorus runoff pollution load for the proposed development shall be reduced by no less than forty (40) percent compared to phosphorus load projected for the development without BMPs.

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g. As previously noted, no impacts to Jurisdictional Wetlands/WOUs will result from construction of the proposed RPA enhancement project. However, a portion of the Thompson Road Assemblage does require a wetland permit. Specifically, the previously referenced three (3) stormwater outfalls have been permitted. Copies of the applicable Wetland Impact Location Map and its corresponding permits (including the COE, DEQ and VMRC) are enclosed in Exhibit #5.

h. Not applicable. There are no on-site sewage disposal systems.

i. Not applicable. This is not agricultural land.

**Analysis of compliance relative to Section 118-3-3 of the Ordinance, *Additional Performance Criteria for RPAs:***

a. Provided. This Water Quality Impact Assessment (WQIA) is submitted in conjunction with a request to redevelop and re-establish the RPA Buffer in an area totaling 0.26 acres by the removal of a small non-jurisdictional farm pond, previously excavated in an "upland area" by a previous property owner, and its replacement with riparian buffer plantings.

b. Not Applicable. The subject project is for the re-establishment of the RPA, not development. As such, the proposed use is in harmony with the purpose and intent of the Ordinance.

c. Comply. The subject project is for the redevelopment and re-establishment of the RPA Buffer in an area totaling 0.26 acres by the removal of a small non-jurisdictional farm pond, previously excavated in an "upland area". As such, the proposed use is in harmony with the purpose and intent of the Ordinance.

d. Comply. The 0.26 acre (±11,280 sf) area of proposed RPA impact equals the area of proposed RPA enhancement, as depicted on Proposed RPA Encroachment/Planting Plan Exhibit, Exhibit #3, and Proposed Planting Schedule/Plant List, Exhibit #6. Therefore, the re-establishment of the RPA minimizes the adverse effect of human activities on the other components of the RPA, state waters and aquatic life by retarding runoff, reducing erosion and filtering nonpoint source pollution from runoff.

e. Not applicable. This is not agricultural land.

f. Comply. Buffer area establishment will be provided to fully satisfy the county required densities. As shown on Exhibit #3 and specified on Exhibit #6, the RPA Buffer Area to be re-established shall consist of a mixture of

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over-story trees, under-story trees, shrubs and groundcovers at densities required by Ordinance Section 118-3-3(f). The density of over-story trees shall be a minimum of 100 trees per acre. The density of under-story trees shall be a minimum of 200 trees per acre. The density of shrubs shall be a minimum of 1089 plants per acre. If seedlings are used instead of container plants, the density of trees shall be doubled. Plant materials shall be randomly placed to achieve a relatively even spacing through out the buffer. Subject to approval by County staff, proposed riparian plantings include Pin Oak (*Quercus palustris*), Sycamore (*Platanus occidentalis*), Red Maple (*Acer rubrum*), Green Ash (*Fraxinus pennsylvanica*), Black Gum (*Nyssa sylvatica*), River Birch (*Betula nigra*), Sweet Gum (*Liquidambar styraciflua*), Silky Dogwood (*Cornus amomum*), Southern Arrowwood (*Viburnum dentatum*), Brookside Alder (*Alnus serrulata*) and Spicebush (*Lindera benzoin*). Plant materials and planting techniques shall be as required by the Public Facilities Manual and detailed in Exhibit #6.

**G. Other Information**

No other information has been requested by the Director. The WQIA is anticipated to be complete and contain all the applicable information (in sufficient detail) to fully support the request to redevelop and re-establish the RPA Buffer. An aerial photograph of the Thompson Road Assemblage and ground photographs in the immediate vicinity of the non-jurisdictional pond are provided in Exhibit #7 and Exhibit #8, respectively.

**II. Conclusion**

After considering the evaluation procedure outlined in this report and analyzing the applicable performance criteria, it is our opinion that the value of the natural processes and ecological relationships associated with the RPA on the site will be enhanced by the re-establishment of the RPA buffer area. The resulting runoff storage, micro-topography and proposed plantings will form an ideal matrix for restoration of the RPA, in an aesthetically pleasing and environmentally sensitive surrounding. The proposed re-establishment of the RPA will enhance the natural storage capacity of the existing floodplain and provide a varied and beneficial wildlife habitat that will also be very effective in providing treatment of stormwater runoff.


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In conclusion, this WQIA demonstrates overall compliance with the Ordinance and substantiates that overall water quality will be enhanced upon the re-establishment of the RPA Buffer Area as proposed and that approval of the subject WQIA is warranted.

Please call our office if you have any questions or need additional information.

Sincerely,

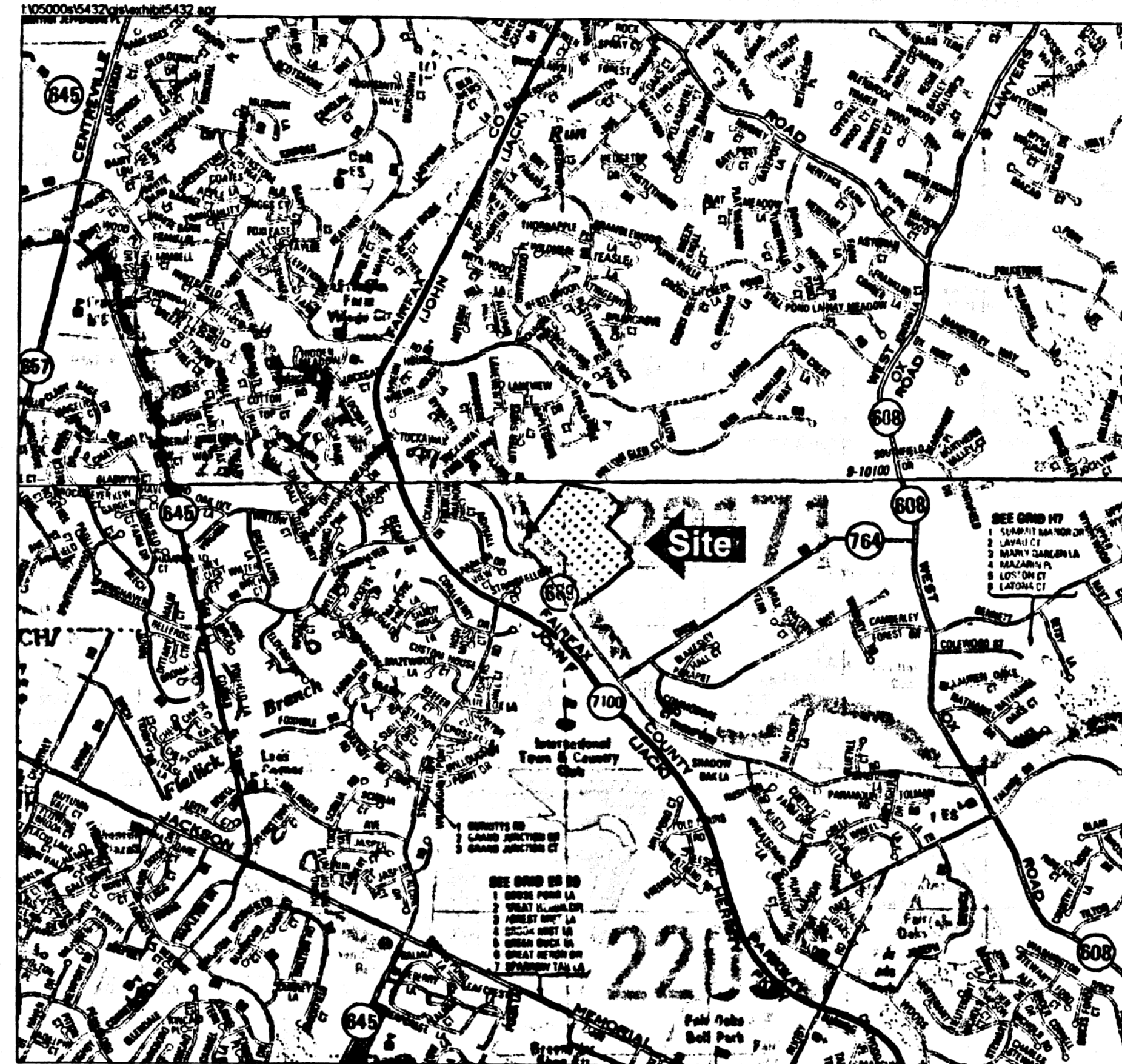
WETLAND STUDIES AND SOLUTIONS, INC.

  
William E. Nell, P.E.  
Vice President

**Enclosures**

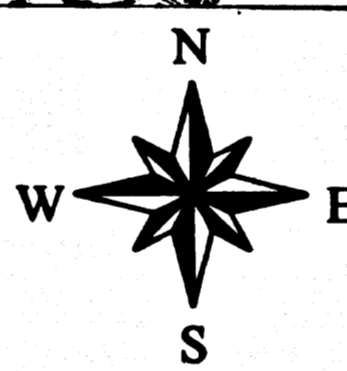
cc: Marc Chadwick, Winchester (w/enc.)  
Anthony Owens, BC Consultants (w/enc.)

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Vicinity Map  
Thompson Road Assemlage  
WSSI #5432  
Scale: 1" = 2000'



Wetland Studies and Solutions, Inc.

Exhibit 1

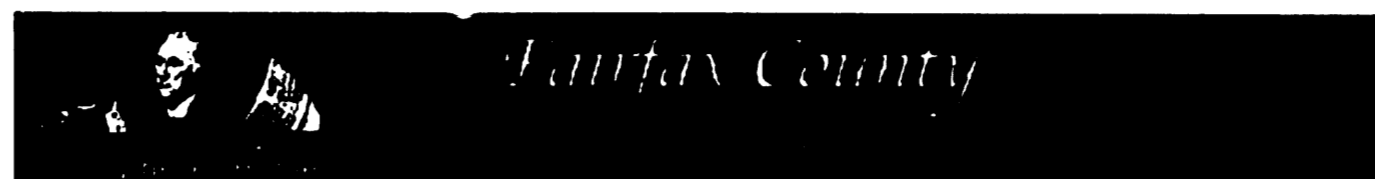
Thompson Road Assemblage  
Water Quality Impact Assessment  
Exhibit #2  
July 26, 2004

**THOMPSON ROAD ASSEMBLAGE  
RESOURCE PROTECTION AREA (RPA) PLAN**

The RPA was field delineated by Wetland Studies and Solutions, Inc. (WSSI) and approved by DPWES under Plan #9820-RPA-01-1 on November 20, 2003. Excerpts from Fairfax County's LDSnet records and the subject Preservation Area Plan (Plan Sheet 2 of 11) are enclosed.

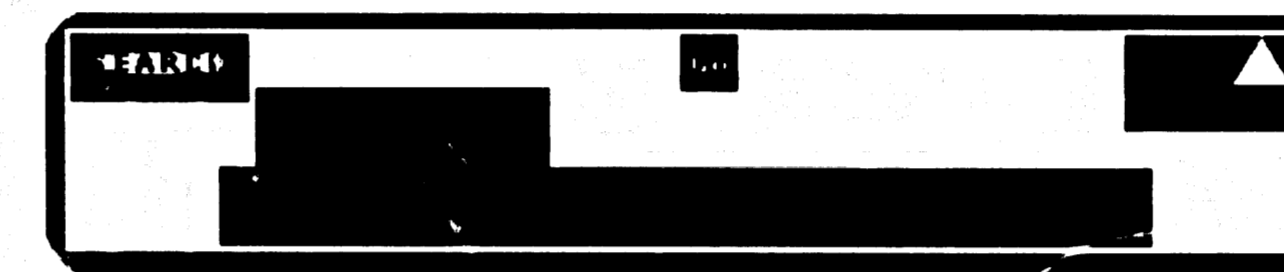
PAWS Search Results

Page 1 of 1

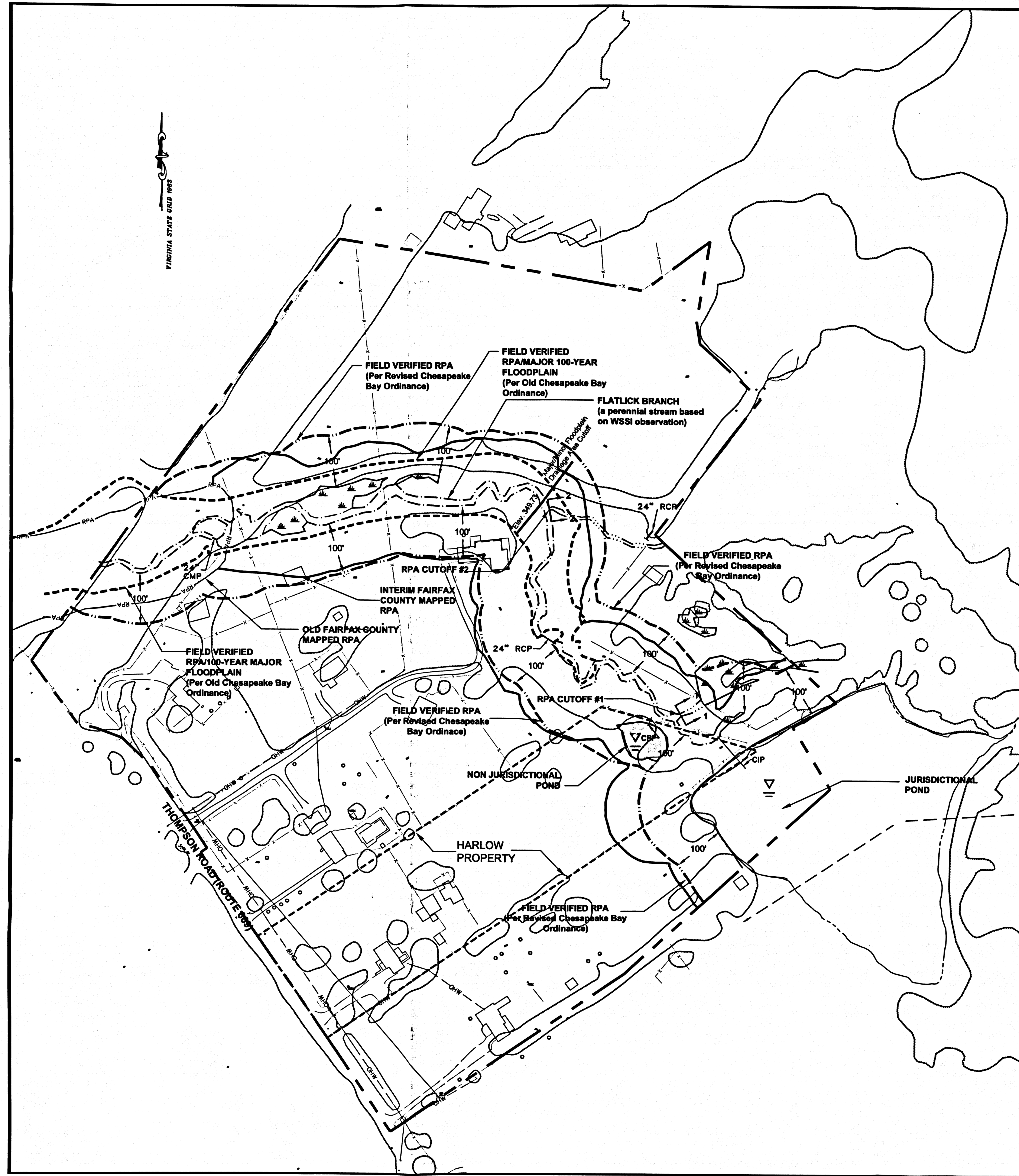
  
**LDSnet Application**  
you are here: [homepage](#) > [construction and land use](#) > [land development system](#)  
LDSnet Friday, July 23, 2004  
**LDSNET Search Results** [Back to Search Criteria](#)  
PAWS Records Found: 1

PAWS	Submission Number/Application ID	Project Name	HIST	LifeCycle Status	LCS Date	Description
PAWS	009820-RPA-01-1	THOMPSON ROAD ASSEMBLAGE		APPROVED	11/20/2003	

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- Boundary information and topographic information was provided in digital (Autocad) format by BC Consultants. The contour interval (C.I.) is 2 feet. This information is based in the NAD 83 horizontal coordinate system and referenced to the NGVD 29 vertical datum.
- The boundaries of Jurisdictional wetlands and other Waters of the U.S. on the site were delineated and surveyed (by conventional methods) by Wetland Studies and Solutions, Inc. (WSSI) and described in two separate reports. The U.S. Army Corps of Engineers verified both delineations with Jurisdictional Determinations. The following is a list of the reports and Jurisdictional Determinations:
  - Wetland Delineation Report #1 (Thompson Road Assemblage)
    - Wetland Delineation Report, Thompson Road Assemblage (± 37 acres), Fairfax County, Virginia, dated March 14, 2003
    - Jurisdictional Determination (#03-N0204) dated March 20, 2003.
  - Wetland Delineation Report #2 (Harlow Property)
    - Wetland Delineation Report, Harlow Property: Parcel F1 (± 5.0 acres), Fairfax County, Virginia, dated May 20, 2003
    - Jurisdictional Determination (#03-N0243) dated May 27, 2003.
 A copy of each Jurisdictional Determination is enclosed in Sheet #10.
- A flood-plain study for the project site was prepared by BC Consultants (FFX# 9820-FP-02-1, approved 9/3/2003), and provided to WSSI in digital (AutoCAD) format. Only the Major portion of the floodplain is provided here on (BC study depicted both Major and Minor). The elevation of the floodplain at the Major/Minor confluence was then continued upstream to depict its backwater extents.
- A 100 foot buffer, landward of RPA core components, governs the location of the RPA when it exceeds the limits of the major floodplain (defined in Section 118-1-6 (c) of the Chesapeake Bay Preservation Ordinance). Flatlick Branch, an RPA core component, is present on this site and therefore a 100-foot buffer extends landward of the stream channel.
- The Chesapeake Bay Ordinance for Fairfax County was revised on July 7, 2003, with an effective date set as the day following adoption of the Chesapeake Bay Preservation Area map (expected on 11/17/2003). Prior to this date, it has been requested by Fairfax County that the RPA be shown based on both the old and new ordinance guidelines. The "old" Chesapeake Bay Ordinance, adopted March 22, 1993, defines a RPA as "any land characterized by one or more of the following features:
  - A tidal wetland;
  - A tidal shore;
  - A tributary stream;
  - A nontidal wetland connected by surface flow and contiguous to a tidal wetland or tributary stream;
  - A buffer area as follows:
    - Any land within a major floodplain;
    - Any land within 100 feet of a feature listed in Sections 118-1-7(b) (1) - (4)."
 A tributary stream is defined as "any perennial stream that is so depicted on the most recent U.S. Geological Survey 7 1/2 minute topographic quadrangle map (scale 1 : 24,000)." Flatlick Branch is mapped as intermittent on the 1984 USGS Harlow Quad Map (see Exhibit #2, Sheet #5). Therefore, Flatlick Branch is not an RPA component and there is no RPA for this site according to the old Chesapeake Bay Ordinance, adopted March 22, 1993.

The revised Chesapeake Bay Ordinance, adopted July 7, 2003, defines a RPA as "any land characterized by one or more of the following features:

- A tidal wetland;
- A tidal shore;
- A water body with perennial flow;
- A nontidal wetland connected by surface flow and contiguous to a tidal wetland or water body with perennial flow;
- A buffer area as follows:
  - Any land within a major floodplain;
  - Any land within 100 feet of a feature listed in Sections 118-1-7(b) (1) - (4).

The full buffer area shall be designated as the landward component of the RPA notwithstanding the presence of permitted uses, encroachments, and permitted vegetation clearing in compliance with Article 3. Designation of the components listed in Sections 118-1-7(b) (1)-(4) shall not be subject to modification unless based on reliable, site-specific information as provided for in Section 118-1-9."

A water body with perennial flow is defined as "a body of water flowing in a natural or man-made channel year-round, except during periods of drought. The term "water body with perennial flow" includes perennial streams, estuaries, and tidal embayments. A perennial stream means any stream that is both perennial and so depicted on the map of Chesapeake Bay Preservation Areas adopted by the Board of Supervisors pursuant to Section 118-1-9(a). Streams identified as perennial on the adopted map are based on field studies conducted by the Department of Public Works and Environmental Services. Lakes and ponds that form the source of a perennial stream, or through which the perennial stream flows, are a part of the perennial stream. The width of a perennial stream may be measured from top-of-bank to top-of-bank or at the Ordinary High Water Mark (OHWM) as defined by 33 CFR Part 328.3(e). The aerial extent of a pond or lake is measured at the OHWM. Generally, the water table is located above the streambed for most of the year and groundwater is the primary source for stream flow. In the absence of pollution or other manmade disturbances, a perennial stream is capable of supporting aquatic life."

Flatlick Branch was field investigated as perennial and is mapped as perennial on the Fairfax County Chesapeake Bay Preservation Areas Interim Guidance Map (see Exhibit #5, Sheet #5). Therefore, Flatlick Branch and the associated 100-foot buffer and floodplain constitute the RPA for this site according to the revised Chesapeake Bay Ordinance, adopted July 7, 2003.

7. The pond completely within the Harlow Property has been classified as non-jurisdictional by the U.S. Army Corps of Engineers. Furthermore, this body of water does not provide the source of the perennial stream, Flatlick Branch, nor is it a part of, or located through which Flatlick Branch flows. Therefore this pond is not an RPA core component. The larger pond to the east of which is partly situated on the site, is located in-line with Flatlick Branch and is therefore an RPA core component with a 100-foot buffer surrounding it.

8. RPA Cutoff #1 is located at the confluence of an unnamed intermittent stream with Flatlick Branch. There are nontidal wetlands associated with this stream, however, they are not connected to the RPA core component, Flatlick Branch, by surface flow nor are they contiguous to it.

9. RPA Cutoff #2 is located at the confluence of an unnamed stream which has no associated nontidal wetlands.

LEGEND	
	SITE BOUNDARY (THOMPSON ROAD ASSEMBLAGE)
	SITE BOUNDARY (HARLOW PROPERTY)
	PERENNIAL STREAM (Per WSSI field investigation)
	INTERMITTENT STREAM (Per WSSI field investigation)
	RPA CUTOFF
	FIELD VERIFIED RPA (Per Old Chesapeake Bay Ordinance) 100 YEAR FLOODPLAIN
	FIELD VERIFIED RPA (Per Revised Chesapeake Bay Ordinance)
	OLD FAIRFAX COUNTY MAPPED RESOURCE PROTECTION AREA BOUNDARY
	INTERIM FAIRFAX COUNTY MAPPED RESOURCE PROTECTION AREA BOUNDARY
	JURISDICTIONAL WETLAND AREAS

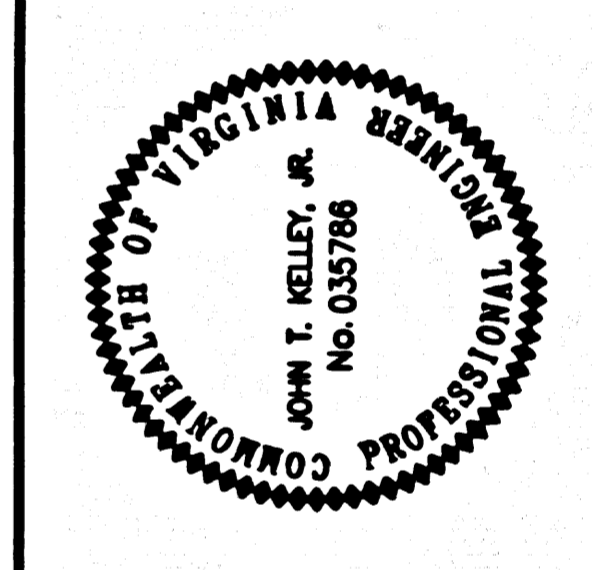
**Wetland**  
Studies and Solutions, Inc.

14088-M Sullyfield Circle, Chantilly, Virginia 20151  
Phone: 703.631.5800 Fax: 703.631.5804  
www.wetlandstudies.com

**THOMPSON ROAD ASSEMBLAGE  
PRESERVATION AREA PLAN**  
FAIRFAX COUNTY, VIRGINIA

**PRESERVATION AREA PLAN**

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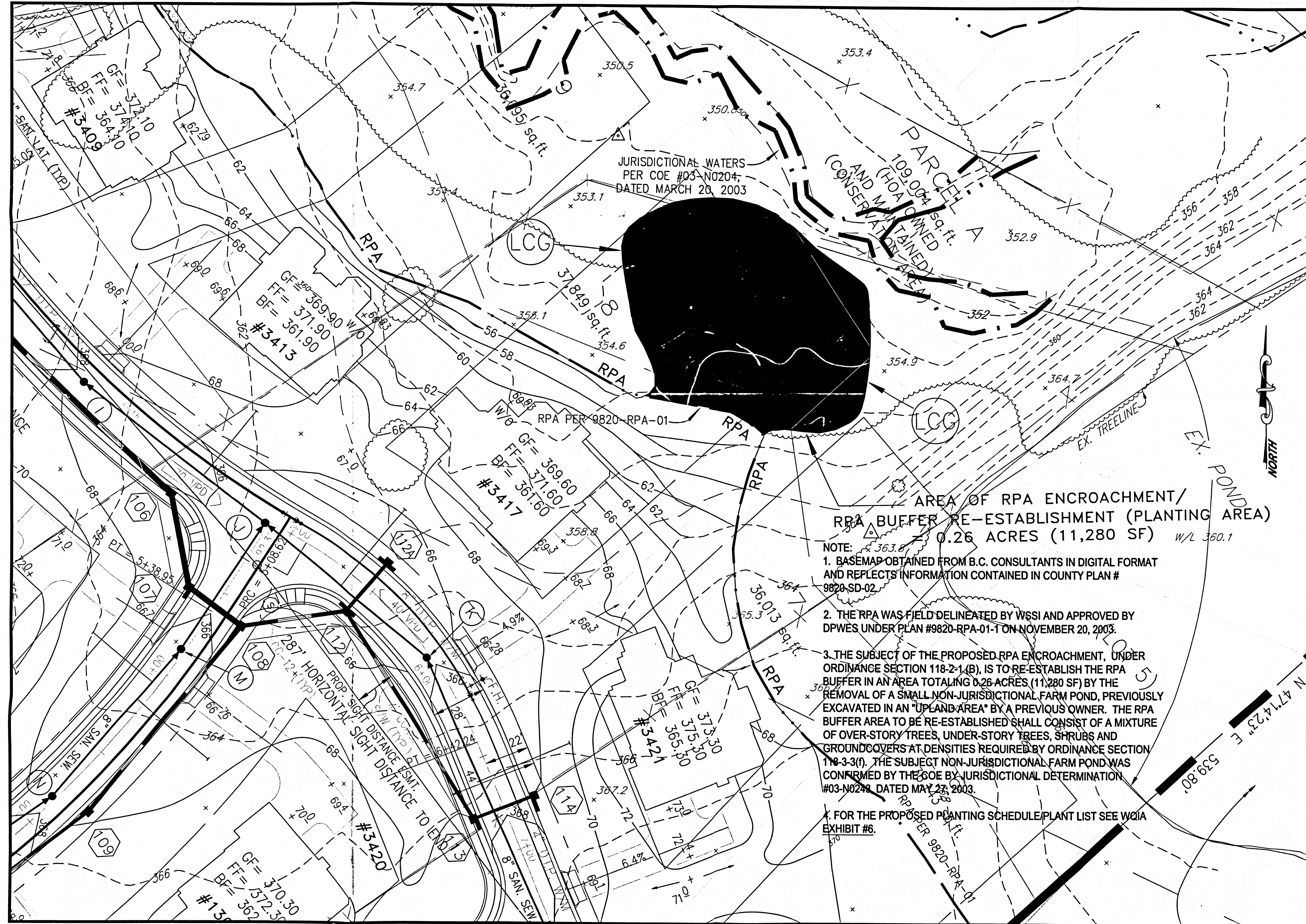
No.	Date	Description	Revisions	
			Rev. By	App. By

Horizontal Datum: NAD 83  
Vertical Datum: NGVD 29  
Boundary and Topo Source: BC CONSULTANTS

Design	Draft	Approved
BMW	BMW	JTK

Sheet #  
**2 of 11**

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JURISDICTIONAL WATERS  
 PER COE #03-N0204,  
 DATED MARCH 20, 2003

PARCEL AND MAINTAINED (CONSERVATOR AREA)  
 109.094 sq. ft.

AREA OF RPA ENCROACHMENT/  
 RPA BUFFER RE-ESTABLISHMENT (PLANTING AREA)  
 0.26 ACRES (11,280 SF) W/L 360.1

- NOTE:
1. BASEMAP OBTAINED FROM B.C. CONSULTANTS IN DIGITAL FORMAT AND REFLECTS INFORMATION CONTAINED IN COUNTY PLAN # 9820-SD-02
  2. THE RPA WAS FIELD DELINEATED BY WSSI AND APPROVED BY DPWES UNDER PLAN #9820-RPA-01-1 ON NOVEMBER 20, 2003.
  3. THE SUBJECT OF THE PROPOSED RPA ENCROACHMENT, UNDER ORDINANCE SECTION 118-2-1 (B), IS TO RE-ESTABLISH THE RPA BUFFER IN AN AREA TOTALING 0.26 ACRES (11,280 SF) BY THE REMOVAL OF A SMALL NON-JURISDICTIONAL FARM POND, PREVIOUSLY EXCAVATED IN AN "UPLAND AREA" BY A PREVIOUS OWNER. THE RPA BUFFER AREA TO BE RE-ESTABLISHED SHALL CONSIST OF A MIXTURE OF OVER-STORY TREES, UNDER-STORY TREES, SHRUBS AND GROUNDCOVERS AT DENSITIES REQUIRED BY ORDINANCE SECTION 118-3-3 (f). THE SUBJECT NON-JURISDICTIONAL FARM POND WAS CONFIRMED BY THE COE BY JURISDICTIONAL DETERMINATION #03-N0249, DATED MAY 27, 2003.

\* FOR THE PROPOSED PLANTING SCHEDULE/PLANT LIST SEE WQIA EXHIBIT #6.

**Wetland**  
 Studies and Solutions, Inc.  
 14188-N Sulphurfield Circle, Chantilly, Virginia 20151  
 Phone 703.631.5800 Fax 703.631.5804  
 www.wetlandstudies.com

THOMPSON ROAD ASSEMBLAGE  
 RPAE/WATER QUALITY IMPACT ASSESSMENT  
 FAIRFAX COUNTY  
 GENERAL RESOURCE PROTECTION AREA  
 ENCROACHMENT/PLANTING PLAN EXHIBIT

REVISIONS

No.	Date	Description	By	Appr

DATE: JULY 2004  
 SCALE: 1" = 20'

Horizontal Datum: NAD 83  
 Vertical Datum: NGVD 29  
 Boundary and Topo Source:  
 BC CONSULTANTS, INC.

Design	Draft	Approved
CAD	CAD	WEN

Sheet #  
 1 of 1

Computer File Name:  
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**FAIRFAX  
COUNTY**

DEPARTMENT OF PUBLIC WORKS  
AND ENVIRONMENTAL SERVICES  
Environmental and Facilities Review Division  
12655 Government Center Parkway, Suite 535  
Fairfax, Virginia 22035-5503  
Telephone: 703-324-1720 Fax: 703-324-8359

V I R G I N I A

March 4, 2004

Brandon Walker, Civil Engineer  
Wetland Studies and Solutions, Inc.  
14088-M Sullyfield Circle  
Chantilly, Virginia 20151

Subject: Water Quality Impact Assessment for Thompson Road Assemblage, Plan #9820-  
WQ-01-1, Tax Map #035-3-02-0000-B, 0000-C1, 0000-D1, 0000-E1, 0000-F1,  
0000-G and 0000-M2, Sully District

Reference: Your Letter Dated February 23, 2004

Dear Mr. Walker:

In response to your request, it has been determined that the Water Quality Impact Assessment (WQIA), for the proposed construction of three stormwater outfall structures is generally acceptable and is hereby approved. This determination is valid as of the date of this letter and does not relieve you of the responsibility of complying with any other Zoning Ordinance or County regulations currently in effect or which may be adopted by the Board of Supervisors at a future date.

Please note the following:

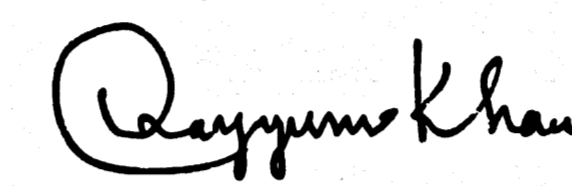
- The limits of clearing and grading for the proposed buildings at Lots #3400, 3405, 3409 and 3413 are very close to the Resource Protection Area (RPA) as depicted on Sheet 1 of 4. It is advised to relocate/move the proposed buildings so that no encroachment upon the RPA will occur.
- The limits of clearing and grading shown near and/or within the limits of the RPA must be strictly observed and enforced. Any encroachment into, and/or disturbance of the RPA not shown on this plan is considered a violation of the Chesapeake Bay Preservation Ordinance (CBPO) and is subject to penalties of the CBPO. This shall include but is not limited to the disturbance for purpose of construction of future decks or any other accessory structure at the backyards of all the impacted lots.

Brandon Walker, Civil Engineer  
Project #9820-WQ-01-1  
Page 2

Please ensure that a copy of this letter is made part of the subject plan.

If you have any questions or need additional information, please contact Yosif Ibrahim, Engineer II, Environmental and Facilities Review Division (EFRD) at 703-324-1720.

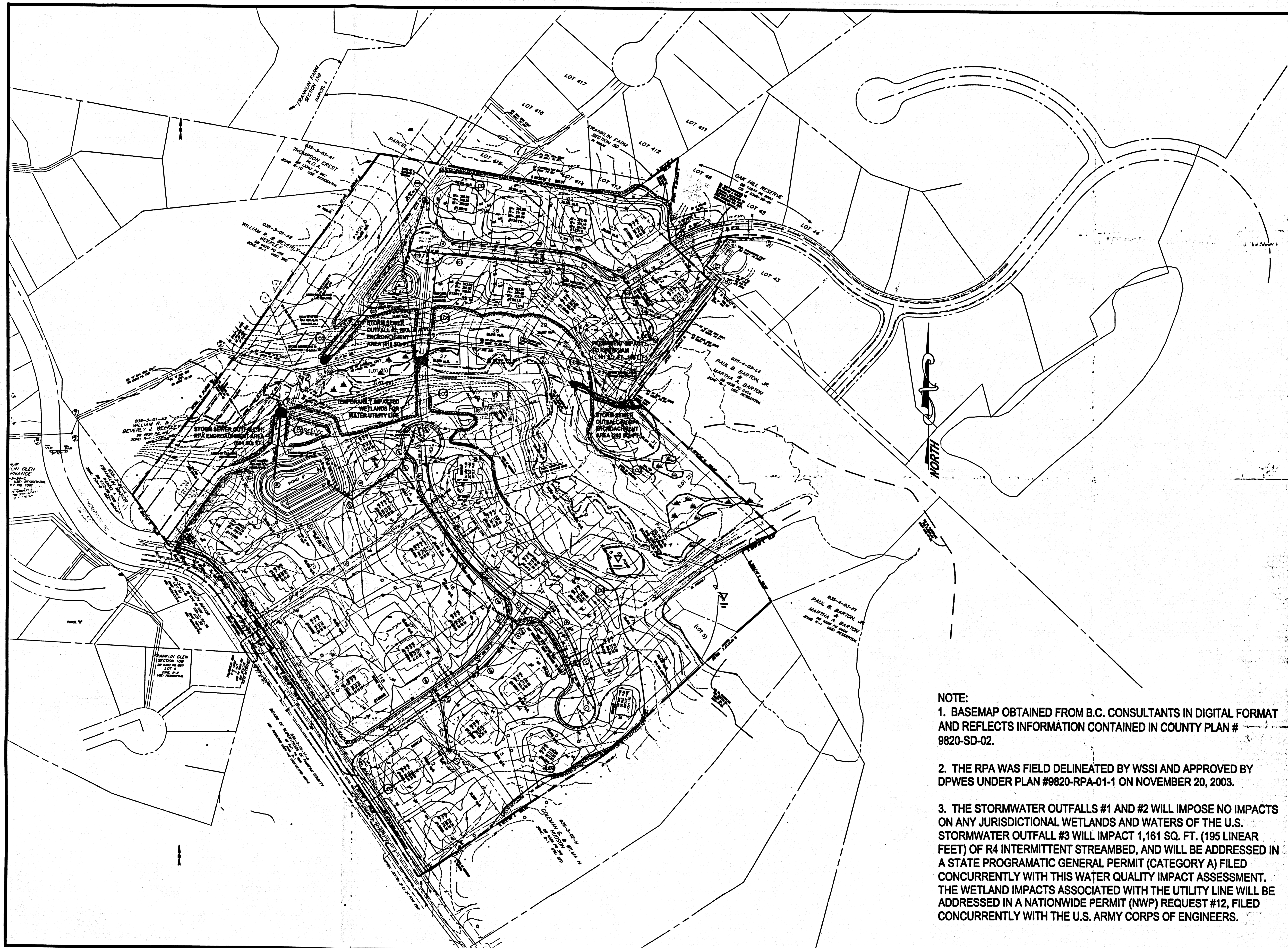
Sincerely,

  
Qayyum Khan  
Chief Stormwater Engineer

QK/mw

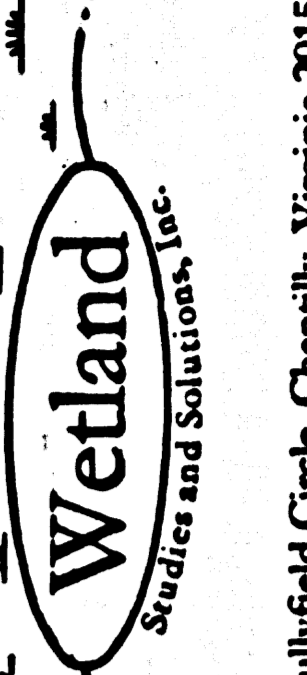
cc: Carl Bouchard, Director, Stormwater Planning, DPWES  
Clinton Abernathy, Chief Site Review Engineer, EFRD, DPWES  
Yosif Ibrahim, Engineer II, EFRD, DPWES





**NOTE:**

1. BASEMAP OBTAINED FROM B.C. CONSULTANTS IN DIGITAL FORMAT AND REFLECTS INFORMATION CONTAINED IN COUNTY PLAN # 9820-SD-02.
2. THE RPA WAS FIELD DELINEATED BY WSSI AND APPROVED BY DPWES UNDER PLAN #9820-RPA-01-1 ON NOVEMBER 20, 2003.
3. THE STORMWATER OUTFALLS #1 AND #2 WILL IMPOSE NO IMPACTS ON ANY JURISDICTIONAL WETLANDS AND WATERS OF THE U.S. STORMWATER OUTFALL #3 WILL IMPACT 1,161 SQ. FT. (195 LINEAR FEET) OF R4 INTERMITTENT STREAMBED, AND WILL BE ADDRESSED IN A STATE PROGRAMATIC GENERAL PERMIT (CATEGORY A) FILED CONCURRENTLY WITH THIS WATER QUALITY IMPACT ASSESSMENT. THE WETLAND IMPACTS ASSOCIATED WITH THE UTILITY LINE WILL BE ADDRESSED IN A NATIONWIDE PERMIT (NWP) REQUEST #12, FILED CONCURRENTLY WITH THE U.S. ARMY CORPS OF ENGINEERS.

  
**Wetland**  
 Studies and Solutions, Inc.

14088-N Sullyfield Circle, Chantilly, Virginia, 20151  
 Phone 703.631.5800 Fax 703.631.5804  
 www.wetlandstudies.com

**THOMPSON ROAD ASSEMBLAGE**  
**WATER QUALITY IMPACT ASSESSMENT**  
 FAIRFAX COUNTY  
**UTILITY & STORMWATER OUTFALL LOCATION**

REVISIONS		DATE	DESCRIPTION	BY	CHK
No.	Date				

DATE: FEBRUARY 2004      SCALE: 1" = 100'  
 Horizontal Datum:      Vertical Datum:      Boundary and Topo Source: BC CONSULTANTS, INC.

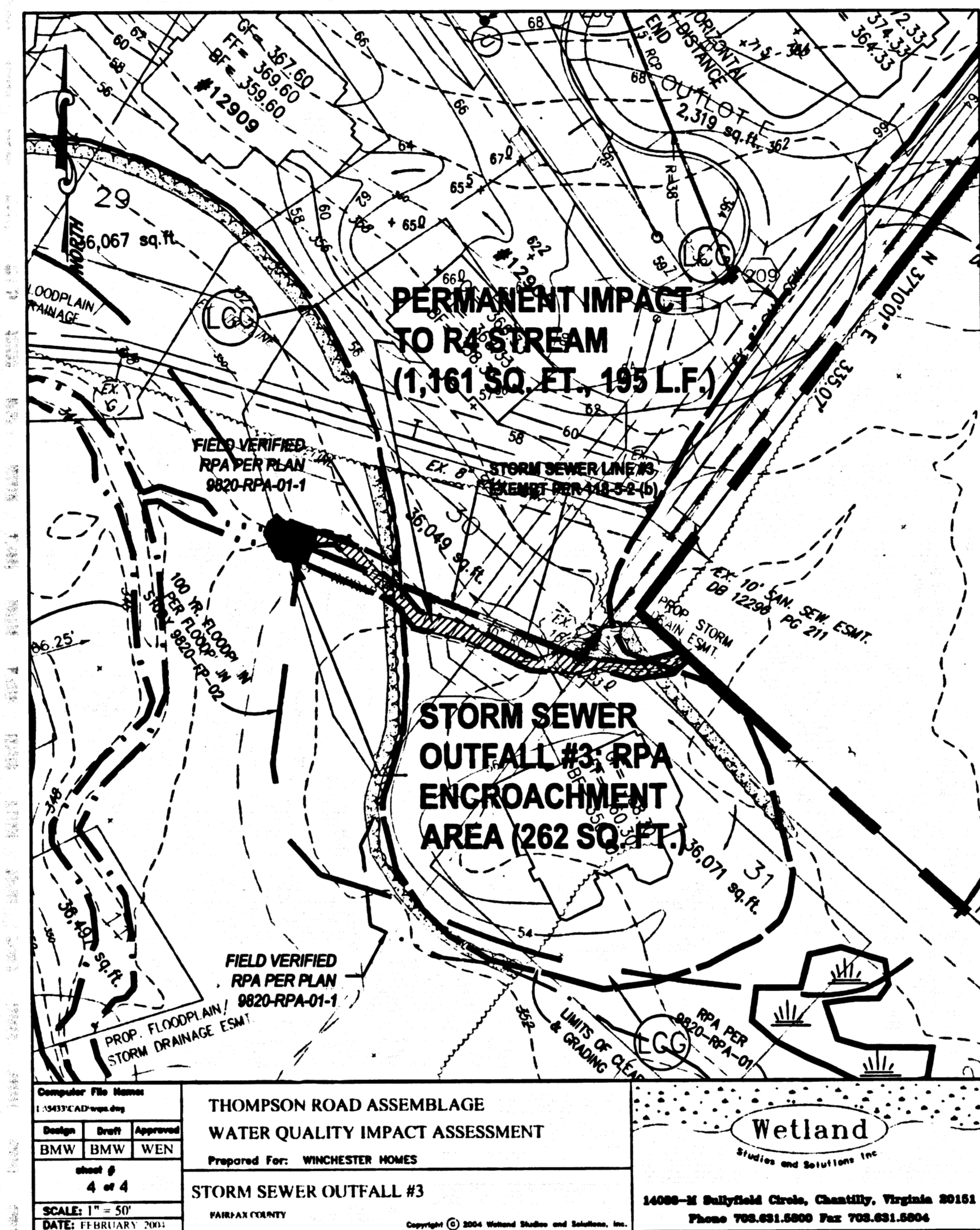
Design	Draw	Approved
BMW	BMW	WEN

Sheet #  
**1 of 4**

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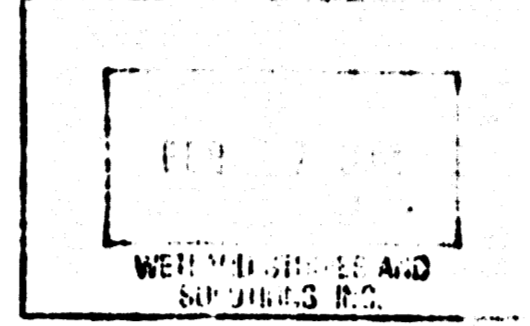




DEPARTMENT OF THE ARMY  
NORFOLK DISTRICT, CORPS OF ENGINEERS  
FORT NORFOLK, 803 FRONT STREET  
NORFOLK, VIRGINIA 23514-1004  
REPLY TO  
ATTENTION OF:  
February 25, 2004

Northern Virginia Regulatory Section  
04-R0758 (Thompson Road Assemblage)

Winchester Homes  
Attn: Sylke Knuppel  
6905 Rockledge Drive  
Bethesda, Maryland 20817



Gentlemen:

This is in response to your pre-construction notification to perform certain work in waters of the United States located on the north side of Thompson (Route 669), approximately 2,000 feet southwest of its intersection with Tuckaway Drive in Fairfax County, Virginia. Your proposal has been reviewed.

We have determined that your request to temporarily impact 0.002 of an acre of jurisdictional wetlands and 25 linear feet of streambed for the installation of 12" water main utility line associated with the development of Thompson Road Assemblage residential subdivision satisfies the criteria contained in the Corps' Nationwide Permit Number 12 (copy enclosed).

The Corps Nationwide Permits were published in the Federal Register (67 FR 2020) on January 15, 2002 as corrected by Federal Register (67 FR 6692) on February 13, 2002 and Federal Register (67 FR 8579) on February 25, 2002 and the regulations governing their use can be found in 33 CFR 330 published in Volume 56, Number 226 of the Federal Register dated November 22, 1991. Enclosed is a "Compliance Certification" form, which must be signed and returned within 30 days of completion of the project. Your signature on this form certifies that you have completed the work in accordance with the terms and conditions of the Nationwide Permit Program. Provided your proposal is carried out in accordance with your pre-construction notification and the stated contingencies and enclosed "General Conditions" are met, an individual Department of the Army permit will not be required. Any additional impacts to wetlands or

3

If you have any questions, please contact Ms. Theresa Crockett in the Northern Virginia Field Office at 18139 Triangle Plaza, Suite 213, Dumfries, Virginia 22026, (703) 221-9736.

Sincerely,

Bruce Williams  
Chief, Northern Virginia  
Regulatory Section

Enclosures

2

other waters of the United States within the current project area or any additional parts or parcels thereof may require an individual permit.

You must also adhere to the 401 certification conditions issued by the Virginia Department of Environmental Quality (DEQ) outlined in their letter of March 29, 2002 or obtain an individual permit from DEQ. The Corps' Nationwide Permit conditions and 401 certification conditions are attached. Also, a permit may be required from the Virginia Marine Resources Commission and/or your local wetlands board, and this verification is not valid until you obtain their approval, if necessary. You may contact the Virginia Marine Resources Commission at (757) 247-2200 for further information concerning their permit requirements.

This authorization does not relieve your responsibility to comply with local requirements pursuant to the Chesapeake Bay Preservation Act (CBPA), nor does it supersede local government authority and responsibilities pursuant to the Act. You should contact your local government before you begin work to find out how the CBPA applies to your project.

This verification is valid for five years from the date of this letter, unless the Norfolk District Engineer uses discretionary authority to modify, suspend or revoke this verification. The Chief of Engineers will periodically review the nationwide permits and their conditions and will decide to either modify, reissue or revoke the permits. These nationwide permits are scheduled to expire on March 19, 2007. If the nationwide permit(s) verified in this letter are reissued without modification or if your activity complies with any subsequent nationwide permit, the expiration date of this verification will not change. However, if the nationwide permit(s) verified in the letter are modified or revoked so that the activity listed above would no longer be authorized and you have commenced or are under contract to commence the work, you will have twelve months from the date of that permit change to complete the activity. Activities completed under the authorization of a nationwide permit which was in effect at the time the activity was completed continue to be authorized by that nationwide permit. It is your responsibility to remain informed of changes to the nationwide permits. We will issue a special public notice announcing any changes to the nationwide permits when they occur.



**Section 401 Water Quality Conditions. No additional permit will be required except in the following cases:**

1. When compensatory mitigation is in the form of the purchase of mitigation bank credits and the bank is not located within the same hydrologic unit or an adjacent hydrologic unit within the same HUC watershed as the impacted site by the Hydrologic Unit Map of the United States, 1984, unless the conditions listed in Section 63.1441-5(b) of the Code of Virginia relating to bank and impact type and location are met.
2. When compensatory mitigation involves only the preservation of wetlands and/or riparian habitat and riparian habitat without accompanying creation or restoration of wetlands or the purchase of mitigation bank credits, or does not meet the goal of no net loss of wetland acreage and function.
3. For the location of a stormwater management facility in perennial stream or in oxygen or temperature impaired waters.
4. For impacts to perennial streams in excess of 500 linear feet and for impacts to intermittent streams in excess of 1500 linear feet.
5. For any water withdrawal project.
6. For associated intake structures or for the purpose of transporting non-potable raw surface water.

affected by the proposed work or within the designated critical habitat that may be affected by the proposed work.

- (1) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.
- (2) Form of Notification. The standard individual permit application form (Form ENR 4345) may be used in the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(19) of General Condition 13. A letter containing the requisite information may be used.
- (3) District Engineer's Decision. In reviewing the PCN for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may, optionally, submit a proposed mitigation plan with the PCN to expedite the process and the District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the activity will result in more than minimal adverse environmental effects on the aquatic environment of the proposed work. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary.
- (4) Any compensatory mitigation proposal must be approved by the District Engineer prior to commencing work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a conceptual mitigation proposal with the PCN, the District Engineer will expeditiously review the proposed compensatory mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would cause no more than minimal adverse effects on the aquatic environment. If the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, the District Engineer will provide a timely written response to the applicant stating that the project can proceed under the terms and conditions of the nationwide permit.
- (5) If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then he will notify the applicant either: (1) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedure to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the national level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the District Engineer determines that mitigation is required in order to ensure no more than minimal adverse effects on the aquatic environment, the activity will be authorized within the 45-day PCN period, including the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the national level. When conceptual mitigation is included, a mitigation plan is required under item (2) above, no work is to be done until the District Engineer has approved the mitigation plan.
- (6) Compensatory Mitigation. The District Engineer will consider any comments from Federal and State agencies concerning the proposed activity's compliance with the terms and conditions of the NWP and the need for mitigation to reduce the project's adverse effects on the aquatic environment to a national level. For activities requiring notification to the District Engineer that result in the loss of greater than 1/2 acre of waters of the United States, the District Engineer will, upon receipt of notification, provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious means), a copy to the appropriate offices of the Fish and Wildlife Service, State natural resource or water quality agency, EPA, State Historic Preservation Office (SHPO), and, if appropriate, the National Marine Fisheries Service. With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or otherwise advise the District Engineer of any comments or objections. If no comments or objections are received by the District Engineer within 10 calendar days, the activity will be authorized as if no comments or objections were received.

calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the reviewer agency, except as provided below. The District Engineer will indicate in the administrative record associated with such notification that the reviewer agency's comments were considered. As required by Section 3005(a)(3) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to National Marine Fisheries Service within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notification to expedite agency notification.

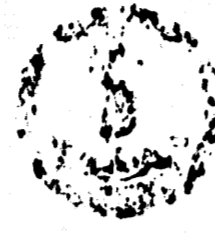
- (7) Wetlands Determination. Wetlands determinations must be prepared in accordance with the current method required by the Corps. For NWP 29 see paragraph (b)(9)(viii) for periods less than 10 acre in size. The permittee may ask the Corps to minimize the special aquatic site. There may be some delay if the Corps is to be delineated. Furthermore, the 45-day period will not start until the wetlands determination has been completed and submitted to the Corps, where appropriate.
- (8) Compliance Certification. Every permittee who has received a nationwide permit verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter. The certification will include: (a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions; (b) A statement that any required mitigation was completed in accordance with the permit conditions; and (c) The signature of the permittee certifying the completion of the work and mitigation.
- (9) Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except with the express consent of the District Engineer. The use of more than one NWP does not exceed the average limit of NWP with the highest specified average limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum average loss of waters of the United States for the total project cannot exceed 1/2 acre.
- (10) State Specific Limits. No activity, including structures and work in navigable waters of the United States or discharge of dredged or fill material, may occur in the proximity of a public water supply intake except when the activity is for the repair of the public water supply intake structure or adjacent bank stabilization.
- (11) Shellfish Beds. No activity, including structures and work in navigable waters of the United States or discharge of dredged or fill material, may occur in areas of concentrated shellfish production, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.
- (12) Sublethal Material. No activity, including structures and work in navigable waters of the United States or discharge of dredged or fill material, may occur in areas of sublethal material (e.g., tank debris, sea urchins, oysters, etc.) in an amount used for construction or discharge unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.
- (13) Mitigation. The District Engineer will consider the factors discussed below when determining the required amount of appropriate and practicable mitigation to offset adverse effects on the aquatic environment that are more than minimal.
- (14) The project must be designed and constructed to avoid and minimize adverse effects to waters of the US to the maximum extent practicable at the project site (i.e., on-site).
- (15) Mitigation in all forms (avoidance, minimization, rectification, or compensation) will be required to the extent necessary to ensure that the adverse effects on the aquatic environment are no more than minimal.
- (16) Compensatory mitigation at a minimum on-site rate will be required for all wetland impacts requiring a PCN, unless the District Engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provide project-specific wetter of this requirement. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only if restoration is not feasible.
- (17) Compensatory mitigation (i.e., replacement or substitution of specific resources for those impacted) will not be used to increase the average losses allowed by the national limits of some of the NWPs. For example, UAF-uses of wetlands cannot be created to change a UAF-use loss of wetlands to UAF-use loss associated with NWP 29 wetlands. However, UAF-uses of created wetlands can be used to reduce the impacts of a UAF-use loss of wetlands to UAF-use loss. UAF-uses of created wetlands in order to meet the national mitigation requirement associated with NWP 29.

- (18) To be practicable, the mitigation must be available and capable of being done considering cost, timing, technology, and location of the overall project program. Examples of mitigation that may be appropriate include: (a) creating, restoring, or enhancing riparian habitat; (b) creating, restoring, or enhancing wetland or riparian habitat; (c) creating, restoring, or enhancing stream habitat; (d) creating, restoring, or enhancing riparian habitat; (e) creating, restoring, or enhancing stream habitat; (f) creating, restoring, or enhancing riparian habitat; (g) creating, restoring, or enhancing stream habitat; (h) creating, restoring, or enhancing riparian habitat; (i) creating, restoring, or enhancing stream habitat; (j) creating, restoring, or enhancing riparian habitat; (k) creating, restoring, or enhancing stream habitat; (l) creating, restoring, or enhancing riparian habitat; (m) creating, restoring, or enhancing stream habitat; (n) creating, restoring, or enhancing riparian habitat; (o) creating, restoring, or enhancing stream habitat; (p) creating, restoring, or enhancing riparian habitat; (q) creating, restoring, or enhancing stream habitat; (r) creating, restoring, or enhancing riparian habitat; (s) creating, restoring, or enhancing stream habitat; (t) creating, restoring, or enhancing riparian habitat; (u) creating, restoring, or enhancing stream habitat; (v) creating, restoring, or enhancing riparian habitat; (w) creating, restoring, or enhancing stream habitat; (x) creating, restoring, or enhancing riparian habitat; (y) creating, restoring, or enhancing stream habitat; (z) creating, restoring, or enhancing riparian habitat.
- (19) Compensatory mitigation plans for projects in or near streams or other open waters will generally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of riparian buffers to open waters. In many cases, riparian buffers will be the only compensatory mitigation required. Vegetated buffers should consist of native species. The width of the riparian buffers required will address downstream water quality or aquatic habitat loss concerns. Normally, the required buffer will be 25 to 50 feet wide on each side of the stream, but the District Engineer may require slightly wider riparian buffers to address downstream water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the Corps will determine the appropriate compensatory mitigation (e.g., stream buffers or wetlands) based on what is best for the aquatic environment as a watershed basis. In cases where riparian buffers are determined to be the most appropriate form of compensatory mitigation, the District Engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (20) Compensatory mitigation proposals submitted with the "notification" may be either conceptual or detailed. If conceptual plans are approved under the notification, then the Corps will condition the verification to require detailed plans to be submitted and approved by the Corps prior to construction of the authorized activity in waters of the US.
- (21) Permittees may propose the use of mitigation banks. In-bank arrangements to require activity-specific compensatory mitigation. In cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and monitoring the mitigation plan.
- (22) Stormwater Management. Activities, including structures and work in navigable waters of the United States or discharge of dredged or fill material, in opening areas during stormwater runoff must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavation, fill, or another disturbance by substantial herbicide) of an important opening area are not authorized.
- (23) Management of Water Flow. To the maximum extent practicable, the activity must be designed to maintain preconstruction flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound water) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining water flow from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flow from the project site, reducing water, or reducing water flow beyond preconstruction conditions. Storm channeling will be allowed to the maximum extent necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flow. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow. This condition is only applicable to projects that have the potential to affect watersheds. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.
- (24) Adverse Effects Data Limitations. If the activity, including structures and work in navigable waters of the United States or discharge of dredged or fill material, creates an impediment to the retention of flow shall be minimized to the maximum extent practicable.
- (25) Wetland Dredging Areas. Activities, including structures and work in navigable waters of the United States or discharge of dredged or fill material, into bays, estuaries, or other areas subject to tidal or other periodic flooding, shall be avoided to the maximum extent practicable.
- (26) Removal of Temporary Fills. Any temporary fill must be removed in their entirety and the affected areas returned to their preexisting condition.

- (27) Disturbance of Critical Resources. Critical resources waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, State natural heritage sites, and outstanding natural resources waters or other waters officially designated by a State as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resources waters after notice and opportunity for public comment.
- (28) Except as noted below, discharge of dredged or fill material into waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 23, 25, 27, 30, 35, 39, 40, 42, 43, and 44 for any activity which, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill material into waters of the United States may be authorized by other NWPs in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened and endangered species if the activity complies with General Condition 11 and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service has consented in a determination of compliance with this condition.
- (29) The NWPs 3, 8, 10, 12, 14, 16, 17, 21, 23, 25, 27, 30, 35, 39, 40, 42, 43, and 44, and authorization is required in accordance with General Condition 11, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWPs only after he determines that the impacts to the critical resource waters will be no more than minimal.
- (30) Fill Within 100-Year Floodplains. For purposes of this general condition, 100-year floodplains will be identified through the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.
- (31) Discharge in Floodplains Below Highwater. Discharge of dredged or fill material into waters of the US within the 100-year floodplain, below highwater (i.e., five (5) feet above the normal stage of the river, stream, or lake), is not authorized by NWP 39, 40, 42, 43, and 44.
- (32) Discharge in Floodplains Above Highwater. Discharge of dredged or fill material into waters of the US within the FEMA or locally mapped floodplain, resulting in permanent above-grade fills, are not authorized by NWP 39, 40, 42, and 44.
- (33) The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.
- (34) Construction Period. For activities that have not been verified by the Corps and the project was commenced or under contract to be commenced by the expiration date of the NWP (or modification or reactivation date), the work must be completed within 12-months after such date (including any modification that affects the project). For activities that have been verified and the project was commenced or under contract to be commenced within the verification period, the work must be completed by the date determined by the Corps. For projects that have been verified by the Corps, an extension of a Corps approved completion date may be requested. The request must be submitted at least one month before the previously approved completion date.

Further Information:

1. District engineers have authority to obtain if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other Federal, State, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.



COMMONWEALTH of VIRGINIA

W. Taylor Murphy, Jr.  
Secretary of Natural Resources

Marine Resources Commission  
2600 Washington Avenue  
Third Floor  
Newport News, Virginia 23607  
March 10, 2004

William A. Pruitt  
Commissioner

Mr. Sylke Knuppel  
Development Manager  
Winchester Homes  
c/o Mr. Brian Chromey, PE  
Wetland Studies and Solutions, Inc.  
14088-M Sullyfield Circle  
Chantilly, Virginia 20151

Re: VMRC #04-0466

Dear Mr. Knuppel:

You have inquired regarding a permit from the Marine Resources Commission to fill and cross approximately 220 linear feet of nontidal, unnamed, intermittent and perennial tributaries of Flatlick Branch to allow for the construction of a residential development project, Thompson Road Assemblage, in Fairfax County.

Your proposed project is in an area over which the Marine Resources Commission is not currently exerting jurisdiction. Therefore, no authorization will be required from this agency.

For your information, however, you may need authorization from your local wetlands board and/or the U. S. Army Corps of Engineers, Norfolk District, 803 Front Street, Norfolk, Virginia 23510, prior to commencing your project. Your application was forwarded to both agencies for their consideration. You may contact the Corps directly at (757) 441-7652.

If we may be of further assistance, please do not hesitate to call on us.

Sincerely,

Justin D. Worrell  
Environmental Engineer

JDW/ncp  
HM  
cc: Applicant  
Fairfax County Wetlands Board

An Agency of the Natural Resources Secretariat  
Telephone (757) 247-2200 (757) 247-2292 VTDD Information and Permitting Hotline 1-800-541-4344 (VTDD)



COMMONWEALTH of VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL QUALITY

W. Taylor Murphy, Jr.  
Secretary of Natural Resources

Northern Virginia Regional Office  
13901 Crown Court  
Woodbridge, VA 22193-1453  
(703) 583-3800 fax (703) 583-3801  
www.deq.state.va.us

Robert G. Burnley  
Director

Jeffery A. Steers  
Regional Director

March 11, 2004

Ms. Sylke Knuppel  
Winchester Homes  
6905 Rockledge Drive, Suite 800  
Bethesda, MD 20817

Re: Virginia Wetland Protection General Permit Authorization WP4-04-0466, Thompson Road Assemblage - Residential, Fairfax County, Virginia, Virginia Water Protection (VWP) Reporting Only General Permit Authorization

Dear Ms. Knuppel:

The Virginia Department of Environmental Quality (DEQ) has received your JPA, dated February 26, 2004, to permanently impact 0.03 acre (195 linear feet) of intermittent stream channel in Fairfax County, Virginia. DEQ has determined that the proposed project is covered under VWP General Permit Number WP4. In accordance with 9 VAC 25-690-10-50.A.2., proposed impacts up to one-tenth acre need only be reported to DEQ. Should the size and scope of the project change, a permit may be required. You are advised that this does not give you the authority to violate Virginia's State Water Quality Standards.

The work authorized by this permit satisfies the terms and conditions contained in the Norfolk District, Corps of Engineers' State Program General Permit (SPGP-01) and no additional authorization from the Corps is required.

If you have any questions or the size and scope of the project change, please do not hesitate to contact Judy A. Robinson at (703) 583-3832 or jarobinson@deq.state.va.us.

Sincerely,

Joan C. Crowther  
Water Resources Development Supervisor

cc: Theresia Crockett, U.S. Army Corps of Engineers, Dumfries Field Office  
Justin Worrell, Virginia Marine Resources Commission  
Brandon Walker, Wetland Studies and Solutions, Inc.



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Robert G. Burnley  
Director

Jeffery A. Steers  
Regional Director

February 26, 2004

Ms. Sylke Knuppel  
Winchester Homes  
6905 Rockledge Drive, Suite 800  
Bethesda, MD 20817

RE: Virginia Water Protection (VWP) Number 04-R0758, Thompson Road Assemblage, Fairfax County, Virginia, Notification of No Permit Required

Dear Ms. Knuppel:

The Virginia Department of Environmental Quality (DEQ) has received your application for the installation of a 12" water main along Flatlick Branch in Fairfax County, Virginia. All impacts are temporary and include 0.002 acre of palustrine forested (PFO) wetlands and 0.014 acre (25 linear feet) of perennial stream channel.

Because the water quality impacts should be minimal and temporary in nature and the project as presented qualifies for a U.S. Army Corps of Engineers (USACE) Nationwide Permit (NWP) No. 12 (Utility Line Activities), and meets all of the \$401 Certification Conditions, a Virginia Water Protection (VWP) general or individual permit will not be required for this project. You are advised that this does not give you the authority to violate Virginia's State Water Quality Standards.

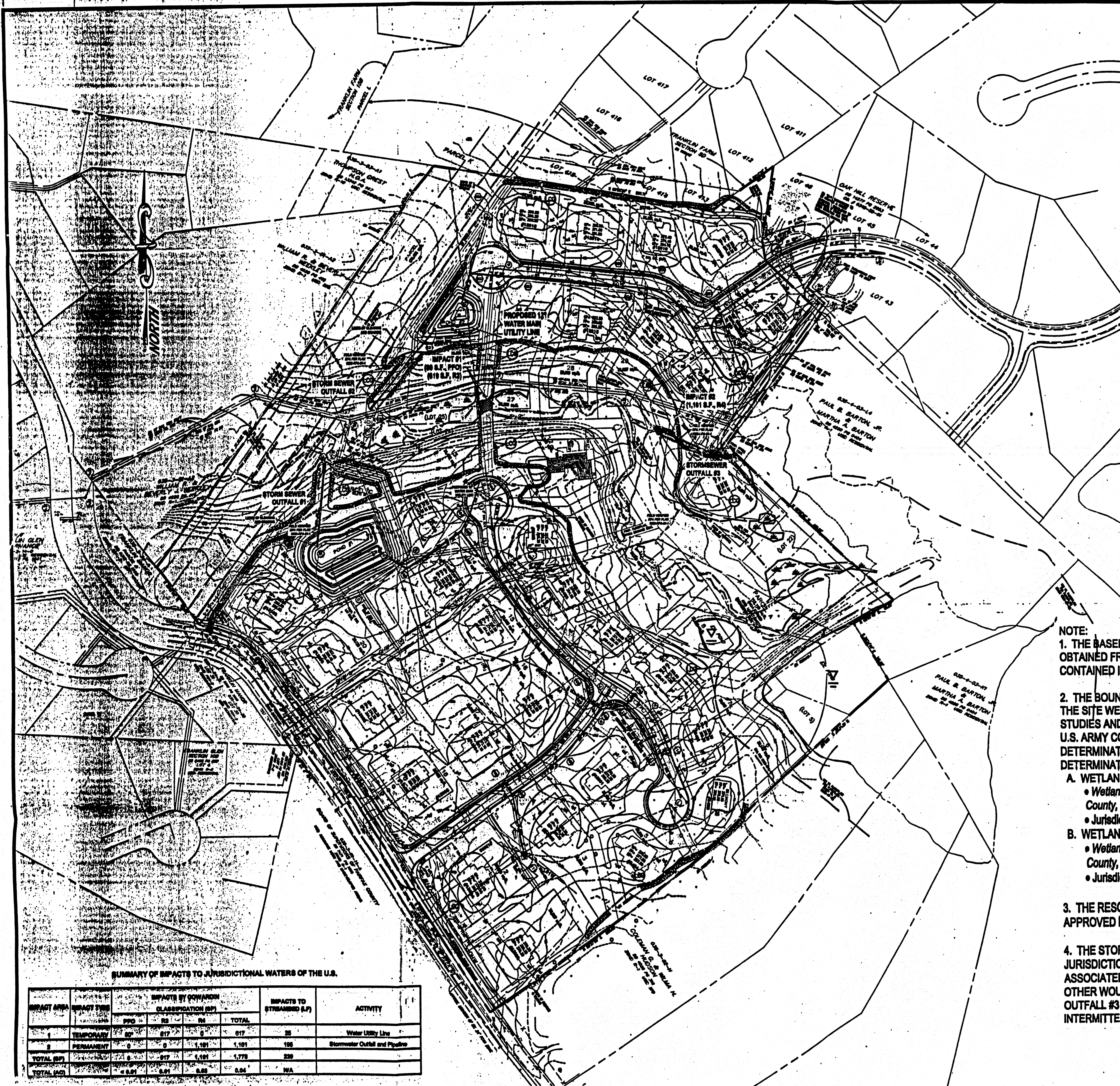
Please note that should the size and scope of the project change, a VWP general or individual permit may be required. If you have any questions, please do not hesitate to contact Judy A. Robinson at (703) 583-3832 or jarobinson@deq.state.va.us.

Sincerely,

Joan C. Crowther  
Water Resources Development Supervisor

cc: Theresia Crockett, U.S. Army Corps of Engineers, Dumfries Field Office  
Brandon Walker, Wetland Studies and Solutions, Inc.





### LEGEND

- SITE BOUNDARY
- PERENNIAL STREAM (For WSSI field investigation)
- INTERMITTENT STREAM (For WSSI field investigation)
- JURISDICTIONAL WETLAND AREAS
- FIELD VERIFIED RPA (For Chesapeake Bay Preservation Ordinance)
- TEMPORARY IMPACTS TO WETLANDS AND OTHER WOUS
- PERMANENT IMPACTS TO WETLANDS AND OTHER WOUS

**NOTE:**

- THE BASEMAP, INCLUDING EXISTING TOPOGRAPHY AND PROPOSED CONSTRUCTION, WAS OBTAINED FROM B.C. CONSULTANTS IN DIGITAL FORMAT AND REFLECTS INFORMATION CONTAINED IN COUNTY PLAN # 9820-SD-02.
- THE BOUNDARIES OF JURISDICTIONAL WETLANDS AND OTHER WATERS OF THE U.S. ON THE SITE WERE DELINEATED AND SURVEYED (BY CONVENTIONAL METHODS) BY WETLAND STUDIES AND SOLUTIONS, INC. (WSSI) AND DESCRIBED IN TWO SEPERATE REPORTS. THE U.S. ARMY CORPS OF ENGINEERS VERIFIED BOTH DELINEATIONS WITH JURISDICTIONAL DETERMINATIONS. THE FOLLOWING IS A LIST OF THE REPORTS AND JURISDICTIONAL DETERMINATIONS:
  - A. WETLAND DELINEATION REPORT #1 (THOMPSON ROAD ASSEMBLAGE)
    - Wetland Delineation Report, Thompson Road Assemblage (± 37 acres), Fairfax County, Virginia, dated March 14, 2003
    - Jurisdictional Determination (#03-N0204) dated March 20, 2003.
  - B. WETLAND DELINEATION REPORT #2 (HARLOW PROPERTY)
    - Wetland Delineation Report, Harlow Property: Parcel F1 (± 5.0 acres), Fairfax County, Virginia, dated May 20, 2003
    - Jurisdictional Determination (#03-N0243) dated May 27, 2003.
- THE RESOURCE PRESERVATION AREA (RPA) WAS FIELD DELINEATED BY WSSI AND APPROVED BY FAIRFAX COUNTY UNDER PLAN #9820-RPA-01-1 ON NOVEMBER 20, 2003.
- THE STORMWATER OUTFALLS #1 AND #2 WILL IMPOSE NO IMPACTS ON ANY JURISDICTIONAL WETLANDS AND WATERS OF THE U.S. (WOUS). THE CONSTRUCTION ASSOCIATED WITH THE UTILITY LINE WILL TEMPORARILY IMPACT 697 S.F. OF WETLANDS AND OTHER WOUS (INCLUDING 25 LINEAR FEET OF PERENNIAL STREAM), AND STORMWATER OUTFALL #3 WILL PERMANENTLY IMPACT 1,161 S.F. OF WOUS (INCLUDING 185 LINEAR FEET OF INTERMITTENT STREAM).

SUMMARY OF IMPACTS TO JURISDICTIONAL WATERS OF THE U.S.

IMPACT AND	IMPACT TYPE	IMPACTS BY CATEGORY CLASSIFICATION (S.F.)				IMPACTS TO STREAMS (S.F.)	ACTIVITY
		PPD	RS	RA	TOTAL		
1	TEMPORARY	697	0	0	697	25	Water Utility Line
2	PERMANENT	0	1,161	0	1,161	185	Stormwater Outfall and Pipeline
<b>TOTAL (S.F.)</b>		<b>697</b>	<b>1,161</b>	<b>0</b>	<b>1,858</b>	<b>210</b>	
<b>TOTAL (AC)</b>		<b>0.016</b>	<b>0.027</b>	<b>0</b>	<b>0.043</b>	<b>N/A</b>	

14088-N Sullyfield Circle, Chantilly, Virginia 20151  
Phone: 703.631.5900 Fax: 703.631.5904  
www.wetlandstudies.com

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**THOMPSON ROAD ASSEMBLAGE**

FAIRFAX COUNTY

**WETLAND IMPACT LOCATION MAP**

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No.	Description	Date	Scale

DATE: FEBRUARY 2004      SCALE: 1" = 100'

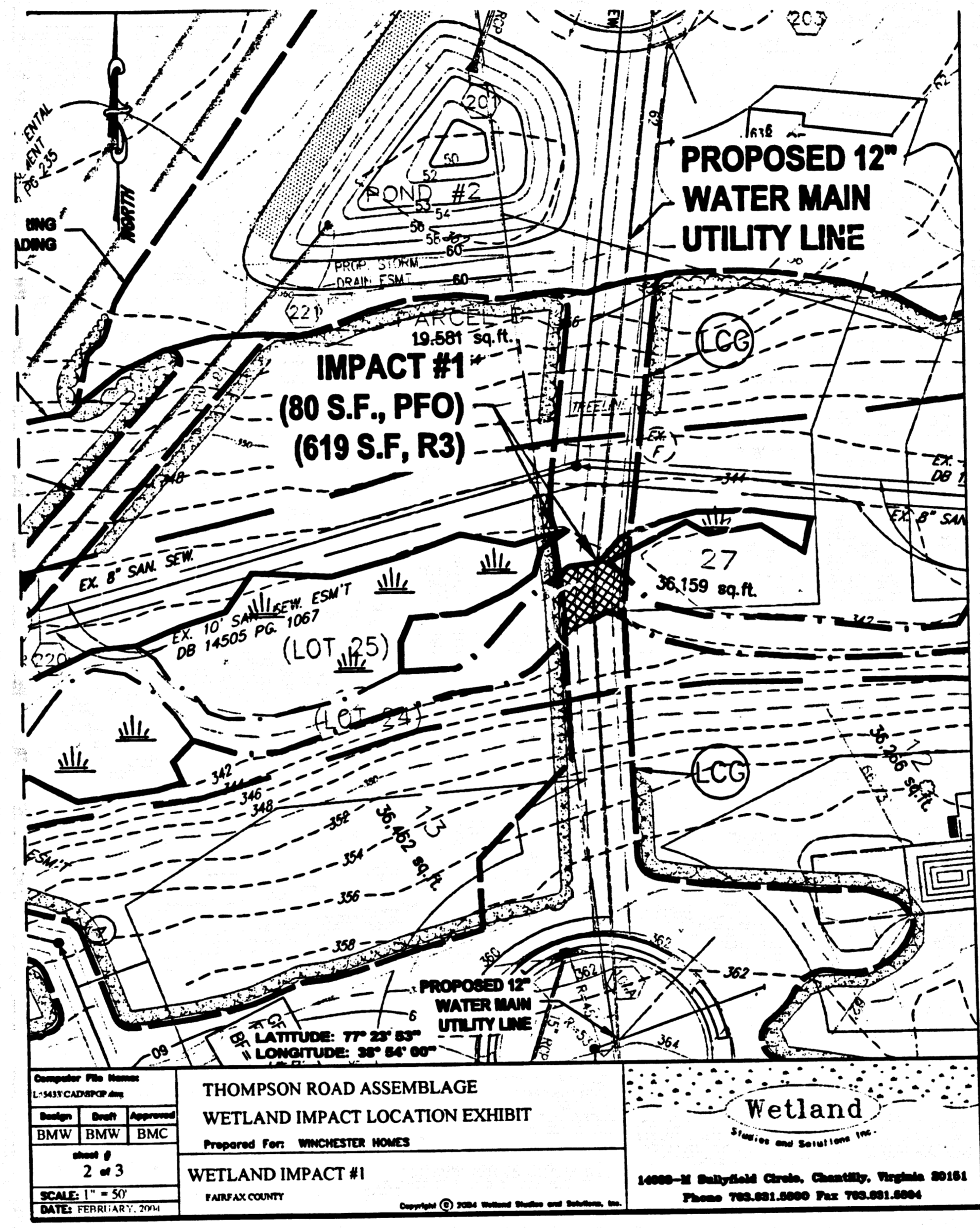
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Horizontal Datum:   
 Vertical Datum:   
 Boundary and Topo Source:   
 B.C. CONSULTANTS, INC.

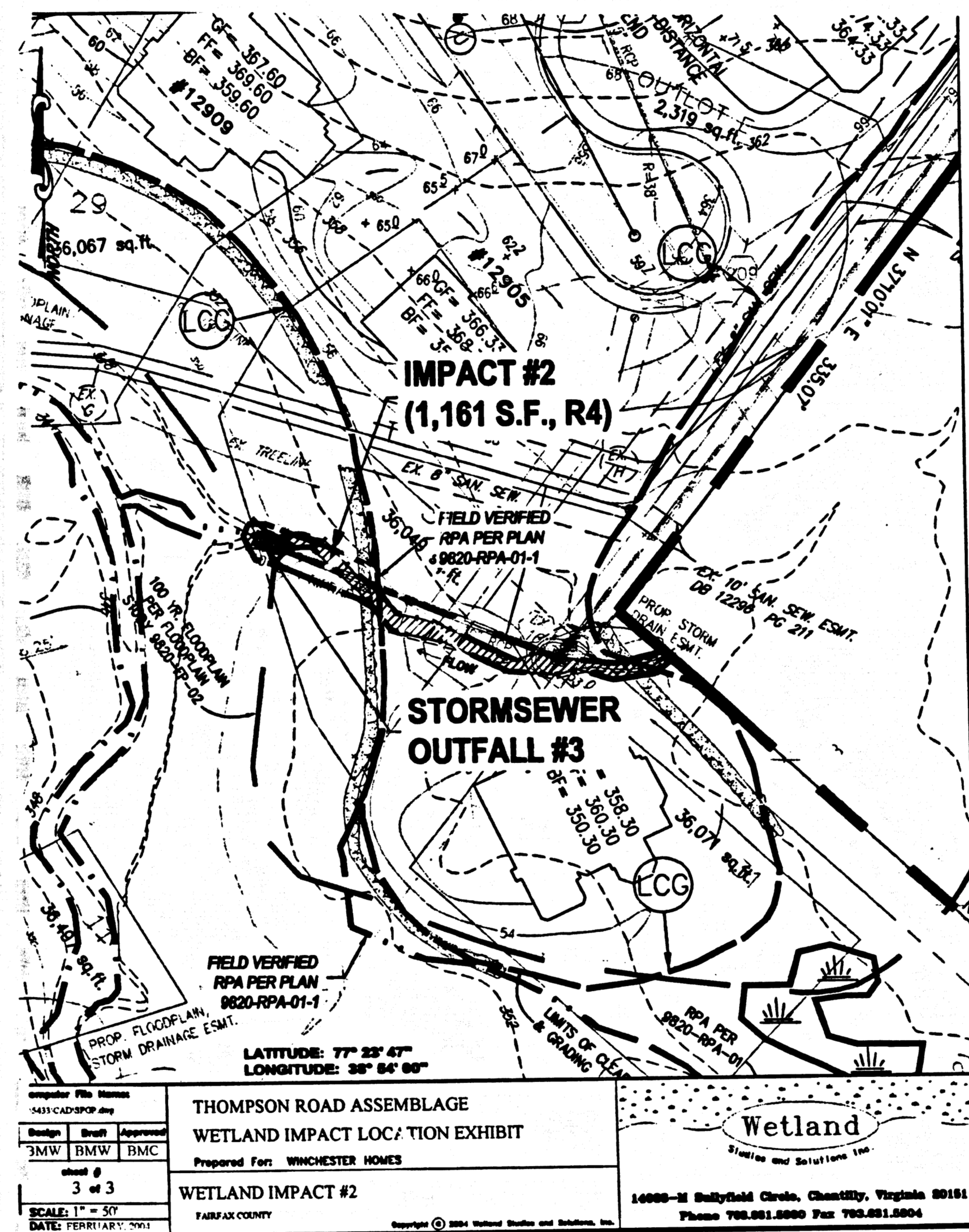
Design	Draw	Approved
BMW	BMW	BMC

Sheet #   
 1 of 3

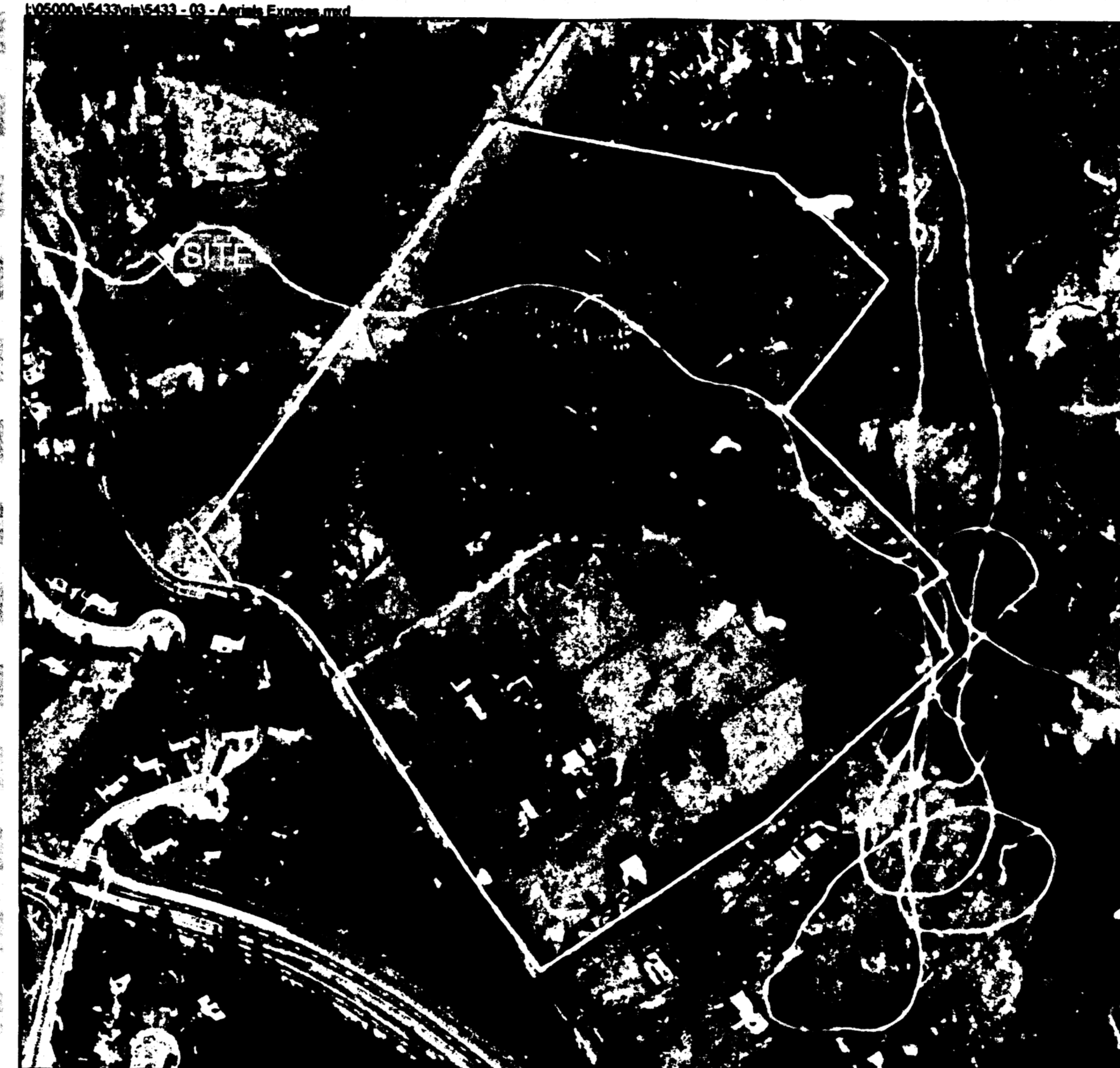
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Designer: J. M. ... Scale: 1" = 50' Date: ...	<b>THOMPSON ROAD ASSEMBLAGE</b> <b>WETLAND IMPACT LOCATION EXHIBIT</b> Proposed For: WINCHESTER HOMES	<b>Wetland</b> Wetland Impact #1 FAIRFAX COUNTY
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December 2002 Natural Color Imagery  
Thompson Road Assemblage  
WSSI #5433E  
Scale: 1" = 300'

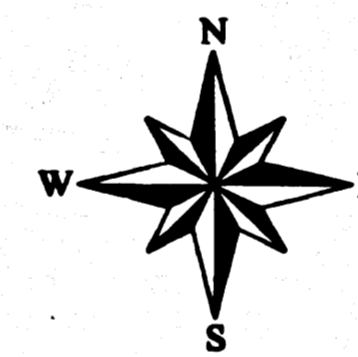


Photo Source: Aerials Express  
Wetland Studies and Solutions, Inc.

○ LOCATION OF  
RPA RE-ESTABLISHMENT

THOMPSON ROAD ASSEMBLAGE  
NON JURISDICTIONAL FARM POND PHOTOS (WQIA EXHIBIT #8)  
PHOTOS TAKEN BY WILLIAM NELL ON 8/23/04 12:30 PM

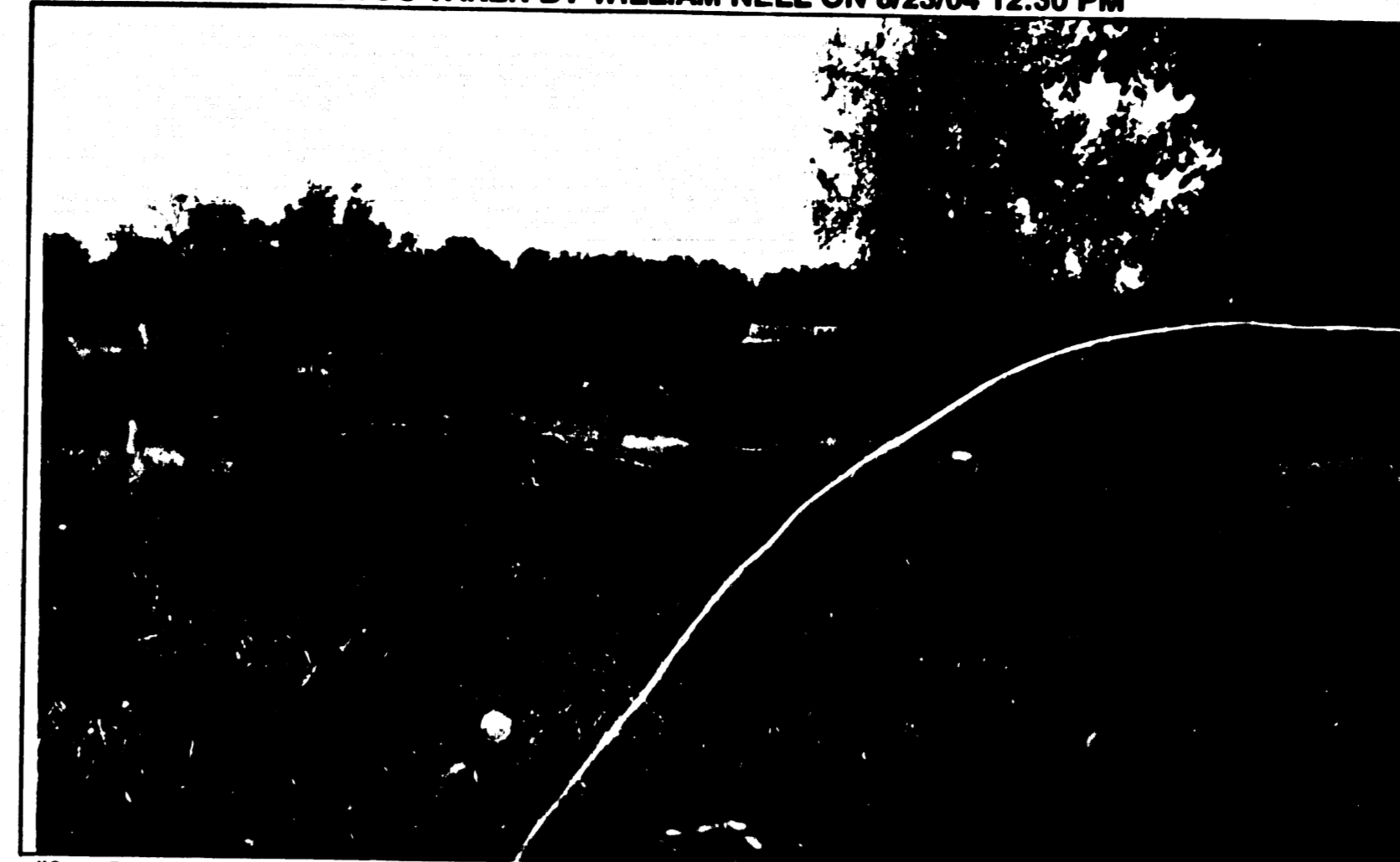


71. Looking east and across the existing non-jurisdictional farm pond.



72. Looking southeast and across the existing non-jurisdictional farm pond.

THOMPSON ROAD ASSEMBLAGE  
NON JURISDICTIONAL FARM POND PHOTOS (WQIA EXHIBIT #8)  
PHOTOS TAKEN BY WILLIAM NELL ON 8/23/04 12:30 PM



83. Looking southwest (toward Thompson Road) from the northwest corner of the ex. non-jurisdictional farm pond.



84. Looking southwest at the outfall of the ex. non-jurisdictional farm pond.

THOMPSON ROAD ASSEMBLAGE  
NON JURISDICTIONAL FARM POND PHOTOS (WQIA EXHIBIT #8)  
PHOTOS TAKEN BY WILLIAM NELL ON 8/23/04 12:30 PM



85. Looking northeast at the outfall of the ex. non-jurisdictional farm pond.

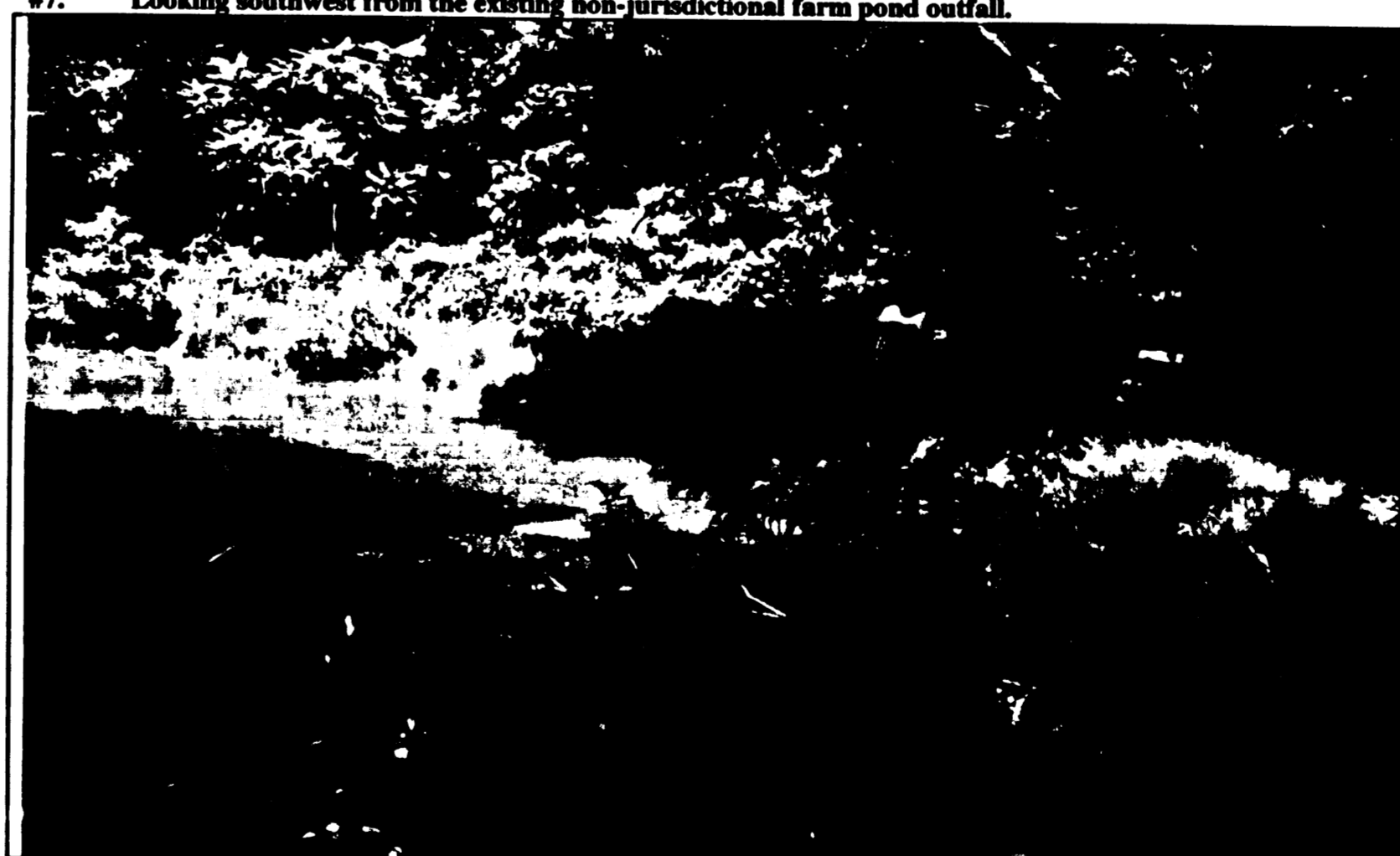


86. Looking southeast from the existing non-jurisdictional farm pond outfall.

THOMPSON ROAD ASSEMBLAGE  
NON JURISDICTIONAL FARM POND PHOTOS (WQIA EXHIBIT #8)  
PHOTOS TAKEN BY WILLIAM NELL ON 8/23/04 12:30 PM



87. Looking southwest from the existing non-jurisdictional farm pond outfall.



88. Looking northwest toward the existing non-jurisdictional farm pond outfall.

THOMPSON ROAD ASSEMBLAGE  
NON JURISDICTIONAL FARM POND PHOTOS (WOIA EXHIBIT #8)  
PHOTOS TAKEN BY WILLIAM NELL ON 8/23/04 12:30 PM



#9. Looking northwest across the existing non-jurisdictional farm pond and toward its outfall.



#10. Looking southwest (toward Thompson Road) from the southeast corner of the ex. non-jurisdictional farm pond.  
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