

**PB# 05-24**

**Sandcastle Homes  
(SP)**

**9-1-101**

TOWN OF NEW WINDSOR  
PLANNING BOARD  
APPROVED COPY

DATE: 11/14/07



16

**MOTION - RELEASE PERFORMANCE BOND & ESTABLISH  
MAINTENANCE BOND - SANDCASTLE SITE PLAN (RIVER ROAD)  
PB #05-24.**

**MOTION BY COUNCIL** Rundstrom

**SECONDED BY COUNCIL** Brasetti

That the Town Board of the Town of New Windsor authorize the release of the performance bond for Sandcastle Site Plan (River Road) PB#05-24 in the amount of \$93,900.00 upon receipt of a one year maintenance bond in the sum of \$9,390.00 as recommended by McGoey, Hauser and Edsall Consulting Engineers, P.C. via correspondence dated August 11, 2008;

**ROLL CALL:** Alley

**MOTION CARRIED:** 5-0

**Town Board Agenda: September 3, 2008**



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. MCGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

11 August 2008

Town of New Windsor Town Board  
555 Union Avenue  
New Windsor, NY 12553

ATTENTION: GEORGE A. GREEN, TOWN SUPERVISOR

SUBJECT: SANDCASTLE SITE PLAN (River Road)  
RECOMMENDATION FOR BOND REDUCTION  
Planning Board Application 05-24

Dear Supervisor Green:

The subject site plan previously submitted a public improvement cost estimate for public improvements associated with the project. The original approved bond amount was \$ 93,900.00. Since that time, the Developer has caused the completion of all the public work associated with the site plan. Our office has reviewed the work and it is our opinion the work has been completed in an acceptable manner. I have contacted John Egitto of CAMO, and he is in agreement.

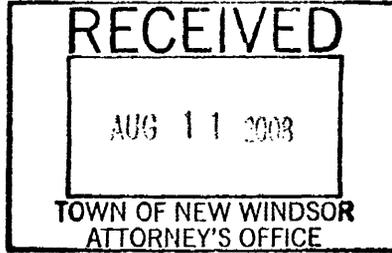
The developer has requested that the bond be released in full. It is our opinion that this is an acceptable request. A portion of the water main constructed is within an easement thru private properties, with such easement to the benefit of the Town of New Windsor. The Attorney for the Town should insure that the easements have been properly filed. We recommend the Town accept the water main and appurtenances for dedication at this time. A maintenance bond in the amount of \$9390 with a term of one year should be required concurrent with the above.

If you have any questions regarding the above, please do not hesitate to contact me.

Very truly yours,

Mark J. Edsall, P.E.  
Engineer for the Town

cc: Anthony Fayo, Town Highway Superintendent (via email)  
Michael Blythe, Esq., Attorney for the Town (via email)  
John Egitto, CAMO (via email)



MAIN OFFICE  
33 AIRPORT CENTER DRIVE  
SUITE 202  
NEW WINDSOR, NEW YORK 12553  
(845) 567-3100  
FAX: (845) 567-3232  
E-MAIL: [MHENT@MHEPC.COM](mailto:MHENT@MHEPC.COM)  
WRITERS EMAIL: [MJE@MHEPC.COM](mailto:MJE@MHEPC.COM)



**REGIONAL OFFICES**

• 111 WHEATFIELD DRIVE • SUITE 1 • MILFORD, PENNSYLVANIA 18337 • 570-296-2765 •  
• 540 BROADWAY • MONTICELLO, NEW YORK 12701 • 845-794-3399 •

**Jessica Marina**

---

**From:** Jessica Marina  
**Sent:** Wednesday, August 20, 2008 2:48 PM  
**To:** 'gregory\_Monteith@keybank.com'  
**Cc:** 'nickcard@frontiernet.net'  
**Subject:** Nick Cardorpoli

Dear Greg:

This is to confirm our conversation today with regard to the above. The Town Engineer has confirmed that the site plan work has been completed and approved and that it is appropriate to release the LOC. In order to do so, a one year maintenance bond, in the amount of \$9,390.00, must be received by the Town and once that is in place, we will be in a position to release the Letter of Credit. The establishment of the maintenance bond and release of the Letter of Credit will be the subject of Town Board action at the next meeting of September 3, 2008. If you have any questions, please do not hesitate to contact me.

Michael D. Blythe, Town Attorney  
Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553  
Tel: 845-563-4630  
Fax: 845-563-4692  
mblythe@town.new-windsor.ny.us

8/20/2008



1763

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553  
Telephone: (845) 563-4611  
Fax: (845) 563-4670

OFFICE OF THE TOWN CLERK  
DEBORAH GREEN

September 5, 2008

Sandcastle Homes  
PO Box 487  
Cornwall-on-Hudson, NY 12520

To Whom It May Concern:

At their Town Board Meeting held on September 3, 2008, the Town of New Windsor Town Board authorized the release of a Performance Bond for the Sandcastle Site Plan (River Road), Planning Board #05-24 in the amount of \$93,900.00 upon receipt of a one (1) year Maintenance Bond in the amount of \$9,390.00 as recommended by McGoey, Hauser and Edsall Consulting Engineers, P.C.

I have attached a certified copy of the motion for your file.

Very truly yours,

A handwritten signature in cursive script that reads 'Deborah Green'.

Deborah Green, Town Clerk  
Town of New Windsor

Dg



# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553  
TELEPHONE: (845) 563-4611  
FAX: (845) 563-4670

OFFICE OF THE TOWN CLERK  
DEBORAH GREEN

## CLERK'S CERTIFICATE

I, **DEBORAH GREEN**, Town Clerk of the Town of New Windsor in the County of Orange, State of New York, **hereby certify** that the below extract of Minutes has been compared by me with the Minutes of the Town Board of the Town of New Windsor in the County of Orange, State of New York, held on the 3rd day of September, 2008, and the same is a true and correct transcript therefrom and of the whole thereof so far as the same relates to the subject matter referred to.

**IN WITNESS WHEREOF**, I have hereunto set my hand and affixed the corporate seal of said Town this 4th day of September 2008.

*Town Seal*

---

*Deborah Green, Town Clerk  
Town of New Windsor*

Motion by Councilman Lundstrom  
Seconded by Councilwoman Biasotti

That the Town Board of the Town of New Windsor authorize the release of the Performance Bond for Sandcastle Site Plan (River Road) PB #05-24 in the amount of \$93,900.00 upon receipt of a one (1) year maintenance bond in the sum of \$9,390.00 as recommended by McGoey, Hauser and Edsall Consulting Engineers P.C. via correspondence dated August 11, 2008.

ROLL CALL: ALL AYES

MOTION CARRIED: 5-0

Town of New Windsor  
555 Union Avenue  
New Windsor, NY 12553  
(845) 563-4611

**RECEIPT**  
**#884-2007**

11/16/2007

Central Valley Real Estate, Inc.

Received \$ 125.00 for Planning Board Fees, on 11/16/2007. Thank you for stopping by the Town Clerk's office.

As always, it is our pleasure to serve you.

**Deborah Green**  
Town Clerk

P.B. # 05-24 Approval fee

**TOWN OF NEW WINDSOR PLANNING BOARD  
COUNTY OF ORANGE**

**NEGATIVE DECLARATION**

*Sandcastle Homes Site Plan*

*PB # 05-24*

*(S-B-L: 9-1-101)*

PLEASE TAKE NOTICE that, according to the provisions of Article 8 of the Environmental Conservation Law and the New York Code of Rules and Regulations Part 617, the Town of New Windsor Planning Board has adopted a Negative Declaration for the project named below. The Planning Board is serving as Lead Agency for this Unlisted Action, for an Coordinated review of this Unlisted Action.

Name of Project: Sandcastle Homes Commercial Subdivision  
Action Type: Unlisted Action; Coordinated Review  
Location: Town of New Windsor, County of Orange  
Location: Union Avenue  
Tax Map Parcel: Section 9, Block 1, Lot 101

**Summary of Action:**

The action involves a request for a site plan approval on a previously approved three-lot commercial subdivision of a 3.23 acre parcel located in the Town of New Windsor. The parcel is presently vacant and has frontage on Union Avenue.

**Reasons Supporting the Negative Declaration:**

Based on its consideration of the available information, the Planning Board finds there would be no significant adverse environmental effects associated with granting site plan approval for the three commercial lot site plan. With respect to traffic patterns, traffic safety and emergency access, the proposed lots will have access to Old Route 9W. With respect to water and sewer resources, the lots will be served by public water and sewer. The site does not constitute significant habitat area for flora or fauna. With respect to grading and land disturbance, a stormwater pollution prevention plan has been developed in conjunction with the proposed site plan for the site. The proposed site plan is considered to comply with all currently existing zoning requirements and municipal plans for the Town of New Windsor, and is consistent with the community character. Neither solid waste generation, energy consumption, nor public service demands would be significant or excessive for the new lots within this proposed site plan. No other potentially significant harmful environmental impacts are identified.

Date of Adoption of Negative Declaration: August 8, 2006  
Agency Address: Town of New Windsor Planning Board  
Town Hall – 555 Union Avenue  
New Windsor, New York 12553  
Tel. (845) 563-4615  
Contact Person: Genaro Argenio, Planning Board Chairman

RESOLUTION GRANTING SITE PLAN APPROVAL

SANDCASTLE HOMES SITE PLAN

PB # 05-24

REAS, an application was made to the Planning Board of the Town of New Windsor for approval of a site plan by Sandcastle Homes (the "applicant") for a project described as "Sandcastle Homes Site Plan";

REAS, the subject site consists of 3.23 acres of land comprised of one tax map parcel in the Town of New Windsor located on the tax map as section 9, block 1, and lot 101 (9-101); and

REAS, the action involves a request for a site plan for three office buildings; and

REAS, the applicant has submitted a fully executed Environmental Assessment Form ("EAF") pursuant to the New York Environmental Quality Review Act ("SEQRA"); and

REAS, the Planning Board conducted a coordinated SEQRA for this project; and

REAS, during the course of the Planning Board's review of the Applicant's proposed site plan layout, the Planning Board held and considered correspondence from the public as well as the Town's consultants; and

REAS, a duly advertised public hearing on the application for site plan approval was held on October 25, 2006 at which time all those wishing to be heard were given the opportunity to be heard; and

REAS, on October 25, 2006 the public hearing on the application for site plan approval was closed; and

REAS, the application and related materials were forwarded to the Orange County Planning Department ("OCDP") for review pursuant to the requirements of the General Municipal Law § 239-m, and OCDP responded on December 5, 2005 recommending denial; and

REAS, the Planning Board has carefully considered all of the comments raised by the public, the Board's consultants, and other interested agencies, organizations and officials,

including those presented at numerous meetings of the Board as well as those submitted separately in writing; and

WHEREAS, the applicant has submitted a proposed site plan consisting of 9 sheets, prepared by Coppola Associates dated July 6, 2007, with no revisions; and

WHEREAS, the Planning Board has heretofore determined that the Proposed Action minimizes or avoids significant environmental impacts and, adopted a Negative Declaration as part of the approval of site plan.

NOW, THEREFORE, the Planning Board finds that the applicant has satisfied the requirements of Town Code § 300-86 and approves the site plan subject to the following terms and conditions:

1. The applicant shall submit proof that the final subdivision plat was duly filed with the Orange County Clerk's office;
2. The applicant shall pay all outstanding fees due the Town in connection with this application;
3. The applicant shall make any required revisions to the site plan to the satisfaction of the Planning Board Engineer and Planning Board Attorney;
4. The applicant shall secure all necessary permits, approvals and authorizations required from any other agency, if required;
5. The applicant shall submit proof of satisfaction of the foregoing conditions and submit a site plan for signature within six months of the date of this resolution.

Upon motion made by Member Henry Vanleeuwen, seconded by Member Neil Schlesinger, the foregoing resolution was adopted as follows:

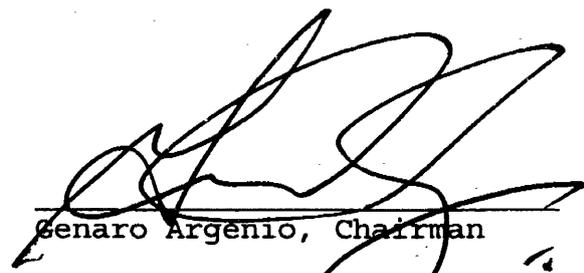
Member, Daniel Gallagher	<input checked="" type="radio"/> Aye	Nay	Abstain	Absent
Member, Howard Brown	<input checked="" type="radio"/> Aye	Nay	Abstain	Absent
Member, Neil Schlesinger	<input checked="" type="radio"/> Aye	Nay	Abstain	Absent

Member, Henry Vanleeuwen       Aye    Nay    Abstain    Absent

Chairman, Genaro Argenio       Aye    Nay    Abstain    Absent

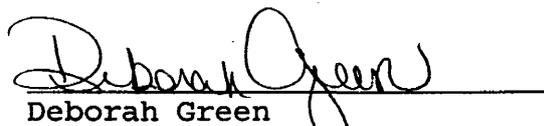
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Alternate, Henry Schieble      Aye    Nay    Abstain    Absent

Dated:      August 8, 2007  
              New Windsor, New York



\_\_\_\_\_  
Genaro Argenio, Chairman

Filed in the Office of the Town Clerk on this 9<sup>th</sup> day  
of August, 2007.



\_\_\_\_\_  
Deborah Green  
Town Clerk

**RESOLUTION ADOPTING A NEGATIVE DECLARATION  
FOR A SITE PLAN APPLICATION**

**SANDCASTLE HOMES SITE PLAN  
PB # 05-24**

**WHEREAS**, an application was made to the Planning Board of the Town of New Windsor for approval of a site plan by Sandcastle Homes (the "applicant") for a project described as the "Sandcastle Homes Site Plan";

**WHEREAS**, the subject site consists of 3.23 acres of land and comprised of one tax map parcel in the Town of New Windsor identified on the tax map as section 9, block 1, and lot 101 (SBL 9-1-101); and

**WHEREAS**, the action involves a request for a site plan approval for three office buildings; and

**WHEREAS**, the applicant has submitted a fully executed Environmental Assessment Form ("EAF") pursuant to the New York State Environmental Quality Review Act ("SEQRA"); and

**WHEREAS**, the Planning Board conducted a coordinated SEQRA review for this project; and

**WHEREAS**, the Planning Board declared its intent to become the Lead Agency with respect to the Proposed Action and circulated a Notice of Intent to be Lead Agency to other involved and interested agencies; and

**WHEREAS**, having received no objection to the proposed Lead Agency designation within thirty (30) days after circulation of the Notice of Intent, the Planning Board was automatically designated the Lead Agency for environmental review of the Proposed Action; and]

**WHEREAS**, during the course of the Planning Board's review of the Applicant's proposed site plan layout, the Planning Board received and considered correspondence from the public as well as the Town's consultants; and

**WHEREAS**, a duly advertised public hearing on the application for site plan approval was held on October 25, 2006 at which time all those wishing to be heard were given the opportunity to heard; and

WHEREAS, on October 25, 2006 the public hearing on the application for site plan approval was closed; and

WHEREAS, the application and related materials were submitted to the Orange County Planning Department ("OCDP") for its review pursuant to the requirements of the General Municipal Law § 239-m, and OCDP responded on December 5, 2005 recommending local determination; and

WHEREAS, the Planning Board has carefully considered all of the comments raised by the public, the Board's consultants, and other interested agencies, organizations and officials, including those presented at numerous meetings of the Board as well as those submitted separately in writing; and

WHEREAS, the applicant has submitted a proposed site plan consisting of 9 sheets, prepared by Coppola Associates dated July 6, 2007, with no revisions; and

WHEREAS, the Planning Board has determined that the Proposed Action minimizes or avoids significant environmental impacts and, therefore, the accompanying Negative Declaration is hereby adopted as part of the approval of site plan.

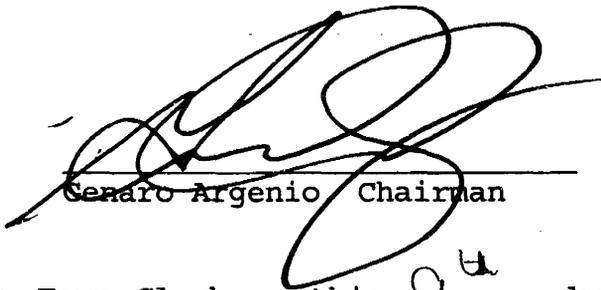
NOW, THEREFORE, be it resolved as follows:

1. The Planning Board is lead agency for a coordinated review of this action;
2. This is an Unlisted Action for SEQRA purposes;
3. The EAF submitted by the applicant has been fully reviewed and considered by the Planning Board;
4. Having reviewed with due care and diligence the EAF submitted by the applicant, the application herein and all pertinent documentation and testimony received at the public hearing, it is determined that the proposed action will not have, nor does it include, the potential for significant adverse environmental impacts;
5. The Planning Board hereby adopts the SEQRA "Negative Declaration" annexed hereto.

Upon motion made by Member Henry Vanleeuwen, seconded by Member Neil Schlesinger, the foregoing resolution was adopted as follows:

Member, Daniel Gallagher	<u>Aye</u>	Nay	Abstain	Absent
Member, Howard Brown	<u>Aye</u>	Nay	Abstain	Absent
Member, Neil Schlesinger	<u>Aye</u>	Nay	Abstain	Absent
Member, Henry Vanleeuwen	<u>Aye</u>	Nay	Abstain	Absent
Chairman, Genaro Argenio	<u>Aye</u>	Nay	Abstain	Absent
- - -				
Alternate, Henry Schieble	Aye	Nay	Abstain	Absent

Dated: August 8, 2007  
New Windsor, New York

  
\_\_\_\_\_  
Genaro Argenio Chairman

Filed in the Office of the Town Clerk on this 9<sup>th</sup> day of August, 2007.

  
\_\_\_\_\_  
Deborah Green  
Town Clerk

# **Taconic Design CONSULTANTS, Inc.**

633 GIDNEY AVENUE \* NEWBURGH, NY 12550  
(845)-569-8400 \* (fax) (845)-569-4583

June 14, 2006

Brendan Masterson  
McGoey, Hausser, Edsall  
33 Airport Center Drive  
Suite 202  
New Windsor, NY 12553

Re: Sand Castle Homes-Commercial  
SBL: 9-1-101  
Town of New Windsor  
Town Project #05-23  
Job #05450

Dear Brendan,

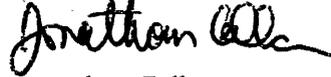
Enclosed please find revised plans and SWPPP for the above referenced project. Based upon your comments, the "Stormwater Management Report" (Appendix J of the SWPPP) has been revised, based upon your comments #3, #4, #6 and #9, such that it is in conformance with current NYS DEC standards.

Your other comments have been addressed as follows (numbered to correspond to your comment #):

- 2) Note 7 on Sheet SP6 states that the parking lot and drainage for Lots #2 and #3 will be constructed concurrently.
- 5) Footing drains and roof leaders are shown on the Southeastern corner of the building on Lot #2.
- 7) Catch basin diversion structures are no longer required due to revised drainage.
- 8) Sheet SP-8 is the "Erosion and Sedimentation Control Plan"
- 10) The NOI will be completed upon acceptance of the proposed drainage practices.
- 11) Rolled erosion control has been specified for slopes greater than 30% in Note #2 on SP 6 and again on Sheet SP 8.

As concerns with drainage for the proposed development was the main concern of your review letter, the remaining sheets have not been submitted at this time. Please review the submitted material and if you have any questions or concerns, please do not hesitate to contact me at the above number.

Very truly yours,



Jonathan Cella

Taconic Design Consultants

pc: AJ Coppola R.A, Coppola Associates  
Myra Mason, Town of New Windsor PB  
Joe Radke, Builder  
Nick Cardaropoli, owner

# STORMWATER POLLUTION PREVENTION PLAN

For

S/B/L: 9-1-101

River Road, Old Route 9W and Union Avenue

Town of New Windsor, NY

Orange County

Prepared for:

Sandcastle Homes, Inc  
PO Box 487  
Cornwall-on-Hudson, NY 12520

Prepared by:

Taconic Design Consultants

633 Gidney Avenue  
Newburgh, NY 12550  
Phone: (845) 569-8400  
Fax: (845) 569-4583

TDC Project #05450-AJC  
12/1/05



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## **SECTION I - EROSION AND SEDIMENTATION CONTROL (INCLUDING SWPPP)**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

##### **A. Section Includes**

- 1. Installation of temporary and permanent erosion and sedimentation control systems.**
- 2. Installation of temporary and permanent slope protection systems.**
- 3. Storm Water Pollution Prevention Plan. (SWPPP)**

##### **B. Related Material**

- 1. Construction Drawings**

#### **1.2 ENVIRONMENTAL REQUIREMENTS**

- ##### **A. Protect adjacent properties, any identified endangered or threatened species or critical habitat, any identified cultural or historic resources, and receiving water resources from erosion and sediment damage until final stabilization.**

### **PART 2 – PRODUCTS**

#### **2.1 MATERIALS**

- ##### **A. Seed, sod, and ground covers for the establishment of vegetation in accordance with erosion and sedimentation control notes.**
- ##### **B. Silt Fencing for sedimentation control as specified on the Construction Drawings.**
- ##### **C. Rolled erosion control products according to Erosion Control Technology Council (ECTC) standard specifications.**
- ##### **D. Temporary mulches such as loose straw, wood cellulose, or agricultural silage.**
- ##### **E. Rip-Rap as specified in construction drawings.**
- ##### **F. Temporary and permanent outfall structures as specified on the drawings.**

### **PART 3 – EXECUTION**

#### **3.1 PREPARATION**

- ##### **A. Review the drawings and Storm Water Pollution Prevention Plan.**
- ##### **B. Revise SWPPP if necessary to address potential pollution from site identified after issuance of the SWPPP at no additional cost to the owner.**
- ##### **C. Conduct storm water pre-construction meeting with Site Contractor, all ground-disturbing Sub-contractors, site engineer, engineer of record, and state or local agency personnel in accordance with requirements of special conditions.**

3.2 **EROSION AND SEDIMENTATION CONTROL AND SLOPE PROTECTION IMPLEMENTATION**

- A. Place erosion control systems in accordance with the drawings and Storm Water Pollution Prevention Plan or as may be dictated by site conditions in order to maintain the intent of the specifications and permits.
- B. Deficiencies or changes on the drawings or Storm Water Pollution Prevention Plan shall be corrected or implemented as site conditions change. Changes during construction shall be noted in the Storm Water Pollution Prevention Plan and posted on the drawings (Site Map).
- C. Owner has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation borrow and embankment operations and to direct Contractor to provide immediate permanent or temporary pollution control measures.
- D. Maintain temporary erosion and sedimentation control systems as dictated by site conditions, indicated in the construction documents, or as directed by governing authorities or Owner to control sediment until final stabilization. Contractor shall respond to maintenance or additional work ordered by Owner or governing authorities immediately, but in no case, within not more than 7 days if required at no additional cost to the Owner.
- E. Contractor shall incorporate permanent erosion control features, paving, permanent slope stabilization and vegetation into project at earliest practical time to minimize need for temporary controls.
- F. Permanently seed and mulch cut slopes as excavation proceeds to extent considered desirable and practical.
- G. Unless required within a shorter timeframe by the applicable General Permit for Storm Water Discharges Associated with Construction Activity, slopes that erode easily or that will not be graded for a period of 14 days or more shall be temporarily stabilized as work progresses with vegetation or other acceptable means unless otherwise specified in the Contract Documents. In the event it is not practical to seed areas, slopes must be stabilized with mulch and tackifier, bonded fiber matrix, netting, blankets or other means to reduce the erosive potential of the area.

END OF SECTION

**Date:** 12/01/05

**RE:** Sandcastle Homes River Road Commercial Subdivision

**Address:**

**S/B/L:** 9-1-101  
River Road, Old Route 9W and Union Avenue  
Town of New Windsor, NY  
Orange County

**GENERAL PERMIT FOR STORMWATER DISCHARGES FROM  
CONSTRUCTION ACTIVITIES  
STORMWATER POLLUTION PREVENTION PLAN**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

**Charles T Brown, PE**  
**Taconic Design Consultants**  
**President**

**Owners Responsibility:**

This SWPPP and associated plans shall be kept on site at all times during construction and a copy shall be provided to all contractors and sub-contractors. It is the owner's responsibility to comply with conditions of this plan.

**Owners Certification:**

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge storm water. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for storm water discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

# Contact List

**Contacts for: Sandcastle Homes, Inc**

**Engineer: Charles T Brown, P.E. Phone: (845) 569-8400**

**Owner: Nick Cardaropoli, Jr  
PO Box 487  
Cornwall-on-Hudson, NY 12520**

**Responsible Contractor's Compliance Officer: Name: \_\_\_\_\_**

**Firm: \_\_\_\_\_**

**Phone: \_\_\_\_\_**

**Responsible for the supervision or completion of construction at a site and able to adequately identify and implement storm water sediment and erosion control practices and effectively instruct employees and contractors in the implementation of such practices.**

**Project Superintendent: Name: \_\_\_\_\_**

**Firm: \_\_\_\_\_**

**Phone (office): \_\_\_\_\_**

**Phone (mobile): \_\_\_\_\_**

**Responsible for overseeing activities and work at a site; has the authority to direct employees and contractors to undertake actions to comply with a Permit, the Clean Water Act, and the site's SWPPP.**

## II. EXECUTIVE SUMMARY

The Storm Water Pollution Prevention Plan (SWPPP) includes, but is not limited to this Specification and appendices, the Erosion and Sedimentation Control Plan included in the Construction Drawings, the Notice of Intent, Permit Authorization, General Permit, Notice of Termination, all records of inspections and activities which are created during the course of the project, and other documents as may be included by reference to this SWPPP. Changes, modifications, revisions, additions or deletions shall become part of this SWPPP as they occur.

**Note: General Contractor must certify this SWPPP in the format included immediately preceding this section. All signed certifications must be kept with the SWPPP documents and be available for inspection.**

The General Contractor and all subcontractors involved with a construction activity that disturbs site soil or who implement a pollutant control measure identified in the Storm Water Pollution Prevention Plan must comply with the following requirements of the National Pollutant Discharge Elimination Systems (NPDES) General Permit ("General Permit") and any local governing agency having jurisdiction concerning erosion and sedimentation control:

- A. A Notice of Intent must be submitted to the NYS Department of Environmental Conservation, Albany office, with copies of the submitted information to the other agencies. The contractor must notify Taconic Design Consultants of the construction start date and the anticipated completion date at least 5 days prior to starting work. Taconic Design Consultants will forward the Notice of Intent (NOI) to Nick Cardaropoli who will forward the following agencies at least 60 days prior to the start work date. All notifications shall be sent via certified mail with return receipt. Copies of the mailing receipts and the NOI shall be forwarded to the contractor and shall be kept on site with the SWPPP.

**NYS Department of Environmental Conservation "Notice of Intent"**

Bureau of Water Permits  
625 Broadway, 4th Floor  
Albany, NY 12233-3505  
(518) 952-2490

- B. Provide a list of any state, county, city, or other personnel who may review the SWPPP or inspect the construction site that should be invited to the pre-construction meeting.

**NYS Department of Environmental Conservation Region 3**

Attn: Janet Swentusky  
Department of Water Quality  
21 South Platt Corners  
New Paltz, NY 12561-1696  
(845) 256-3159

**Town of New Windsor Engineer**

Attn: Mark Edsall, PE  
McGoey, Hausser, Edsall  
33 Airport Center Drive  
Suite 202  
New Windsor, NY 12553  
(845) 567-3100

**Town of New Windsor Building Dept.**

Attn: Michael Babcock  
555 Union Avenue  
New Windsor, NY 12553  
(845) 563-4618

- C. A copy of the Notice of Intent (NOI), attached as Appendix B, the permit authorization number(s), a description of the project, and the General Contractor's local contact name and number (site Storm Water Coordinator) must be posted in a prominent place for public viewing at the construction site until termination of permit coverage has been obtained by a Notice of Termination.
- D. A copy of the completed Notice of Intent (NOI), attached as Appendix B, the permit authorization, a description of the project, and the General Contractor's local contact name and number (site Storm Water Coordinator) must be posted in a prominent place for public viewing at the construction site until termination of permit coverage has been obtained by a Notice of Termination.
- E. A Construction Site Notice form must be completed and posted at the job site entrance with the contractor name, address and phone number.
- F. Complete copy of the SWPPP, including copies of all inspection reports, plan revisions, etc., must be retained at the project site at all times during the duration of the project and kept in the permanent project records for at least five years following submission of the Notice of Termination (NOT).
- G. The General Contractor must provide names and addresses of all subcontractors working on this project who will be involved with the major construction activities that disturb site soil ("Sub-Contractor List"). That information must be kept with this SWPPP.
- H. The General Contractor and all subcontractors involved with ground-disturbing activities must sign a copy of the appropriate certification statement included in Appendix C. That information must be kept with this SWPPP.
- I. Daily inspections by the Project Superintendent, bi-weekly inspections by the Contractor's Compliance Officer, and monthly inspections by the Owner's Construction Manager must be made to determine the effectiveness of the SWPPP. A daily stormwater inspection report is included as Appendix D. If the state and local agencies have a required inspection form then both forms must be completed. The Stormwater Pollution Prevention Plan including the best management practices implemented on the jobsite shall be modified as needed to prevent pollutants from discharging from the site.

The inspector must be a person familiar with the site, the nature of the major construction activities and qualified to evaluate both overall system performance and individual component performance. Inspectors qualifications must be entered on the Inspection Report Form. The inspector must either be someone empowered to implement modifications to this SWPPP and the pollutant control devices, if needed, in order to increase effectiveness to an acceptable level, or someone with the authority to cause such things to happen. Additionally, the inspector shall be properly authorized in accordance with the applicable General permit to conduct and certify site stormwater inspections.

- J. This SWPPP must be updated each time there are significant modifications to the pollutant prevention system or a change of contractors working on the project that disturb site soil.
- K. Discharge of oil or other hazardous substances into storm water or the storm water (storm sewer) system is subject to reporting and cleanup requirements. Spills must be reported per current State and local codes.
- L. Once the site reaches final stabilization, all permanent erosion and sedimentation controls installed and all temporary erosion and sedimentation controls removed, the General Contractor and Owner must complete a final site inspection. Upon approval by Owner, the Owner and General Contractor, as applicable, must complete and submit a Notice of Termination (NOT).

- M. This SWPPP intends to control water-borne and liquid pollutant discharges by some combination of interception, sedimentation, filtration, and containment. The General Contractor and subcontractors implementing this SWPPP must remain alert to the need to periodically refine and update the SWPPP in order to accomplish the intended goals. The General Contractor is ultimately responsible for all site conditions and permit compliance.
- N. This SWPPP must be amended as necessary during the course of construction in order to keep it current with the pollutant control measures utilized at the site. Amending the SWPPP does not mean that it has to be reprinted. It is acceptable to add addenda, sketches, new sections, and/or revised drawings. The Site Map showing the locations of all storm water controls must be posted on the site and updated to reflect the progress of construction and changes to the SWPPP.
- O. A record of the dates when major ground-disturbing activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated must be maintained until the NOT is filed. A log for keeping such records is included as Appendix G. Controls must be in place down slope of ground-disturbing activities prior to the commencement of construction and noted on the Site Map and Record of Stabilization and Construction Activity Dates.
- P. A log of all inspections by federal, state, or local storm water or other environmental agencies shall be kept in the General Contractor's SWPPP. The log form can be found in Appendix I and should include the date and time of visit and whether a report was issued or will be issued as a result of the inspection. Any reports issued will be faxed to Sandcastle Homes, Inc.

### III. INTRODUCTION

This SWPPP has been prepared for major activities associated with construction of:

#### Sandcastle Homes River Road Commercial Subdivision

This SWPPP, including the applicable General Permit, includes the elements necessary to comply with the national General Permit for construction activities administered by the U.S. Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) program and all local governing agency requirements. This SWPPP must be implemented at the start of construction.

Construction phase pollutant sources anticipated at the site are disturbed (bare) soil, vehicle fuels and lubricants, chemicals and coatings associated with site or building construction and pavement installation, construction-generated litter and debris, and building materials. Without adequate control there is the potential for each type of pollutant to be transported by storm water.

Project construction will consist primarily of site grading, road paving and associated drainage within the R.O.W. for the lots.

#### A. Purpose

A major goal of pollution prevention efforts during project construction is to control soil and pollutants that originate on the site and prevent them from flowing to surface waters. The purpose of this SWPPP is to provide guidelines for achieving that goal. A successful pollution prevention program also relies upon careful inspection and adjustments during the construction process in order to enhance its effectiveness.

## **B. Scope**

**This SWPPP must be implemented before construction begins on the site. It primarily addresses the impact of storm rainfall and runoff on areas of the ground surface disturbed during the construction process. In addition, there are recommendations for controlling other sources of pollution that could accompany the major construction activities. This SWPPP will terminate when disturbed areas are stabilized, permanent erosion and sedimentation controls installed, temporary erosion and sedimentation controls removed, construction activities covered herein have ceased, and a completed Notice of Termination (NOT) is mailed to the governing agency.**

**Forms which are necessary for implementing the SWPPP are included herein.**

**The national General Permit for Storm Water Discharges Associated with Construction Activities prohibits most non-storm water discharges during the construction phase. Allowable non-storm water discharges that could occur during construction on this project, which would therefore be covered by the General Permit, include:**

- 1. Discharges from fire fighting activities;**
- 2. Water used to wash vehicles or control dust;**
- 3. Water flowing from potable sources;**
- 4. Irrigation drainage;**
- 5. Runoff from pavement wash down where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents have not been used; and**
- 6. Springs and uncontaminated groundwater**

**Best Management Practices must be implemented for the above allowable foreseeable discharges for the duration of the permit. Each non-storm water discharge should be noted in the SWPPP and weekly inspection with the exception of discharges from fire fighting activities.**

**The techniques described in this SWPPP focus on providing control of pollutant discharges with practical approaches that utilize readily available expertise, materials, and equipment.**

**The Owner referred to in this SWPPP is Nick Cardaropoli, Jr. The General Contractor shall construct the site development improvements while working under contract with the Owner.**

#### **IV. PROJECT DESCRIPTION**

Described below are the major construction activities that are the subject of this SWPPP. They are presented in the order (or sequence) they are expected to begin, but each activity will not necessarily be completed before the next begins. Also, these activities could occur in a different order if necessary to maintain adequate erosion and sedimentation control. All activities and the timeframe (beginning and ending dates) shall be noted on the Site Map and Record of Stabilization and Construction Activity Dates:

- A. Fill in the lot per the proposed grading
- B. Stakeout parking lots, buildings and drainage facilities
- C. Install temporary sediment devices and stabilized construction entrance
- D. Install infiltration beds
- E. Clear building area and stockpile soil
- F. Perform rough grading for road
- G. Install drainage system and corresponding erosion control
- H. Fine grade site, place parking lot sub-base and seed unpaved areas
- I. Complete construction
- J. Clean all drainage facilities
- K. Remove temporary erosion control devices

The actual schedule for implementing pollutant control measures will be determined by project construction progress and recorded by the General Contractor on the Soil Erosion/Sedimentation Control Operation Time Schedules on the Erosion & Sedimentation Control Plans (Site Map). Down slope protective measures must always be in place before soil is disturbed.

#### **V. SITE DESCRIPTION**

This SWPPP has been prepared for construction of the three commercial buildings, their parking lots and associated drainage network only. Included as part of this SWPPP are the project Construction Drawings- Refer to the Construction Drawings for detailed site information.

- A. **Site Location** -- The 3.23 acre parcel, located in the Town of New Windsor is bound by three roads; Old Route 9W on the Southwest, Union Avenue on the North and River Road on the East. This parcel will be divided into three commercial lots, one with access onto Old Route 9W, and the other two with a common access onto River Road. This site in both existing and proposed conditions drains to an existing box culvert which begins at the midpoint of the parcels frontage on River Road. All flows go to the East and terminate in the Hudson River. Due to its proximity to the River (<1000ft), this site has been assumed to be discharging directly to a 4<sup>th</sup> order or greater stream and all requirements to treat for Cpv, Qf, and Qp have been waived as allowed by the NYSDEC, and set forth in Chapter 4 of the "New York State Stormwater Management Design Manual (August, 2003)".
- B. **Site Topography** -- In existing conditions the site slopes from its high point at the junction of Union Avenue and Old Route 9W in the Northwest corner of the property. In existing conditions the site slopes down toward an existing box culvert at River Road forming a bowl.
- C. **Rainfall Information** -- Based on Orange County rainfall curves 1.2 inches of rain have been used for the 90% rainfall event.

- D. Site Soils – Based on the Orange County Soil Survey (Oct, 1981), it was determined that the soils within the site are as follows:

Symbol	Description	Hydrologic Group
MdB	Mardin gravelly silt loam	3-8% slope "B"
UH	Udorthents, smoothed	Level

- E. Total Area and Disturbed Area - The entire site contains 3.23 acres nearly all of which will be disturbed by grading. Due to the proposed construction, impervious area will increase by approximately 1.5 acres.
- F. Quality of Receiving Waters– Pre-construction storm water for the site discharges into the Hudson River. Post-Construction storm water will be consistent with the same path as the pre-construction. All stormwater from the site will be collected by two drainage systems and will be transported to two separate infiltration beds. These beds have been sized to store required WQv.
- G. Erosion and Sedimentation Control Plan – Temporary and permanent erosion control measures will be implemented for the proposed construction. The requirements for erosion control are outlined on the erosion control plans and details, which are part of the site development plans.

## VI. STORM WATER POLLUTION PREVENTION MEASURES AND CONTROLS

A variety of storm water pollutant controls are recommended for this project. Some controls are intended to function temporarily and will be used as needed for pollutant control during the construction period. These include temporary sediment barriers and permanent storm retention ponds (which can also function as permanent sediment basins). For most disturbed areas, permanent stabilization will be accomplished by covering the soil with pavement or vegetation.

### A. Erosion and Sediment Controls

1. Soil Stabilization - The purpose of soil stabilization is to prevent soil from leaving the site. In the natural condition, soil is stabilized by native vegetation. The primary technique to be used at this project for stabilizing site soil will be to provide a protective cover of turf grass or pavement.
  - a) Temporary Seeding or Stabilization – Areas may be stabilized temporarily with the use of fast-germinating annual seed, straw mulch, wood cellulose fibers, tackifiers, netting or blankets. Where conditions are favorable, areas shall be temporarily stabilized within 14 days after construction activity ceases. All disturbed ground where there will not be construction for longer than 21 days must be seeded or otherwise stabilized.
  - b) Permanent Seeding or Sod - All areas at final grade must be seeded or sodded within 14 days after completion of the major construction activity. Except for small level spots, seeded areas should generally be protected with mulch.
2. Structural Controls — The site storm water flows through a series of storm sewers and structures to an on-site detention basin. Stone berms are provided at any concentrated point of discharge (i.e. pipe end section), across the entire detention basin, silt fence at areas of sheet flow, and inlet protection at all proposed and remaining storm sewer inlets to improve storm water quality.

- a) **Sediment Basins** - Temporary sediment basins are depressions constructed downslope of construction activity and located such that storm water runoff from upland areas of less than 100 acres are diverted through the basin. Sediment basins shall be constructed as directed by the Storm Water Pollution Prevention Plan and shall be constructed as part of the initial best management practices whenever practical. Basins are designed for the 90% storm requirement as dictated by the New York State Stormwater Management Design Manual. An overflow channel is incorporated at the outlet to discharge flow from the basin. Sediment basins shall be phased with the earthwork activity where practical.
- b) **Sediment Traps** - Temporary sediment traps are depressions constructed downslope of construction activity and located such that storm water runoff from upland areas of less than 5 acres are diverted through the trap. Sediment traps shall be constructed as indicated by the Storm Water Pollution Prevention Plan and shall be constructed as part of the initial best management practices whenever practical. Traps are designed for:

**Grass Outlet Sediment Trap:**

The outlet length(feet) shall equal to four times the drainage area (acres) and a minimum length of four feet. The outlet shall be free of any restrictions to flow. The outlet lip must remain undisturbed and level. Grass outlet sediment traps shall be limited to a five acre maximum drainage area.

**Swale Sediment Trap:**

The swale sediment trap shall be limited to a maximum drainage area of two acres. The volume of this trap shall be computed at the elevation of the invert of the outlet. An overflow weir is incorporated at the outlet to discharge flow from the traps. Sediment traps shall be phased with the earthwork activity where practical.

- c) **Silt Fence** - Silt fence is a synthetic permeable woven or non-woven fabric typically incorporating wooden or metal support stakes at intervals sufficient to support the fence, water and sediment retained by the fence. Silt fence can also be installed with a wire fence backing. The fence is designed to retain sediment-laden water and allow settlement of suspended soils before the storm water flows through the fabric for discharge downstream. Silt fence shall be located to capture overland, low-velocity sheet flows as follows:

Slope Steepness	Maximum Slope Length
2:1	50
3:1	75
4:1	125
5:1	175
Flatter than 5:1	200

- Maximum drainage area for overland flow shall not exceed 1/2 acre per 100 feet of fence
- Erosion would occur in the form of sheet erosion.
- There is no concentration of water flowing to the barrier

Install silt fence at a fairly level grade (along the contour) to provide sufficient upstream storage volume for the anticipated runoff. Drainage area shall not exceed 1/4 acre per 100 feet on non-reinforced silt fence, or 1/2 acre per 100 feet of wire-reinforced silt fence for slopes less than 2 percent. In areas of steeper slopes or highly erodible soils, wire reinforced silt fence shall be used.

- d) **Construction Exit** – All access points from the public street into the construction site shall include a construction exit composed of course stone to the dimensions shown on the Construction Drawings. The rough texture of the stone helps to remove clumps of soil adhering to construction vehicle tires through the action of vibration and jarring over the rough surface and the friction of the stone matrix against soils attached to vehicle tires.
- e) **Storm Sewer Inlet Protection** – Curb and grated inlets are protected from the intrusion of silt and sediment through a variety of measures as shown on the Construction Drawings. The primary mechanism is to place controls in the path of flow sufficient to slow sediment-laden water to allow settlement of suspended soils before discharging into the storm sewer. Grated inlets typically include a sturdy frame wrapped in silt fence or crushed stone-lined perimeter to slow the flow of water and allow ponding where sediment may settle out. Curb inlets typically include crushed stone barriers held in place with silt fence material or geotextile fabric. Other manufactured products are also available.
- f) **Check Dam** – Defined channels subject to concentrated flows in larger quantities and higher velocities may be protected with rock or other manufactured device check dams. The dams impound sediment-laden water to allow settlement of suspended soils before flowing over and through the device. Dams shall be placed along the water course and shall be spaced as necessary in the channel so that the crest of the downstream dam is at the elevation of the toe of the upstream dam. The channel slopes shall be a maximum of 2:1, the height shall not be greater than 2 feet, the center maintained 9 inches below the abutments at natural ground. Check dams shall be placed as shown on the Construction Drawings and are composed of components of crushed stone and/or riprap or other manufactured device.
- g) **Diversion Ditch/Berm** – Diversion ditches (or swales) and berms (or dikes) are constructed as shown on the Construction Drawings at locations within the construction site to intercept overland flow and direct or divert flow to a sediment basin or other point where discharge can be controlled. Ditches are excavated in the surface soils with the spoils from excavation typically placed along the downstream edge of the ditch to provide additional capacity. Berms are built up on the surface soils and compacted to create a stable diversion.

	Swale A	Swale B
Drainage Area	<5 ac	5-10 ac
Bottom Width of Flow Channel	4ft	6ft
Depth of Flow Channel	1ft	1ft
Side Slopes	2:1 or Flatter	2:1 or Flatter
Grade	0.5% Min. 20.0% Max	0.5% Min. 0.0% Max.

For drainage areas larger than 10 acres, refer to the standard and specifications for waterways.

**Stabilization:**

Stabilization of the swale be completed within 10 days of installation in accordance with the appropriate standard and specifications for vegetative stabilization or stabilization with mulch as determined by the time of year. The flow channel shall be stabilized as per the following criteria:

Type of Treatment	Channel Grade:	Flow Channel:	
		A(<5Ac)	A(5-10 Ac)
1	0.5-3.0%	Seed & Straw Mulch	Seed & Straw Mulch
2	3.1-5.0%	Seed & Straw Mulch	Seed and cover with Jute Or Excelsior Sod , or lined with 2" stone
3	5.1-8.0%	Seed and cover with Jute Or Excelsior, sod line With 2" stone	Line with 4-8" stone or recyl equivalentz
4	8.1-20%	Line with 4-8 "stone Or recycled concrete Equivalentz	

- 1 In highly erodible soils, as defined by the local approving agency, refer to the next higher slope for type of stabilization.
- 2 Recycled concrete equivalent shall be concrete broken into the required size, and shall contain no steel reinforcement.

Final site stabilization is achieved when turf grass cover provides permanent stabilization for at least 70 percent of the disturbed soil surface, exclusive of areas that have been paved.

**B. Other Pollutant Controls**

Control of sediments has been described previously. Other aspects of this SWPPP are listed below:

- 1. Dust Control - Construction traffic must enter and exit the site at the stabilized construction entrance. The purpose is to trap dust and mud that would otherwise be carried off-site by construction traffic. Water trucks will be used as needed during construction to reduce dust generated on the site. Dust control must be provided by the General Contractor to a degree that is acceptable, and in compliance with applicable local and state dust control regulations. After construction, the site will be stabilized (as described elsewhere), which will reduce the potential for dust generation.
- 2. Solid Waste Disposal - No solid materials, including building materials, are allowed to be discharged from the site with storm water. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers will be emptied as necessary by a contract trash disposal service and hauled away from the site. The location of solid waste receptacles shall be shown on the Erosion and Sedimentation Control Plan ("Site Map"). Substances that have the potential for polluting surface and/or groundwater must be controlled by whatever means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed so that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil. In this regard, potentially polluting substances should be handled in a manner consistent with the impact they represent.

3. **Sanitary Facilities** - All personnel involved with construction activities must comply with state and local sanitary or septic system regulations. Temporary sanitary facilities will be provided at the site throughout the construction phase. They must be utilized by all construction personnel and will be serviced by a commercial operator. The location of sanitary facilities shall be shown on the Erosion and Sedimentation Control Plan ("Site Map").
4. **Water Source** - Non-storm water components of site discharge must be clean water. Water used for construction which discharges from the site must originate from a public water supply or private well approved by the County Health Department. Water used for construction that does not originate from an approved public supply must not discharge from the site. It can be retained in the ponds until it infiltrates and evaporates.
5. **Concrete Waste from Concrete Ready-Mix Trucks** - Discharge of excess or waste concrete and/or wash water from concrete trucks will be allowed on the construction site, but only in specifically designated diked areas prepared to prevent contact between the concrete and/or wash water and storm water that will be discharged from the site. Alternatively, waste concrete can be placed into forms to make riprap or other useful concrete products. The cured residue from the concrete washout diked areas shall be disposed in accordance with applicable state and federal regulations. The jobsite superintendent is responsible for assuring that these procedures are followed. The location of concrete washout areas shall be shown on the Erosion and Sedimentation Plan ("Site Map").
6. **Fuel Tanks** - Temporary on-site fuel tanks for construction vehicles shall meet all state and federal regulations. Tanks shall have approved spill containment with the capacity required by the applicable regulations. The tank shall be in sound condition free of rust or other damage which might compromise containment. Hoses, valves, fittings, caps, filler nozzles, and associated hardware shall be maintained in proper working condition at all times. The location of fuel tanks shall be shown on the Erosion and Sedimentation Plan ("Site Map").
7. **Hazardous Waste Management and Spill Reporting Plan** - Any hazardous or potentially hazardous waste that is brought onto the construction site will be handled properly in order to reduce the potential for storm water pollution. All materials used on this construction site will be properly stored, handled and dispensed following any applicable label directions. Material Safety Data Sheets (MSDS) information will be kept on site for any and all applicable materials.

Should an accidental spill occur, immediate action will be undertaken by the General Contractor to contain and remove the spilled material. All hazardous materials will be disposed of by the Contractor in the manner specified by local, state, and federal regulations and by the manufacturer of such products. As soon as possible, the spill will be reported to the appropriate state and local agencies. As required under the provisions of the Clean Water Act, any spill or discharge entering the waters of the United States will be properly reported. The General Contractor will prepare a written record of any such spill and will provide notice to the Owner within 24-hours of the occurrence of the spill. A spill report form is located in Appendix E.

Any spills of hazardous materials in quantities in excess of Reportable Quantities as defined by EPA or the State Agency regulations, shall be immediately reported to the EPA National Response Center (1-800-424-8802) and New York State Department of Environmental conservation hotline (1-800-457-7362). The reportable quantity for petroleum products is all except spills which meet all of the following criteria:

1. The quantity is known to be less than 5 gallons; and
2. The spill is contained and under the control of the spiller; and
3. The spill has not and will not reach the State's water or any land; and
4. The spill is cleaned up within 2 hours of discovery.

A spill is considered to have not impacted land if it occurs on a paved surface such as asphalt or concrete. A spill in a dirt or gravel parking lot is considered to have impacted land and is reportable.

The reportable quantity for hazardous materials can be found in Part 597 on the NYSDEC web page, [www.dec.state.ny.us/website/regs/597b.htm](http://www.dec.state.ny.us/website/regs/597b.htm)

In order to minimize the potential for a spill of hazardous materials to come in contact with stormwater, the following steps will be implemented:

- a) All materials with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, cleaning solvents, additives for soil stabilization, concrete, curing compounds and additives, etc.) will be stored in a secure location, under cover, when not in use.
  - b) The minimum practical quantity of all such materials will be kept on the job site and scheduled for delivery as close to time of use as practical.
  - c) A spill control and containment kit (containing for example, absorbent such as kitty litter or sawdust, acid neutralizing agent, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided at the storage site.
  - d) All of the product in a container will be used before the container is disposed of. All such containers will be triple rinsed, with water prior to disposal. The rinse water used in these containers will be disposed of in a manner in compliance with state and federal regulations and will not be allowed to mix with storm water discharges.
  - e) All products will be stored in and used from the original container with the original product label.
  - f) All products will be used in strict compliance with instructions on the product label.
  - g) The disposal of excess or used products will be in strict compliance with instructions on the product label.
8. Long-Term Pollutant Controls - Storm water pollutant control measures installed during construction that will also provide benefits after construction, include the wetlands and water quality area, riprapped outfalls, grass lined channels, and drainage structures with sumps and oil hoods. The detention basin also has a stone filter berm as part of the long term pollutant removal system. These sediment barriers that do not interfere with normal operations and appear to provide long-term benefits can be left in place after construction is completed.

#### C. Construction Phase "Best Management Practices"

During the construction phase, the General Contractor shall implement the following measures:

1. Materials resulting from the clearing and grubbing or excavation operations shall be stockpiled up slope from adequate sedimentation controls. Materials removed to an off-site location shall be protected with appropriate controls and properly permitted.
2. The General Contractor shall designate areas on the erosion and sediment control Site Maps for equipment cleaning, maintenance, and repair. The General Contractor and subcontractors shall utilize such designated areas. Cleaning, maintenance, and repair areas shall be protected by a temporary perimeter berm, shall not occur within 150 feet of any waterway, and in areas located as far as practical from storm inlets.
3. Use of detergents for large scale washing is prohibited (i.e., vehicles, buildings, pavement surfaces, etc.)
4. Chemicals, paints, solvents, fertilizers, and other toxic materials must be stored in weatherproof containers. Except during application, the contents must be kept in trucks or within storage facilities. Runoff containing such material must be collected, removed from the site, treated, and disposed at an approved solid waste or chemical disposal facility.

#### D. Off-Site Facilities

Whenever dirt, rock, or other materials are imported to the construction site or exported for placement in areas off of the primary construction site, the General Contractor is responsible for determining that all storm water permitting and pollution control requirements are met for each and every site which receives such materials or from which such materials are taken. Prior to the disturbance of any such site, the General Contractor will furnish the Owner with a copy of the storm water permit issued for each such site, as well as a copy of the off-site Owners certification statement agreeing to implement necessary storm water pollution prevention measures. The General Contractor will also furnish a copy of the SWPPP for each such site, including a description of the erosion control measures, which will be applied.

At a minimum, each off-site area that provides or receives materials or is disturbed by project activities must implement erosion control measures consisting of perimeter controls on all down slope and side slope boundaries and must also provide for both temporary stabilization measures and for permanent revegetation after all disturbance is ended.

### VII. LOCAL PLANS

In addition to this SWPPP, construction activities associated with this project must comply with any guidelines set forth by local regulatory agencies. The General Contractor shall maintain documents evidencing such compliance to the SWPPP.

### VIII. INSPECTIONS AND SYSTEM MAINTENANCE

Between the time this SWPPP is implemented and final Notice of Termination has been submitted, all disturbed areas and pollutant controls must be inspected daily. The purpose of site inspections is to assess performance of pollutant controls. The inspections will be conducted by the General Contractor's Site Superintendent. Based on these inspections, the General Contractor will decide whether it is necessary to modify this SWPPP, add or relocate controls, or revise or implement additional Best Management Practices in order to prevent pollutants from leaving the site via storm water runoff. The General Contractor has the duty to cause pollutant control measures to be repaired, modified, maintained, supplemented, or take additional steps as necessary in order to achieve effective pollutant control.

Examples of specific items to evaluate during site inspections are listed below. This list is not intended to be comprehensive. During each inspection, the inspector must evaluate overall pollutant control system performance as well as particular details of individual system components. Additional factors should be considered as appropriate to the circumstances.

- A. Locations where vehicles enter and exit the site must be inspected for evidence of off-site sediment tracking. A stabilized construction exit shall be constructed where vehicles enter and exit. Exits shall be maintained or supplemented as necessary to prevent the release of sediment from vehicles leaving the site. Any sediment deposited on the roadway shall be swept as necessary throughout the day or at the end of every day and disposed of in an appropriate manner. Sediment shall not be washed into storm sewer systems.
- B. Sediment barriers, traps and basins must be inspected and they must be cleaned out at such time as their original capacity has been reduced by 50 percent. All material excavated from behind sediment barriers or in traps and basins shall be incorporated into on-site soils or spread out on an upland portion of the site and stabilized. Additional sediment barriers must be constructed as needed.
- C. Inspections shall evaluate disturbed areas and areas used for storing materials that are exposed to rainfall for evidence of, or the potential for, pollutants entering the drainage system or discharging from the site. If necessary, the materials must be covered or original covers must be repaired or supplemented. Also, protective berms must be constructed, if

needed, in order to contain runoff from material storage areas. All state and local regulations pertaining to material storage areas will be adhered to.

- D. Grassed areas shall be inspected to confirm that a healthy stand of grass is maintained. The site has achieved final stabilization once all areas are covered with building foundation or pavement, or have a stand of grass with at least 70 percent density or greater in accordance with General Permit requirements. The vegetative density must be maintained to be considered stabilized. Areas must be watered, fertilized, and reseeded as needed to achieve this requirement.
- E. All discharge points must be inspected to determine whether erosion and sediment control measures are effective in preventing discharge of sediment from the site or impacts to receiving waters.

The Inspection Report Form (Appendix D) must identify all deficiencies, any corrections, whether they are identified during the current inspection or have occurred since the previous inspection, and any additional comments. For inspections following a 0.5" or higher rain event, report shall clearly note the rainfall total as measured in the on-site rain gauge. Based on inspection results, any modification necessary to increase effectiveness of this SWPPP to an acceptable level must be made within 48 hours of the inspection. The inspection reports must be complete and additional remarks should be included if needed to fully describe a situation. An important aspect of the inspection report is the description of additional measures that need to be taken to enhance plan effectiveness. The inspection report must identify whether the site was in compliance with the SWPPP at the time of inspection and specifically identify all incidents of non-compliance.

A responsible corporate officer (Vice President or higher) must sign a letter delegating the site superintendent as the authorized position for conducting the required inspections. A draft form of this authorization is included in Appendix D. Inspectors qualifications must be entered on the Inspection Report Form. Inspection reports must include an original, authorized signature and date of the inspection. Inspection reports must be retained by the General Contractor as an integral part of this SWPPP for at least five years from the date of submission of the Notice of Termination of permit coverage.

Ultimately, it is the responsibility of the General Contractor to assure the adequacy of site pollutant discharge controls. Actual physical site conditions or contractor practices could make it necessary to install more structural controls than are shown on the plans. (For example, localized concentrations of runoff could make it necessary to install additional sediment barriers.) Assessing the need for additional controls and implementing them or adjusting existing controls will be a continuing aspect of this SWPPP until the site achieves final stabilization.

**APPENDIX A - VICINITY MAP**

**APPENDIX B - NOTICE OF INTENT (NOI)**

**APPENDIX C - CERTIFICATION FORMS**

**APPENDIX D - INSPECTION REPORT (SAMPLE FORM) WITH GENERAL  
CONTRACTOR'S DELEGATED INSPECTOR LETTER**

**APPENDIX E - SPILL REPORT FORM**

**APPENDIX F - NOTICE OF TERMINATION (NOT)**

**APPENDIX G - RECORD OF STABILIZATION AND CONSTRUCTION ACTIVITY DATES**

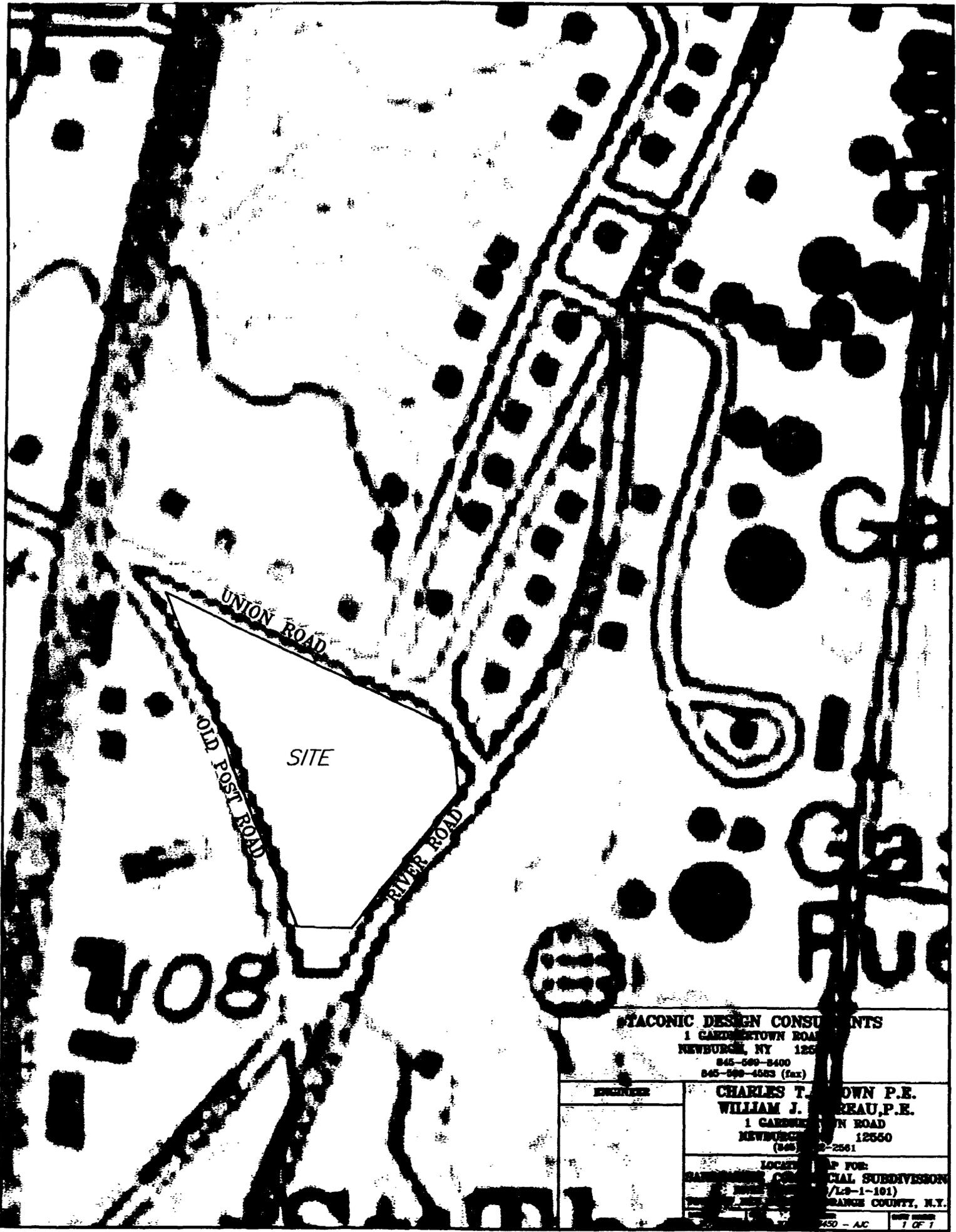
**APPENDIX H - CONSTRUCTION SITE NOTICE**

**APPENDIX I - LOG FOR FEDERAL, STATE, OR LOCAL STORM WATER OR OTHER  
ENVIRONMENTAL INSPECTIONS**

**APPENDIX J - STORMWATER MANAGEMENT REPORT**

**APPENDIX A**

**VICINITY MAP**



UNION ROAD

OLD POST ROAD

RIVER ROAD

SITE

**TACONIC DESIGN CONSULTANTS**  
 1 CARDEN TOWN ROAD  
 NEWBURGH, NY 12550  
 845-590-8400  
 845-590-4583 (fax)

ENGINEER

**CHARLES T. ... P.E.**  
**WILLIAM J. ... P.E.**  
 1 CARDEN TOWN ROAD  
 NEWBURGH, NY 12550  
 (845) ... 2-2561

LOCAL ... FOR:  
 ... SUBDIVISION  
 ... (L/S-1-101)  
 ... ORANGE COUNTY, N.Y.

**APPENDIX B**  
**NOTICE OF INTENT**

NOTICE OF INTENT

New York State Department of Environmental Conservation

Division of Water

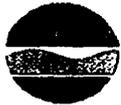
625 Broadway, 4th Floor

NYR

Five empty boxes for DEC use only

(for DEC use only)

Albany, New York 12233-3505



Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-02-01 All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required. To properly complete this form, please refer to the Instruction Manual which can be accessed at www.dec.state.ny.us/website/dow/toolbox/instr\_man.pdf

- IMPORTANT -

THIS FORM FOR HANDPRINT ONLY

RETURN THIS FORM TO THE ADDRESS ABOVE

PRINT CAPITAL LETTERS IN BLACK INK AND AVOID CONTACT WITH THE EDGE OF BOXES FILL IN CIRCLES COMPLETELY AND DO NOT USE CHECKMARKS OWNER/OPERATOR MUST SIGN FORM

Form with multiple sections for Owner/Operator information, including fields for Name, Contact Person, Address, City, State, Zip, Phone, and Fax. Each section contains a grid of boxes for data entry.

Location Information

Project Site Name

Street Address (City, State, ZIP)

City/Town/Village (That Requires Building Permit)

State: NY

County: DEC Region (if known)

Name of Nearest Cross Street

Distance to Nearest Cross Street (feet)

Direction to Nearest Cross Street

North  South  East  West

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you must go to the NYSDEC Stormwater Interactive Map on the DEC website at:

[www.dec.state.ny.us/website/inmaps/stormwater/viewer.htm](http://www.dec.state.ny.us/website/inmaps/stormwater/viewer.htm)

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site go to the dropdown menu on the left and choose "Get Coordinates". Click on the center of your site and a small window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinate (Easting)

Y Coordinate (Northing)

2. What is the nature of this construction project?

New Construction

Redevelopment with increase in imperviousness

Redevelopment with no increase in imperviousness





Stormwater Pollution Prevention Plan (SWPPP)

18. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book) ?

Yes No

19. Does this construction activity require the development of a SWPPP that includes Water Quality and Quantity Control components (Post-Construction Stormwater Management Practices) If no, skip question 20

Yes No

20. Have the Water Quality and Quantity Control components of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual ?

Yes No

NOTE: If you answered no to question 18 or 20, Pursuant to Part I.D.3. (b) of the permit, you must have your SWPPP prepared and certified by a licensed/certified professional and the SWPPP is subject to a 60-business day review. Please provide further details in the details/comment section on the last page of this form.

21. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

Professional Engineer (P.E.)
Soil and Water Conservation District (SWCD)
Professional Landscaping Consultant (P.L.C.)
Certified Professional in Erosion and Sediment Control (CPESC)
Owner/Operator
Other

SWPPP Preparer
Contact Name (Last, First, Middle)
Mailing Address
City
State Zip
Phone Fax
Email

**Stormwater Pollution Prevention Plan (SWPPP)**

**Erosion and Sediment Control Practices**

22. Has a construction sequence schedule for the planned management practices been prepared?

Yes  No

23. Select **all** of the erosion and sediment control practices that will be employed on the project site.

<u>Temporary Practices</u>	<u>Permanent Practices</u>
<input type="checkbox"/> Rock Bars	<input type="checkbox"/> Rock Riprap
<input type="checkbox"/> Revegetation and Stabilization	<input type="checkbox"/> Road Stabilization
<input type="checkbox"/> Silt Control	<input type="checkbox"/> Stream Bank
<input type="checkbox"/> Silt Mats	<input type="checkbox"/> Temporary
<input type="checkbox"/> Silt Screens	<input type="checkbox"/> Temporary Sedimentation
<input type="checkbox"/> Vegetative Riprap	<input type="checkbox"/> Revegetation and Stabilization
<input type="checkbox"/> Edge Slope Banks	<input type="checkbox"/> Seeding
<input type="checkbox"/> Flexible Siltment Mats	<input type="checkbox"/> Mulching
<input type="checkbox"/> Rock Bars	<input type="checkbox"/> Straw/Raw Hair Mats
<input type="checkbox"/> Sediment Basin	<input type="checkbox"/> Streambank Protection
<input type="checkbox"/> Sediment Traps	<input type="checkbox"/> Temporary Seals
<input type="checkbox"/> Silt Fences	<input type="checkbox"/> Topsoiling
<input type="checkbox"/> Stabilized Construction Entrance	<input type="checkbox"/> Vegetating Waterways
<input type="checkbox"/> Storm Drain Inlet Protection	
<input type="checkbox"/> Straw/Raw Hair Mats	<u>Permanent Structures</u>
<input type="checkbox"/> Temporary Access Waterway Crossing	<input type="checkbox"/> Geotile Basins
<input type="checkbox"/> Temporary Swale/Channel Diversion	<input type="checkbox"/> Structures
<input type="checkbox"/> Temporary Seals	<input type="checkbox"/> Stone Stabilization Structures
<input type="checkbox"/> Turbidity Curtain	<input type="checkbox"/> Land Grading
<input type="checkbox"/> Water Bars	<input type="checkbox"/> Lined Waterway (Rock)
	<input type="checkbox"/> Lined Channel (Concrete)
<u>Geotechnical</u>	<input type="checkbox"/> Paved Flume
<input type="checkbox"/> Crash Matting	<input type="checkbox"/> Retaining Wall
<input type="checkbox"/> Matting	<input type="checkbox"/> Riprap Slope Protection
	<input type="checkbox"/> Rock Outlet Protection
<u>Other</u>	<input type="checkbox"/> Streambank Protection

**Stormwater Pollution Prevention Plan (SWPPP)**

**Water Quality and Quantity Control**

**Important:** Completion of Questions 24-30 is not required if the project:

Disturbs less than 5 acres and is planned for single-family residential homes (including subdivisions) or construction on agricultural property and does not have a discharge to a 303(d) water or is not located within a TMDL watershed.

Additionally, sites where there will be no future impervious area within the disturbed area and that do not have a change (pre to post development) in hydrology do not need to complete questions 24-30.

24. Indicate all the permanent Stormwater Management Practice(s) that will be installed on this site

**Post Construction Stormwater Management Practices**

**Retention**

- Municipal Retention Detention (P-1)
- Wet Pond (P-2)
- Wet Extended Detention (P-3)
- Multiple Pond System (P-4)
- Pocket Pond (P-5)

**Filtering**

- Surface Sand Filter (F-1)
- Underground Sand Filter (F-2)
- Perimeter Sand Filter (F-3)
- Organic Filter (F-4)
- Retention (F-5)
- Other

Describe other stormwater management practices not listed above or explain any deviations from the technical standards. If the SWPPP does not conform to the technical standards, the SWPPP must be prepared and certified by a licensed/certified professional and is subject to a 60-business day review.

**Retention**

- Shallow Wetland (W-1)
- Extended Detention Wetland (W-2)
- Pond/Wetland System (W-3)
- Pocket Wetland (W-4)

**Infiltration**

- Infiltration Trench (I-1)
- Infiltration Basin (I-2)
- Dry Well (I-3)

**Open Channels**

- Dry Swale (O-1)
- Wet Swale (O-2)

Has a long term Operation and Maintenance plan for the post construction management practices been developed?

Yes  No

If Yes, Identify the entity responsible for the long term Operation and Maintenance




Other permits

31. Select any other DEC permits that are required for this project or  Other

<input type="checkbox"/> Air Pollution Control	<input type="checkbox"/> Storm Protection/Article 15
<input type="checkbox"/> General Permit	<input type="checkbox"/> Other
<input type="checkbox"/> Sewerage	<input type="checkbox"/> Other
<input type="checkbox"/> Solid Waste	<input type="checkbox"/> Other
<input type="checkbox"/> Hazardous Waste	<input type="checkbox"/> Other
<input type="checkbox"/> Other	<input type="checkbox"/> Other
<input type="checkbox"/> Other	<input type="checkbox"/> Other
<input type="checkbox"/> Other	<input type="checkbox"/> Other
<input type="checkbox"/> Other	<input type="checkbox"/> Other

32. If this NOI is being submitted for the purpose of continuing coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.

N	Y	R							
---	---	---	--	--	--	--	--	--	--

Details/Comments

Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I also certify under penalty of law that this document and the corresponding documents were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name	MI
<input type="text"/>	<input type="text"/>
Print Last Name	
<input type="text"/>	
Owner/Operator Signature	Date
<input type="text"/>	<input type="text"/>

**APPENDIX C**  
**CERTIFICATION FORM**

# CONTRACTOR CERTIFICATIONS

**Sandcastle Homes River Road Commercial Subdivision  
S/B/L: 9-1-101  
River Road, Old Route 9W and Union Avenue  
Orange County**

The General Contractor and/or subcontractor(s) that will implement the pollutant control measures described in the SWPPP must be identified below. Each must sign a statement certifying that they understand the General Permit authorizing storm water discharges during construction. These statements must be maintained in the SWPPP file on site.

Contractor implementing the SWPPP:

\_\_\_\_\_  
Business Name

\_\_\_\_\_  
Business Address

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Business Telephone Number

CERTIFICATION: (Note signature requirements in Part VI.G. of the NPDES General Permit.)

*"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."*

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

**APPENDIX D**

**DAILY INSPECTION REPORT**

**&**

**GENERAL CONTRACTOR'S DELEGATED INSPECTOR FORM**

**&**

**WEEKLY INSPECTION SUMMARY FORM**

## Daily Storm Water Inspection Report

**Project Type and Location:** Sandcastle Homes Commercial Subdivision, River Road, New Windsor

**Inspector Name and Title:**

**Date/Time of Inspection:**

**Date of Most Recent Storm Event >0.5":**

**Schedule Completion Date:**

**Construction Stage (circle all that apply):**

Clearing/Grubbing      Rough Grading      Infrastructure      Paving      Building Construction  
 Final Grading      Final Stabilization

Type of Control	Describe status and identify problems or maintenance needs NA- if not applicable	Have you had problems with this control at this location before?	Yes	NA	No	Problem addressed (date and description of corrective action).
<b>Structural:</b>						
Silt Fence			Yes	NA	No	
Construction Exit			Yes	NA	No	
Check Dam			Yes	NA	No	
Storm Drain Inlet Protection			Yes	NA	No	
Diversions Ditch/Berm			Yes	NA	No	
Sediment Trap			Yes	NA	No	
Sedimentation Pond			Yes	NA	No	
Vehicle Track-Out			Yes	NA	No	
Other Structural Controls			Yes	NA	No	
<b>Non-Structural:</b>						
Street Cleaning			Yes	NA	No	
Good Housekeeping & Waste Disposal Practices			Yes	NA	No	
Equipment Wash & Maintenance Area			Yes	NA	NO	
Concrete Washout Area			Yes	NA	No	
<b>Stabilization:</b>						
Seeding, Mulching						

Geotextile, Sod, Blankets	Yes	NA	No
70% or greater vegetative cover.	Yes	NA	No
Terminate permit			
<b>Miscellaneous:</b>			
List Revisions to SWPPP to Reflect BMP Additions or Modifications			

I certify under penalty of perjury that I personally conducted this inspection and prepared this inspection report. Based upon my observations during the inspection, I certify that the information in this inspection report is true, accurate, and complete. I am aware that there are significant penalties for perjury, including fines and imprisonment for knowing violations.

\_\_\_\_\_  
Inspector's Signature – Daily Inspection

\_\_\_\_\_  
Date

I certify under penalty of perjury that I personally observed this inspection. All corrective actions noted as necessary on this inspection report have been fully and timely completed. Based upon my observations during the inspection, I certify that the information in this inspection report is true, accurate, and complete. In addition, I have reviewed the nine inspection reports previous to this one and I certify that all corrective actions noted as necessary have been fully and timely completed. I am aware that there are significant penalties for perjury, including fines and imprisonment for knowing violations.

\_\_\_\_\_  
Compliance Officer's Signature  
(every 10th inspection)

\_\_\_\_\_  
Date

I certify under penalty of perjury that I personally observed this inspection and that all corrective actions noted necessary on this inspection report have been fully and timely completed. Based upon my observations during the inspection, I certify that the information in this inspection report is true, accurate, and complete. In addition, I have reviewed the \_\_\_\_\_ [insert number of inspection reports] inspection reports previous to this one and I certify that all corrective actions noted as necessary have been fully and timely completed. I am aware that there are significant penalties for perjury, including fines and imprisonment for knowing violations.

\_\_\_\_\_  
Construction Manager's Signature  
(every monthly inspection)

\_\_\_\_\_  
Date

Date: \_\_\_\_\_

**CERTIFIED MAIL Receipt**  
No. \_\_\_\_\_

Director of Governing Authority, Storm Water:

Project: Sandcastle Homes River Road  
Commercial Subdivision, Town  
of New Windsor

Name:

Title

Address

Address: River Road, Old Route 9W &  
Union Avenue  
Town of New Windsor,  
Orange County

Permit Authorization for Storm Water: Permit # \_\_\_\_\_

**GENERAL PERMIT FOR STORMWATER DISCHARGES  
FROM CONSTRUCTION ACTIVITIES  
SIGNATURE DELEGATION**

I, the undersigned, hereby delegate \_\_\_\_\_ Project Superintendent or  
Project Manager as the authorized signatory for all reports required by this permit and other information  
requested by the Director or authorized representative of the Director in accordance with the provisions of  
the General Permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or  
supervision in accordance with a system designed to assure qualified personnel properly gathered and  
evaluated the information submitted. Based on my inquiry of the person or persons who manage this  
system, or those persons directly responsible for gathering the information, the information submitted is, to  
the best of my knowledge and belief, true accurate and complete. I am aware that there are significant  
penalties for submitting false information, including the possibility of fine and imprisonment for  
knowing violations.

Sincerely,

**The following form is the Weekly Storm Water Inspection Summary**  
**Submit this form to Nick Cardaropoli, Jr after complete**

## Weekly Storm Water Inspection Summary

Project Type and Location: Sandcastle Homes River Road Commercial Subdivision

Inspector Name and Title: \_\_\_\_\_

Week of Inspections: \_\_\_\_\_

Storm Event >0.5" within the week: \_\_\_\_\_

Schedule Completion Date: \_\_\_\_\_ Construction Stage (circle all that apply):  
 Clearing/Grubbing    Rough Grading    Infrastructure    Paving    Building Construction

Final Grading    Final Stabilization

Type of Control	Describe summary of deficiencies noted NA- if not applicable	Corrective Action taken (date and description of corrective action)
<b>Structural:</b>		
Silt Fence		
Construction Exit		
Check Dam		
Storm Drain Inlet Protection		
Diversion Ditch/Berm		
Sediment Trap		
Sedimentation Pond		
Vehicle Track-Out		
Other Structural Controls		
<b>Non-Structural:</b>		
Street Cleaning		

<b>Good Housekeeping &amp; Waste Disposal Practices</b>
<b>Equipment Wash &amp; Maintenance Area</b>
<b>Concrete Washout Area</b>
<b>Stabilization:</b>
<b>Seeding, Mulching, Geotextile, Sod, Blankets</b>
<b>Miscellaneous:</b>
<b>List Revisions to SWPPP to Reflect BMP Additions or Modifications</b>

I certify under penalty of perjury that all daily inspections were completed between and I personally prepared this inspection summary report noting the deficiencies in BMPs this week and the corrective actions taken. I certify that the information in this report is true, accurate, and complete. I am aware that there are significant penalties for perjury, including fines and imprisonment for knowing violations.

\_\_\_\_\_  
Project Superintendent

\_\_\_\_\_  
Date

**APPENDIX E  
SPILL REPORT FORM**

**Spill Report Form**

**Project Type and Location: Sandcastle Homes Commercial Subdivision, River Road, Old Route 9W and Union Avenue**

Spill Reported by: \_\_\_\_\_

Date/Time Spill: \_\_\_\_\_

Describe spill location and events leading to spill: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Material spilled: \_\_\_\_\_

Source of spill: \_\_\_\_\_

Amount spilled: \_\_\_\_\_ Amount spilled to waterway: \_\_\_\_\_

Containment or clean up action: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Approximate depth of soil excavation: \_\_\_\_\_

List Injuries or Personal Contamination: \_\_\_\_\_

Action to be taken to prevent future spills: \_\_\_\_\_

\_\_\_\_\_

Modifications to the SWPPP necessary due to this spill: \_\_\_\_\_

\_\_\_\_\_

Agencies notified of the spill: \_\_\_\_\_

\_\_\_\_\_

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Contractor Superintendent

\_\_\_\_\_  
Date

**APPENDIX F**  
**NOTICE OF TERMINATION**

## **NOTICE of TERMINATION**

**Two copies of the Notice of Termination must be completed for the SWPPP specifications and when construction activities that disturb site soil have been completed and the site has achieved final stabilization. One should be forwarded to Nick Cardaropoli, Jr and if the State where the site is located requires the General Contractor to file a separate Notice of Intent; become a co-permittee; or the Notice of Intent/Permit is transferred, the General Constructor will be required to complete another Notice of Termination to the following address:**

**New York State Department of Environmental Conservation "Notice of Termination"  
Bureau of Water Permits  
625 Broadway  
Albany, NY 12233-3505**

**APPENDIX G**

**RECORD OF STABILIZATION AND  
CONSTRUCTION ACTIVITY DATES**

# SITE STABILIZATION and CONSTRUCTION ACTIVITY DATES

A record of dates when stabilization measures are initiated, when major grading activities occur, and when construction activities temporarily or permanently cease on a portion of the site shall be maintained until final site stabilization is achieved and the Notice of Termination is filed.

## MAJOR STABILIZATION AND GRADING ACTIVITIES

Description of Activity: \_\_\_\_\_

Site Contractor: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_

Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_

Site Contractor: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_

Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_

Site Contractor: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_

Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_

Site Contractor: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_

Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_

Site Contractor: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_

Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_

Site Contractor: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_

Location: \_\_\_\_\_

Description of Activity: \_\_\_\_\_

Site Contractor: \_\_\_\_\_ Begin (date): \_\_\_\_\_ End(date): \_\_\_\_\_

Location: \_\_\_\_\_

**APPENDIX H**

**CONSTRUCTION SITE NOTICE**

# CONSTRUCTION SITE NOTICE

FOR THE

NPDES GENERAL PERMIT

Contractor Firm: \_\_\_\_\_

Contractor Address: \_\_\_\_\_

\_\_\_\_\_  
Contact Name & Number:

\_\_\_\_\_  
Project Description:

R.O.W. Construction for Sandcastle Homes River Road Commercial Subdivision  
River Road, Old Route 9W and Union Avenue  
Town of New Windsor  
Orange County

**APPENDIX I**

**FEDERAL, STATE, OR LOCAL STORM WATER OR OTHER  
ENVIRONMENTAL INSPECTOR SITE VISIT LOG**

## Federal, State, or Local Storm Water or other Environmental Inspector Site Visit Log

Inspectors Name: \_\_\_\_\_ Agency: \_\_\_\_\_

Contractors Representative Present: \_\_\_\_\_

Others Present: \_\_\_\_\_

Time and Date: \_\_\_\_\_ Report Prepared: Yes No

Inspectors Name: \_\_\_\_\_ Agency: \_\_\_\_\_

Contractors Representative Present: \_\_\_\_\_

Others Present: \_\_\_\_\_

Time and Date: \_\_\_\_\_ Report Prepared: Yes No

Inspectors Name: \_\_\_\_\_ Agency: \_\_\_\_\_

Contractors Representative Present: \_\_\_\_\_

Others Present: \_\_\_\_\_

Time and Date: \_\_\_\_\_ Report Prepared: Yes No

Inspectors Name: \_\_\_\_\_ Agency: \_\_\_\_\_

Contractors Representative Present: \_\_\_\_\_

Others Present: \_\_\_\_\_

Time and Date: \_\_\_\_\_ Report Prepared: Yes No

**Nick Cardaropoli, Jr must be contacted at the conclusion of any agency inspection. Caller must provide as a minimum date, inspection beginning and completion times, inspecting agency, agency inspector name, all contractor representative names, and a brief summary of any comments, observations or deficiencies noted during the inspection.**

**APPENDIX J**

**STORMWATER MANAGEMENT REPORT**

# **Taconic Design**

**ENGINEERING, PLLC.**

3125 ROUTE 9W \* NEW WINDSOR, NY 12553

(845)-569-8400 \* (fax) (845)-569-4583

## **STORMWATER MANAGEMENT REPORT**

**for the**

### **SANDCASTLE HOMES RIVER ROAD COMMERCIAL SUBDIVISION**

River Road, Old Route 9W and Union Avenue

S/B/L: 9-1-101

Town of New Windsor

Orange County, New York

#### **Report prepared for:**

Anthony Coppola  
3 Washington Center  
2<sup>nd</sup> Floor  
Newburgh, NY 12550

Sandcastle Homes  
Nick Cardaropoli, Jr  
PO Box 487  
Cornwall-on-Hudson, NY 12520

#### **Report prepared by:**

Charles T. Brown, PE  
Taconic Design Engineering, PLLC.  
3125 Route 9W, Suite 201  
New Windsor, NY 12553  
(845) 569-8400

Rev: May 4, 2007  
Rev: May 30, 2006  
December 1, 2005  
Job #05450-AJC

#### **Contents:**

- I      **Commentary**
- II     **Plans**
- III    **Hydraulic Calculations for Channel Protection**
- IV     **Hydraulic Calculations for Quality**
- V      **Hydraulic Calculations for Quantity**
- VI     **Pond Volume Calculations**
- VII    **Outlet Control Structure Details**
- VIII   **Pipe Calculations**
- IX     **Pond Construction Specifications**

# I Commentary

## 1.0 Purpose:

The purpose of this study is to address the potential impacts, if any, which would be generated by the development of the proposed 3 lot commercial site plan of S/B/L: 9-1-101 located in the Town of New Windsor, Orange County, New York, and to develop a stormwater management plan for the site.

## 2.0 Project Description:

The proposed project is a 3 lot commercial subdivision of an existing 3.23 acre parcel that is currently vacant. Lot #1 will have access to Old Route 9W while Lot #2 and Lot #3 will have a common access onto River Road. This culvert crosses River Road and discharges onto the adjoining parcel to the East. The three lots will have individual commercial buildings and parking lots to service them. Plans for this project detail all improvements and sedimentary control measures and are a part of this project.

The parent parcel is bound by three roads: Old Route 9W on the Southwest, Union Avenue on the North and River Road on the East. In both existing and proposed conditions the parcel drains to the existing 2' x 2' box culvert at the approximate midpoint of the parcels property frontage on River Road. All flows entering this culvert end in the Hudson River, which is less than 1000ft to the East of the parcel.

## 3.0 Quantitative Analysis:

This study analyses the pre-development and post-development storm drainage flows using the Soil Conservation Service method as outlined in TR-55 ("Urban Hydrology for Small Watersheds", June 1986). Quantitative storm water flows are evaluated. The rational method is used for on site piping design.

## 4.0 Soils:

Based on the Orange County Soil Survey (October 1981), it was determined that the soils within the drainage areas are as follows:

<u>Symbol</u>	<u>Description</u>	<u>Hydrologic Group</u>	
MdB	Mardin gravelly silt loam	3-8% slope	"B"
UH	Udorthents, smoothed	Level	"C"

## 5.0 Land Coverage:

The type of land coverage for the areas analyzed was determined by field investigation combined with referencing the USGS topo maps, the field survey of this site and the soil survey. The areas analyzed are presently predominately covered by overgrown brush.

## **6.0 Drainage Areas:**

### **General**

All areas, as required, are evaluated for 10 year (Qp) and 100 year (Qf) storms for existing and developed conditions, per NYSDEC and Town requirements using 24 hour Type III storms. Further analysis required by the NYSDEC, including water quality and channel protection, have been provided for as required.

### **Drainage Area "AEX"**

This would be the entire site, approximately 3.25 acres, in existing conditions. Due to the parcel being surrounded by three (3) roads and their respective roadside swales no offsite area drains through the site. This parcel drains from the Northern corner to the existing 2'x 2' box culvert near the Southeastern corner of the property. This culvert crosses under River Road and discharges onto a wooded hillside. These flows combine with the rest of the drainage basin and travel overland approximately 1000' to the Hudson River. In existing conditions this entire area is overgrown brush in fair condition.

### **Drainage Area "APR"**

This would be the Northern most lot (Building #1). This drainage area consists of all impervious area on this lot and lawn area North of the proposed pond, "Pond 1". Runoff from this area is collected by a series of catch basins and piped directly to this pond. Overflows from this pond are piped directly to the existing 2 x 2 box culvert just East of the River Road entrance to Lot #2 and Lot #3. This drainage area is a total of 0.88 acres.

### **Drainage Area "BPR"**

This is the Southern drainage area of Building #2 and Building #3. This area is the remaining 2.37 acres. All runoff from this area will be routed through proposed pond, "Pond 2", with overflows being piped to the existing 2' x 2' culvert where flows will combine with flows from Area "APR". The total of the two drainage areas in proposed conditions ("APR" and "BPR") after being routed through their respective ponds, is denoted as "TR" in "Hydraulic Calculations for Quantity".

After discharging from the 2 x 2 culvert on the Eastern side of River Road flows travel overland combining with runoff from a fuel storage yard and discharges directly to the Hudson River. The subject parcel is separated from the Hudson by approximately 7 acres with a depth of 750' +/-.

## **7.0 Stream Channel Protection Requirements (Cpv):**

Stream channel protection volume requirements (Cpv) are required by the NYSDEC to protect stream channels from erosion. To accomplish this, standards require 24 hour extended detention of the one year 24 hr storm event. Storage volumes are to be determined by methods set forth in TR-55. The one year 24 hr storm event for this area of Orange County is 3.0 in of rain, conservatively. Channel protection requirements for each proposed drainage area have been met as follows with supporting calculations provided in Section III of this report.

To determine the required Cpv for each drainage area the peak flows from the existing drainage area, "AEX", were compared to the total flows in proposed conditions. This would be the AEX-1 and APR-1 hydrographs with peak flows of 0.7 and 3.4 CFS respectively. By methods in Chapter 6 of the TR-55 manual it was determined that a total Cpv of 0.41 acre feet is required, due to increased total flows, for the entire site.

The 0.41 acre feet was divided amongst Dry Swale 1 and Dry Swale 2 based upon the size of their contributory drainage area. For drainage area "APR" the required Cpv was 0.14 acre feet and 0.27 acre feet for area "BPR". In each swale this volume is provided above the WQv and below the outlet control pipe of the outlet control structure. This volume will drain the pond over 24 hours as required by the NYSDEC.

### **8.0 Qualitative Analysis:**

The SPDES permit for this project is required under GP-02-01. For post construction water quality, the methods outlined in GP-02-01 have been used (plans and calculations are attached). The water quality volume (WQv) has been determined for all on-site areas as set forth in the N.Y.S.D.E.C. Design Standard "Stormwater Management Design Manual (August, 2003)" and results are based upon actual proposed impervious areas for each drainage area. As stated in Section 6.0 runoff from Lot #1 will be treated separately, and runoff from Lot #2 and Lot #3 will be combined. Required WQv volumes and treatment volumes provided have been prepared and are in Section IV of this report.

This required WQv for drainage Area "APR" is 0.06 acre feet and a WQv of 0.09 acre feet has been provided in the bottom 1 1/2" of Dry Swale 1.

For drainage area "BPR" a WQv of 0.09 acre feet is required. In the bottom 1 1/2" of Dry Swale 2, a storage volume of 0.11 acre feet has been provided for water quality.

### **9.0 Overbank Flood Control Criteria (Qp) and Extreme Flood Control Criteria (Qf):**

Overbank flood control sizing criteria is to prevent an increase in the frequency and magnitude of out-of-bank flooding generated by urban development. Control of this requires that the post development peak flows for the ten year design storm be decreased below pre-developed conditions. Extreme flood control criteria (Qf) is provided by either matching or decreasing the peak flows from the 100 yr storm of the post developed conditions below that of the pre-developed conditions. Qf is required to prevent the increased risk of flood damage from large storms, maintain the boundaries of the pre-development 100 yr flood plain, and to protect the physical integrity of stormwater management practices.

Per Section 4.4 and 4.5 of the NYSDEC design manual, methods set forth by TR-55 may be used to determine peak discharge rates for both Qp and Qf. Further, Tc for all drainage areas has been determined by methods set forth in Section 4.4 of the NYSDEC design manual.

Due to proposed development, discharges from drainage Area "APR" and Area "BPR" have been routed through Dry Swale 1 and Dry Swale 2, which are the "AR" and "BR" hydrographs, respectively. The total of these two is the "TR" hydrograph. All calculations have been included in Section V of this report and are summarized below. All drainage areas are depicted on the existing and proposed drainage maps included with this report and previously described in Section 6.0.

Storm	Rainfall	RUNOFF (CFS)			RUNOFF (CFS)			% decrease
		AEX	APR	AR	BPR	BR	TR	
10 yr (Qp)	5.5 in	3.7	3.3	0.2	6.7	0.5	0.5	86%
100 yr (Qf)	8.0 in	7.9	5.5	0.5	11.7	3.3	3.5	56%

### **10.0 Stormwater Management Practices (SMPs):**

Based upon the project description (Section 2.0) this project would be classified as commercial development. Using selection matrices in Chapter 7 of the NYSDEC manual both "Dry Swale 1" and "Dry Swale 2" will be constructed as dry swales, which are designated as Stormwater Open Channel O-2. Per table 7.1 titled "Land Use Selection Matrix" of the current NYSDEC manual, pocket ponds are a "suitable" SMP design option for commercial development.

### **11.0 Construction Sequence:**

The construction sequence below must be followed and adhered to.

1. Stakeout grade stakes for various points throughout the site
2. Install temporary sediment devices and stabilized construction entrance
3. Cut and fill in the lot per the proposed grading
4. Stakeout parking lots, buildings, and drainage facilities.
5. Install dry swales
6. Clear building area and stockpile soil
7. Perform rough grading for lots
8. Install drainage system and corresponding erosion control
9. Fine grade site, place parking lot sub-base and seed unpaved areas
10. Complete construction
11. Clean all drainage facilities
12. Remove temporary erosion control devices

Roll off dumpsters and trash receptacles are to remain on site for the duration of the project for the proper collection and disposal of all construction debris and additional litter produced by workers. These collection devices are to be emptied regularly.

### **12.0 Conclusion:**

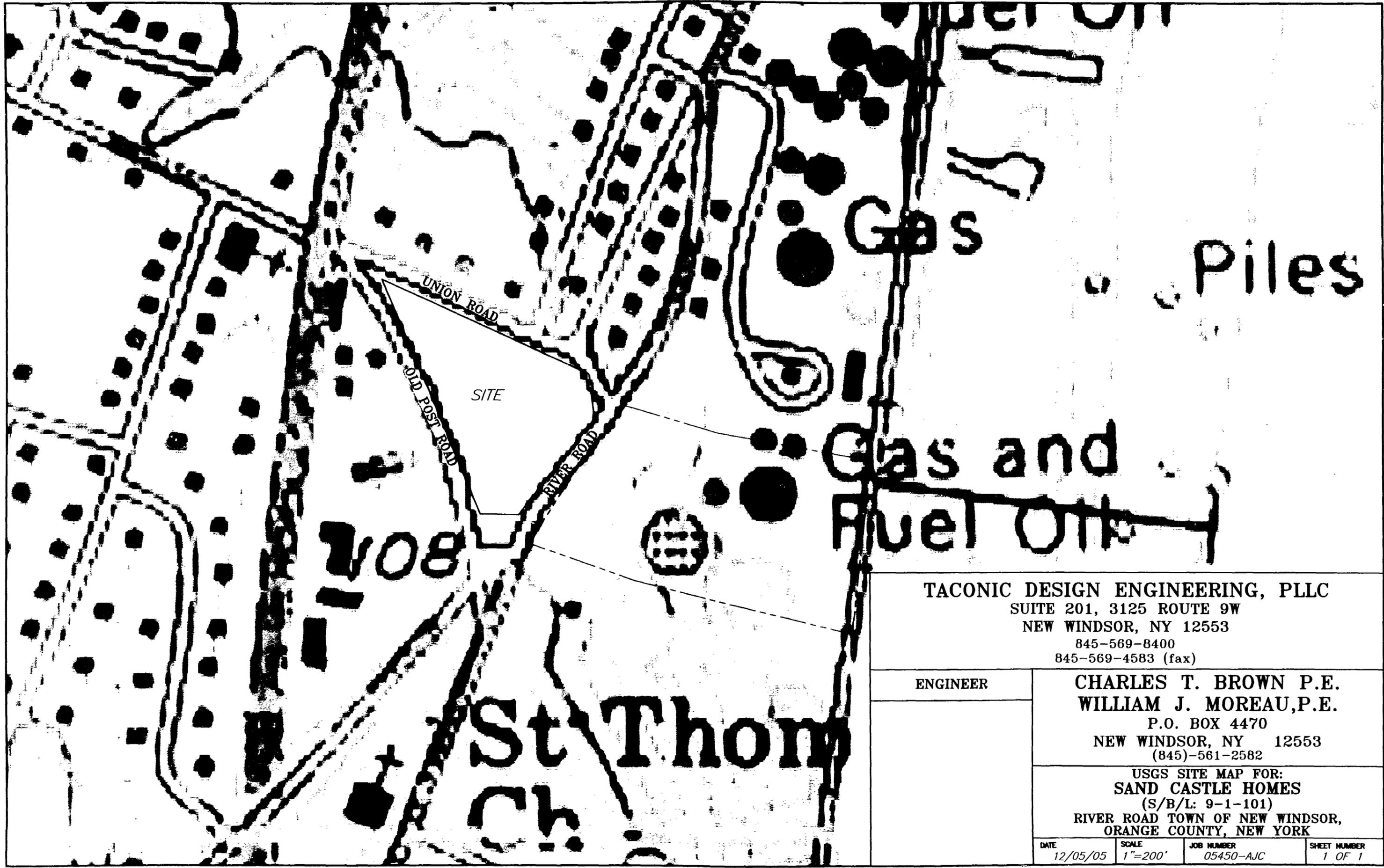
Based on the analysis and results set forth in this study and the associated reference material, it is the professional conclusion of the undersigned that the proposed commercial development for Sandcastle Homes at S/B/L: 9-1-101, in the Town of New Windsor will cause no adverse impacts on the existing water facilities.

**"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."**

**Respectfully submitted,**

**Charles T. Brown, PE  
Taconic Design Engineering, PLLC  
President  
NYS Lic. # 065996**

**USGS MAPS**



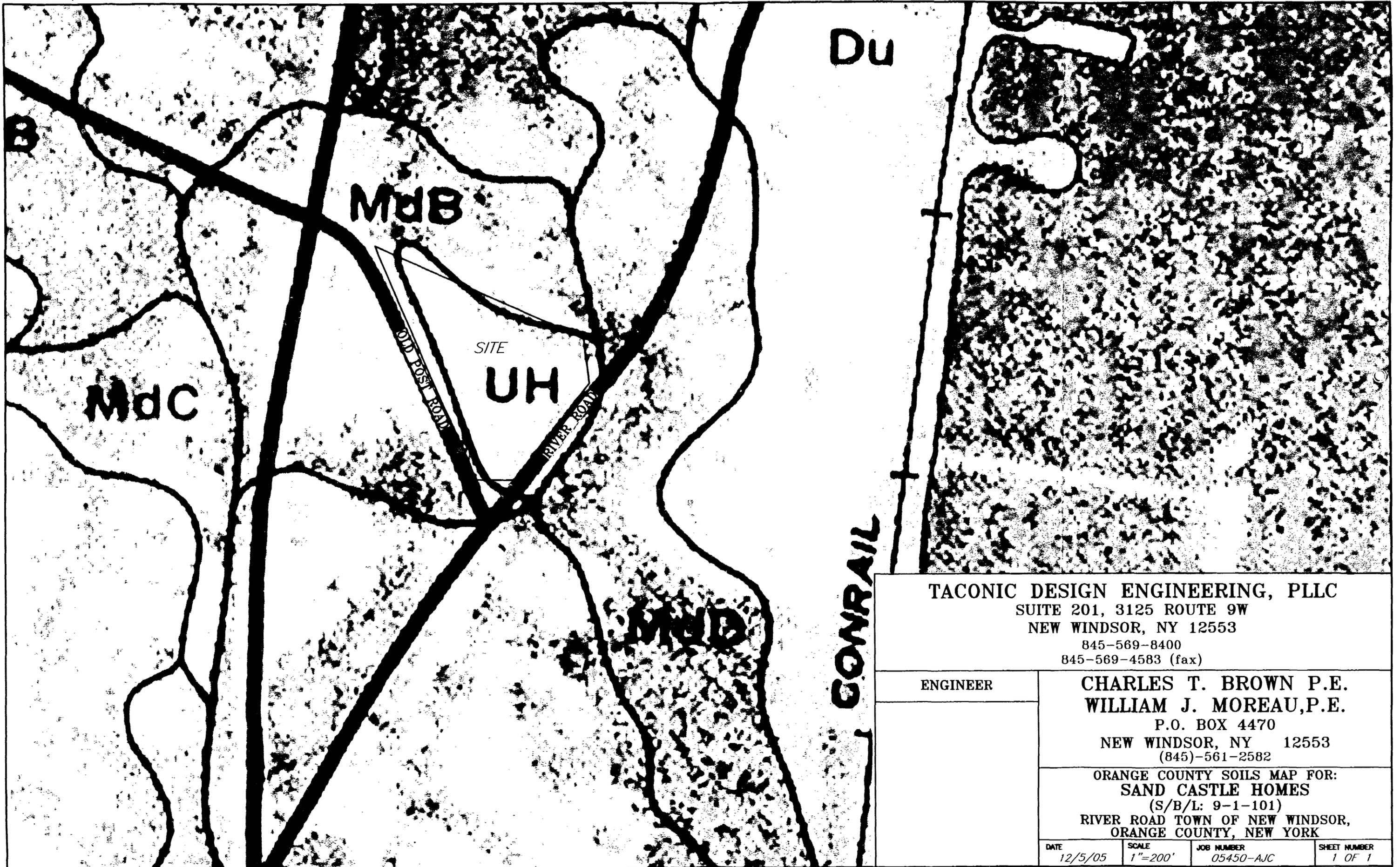
TACONIC DESIGN ENGINEERING, PLLC  
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ENGINEER

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USGS SITE MAP FOR:  
 SAND CASTLE HOMES  
 (S/B/L: 9-1-101)  
 RIVER ROAD TOWN OF NEW WINDSOR,  
 ORANGE COUNTY, NEW YORK

DATE 12/05/05	SCALE 1"=200'	JOB NUMBER 05450-AJC	SHEET NUMBER 1 OF 1
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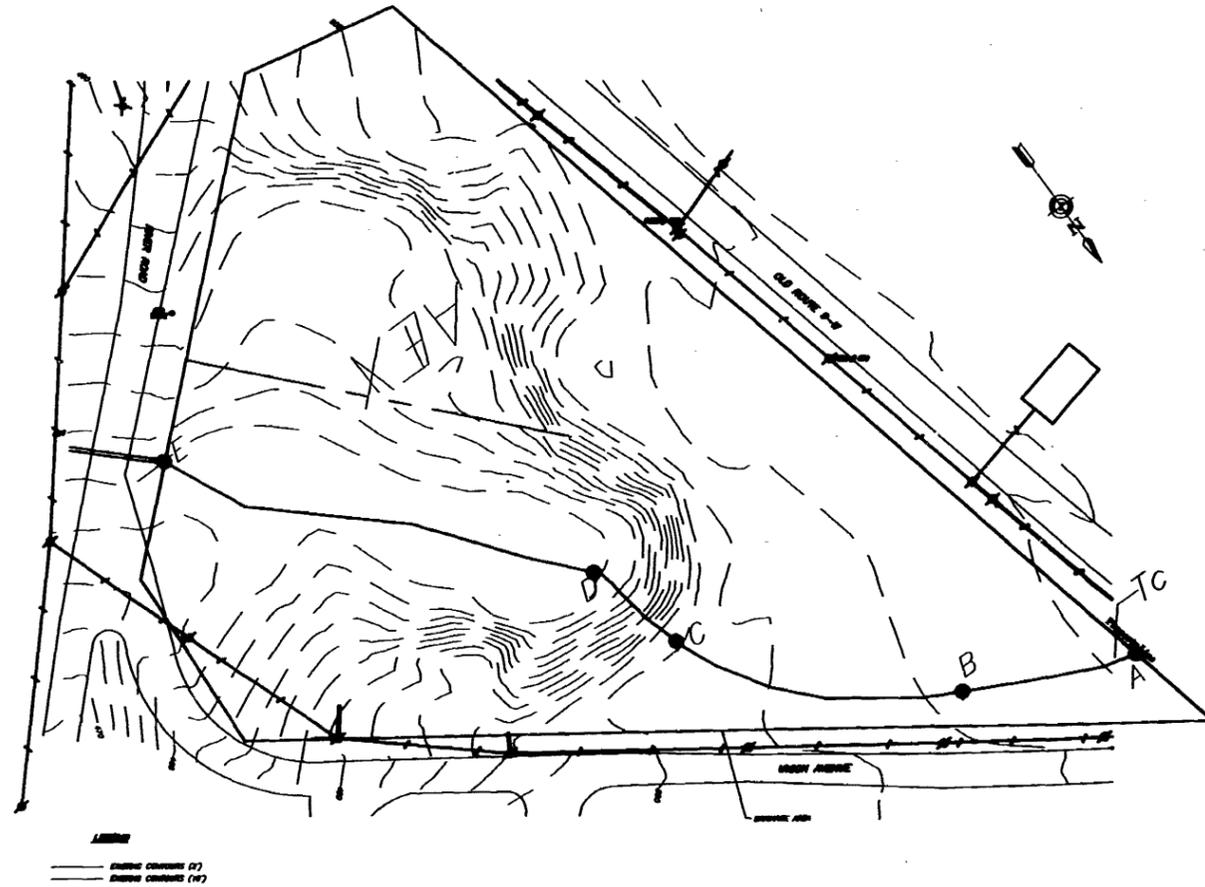
ENGINEER

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ORANGE COUNTY SOILS MAP FOR:  
 SAND CASTLE HOMES  
 (S/B/L: 9-1-101)  
 RIVER ROAD TOWN OF NEW WINDSOR,  
 ORANGE COUNTY, NEW YORK

DATE 12/5/05	SCALE 1"=200'	JOB NUMBER 05450-AJC	SHEET NUMBER 1 OF 1
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**PRE-DEVELOPMENT DRAINAGE MAP**



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**ENGINEER**

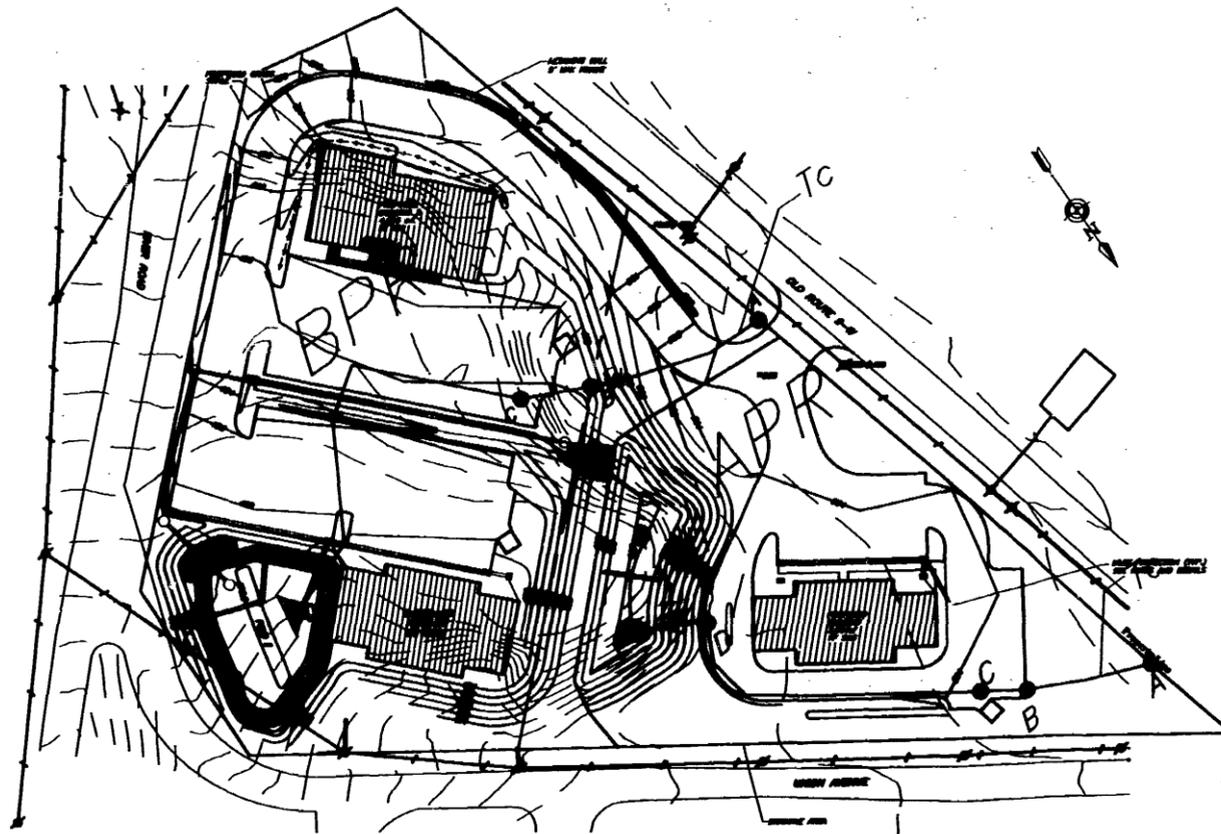
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**PRE-DEVELOPMENT DRAINAGE MAP FOR:**  
**OLD 9-W AND RIVER ROAD**  
**LANDS OF SANDCASTLE HOMES**  
**TOWN OF NEW WINDSOR**  
**ORANGE COUNTY, NEW YORK**

<b>DATE</b> 5/26/06	<b>SCALE</b> 1"=100'	<b>JOB NUMBER</b> 03309-MOB	<b>SHEET NUMBER</b> 1 OF 1
------------------------	-------------------------	--------------------------------	-------------------------------

**POST DEVELOPMENT DRAINAGE MAP**

1



——— PROPERTY LINE EXISTING  
 ——— EXISTING DRAINAGE (17)  
 ——— EXISTING DRAINAGE (18)  
 ——— EXISTING DRAINAGE (19)  
 ——— EXISTING DRAINAGE (20)  
 - - - - - PROPOSED DRAINAGE

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POST-DEVELOPMENT DRAINAGE MAP FOR:  
**OLD 9-W AND RIVER ROAD**  
 LANDS OF SANDCASTLE HOMES  
 TOWN OF NEW WINDSOR  
 ORANGE COUNTY, NEW YORK

DATE 5/26/06	SCALE 1"=100'	JOB NUMBER 05450-AJC	SHEET NUMBER 1 OF 1
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**HYDRAULIC CALCULATIONS  
FOR  
CHANNEL PROTECTION**

**Taconic Design**  
**CONSULTANTS**  
 SITE PLANNING/SUB DIVISIONS  
 RESIDENTIAL/COMMERCIAL DESIGN/SURVEYING  
 PERMIT PREPARATION/HEALTH DEPT. APPROVAL  
 STRUCTURAL ENGINEERING/SEPTIC DESIGN/CADD SERVICES

JOB 05/10/06 "SANDY CREEK" #0115  
 SHEET NO. CPH 2 OF 3  
 CALCULATED BY JMC DATE 5/25/06  
 CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 SCALE \_\_\_\_\_

THE FOLLOWING CALCULATIONS HAVE BEEN PREPARED TO  
 DETERMINE THE REQUIRED STORAGE VOLUME TO ACCOMMODATE  
 1 YEAR FLOW FROM EACH FOR 15 YEARS (15). THIS VOLUME  
 HAS BEEN DETERMINED FOR AN 80% RAIN.

DESIGN RAIN: 1.75 IN

RAIN FALLING ON STRUCTURAL UNPAVED AREAS  
 DESIGN RAINFALL (ROOF) 0.027

7.50 = 15 YEARS 1.75 IN RAIN FLOW FROM  
 1 AC. AREA (CALCULATED)

DESIGN RAIN FLOW FROM  
 1 AC. AREA (CALCULATED)  
 TOTAL FLOW FROM

1 VOLUME OF STORAGE VOLUME  
 $V = R \cdot A \cdot T$   
 $V = 1.75 \text{ IN} \cdot 1 \text{ AC} \cdot 15 \text{ YEARS}$   
 $V = 1.75 \text{ IN} \cdot 1 \text{ AC} \cdot 15 \text{ YEARS}$   
 $V = 1.75 \text{ IN} \cdot 1 \text{ AC} \cdot 15 \text{ YEARS}$

DESIGN RAIN FLOW FROM 1 AC. AREA (CALCULATED)  
 DESIGN RAIN FLOW FROM 1 AC. AREA (CALCULATED)

DESIGN RAIN FLOW FROM 1 AC. AREA (CALCULATED)  
 DESIGN RAIN FLOW FROM 1 AC. AREA (CALCULATED)

DESIGN RAIN FLOW FROM 1 AC. AREA (CALCULATED)  
 DESIGN RAIN FLOW FROM 1 AC. AREA (CALCULATED)

**Taconic Design**  
**CONSULTANTS**  
 SITE PLANNING/SUB DIVISIONS  
 RESIDENTIAL/COMMERCIAL DESIGN/SURVEYING  
 PERMIT PREPARATION/HEALTH DEPT. APPROVAL  
 STRUCTURAL ENGINEERING/SEPTIC DESIGN/CADD SERVICES

JOB: CONCRETE SAND CASTLE HOMES  
 SHEET NO. CPV 1 OF 2  
 CALCULATED BY: JOL DATE: 5/22/06  
 CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 SCALE: \_\_\_\_\_

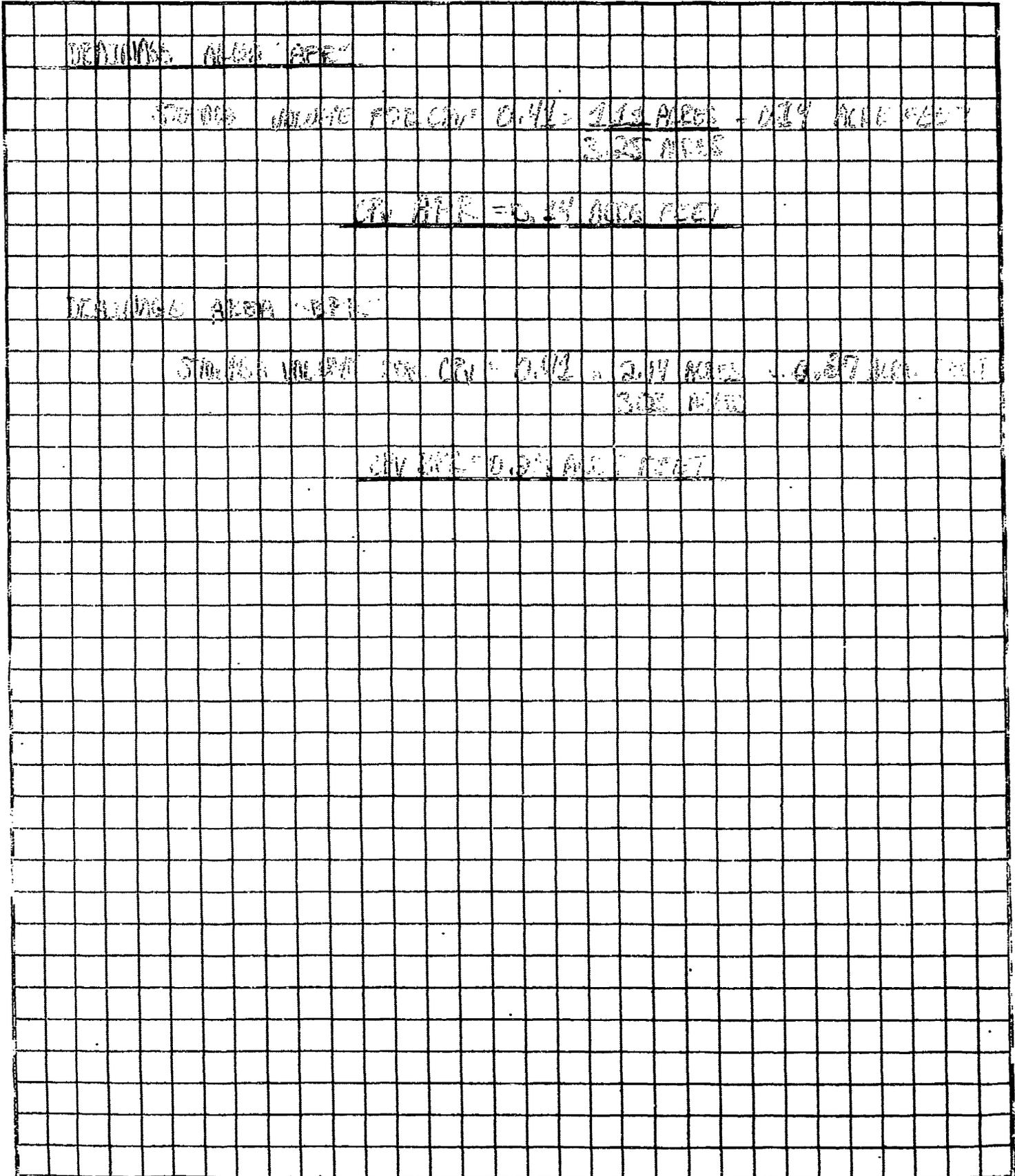
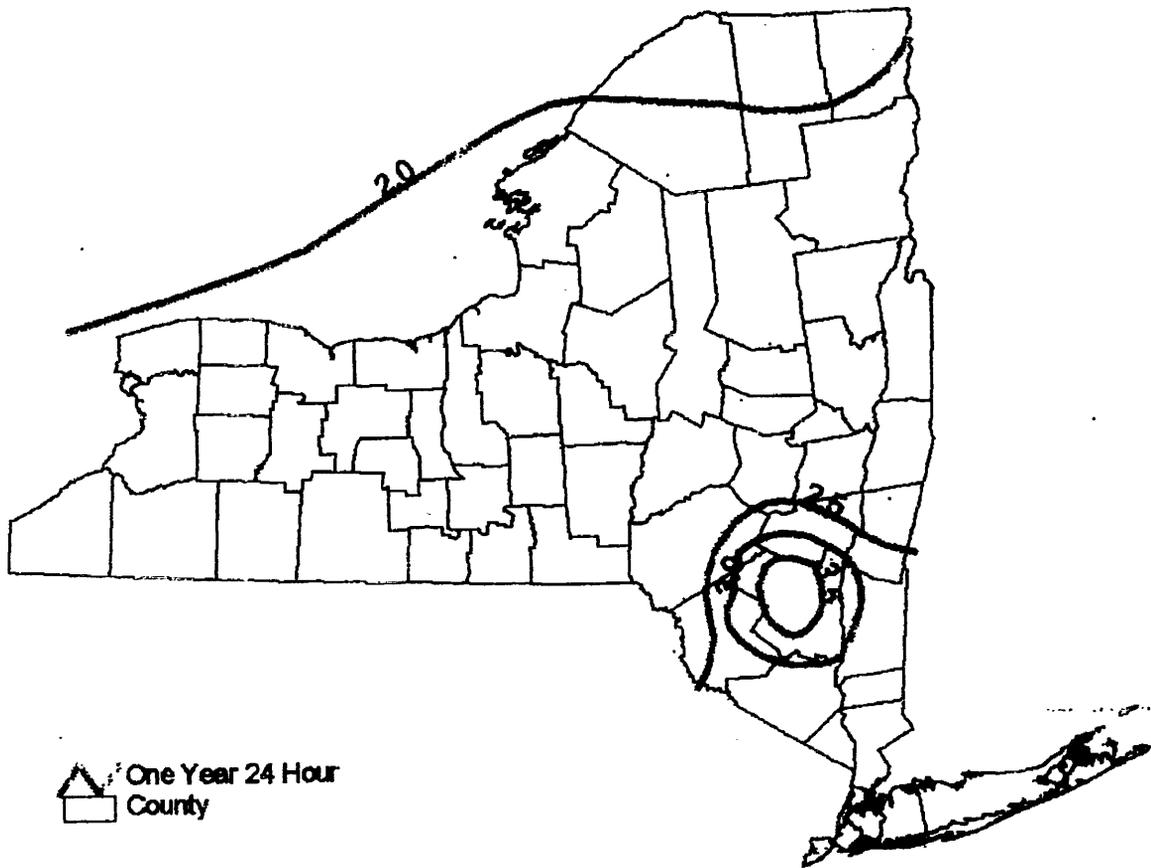


Figure 4.4 One-Year Design Storm



## Input requirements and procedures

Use figure 6-1 to estimate storage volume ( $V_s$ ) required or peak outflow discharge ( $q_o$ ). The most frequent application is to estimate  $V_s$  for which the required inputs are runoff volume ( $V_r$ ),  $q_o$ , and peak inflow discharge ( $q_i$ ). To estimate  $q_o$ , the required inputs are  $V_r$ ,  $V_s$ , and  $q_i$ .

## Estimating $V_s$

Use worksheet 6a to estimate  $V_s$ , storage volume required, by the following procedure.

1. Determine  $q_o$ . Many factors may dictate the selection of peak outflow discharge. The most common is to limit downstream discharges to a desired level, such as predevelopment discharge. Another factor may be that the outflow device has already been selected.
2. Estimate  $q_i$  by procedures in chapters 4 or 5. Do not use peak discharges developed by any other procedure. When using the Tabular Hydrograph method to estimate  $q_i$  for a subarea, only use

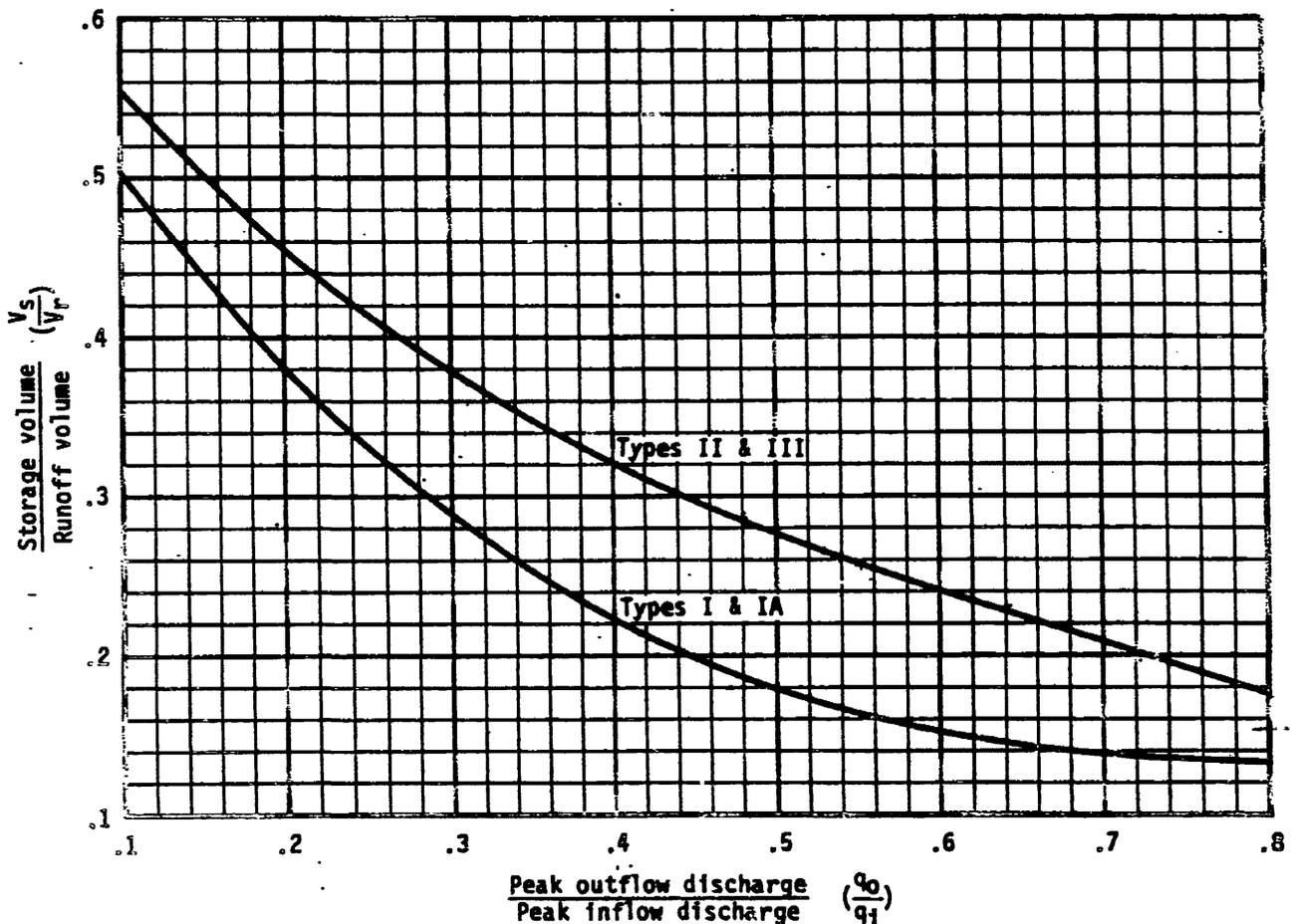


Figure 6-1.—Approximate detention basin routing for rainfall types I, IA, II, and III.

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 05-25-06

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 1 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

Hydrograph Name: AEX-1

Storm Data

Frequency : 1 Yrs.  
Rainfall : 3.00 In.  
Runoff : 0.27 In.

Drainage Area Data

Area: 3.3 Ac. T.C.: 0.30 Hrs.  
CN : 58 Ia/P: 0.10  
\*\*\*\* Hydrograph Status: Valid \*\*\*\*

Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)
11.00	0.0	13.60	0.1	16.20	0.0
11.10	0.0	13.70	0.1	16.30	0.0
11.20	0.0	13.80	0.1	16.40	0.0
11.30	0.0	13.90	0.1	16.50	0.0
11.40	0.0	14.00	0.1	16.60	0.0
11.50	0.1	14.10	0.1	16.70	0.0
11.60	0.1	14.20	0.1	16.80	0.0
11.70	0.1	14.30	0.1	16.90	0.0
11.80	0.1	14.40	0.1	17.00	0.0
11.90	0.1	14.50	0.1	17.10	0.0
12.00	0.2	14.60	0.1	17.20	0.0
12.10	0.2	14.70	0.1	17.30	0.0
12.20	0.4	14.80	0.1	17.40	0.0
12.30	0.6	14.90	0.1	17.50	0.0
12.40	0.7	15.00	0.1	17.60	0.0
12.50	0.6	15.10	0.1	17.70	0.0
12.60	0.5	15.20	0.1	17.80	0.0
12.70	0.4	15.30	0.0	17.90	0.0
12.80	0.3	15.40	0.0	18.00	0.0
12.90	0.2	15.50	0.0	18.10	0.0
13.00	0.2	15.60	0.0	18.20	0.0
13.10	0.1	15.70	0.0	18.30	0.0
13.20	0.1	15.80	0.0	18.40	0.0
13.30	0.1	15.90	0.0	18.50	0.0
13.40	0.1	16.00	0.0	18.60	0.0
13.50	0.1	16.10	0.0	18.70	0.0
				18.80	0.0
				18.90	0.0
				19.00	0.0
				19.10	0.0
				19.20	0.0
				19.30	0.0
				19.40	0.0
				19.50	0.0
				19.60	0.0
				19.70	0.0
				19.80	0.0
				19.90	0.0
				20.00	0.0
				20.10	0.0
				20.20	0.0
				20.30	0.0
				20.40	0.0
				20.50	0.0
				20.60	0.0
				20.70	0.0
				20.80	0.0
				20.90	0.0
				21.00	0.0

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 05-25-06

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 4 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

Hydrograph Name: APR-1

Storm Data

Frequency : 1 Yrs.  
Rainfall : 3.00 In.  
Runoff : 1.25 In.

Drainage Area Data

Area: 1.1 Ac. T.C.: 0.20 Hrs.  
CN : 80 Ia/P: 0.10  
\*\*\* Hydrograph Status: Valid \*\*\*

Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)
11.00	0.1	13.60	0.1	16.20	0.1
11.10	0.1	13.70	0.1	16.30	0.1
11.20	0.1	13.80	0.1	16.40	0.1
11.30	0.1	13.90	0.1	16.50	0.1
11.40	0.1	14.00	0.1	16.60	0.0
11.50	0.1	14.10	0.1	16.70	0.0
11.60	0.1	14.20	0.1	16.80	0.0
11.70	0.2	14.30	0.1	16.90	0.0
11.80	0.2	14.40	0.1	17.00	0.0
11.90	0.3	14.50	0.1	17.10	0.0
12.00	0.4	14.60	0.1	17.20	0.0
12.10	0.6	14.70	0.1	17.30	0.0
12.20	1.0	14.80	0.1	17.40	0.0
12.30	1.2	14.90	0.1	17.50	0.0
12.40	1.0	15.00	0.1	17.60	0.0
12.50	0.8	15.10	0.1	17.70	0.0
12.60	0.6	15.20	0.1	17.80	0.0
12.70	0.4	15.30	0.1	17.90	0.0
12.80	0.3	15.40	0.1	18.00	0.0
12.90	0.2	15.50	0.1	18.10	0.0
13.00	0.2	15.60	0.1	18.20	0.0
13.10	0.2	15.70	0.1	18.30	0.0
13.20	0.2	15.80	0.1	18.40	0.0
13.30	0.2	15.90	0.1	18.50	0.0
13.40	0.1	16.00	0.1	18.60	0.0
13.50	0.1	16.10	0.1	18.70	0.0

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 05-25-06

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 2 OF

COMMENTS: TYPE III DISTRIBUTION

COMPUTED BY: JJC

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

Hydrograph Name: BPR-1

Storm Data

Frequency : 1 Yrs.  
Rainfall : 3.00 In.  
Runoff : 1.07 In.

Drainage Area Data

Area: 2.1 Ac. T.C.: 0.10 Hrs.  
CN : 77 Ia/P: 0.10  
\*\*\* Hydrograph Status: Valid \*\*\*

Time (Hrs)	Flow (CFS)						
11.00	0.1	13.60	0.2	16.20	0.1	18.80	0.1
11.10	0.1	13.70	0.2	16.30	0.1	18.90	0.1
11.20	0.1	13.80	0.2	16.40	0.1	19.00	0.1
11.30	0.1	13.90	0.2	16.50	0.1	19.10	0.1
11.40	0.2	14.00	0.2	16.60	0.1	19.20	0.1
11.50	0.2	14.10	0.2	16.70	0.1	19.30	0.1
11.60	0.2	14.20	0.2	16.80	0.1	19.40	0.1
11.70	0.3	14.30	0.2	16.90	0.1	19.50	0.1
11.80	0.5	14.40	0.2	17.00	0.1	19.60	0.0
11.90	0.6	14.50	0.2	17.10	0.1	19.70	0.0
12.00	0.9	14.60	0.1	17.20	0.1	19.80	0.0
12.10	1.5	14.70	0.1	17.30	0.1	19.90	0.0
12.20	2.4	14.80	0.1	17.40	0.1	20.00	0.0
12.30	1.9	14.90	0.1	17.50	0.1	20.10	0.0
12.40	1.2	15.00	0.1	17.60	0.1	20.20	0.0
12.50	0.9	15.10	0.1	17.70	0.1	20.30	0.0
12.60	0.7	15.20	0.1	17.80	0.1	20.40	0.0
12.70	0.5	15.30	0.1	17.90	0.1	20.50	0.0
12.80	0.4	15.40	0.1	18.00	0.1	20.60	0.0
12.90	0.3	15.50	0.1	18.10	0.1	20.70	0.0
13.00	0.3	15.60	0.1	18.20	0.1	20.80	0.0
13.10	0.3	15.70	0.1	18.30	0.1	20.90	0.0
13.20	0.2	15.80	0.1	18.40	0.1	21.00	0.0
13.30	0.2	15.90	0.1	18.50	0.1		
13.40	0.2	16.00	0.1	18.60	0.1		
13.50	0.2	16.10	0.1	18.70	0.1		

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD

DATE : 05-30-06

TOWN OF NEW WINDSOR, NY

SHEET 1 OF

TYPE OF CALCULATION: STORM WATER MANAGEMENT

COMPUTED BY: JJC

COMMENTS: TYPE III DISTRIBUTION

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

Hydrograph Name: TPR-1

Storm Data

Frequency : 1 Yrs.  
 Rainfall : 3.00 In.  
 Runoff : 0.00 In.

Drainage Area Data

Area: 3.3 Ac. T.C.: 0.00 Hrs.  
 CN : 0 Ia/p: 0.00  
 \*\*\* Hydrograph Status: Valid \*\*\*

Time (Hrs)	Flow (CFS)						
11.00	0.2	13.60	0.3	16.20	0.2	18.80	0.1
11.10	0.2	13.70	0.3	16.30	0.2	18.90	0.1
11.20	0.2	13.80	0.3	16.40	0.2	19.00	0.1
11.30	0.2	13.90	0.3	16.50	0.2	19.10	0.1
11.40	0.3	14.00	0.3	16.60	0.1	19.20	0.1
11.50	0.3	14.10	0.3	16.70	0.1	19.30	0.1
11.60	0.3	14.20	0.3	16.80	0.1	19.40	0.1
11.70	0.5	14.30	0.3	16.90	0.1	19.50	0.1
11.80	0.7	14.40	0.3	17.00	0.1	19.60	0.0
11.90	0.9	14.50	0.3	17.10	0.1	19.70	0.0
12.00	1.3	14.60	0.2	17.20	0.1	19.80	0.0
12.10	2.1	14.70	0.2	17.30	0.1	19.90	0.0
12.20	3.4	14.80	0.2	17.40	0.1	20.00	0.0
12.30	3.1	14.90	0.2	17.50	0.1	20.10	0.0
12.40	2.2	15.00	0.2	17.60	0.1	20.20	0.0
12.50	1.7	15.10	0.2	17.70	0.1	20.30	0.0
12.60	1.3	15.20	0.2	17.80	0.1	20.40	0.0
12.70	0.9	15.30	0.2	17.90	0.1	20.50	0.0
12.80	0.7	15.40	0.2	18.00	0.1	20.60	0.0
12.90	0.5	15.50	0.2	18.10	0.1	20.70	0.0
13.00	0.5	15.60	0.2	18.20	0.1	20.80	0.0
13.10	0.5	15.70	0.2	18.30	0.1	20.90	0.0
13.20	0.4	15.80	0.2	18.40	0.1	21.00	0.0
13.30	0.4	15.90	0.2	18.50	0.1		
13.40	0.3	16.00	0.2	18.60	0.1		
13.50	0.3	16.10	0.2	18.70	0.1		

**HYDRAULIC CALCULATIONS  
FOR  
QUALITY**

THE FOLLOWING CALCULATIONS HAVE BEEN PREPARED TO DETERMINE THE REQUIRED DRY PILE CAPACITY FOR THE PROPOSED BRIDGE OVER THE RIVER AT THE LOCATION INDICATED ON THE TOWN OF [Name] MAP.	
ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.	
PILE CAPACITY CALCULATIONS:	
PILE NO. 1	CAPACITY = 150
PILE NO. 2	CAPACITY = 150
PILE NO. 3	CAPACITY = 150
PILE NO. 4	CAPACITY = 150
PILE NO. 5	CAPACITY = 150
PILE NO. 6	CAPACITY = 150
PILE NO. 7	CAPACITY = 150
PILE NO. 8	CAPACITY = 150
PILE NO. 9	CAPACITY = 150
PILE NO. 10	CAPACITY = 150
PILE NO. 11	CAPACITY = 150
PILE NO. 12	CAPACITY = 150
PILE NO. 13	CAPACITY = 150
PILE NO. 14	CAPACITY = 150
PILE NO. 15	CAPACITY = 150
PILE NO. 16	CAPACITY = 150
PILE NO. 17	CAPACITY = 150
PILE NO. 18	CAPACITY = 150
PILE NO. 19	CAPACITY = 150
PILE NO. 20	CAPACITY = 150
PILE NO. 21	CAPACITY = 150
PILE NO. 22	CAPACITY = 150
PILE NO. 23	CAPACITY = 150
PILE NO. 24	CAPACITY = 150
PILE NO. 25	CAPACITY = 150
PILE NO. 26	CAPACITY = 150
PILE NO. 27	CAPACITY = 150
PILE NO. 28	CAPACITY = 150
PILE NO. 29	CAPACITY = 150
PILE NO. 30	CAPACITY = 150
PILE NO. 31	CAPACITY = 150
PILE NO. 32	CAPACITY = 150
PILE NO. 33	CAPACITY = 150
PILE NO. 34	CAPACITY = 150
PILE NO. 35	CAPACITY = 150
PILE NO. 36	CAPACITY = 150
PILE NO. 37	CAPACITY = 150
PILE NO. 38	CAPACITY = 150
PILE NO. 39	CAPACITY = 150
PILE NO. 40	CAPACITY = 150
PILE NO. 41	CAPACITY = 150
PILE NO. 42	CAPACITY = 150
PILE NO. 43	CAPACITY = 150
PILE NO. 44	CAPACITY = 150
PILE NO. 45	CAPACITY = 150
PILE NO. 46	CAPACITY = 150
PILE NO. 47	CAPACITY = 150
PILE NO. 48	CAPACITY = 150
PILE NO. 49	CAPACITY = 150
PILE NO. 50	CAPACITY = 150

**HYDRAULIC CALCULATIONS  
FOR  
QUANTITY**

**Worksheet 2: Runoff curve number and runoff**

Project 20150-00 SAND CREEK WY/05 By AK Date 2/17/06  
 Location 1100 E. COLLEGE AVE. WY/05 Checked \_\_\_\_\_ Date \_\_\_\_\_  
 Circle one: Present Developed \_\_\_\_\_ AK

**1. Runoff curve number (CN)**

Soil name and hydrologic group (appendix A)	Cover description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN			Area <input type="checkbox"/> acres <input type="checkbox"/> mi <sup>2</sup> <input type="checkbox"/> %	Product of CN x Area
		Table 2-2	Fig. 2-3	Fig. 2-4		
<u>UR</u>	<u>GRASS - BARE SOIL</u>	<u>56</u>			<u>2.17</u>	<u>119</u>
<u>UR</u>	<u>GRASS - BARE SOIL</u>	<u>70</u>			<u>0.57</u>	<u>39</u>

1/ Use only one CN source per line.

Totals = 275

CN (weighted) =  $\frac{\text{total product}}{\text{total area}}$  = 119 + 39 = 158

Use CN = 56

**2. Runoff**

Frequency ..... yr  
 Rainfall, P (24-hour) ..... in  
 Runoff, Q ..... in  
 (Use P and CN with table 2-1, fig. 2-1, or eqs. 2-3 and 2-4.)

Storm #1	Storm #2	Storm #3

### Worksheet 3: Time of concentration ( $T_c$ ) or travel time ( $T_t$ )

Project OSKOD RIVER SAND CASTLE WATERSHED By ML Date 5/20/78

Location EDDIE VAIL FLOOD CONTROL CANAL, NEW BRUNSWICK Checked \_\_\_\_\_ Date \_\_\_\_\_

Circle one: Present Developed ALBA TRAY

Circle one:  $T_c$   $T_c$  through subarea \_\_\_\_\_

NOTES: Space for as many as two segments per flow type can be used for each worksheet.  
 Include a map, schematic, or description of flow segments.

Sheet flow (Applicable to  $T_c$  only)

	Segment ID	
1. Surface description (table 3-1) .....	A	
2. Manning's roughness coeff., n (table 3-1) ..	0.25	
3. Flow length, L (total L $\leq$ 300 ft) ..... ft	100	
4. Two-yr 24-hr rainfall, $P_2$ ..... in	3.5	
5. Land slope, s ..... ft/ft	0.02	
6. $T_c = \frac{0.007 \cdot (nL)^{0.8}}{P_2^{0.5} s^{0.4}}$ Compute $T_c$ ..... hr	0.02	+ [ ] = 0.02

Shallow concentrated flow

	Segment ID	
7. Surface description (paved or unpaved) .....	B	D E
8. Flow length, L ..... ft	155	60
9. Watercourse slope, s ..... ft/ft	0.00	0.00
10. Average velocity, V (figure 3-1) ..... ft/s	2.35	1.15
11. $T_c = \frac{L}{3600 V}$ Compute $T_c$ ..... hr	0.02	+ 0.02 = 0.04

Channel flow

	Segment ID	
12. Cross sectional flow area, a ..... ft <sup>2</sup>		
13. Wetted perimeter, $P_w$ ..... ft		
14. Hydraulic radius, $r = \frac{a}{P_w}$ Compute r ..... ft		
15. Channel slope, S ..... ft/ft		
16. Manning's roughness coeff., n .....		
17. $V = \frac{1.49 r^{2/3} S^{1/2}}{n}$ Compute V ..... ft/s		
18. Flow length, L ..... ft		
19. $T_c = \frac{L}{3600 V}$ Compute $T_c$ ..... hr		
20. Watershed or subarea $T_c$ or $T_t$ (add $T_c$ in steps 6, 11, and 19) ..... hr		0.30

USE THIS FORM

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 04-27-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 15 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

Hydrograph Name: AEX-10

Storm Data

Frequency : 10 Yrs.  
Rainfall : 5.50 In.  
Runoff : 1.45 In.

Drainage Area Data

Area: 3.3 AC. T.C.: 0.30 Hrs.  
CN : 58 Ia/P: 0.10  
\*\*\*\* Hydrograph Status: Valid \*\*\*\*

Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)
11.00	0.2	13.60	0.5	16.20	0.2
11.10	0.2	13.70	0.4	16.30	0.2
11.20	0.2	13.80	0.4	16.40	0.2
11.30	0.2	13.90	0.4	16.50	0.2
11.40	0.3	14.00	0.4	16.60	0.2
11.50	0.3	14.10	0.4	16.70	0.2
11.60	0.3	14.20	0.4	16.80	0.2
11.70	0.4	14.30	0.4	16.90	0.2
11.80	0.5	14.40	0.3	17.00	0.2
11.90	0.6	14.50	0.3	17.10	0.2
12.00	0.9	14.60	0.3	17.20	0.2
12.10	1.3	14.70	0.3	17.30	0.2
12.20	2.1	14.80	0.3	17.40	0.1
12.30	3.2	14.90	0.3	17.50	0.1
12.40	3.7	15.00	0.3	17.60	0.1
12.50	3.3	15.10	0.3	17.70	0.1
12.60	2.6	15.20	0.3	17.80	0.1
12.70	2.0	15.30	0.3	17.90	0.1
12.80	1.5	15.40	0.3	18.00	0.1
12.90	1.2	15.50	0.3	18.10	0.1
13.00	0.9	15.60	0.2	18.20	0.1
13.10	0.8	15.70	0.2	18.30	0.1
13.20	0.6	15.80	0.2	18.40	0.1
13.30	0.6	15.90	0.2	18.50	0.1
13.40	0.5	16.00	0.2	18.60	0.1
13.50	0.5	16.10	0.2	18.70	0.1

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :04-27-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 1 OF

COMMENTS: TYPE III DISTRIBUTION

COMPUTED BY: JJC

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

Hydrograph Name: AEX-100

Storm Data

Frequency : 100 Yrs.  
Rainfall : 8.00 In.  
Runoff : 3.11 In.

Drainage Area Data

Area: 3.3 Ac. T.C.: 0.30 Hrs.  
CN : 58 Ia/P: 0.10  
\*\*\* Hydrograph Status: Valid \*\*\*

Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)
11.00	0.4	13.60	1.0	16.20	0.4
11.10	0.4	13.70	1.0	16.30	0.4
11.20	0.5	13.80	0.9	16.40	0.4
11.30	0.5	13.90	0.9	16.50	0.4
11.40	0.6	14.00	0.9	16.60	0.4
11.50	0.6	14.10	0.8	16.70	0.4
11.60	0.7	14.20	0.8	16.80	0.4
11.70	0.9	14.30	0.8	16.90	0.3
11.80	1.1	14.40	0.7	17.00	0.3
11.90	1.3	14.50	0.7	17.10	0.3
12.00	2.0	14.60	0.7	17.20	0.3
12.10	2.9	14.70	0.7	17.30	0.3
12.20	4.5	14.80	0.7	17.40	0.3
12.30	7.0	14.90	0.6	17.50	0.3
12.40	7.9	15.00	0.6	17.60	0.3
12.50	7.1	15.10	0.6	17.70	0.3
12.60	5.7	15.20	0.6	17.80	0.3
12.70	4.4	15.30	0.6	17.90	0.3
12.80	3.2	15.40	0.6	18.00	0.3
12.90	2.5	15.50	0.5	18.10	0.3
13.00	1.9	15.60	0.5	18.20	0.3
13.10	1.6	15.70	0.5	18.30	0.3
13.20	1.4	15.80	0.5	18.40	0.3
13.30	1.2	15.90	0.5	18.50	0.3
13.40	1.1	16.00	0.5	18.60	0.2
13.50	1.1	16.10	0.4	18.70	0.2
				18.80	0.2
				18.90	0.2
				19.00	0.2
				19.10	0.2
				19.20	0.2
				19.30	0.2
				19.40	0.2
				19.50	0.2
				19.60	0.2
				19.70	0.2
				19.80	0.2
				19.90	0.2
				20.00	0.2
				20.10	0.2
				20.20	0.2
				20.30	0.2
				20.40	0.2
				20.50	0.2
				20.60	0.2
				20.70	0.2
				20.80	0.2
				20.90	0.2
				21.00	0.2



### Worksheet 3: Time of concentration ( $T_c$ ) or travel time ( $T_t$ )

Project 03750-172 "SHAD" CANYON DAMS By JK Date 7/26/06  
 Location Black Mountain, OH, east rd N.W. Checked \_\_\_\_\_ Date \_\_\_\_\_  
 Circle one: Present  Developed  1987 1988  
 Circle one:  $T_c$    $T_t$  through subarea \_\_\_\_\_

NOTES: Space for as many as two segments per flow type can be used for each worksheet.

Include a map, schematic, or description of flow segments.

Sheet flow (Applicable to  $T_c$  only) Segment ID

1. Surface description (table 3-1) .....	AB	BC	
2. Manning's roughness coeff., n (table 3-1) ..	0.21	0.15	
3. Flow length, L (total L $\leq$ 300 ft) ..... ft	95	25	
4. Two-yr 24-hr rainfall, $P_2$ ..... in	3.5	3.5	
5. Land slope, s ..... ft/ft	0.00	0.00	
6. $T_t = \frac{0.007 \cdot (nL)^{0.8}}{P_2^{0.5} \cdot s^{0.4}}$ Compute $T_t$ ..... hr	0.18	0.02	0.20

Shallow concentrated flow Segment ID

7. Surface description (paved or unpaved) .....	ED		
8. Flow length, L ..... ft	10		
9. Watercourse slope, s ..... ft/ft	0.01		
10. Average velocity, V (figure 3-1) ..... ft/s	2.00		
11. $T_t = \frac{L}{3600 V}$ Compute $T_t$ ..... hr	0.02		0.02

Channel flow Segment ID

12. Cross sectional flow area, a ..... ft <sup>2</sup>	DE		
13. Wetted perimeter, $p_w$ ..... ft			
14. Hydraulic radius, $r = \frac{a}{p_w}$ Compute r ..... ft			
15. Channel slope, s ..... ft/ft			
16. Manning's roughness coeff., n .....			
17. $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V ..... ft/s	5		
18. Flow length, L ..... ft	40		
19. $T_c = \frac{L}{3600 V}$ Compute $T_c$ ..... hr	0.01		0.01
20. Watershed or subarea $T_c$ or $T_t$ (add $T_c$ in steps 6, 11, and 19) ..... hr			0.23

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 04-27-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 16 OF

COMMENTS: TYPE III DISTRIBUTION

COMPUTED BY: JJC

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

Hydrograph Name : APR-10

Storm Data

Frequency : 10 Yrs.  
Rainfall : 5.50 In.  
Runoff : 3.33 In.

Drainage Area Data

Area: 1.1 Ac. T.C.: 0.20 Hrs.  
CN : 80 Ia/p: 0.10  
\*\*\*\* Hydrograph Status: Valid \*\*\*\*

Time (Hrs)	Flow (CFS)						
11.00	0.2	13.60	0.3	16.20	0.2	18.80	0.1
11.10	0.2	13.70	0.3	16.30	0.2	18.90	0.1
11.20	0.2	13.80	0.3	16.40	0.1	19.00	0.1
11.30	0.2	13.90	0.3	16.50	0.1	19.10	0.1
11.40	0.2	14.00	0.3	16.60	0.1	19.20	0.1
11.50	0.3	14.10	0.3	16.70	0.1	19.30	0.1
11.60	0.3	14.20	0.3	16.80	0.1	19.40	0.1
11.70	0.4	14.30	0.3	16.90	0.1	19.50	0.1
11.80	0.6	14.40	0.3	17.00	0.1	19.60	0.1
11.90	0.7	14.50	0.2	17.10	0.1	19.70	0.1
12.00	1.0	14.60	0.2	17.20	0.1	19.80	0.1
12.10	1.5	14.70	0.2	17.30	0.1	19.90	0.1
12.20	2.6	14.80	0.2	17.40	0.1	20.00	0.1
12.30	3.3	14.90	0.2	17.50	0.1	20.10	0.1
12.40	2.8	15.00	0.2	17.60	0.1	20.20	0.1
12.50	2.1	15.10	0.2	17.70	0.1	20.30	0.1
12.60	1.6	15.20	0.2	17.80	0.1	20.40	0.1
12.70	1.1	15.30	0.2	17.90	0.1	20.50	0.1
12.80	0.8	15.40	0.2	18.00	0.1	20.60	0.1
12.90	0.7	15.50	0.2	18.10	0.1	20.70	0.1
13.00	0.5	15.60	0.2	18.20	0.1	20.80	0.1
13.10	0.5	15.70	0.2	18.30	0.1	20.90	0.1
13.20	0.4	15.80	0.2	18.40	0.1	21.00	0.1
13.30	0.4	15.90	0.2	18.50	0.1		
13.40	0.4	16.00	0.2	18.60	0.1		
13.50	0.4	16.10	0.2	18.70	0.1		

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 12 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

=====

WORKING CURVE  
FOR POND NO. POND1

DT= 0.10 HRS

ELEV (FT)	DISC. (CFS)	STORAGE		O2/2 (CFS)	S2/DT (CFS)	S2/DT+O2/2 (CFS)
		S2 (AC FT)	S2 (CFS-HRS)			
487.00	0.0	0.00	0.0	0.0	0.0	0.0
488.00	0.0	0.04	0.5	0.0	5.0	5.0
489.00	0.0	0.11	1.3	0.0	13.0	13.0
490.00	0.0	0.19	2.3	0.0	23.0	23.0
491.00	0.8	0.39	4.7	0.4	47.0	47.4
492.00	4.0	0.50	6.1	2.0	61.0	63.0

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TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

SHEET 13 OF

TYPE OF CALCULATION: STORM WATER MANAGEMENT

COMPUTED BY: JJC

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

POND ROUTING

HYDROGRAPH #APR-10  
POND #POND1  
STORM FREQUENCY: 10 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+O2/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
11.00	0.2	0.1	0.1	0.0	487.02	0.00
11.10	0.2	0.2	0.3	0.0	487.06	0.00
11.20	0.2	0.2	0.5	0.0	487.10	0.00
11.30	0.2	0.2	0.7	0.0	487.14	0.01
11.40	0.2	0.2	0.9	0.0	487.18	0.01
11.50	0.3	0.3	1.2	0.0	487.24	0.01
11.60	0.3	0.3	1.5	0.0	487.30	0.01
11.70	0.4	0.4	1.9	0.0	487.38	0.02
11.80	0.6	0.5	2.4	0.0	487.48	0.02
11.90	0.7	0.7	3.1	0.0	487.62	0.03
12.00	1.0	0.9	4.0	0.0	487.80	0.03
12.10	1.5	1.3	5.3	0.0	488.04	0.04
12.20	2.6	2.1	7.4	0.0	488.30	0.06
12.30	3.3	2.9	10.3	0.0	488.66	0.09
12.40	2.8	3.1	13.4	0.0	489.04	0.11
12.50	2.1	2.4	15.8	0.0	489.28	0.13
12.60	1.6	1.9	17.7	0.0	489.47	0.15
12.70	1.1	1.4	19.1	0.0	489.61	0.16
12.80	0.8	1.0	20.1	0.0	489.71	0.17
12.90	0.7	0.8	20.9	0.0	489.79	0.17
13.00	0.5	0.6	21.5	0.0	489.85	0.18
13.10	0.5	0.5	22.0	0.0	489.90	0.18
13.20	0.4	0.5	22.5	0.0	489.95	0.19
13.30	0.4	0.4	22.9	0.0	489.99	0.19
13.40	0.4	0.4	23.3	0.0	490.01	0.19
13.50	0.4	0.4	23.7	0.0	490.03	0.20
13.60	0.3	0.4	24.1	0.0	490.05	0.20
13.70	0.3	0.3	24.4	0.0	490.06	0.20
13.80	0.3	0.3	24.7	0.1	490.07	0.20
13.90	0.3	0.3	24.9	0.1	490.08	0.21
14.00	0.3	0.3	25.1	0.1	490.09	0.21
14.10	0.3	0.3	25.3	0.1	490.09	0.21
14.20	0.3	0.3	25.5	0.1	490.10	0.21
14.30	0.3	0.3	25.7	0.1	490.11	0.21
14.40	0.3	0.3	25.9	0.1	490.12	0.21



TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 15 OF

COMMENTS: TYPE III DISTRIBUTION

COMPUTED BY: JJC

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

=====  
POND ROUTING  
=====

HYDROGRAPH #APR-10  
POND #POND1  
STORM FREQUENCY: 10 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+02/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
18.20	0.1	0.1	27.5	0.1	490.18	0.23
18.30	0.1	0.1	27.5	0.1	490.18	0.23
18.40	0.1	0.1	27.5	0.1	490.18	0.23
18.50	0.1	0.1	27.5	0.1	490.18	0.23
18.60	0.1	0.1	27.5	0.1	490.18	0.23
18.70	0.1	0.1	27.5	0.1	490.18	0.23
18.80	0.1	0.1	27.5	0.1	490.18	0.23
18.90	0.1	0.1	27.5	0.1	490.18	0.23
19.00	0.1	0.1	27.5	0.1	490.18	0.23
19.10	0.1	0.1	27.5	0.1	490.18	0.23
19.20	0.1	0.1	27.5	0.1	490.18	0.23
19.30	0.1	0.1	27.5	0.1	490.18	0.23
19.40	0.1	0.1	27.5	0.1	490.18	0.23
19.50	0.1	0.1	27.5	0.1	490.18	0.23
19.60	0.1	0.1	27.5	0.1	490.18	0.23
19.70	0.1	0.1	27.5	0.1	490.18	0.23
19.80	0.1	0.1	27.5	0.1	490.18	0.23
19.90	0.1	0.1	27.5	0.1	490.18	0.23
20.00	0.1	0.1	27.5	0.1	490.18	0.23
20.10	0.1	0.1	27.5	0.1	490.18	0.23
20.20	0.1	0.1	27.5	0.1	490.18	0.23
20.30	0.1	0.1	27.5	0.1	490.18	0.23
20.40	0.1	0.1	27.5	0.1	490.18	0.23
20.50	0.1	0.1	27.5	0.1	490.18	0.23
20.60	0.1	0.1	27.5	0.1	490.18	0.23
20.70	0.1	0.1	27.5	0.1	490.18	0.23
20.80	0.1	0.1	27.5	0.1	490.18	0.23
20.90	0.1	0.1	27.5	0.1	490.18	0.23
21.00	0.1	0.1	27.5	0.1	490.18	0.23

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 16 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

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HYDROGRAPH #APR-10  
POND #POND1  
STORM FREQUENCY: 10 YRS.

SUMMARY OF POND ROUTING RESULTS

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PEAK INFLOW	:	3.3 CFS @ T = 12.30 HRS.
PEAK DISCHARGE	:	0.2 CFS @ T = 16.00 HRS.
PEAK STORAGE VOLUME	:	0.23 AC.FT.
PEAK STORAGE ELEVATION	:	490.19
FREEBOARD	:	1.81 FT.

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TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :04-27-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 2 OF

COMMENTS: TYPE III DISTRIBUTION

COMPUTED BY: JJC

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

Hydrograph Name: APR-100

Storm Data

Frequency : 100 Yrs.  
Rainfall : 8.00 In.  
Runoff : 5.63 In.

Drainage Area Data

Area: 1.1 Ac. T.C.: 0.20 Hrs.  
CN : 80 Ia/P: 0.10  
\*\*\* Hydrograph Status: Valid \*\*\*

Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)
11.00	0.3	13.60	0.6	16.20	0.3
11.10	0.3	13.70	0.6	16.30	0.3
11.20	0.3	13.80	0.5	16.40	0.2
11.30	0.3	13.90	0.5	16.50	0.2
11.40	0.4	14.00	0.5	16.60	0.2
11.50	0.4	14.10	0.5	16.70	0.2
11.60	0.5	14.20	0.5	16.80	0.2
11.70	0.7	14.30	0.4	16.90	0.2
11.80	0.9	14.40	0.4	17.00	0.2
11.90	1.2	14.50	0.4	17.10	0.2
12.00	1.7	14.60	0.4	17.20	0.2
12.10	2.5	14.70	0.4	17.30	0.2
12.20	4.4	14.80	0.4	17.40	0.2
12.30	5.5	14.90	0.4	17.50	0.2
12.40	4.7	15.00	0.4	17.60	0.2
12.50	3.5	15.10	0.4	17.70	0.2
12.60	2.6	15.20	0.4	17.80	0.2
12.70	1.9	15.30	0.3	17.90	0.2
12.80	1.3	15.40	0.3	18.00	0.2
12.90	1.1	15.50	0.3	18.10	0.2
13.00	0.9	15.60	0.3	18.20	0.2
13.10	0.8	15.70	0.3	18.30	0.2
13.20	0.7	15.80	0.3	18.40	0.2
13.30	0.7	15.90	0.3	18.50	0.1
13.40	0.6	16.00	0.3	18.60	0.1
13.50	0.6	16.10	0.3	18.70	0.1

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 1 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

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WORKING CURVE  
FOR POND NO.POND1

DT= 0.10 HRS

ELEV (FT)	DISC. (CFS)	STORAGE		O2/2 (CFS)	S2/DT (CFS)	S2/DT+O2/2 (CFS)
		S2 (AC FT)	S2 (CFS-HRS)			
487.00	0.0	0.00	0.0	0.0	0.0	0.0
488.00	0.0	0.04	0.5	0.0	5.0	5.0
489.00	0.0	0.11	1.3	0.0	13.0	13.0
490.00	0.0	0.19	2.3	0.0	23.0	23.0
491.00	0.8	0.39	4.7	0.4	47.0	47.4
492.00	4.0	0.50	6.1	2.0	61.0	63.0

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 2 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

=====  
POND ROUTING

HYDROGRAPH #APR-100  
POND #POND1  
STORM FREQUENCY: 100 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+O2/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
11.00	0.3	0.2	0.2	0.0	487.04	0.00
11.10	0.3	0.3	0.5	0.0	487.10	0.00
11.20	0.3	0.3	0.8	0.0	487.16	0.01
11.30	0.3	0.3	1.1	0.0	487.22	0.01
11.40	0.4	0.4	1.5	0.0	487.30	0.01
11.50	0.4	0.4	1.9	0.0	487.38	0.02
11.60	0.5	0.5	2.4	0.0	487.48	0.02
11.70	0.7	0.6	3.0	0.0	487.60	0.02
11.80	0.9	0.8	3.8	0.0	487.76	0.03
11.90	1.2	1.1	4.9	0.0	487.98	0.04
12.00	1.7	1.5	6.4	0.0	488.18	0.05
12.10	2.5	2.1	8.5	0.0	488.44	0.07
12.20	4.4	3.5	12.0	0.0	488.88	0.10
12.30	5.5	5.0	17.0	0.0	489.40	0.14
12.40	4.7	5.1	22.1	0.0	489.91	0.18
12.50	3.5	4.1	26.2	0.1	490.13	0.22
12.60	2.6	3.1	29.2	0.2	490.25	0.24
12.70	1.9	2.3	31.3	0.3	490.34	0.26
12.80	1.3	1.6	32.6	0.3	490.39	0.27
12.90	1.1	1.2	33.5	0.3	490.43	0.28
13.00	0.9	1.0	34.2	0.4	490.46	0.28
13.10	0.8	0.9	34.7	0.4	490.48	0.29
13.20	0.7	0.8	35.1	0.4	490.50	0.29
13.30	0.7	0.7	35.4	0.4	490.51	0.29
13.40	0.6	0.7	35.7	0.4	490.52	0.29
13.50	0.6	0.6	35.9	0.4	490.53	0.30
13.60	0.6	0.6	36.1	0.4	490.54	0.30
13.70	0.6	0.6	36.3	0.4	490.55	0.30
13.80	0.5	0.6	36.5	0.4	490.55	0.30
13.90	0.5	0.5	36.6	0.4	490.56	0.30
14.00	0.5	0.5	36.7	0.4	490.56	0.30
14.10	0.5	0.5	36.8	0.5	490.57	0.30
14.20	0.5	0.5	36.8	0.5	490.57	0.30
14.30	0.4	0.5	36.8	0.5	490.57	0.30
14.40	0.4	0.4	36.7	0.4	490.56	0.30

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 3 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

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POND ROUTING

HYDROGRAPH #APR-100

POND #POND1

STORM FREQUENCY: 100 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+O2/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
14.60	0.4	0.4	36.7	0.4	490.56	0.30
14.70	0.4	0.4	36.7	0.4	490.56	0.30
14.80	0.4	0.4	36.7	0.4	490.56	0.30
14.90	0.4	0.4	36.7	0.4	490.56	0.30
15.00	0.4	0.4	36.7	0.4	490.56	0.30
15.10	0.4	0.4	36.7	0.4	490.56	0.30
15.20	0.4	0.4	36.7	0.4	490.56	0.30
15.30	0.3	0.4	36.7	0.4	490.56	0.30
15.40	0.3	0.3	36.6	0.4	490.56	0.30
15.50	0.3	0.3	36.5	0.4	490.55	0.30
15.60	0.3	0.3	36.4	0.4	490.55	0.30
15.70	0.3	0.3	36.3	0.4	490.55	0.30
15.80	0.3	0.3	36.2	0.4	490.54	0.30
15.90	0.3	0.3	36.1	0.4	490.54	0.30
16.00	0.3	0.3	36.0	0.4	490.53	0.30
16.10	0.3	0.3	35.9	0.4	490.53	0.30
16.20	0.3	0.3	35.8	0.4	490.52	0.29
16.30	0.3	0.3	35.7	0.4	490.52	0.29
16.40	0.2	0.3	35.6	0.4	490.52	0.29
16.50	0.2	0.2	35.4	0.4	490.51	0.29
16.60	0.2	0.2	35.2	0.4	490.50	0.29
16.70	0.2	0.2	35.0	0.4	490.49	0.29
16.80	0.2	0.2	34.8	0.4	490.48	0.29
16.90	0.2	0.2	34.6	0.4	490.48	0.28
17.00	0.2	0.2	34.4	0.4	490.47	0.28
17.10	0.2	0.2	34.2	0.4	490.46	0.28
17.20	0.2	0.2	34.0	0.4	490.45	0.28
17.30	0.2	0.2	33.8	0.4	490.44	0.28
17.40	0.2	0.2	33.6	0.3	490.43	0.28
17.50	0.2	0.2	33.5	0.3	490.43	0.28
17.60	0.2	0.2	33.4	0.3	490.43	0.27
17.70	0.2	0.2	33.3	0.3	490.42	0.27
17.80	0.2	0.2	33.2	0.3	490.42	0.27
17.90	0.2	0.2	33.1	0.3	490.41	0.27
18.00	0.2	0.2	33.0	0.3	490.41	0.27

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 4 OF

COMMENTS : TYPE III DISTRIBUTION

COMPUTED BY: JJC

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

POND ROUTING

HYDROGRAPH #APR-100  
POND #POND1  
STORM FREQUENCY: 100 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+O2/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
18.20	0.2	0.2	32.8	0.3	490.40	0.27
18.30	0.2	0.2	32.7	0.3	490.40	0.27
18.40	0.2	0.2	32.6	0.3	490.39	0.27
18.50	0.1	0.2	32.5	0.3	490.39	0.27
18.60	0.1	0.1	32.3	0.3	490.38	0.27
18.70	0.1	0.1	32.1	0.3	490.37	0.26
18.80	0.1	0.1	31.9	0.3	490.36	0.26
18.90	0.1	0.1	31.7	0.3	490.36	0.26
19.00	0.1	0.1	31.5	0.3	490.35	0.26
19.10	0.1	0.1	31.3	0.3	490.34	0.26
19.20	0.1	0.1	31.1	0.3	490.33	0.26
19.30	0.1	0.1	30.9	0.3	490.32	0.25
19.40	0.1	0.1	30.7	0.3	490.32	0.25
19.50	0.1	0.1	30.5	0.2	490.31	0.25
19.60	0.1	0.1	30.4	0.2	490.30	0.25
19.70	0.1	0.1	30.3	0.2	490.30	0.25
19.80	0.1	0.1	30.2	0.2	490.30	0.25
19.90	0.1	0.1	30.1	0.2	490.29	0.25
20.00	0.1	0.1	30.0	0.2	490.29	0.25
20.10	0.1	0.1	29.9	0.2	490.28	0.25
20.20	0.1	0.1	29.8	0.2	490.28	0.25
20.30	0.1	0.1	29.7	0.2	490.27	0.24
20.40	0.1	0.1	29.6	0.2	490.27	0.24
20.50	0.1	0.1	29.5	0.2	490.27	0.24
20.60	0.1	0.1	29.4	0.2	490.26	0.24
20.70	0.1	0.1	29.3	0.2	490.26	0.24
20.80	0.1	0.1	29.2	0.2	490.25	0.24
20.90	0.1	0.1	29.1	0.2	490.25	0.24
21.00	0.1	0.1	29.0	0.2	490.25	0.24

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 5 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

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HYDROGRAPH #APR-100  
POND #POND1  
STORM FREQUENCY: 100 YRS.

SUMMARY OF POND ROUTING RESULTS

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PEAK INFLOW	:	5.5 CFS	@	T = 12.30 HRS.
PEAK DISCHARGE	:	0.5 CFS	@	T = 14.10 HRS.
PEAK STORAGE VOLUME	:	0.30 AC.FT.		
PEAK STORAGE ELEVATION	:	490.57		
FREEBOARD	:	1.43 FT.		

---



### Worksheet 3: Time of concentration ( $T_c$ ) or travel time ( $T_t$ )

Project CS 450-ASE SAND CIRCLE AVENUE By ML Date \_\_\_\_\_

Location RIVER ROAD & COLLEGE ROAD 9th, NW Checked \_\_\_\_\_ Date \_\_\_\_\_

Circle one: Present Developed AREA 2585  
 Circle one:  $T_c$   $T_c$  through subarea \_\_\_\_\_

NOTES: Space for as many as two segments per flow type can be used for each worksheet.  
 Include a map, schematic, or description of flow segments.

Sheet flow (Applicable to  $T_c$  only) Segment ID

1. Surface description (table 3-1) .....		AS	EC	
2. Manning's roughness coeff., n (table 3-1) ..		0.24	0.012	
3. Flow length, L (total L < 300 ft) .....	ft	70	10	
4. Two-yr 24-hr rainfall, $P_2$ .....	in	3.8	3.5	
5. Land slope, s .....	ft/ft	0.018	0.006	
6. $T_c = \frac{0.007 \cdot (nL)^{0.8}}{P_2^{0.5} s^{0.4}}$ Compute $T_c$ .....	hr	0.09	+ 0.01	= 0.10

Shallow concentrated flow Segment ID

7. Surface description (paved or unpaved) .....		OB		
8. Flow length, L .....	ft	70		
9. Watercourse slope, s .....	ft/ft	0.06		
10. Average velocity, V (figure 3-1) .....	ft/s	7.05		
11. $T_t = \frac{L}{3600 V}$ Compute $T_t$ .....	hr	0.01	+	= 0.01

Channel flow Segment ID

12. Cross sectional flow area, a .....		NS		
13. Wetted perimeter, $P_w$ .....	ft			
14. Hydraulic radius, $r = \frac{a}{P_w}$ Compute r .....	ft			
15. Channel slope, s .....	ft/ft			
16. Manning's roughness coeff., n .....				
17. $V = \frac{1.49 r^{2/3} s^{1/2}}{n}$ Compute V .....	ft/s	5		
18. Flow length, L .....	ft	275		
19. $T_c = \frac{L}{3600 V}$ Compute $T_c$ .....	hr	0.01	+	= 0.01
20. Watershed or subarea $T_c$ or $T_t$ (add $T_t$ in steps 6, 11, and 19) .....	hr			0.11

USE 12-10-10

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD

DATE : 04-27-07

TOWN OF NEW WINDSOR, NY

SHEET 22 OF

TYPE OF CALCULATION: STORM WATER MANAGEMENT

COMPUTED BY: JJC

COMMENTS: TYPE III DISTRIBUTION

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

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Hydrograph Name: BPR-10

Storm Data

Frequency : 10 Yrs.  
 Rainfall : 5.50 In.  
 Runoff : 3.04 In.

Drainage Area Data

Area: 2.1 Ac. T.C.: 0.10 Hrs.  
 CN : 77 Ia/P: 0.10  
 \*\*\* Hydrograph Status: Valid \*\*\*\*

Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)
11.00	0.3	13.60	0.6	16.20	0.3
11.10	0.3	13.70	0.6	16.30	0.3
11.20	0.4	13.80	0.5	16.40	0.2
11.30	0.4	13.90	0.5	16.50	0.2
11.40	0.4	14.00	0.5	16.60	0.2
11.50	0.5	14.10	0.5	16.70	0.2
11.60	0.6	14.20	0.5	16.80	0.2
11.70	1.0	14.30	0.4	16.90	0.2
11.80	1.4	14.40	0.4	17.00	0.2
11.90	1.7	14.50	0.4	17.10	0.2
12.00	2.4	14.60	0.4	17.20	0.2
12.10	4.3	14.70	0.4	17.30	0.2
12.20	6.7	14.80	0.4	17.40	0.2
12.30	5.4	14.90	0.4	17.50	0.2
12.40	3.5	15.00	0.4	17.60	0.2
12.50	2.7	15.10	0.4	17.70	0.2
12.60	1.9	15.20	0.4	17.80	0.2
12.70	1.3	15.30	0.3	17.90	0.2
12.80	1.0	15.40	0.3	18.00	0.2
12.90	0.9	15.50	0.3	18.10	0.2
13.00	0.8	15.60	0.3	18.20	0.2
13.10	0.8	15.70	0.3	18.30	0.2
13.20	0.7	15.80	0.3	18.40	0.2
13.30	0.7	15.90	0.3	18.50	0.2
13.40	0.6	16.00	0.3	18.60	0.2
13.50	0.6	16.10	0.3	18.70	0.2

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 17 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

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WORKING CURVE  
FOR POND NO. POND2

DT= 0.10 HRS

ELEV (FT)	DISC. (CFS)	STORAGE		O2/2 (CFS)	S2/DT (CFS)	S2/DT+O2/2 (CFS)
		S2 (AC FT)	S2 (CFS-HRS)			
476.50	0.0	0.00	0.0	0.0	0.0	0.0
477.00	0.0	0.03	0.4	0.0	4.0	4.0
478.00	0.0	0.12	1.5	0.0	15.0	15.0
479.00	0.0	0.22	2.7	0.0	27.0	27.0
480.00	0.0	0.33	4.0	0.0	40.0	40.0
481.00	4.8	0.46	5.6	2.4	56.0	58.4

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TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 18 OF

COMMENTS : TYPE III DISTRIBUTION

COMPUTED BY: JJC

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

POND ROUTING

HYDROGRAPH #BPR-10  
POND #POND2  
STORM FREQUENCY: 10 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+02/2 (CFS)	OUTFLOW (CFS)	WATER ELIEV (FT)	STORAGE (AC FT)
11.00	0.3	0.2	0.2	0.0	476.53	0.00
11.10	0.3	0.3	0.5	0.0	476.56	0.00
11.20	0.4	0.4	0.9	0.0	476.61	0.01
11.30	0.4	0.4	1.3	0.0	476.66	0.01
11.40	0.4	0.4	1.7	0.0	476.71	0.01
11.50	0.5	0.5	2.2	0.0	476.78	0.02
11.60	0.6	0.6	2.8	0.0	476.85	0.02
11.70	1.0	0.8	3.6	0.0	476.95	0.03
11.80	1.4	1.2	4.8	0.0	477.07	0.04
11.90	1.7	1.6	6.4	0.0	477.22	0.05
12.00	2.4	2.1	8.5	0.0	477.41	0.07
12.10	4.3	3.4	11.9	0.0	477.72	0.10
12.20	6.7	5.5	17.4	0.0	478.20	0.14
12.30	5.4	6.1	23.5	0.0	478.71	0.19
12.40	3.5	4.5	28.0	0.0	479.08	0.23
12.50	2.7	3.1	31.1	0.0	479.32	0.26
12.60	1.9	2.3	33.4	0.0	479.49	0.28
12.70	1.3	1.6	35.0	0.0	479.62	0.29
12.80	1.0	1.2	36.2	0.0	479.71	0.30
12.90	0.9	1.0	37.2	0.0	479.78	0.31
13.00	0.8	0.9	38.1	0.0	479.85	0.31
13.10	0.8	0.8	38.9	0.0	479.92	0.32
13.20	0.7	0.8	39.7	0.0	479.98	0.33
13.30	0.7	0.7	40.4	0.1	480.02	0.33
13.40	0.6	0.7	41.0	0.3	480.05	0.34
13.50	0.6	0.6	41.3	0.3	480.07	0.34
13.60	0.6	0.6	41.6	0.4	480.09	0.34
13.70	0.6	0.6	41.8	0.5	480.10	0.34
13.80	0.5	0.6	41.9	0.5	480.10	0.34
13.90	0.5	0.5	41.9	0.5	480.10	0.34
14.00	0.5	0.5	41.9	0.5	480.10	0.34
14.10	0.5	0.5	41.9	0.5	480.10	0.34
14.20	0.5	0.5	41.9	0.5	480.10	0.34
14.30	0.4	0.5	41.9	0.5	480.10	0.34
14.40	0.4	0.4	41.8	0.5	480.10	0.34

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

SHEET 19 OF

TYPE OF CALCULATION: STORM WATER MANAGEMENT

COMPUTED BY: JJC

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

POND ROUTING

HYDROGRAPH #BPR-10  
POND #POND2  
STORM FREQUENCY: 10 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+O2/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
14.60	0.4	0.4	41.7	0.4	480.09	0.34
14.70	0.4	0.4	41.7	0.4	480.09	0.34
14.80	0.4	0.4	41.7	0.4	480.09	0.34
14.90	0.4	0.4	41.7	0.4	480.09	0.34
15.00	0.4	0.4	41.7	0.4	480.09	0.34
15.10	0.4	0.4	41.7	0.4	480.09	0.34
15.20	0.4	0.4	41.7	0.4	480.09	0.34
15.30	0.3	0.4	41.7	0.4	480.09	0.34
15.40	0.3	0.3	41.6	0.4	480.09	0.34
15.50	0.3	0.3	41.5	0.4	480.08	0.34
15.60	0.3	0.3	41.4	0.4	480.08	0.34
15.70	0.3	0.3	41.3	0.3	480.07	0.34
15.80	0.3	0.3	41.3	0.3	480.07	0.34
15.90	0.3	0.3	41.3	0.3	480.07	0.34
16.00	0.3	0.3	41.3	0.3	480.07	0.34
16.10	0.3	0.3	41.3	0.3	480.07	0.34
16.20	0.3	0.3	41.3	0.3	480.07	0.34
16.30	0.3	0.3	41.3	0.3	480.07	0.34
16.40	0.2	0.3	41.3	0.3	480.07	0.34
16.50	0.2	0.2	41.2	0.3	480.07	0.34
16.60	0.2	0.2	41.1	0.3	480.06	0.34
16.70	0.2	0.2	41.0	0.3	480.05	0.34
16.80	0.2	0.2	40.9	0.2	480.05	0.34
16.90	0.2	0.2	40.9	0.2	480.05	0.34
17.00	0.2	0.2	40.9	0.2	480.05	0.34
17.10	0.2	0.2	40.9	0.2	480.05	0.34
17.20	0.2	0.2	40.9	0.2	480.05	0.34
17.30	0.2	0.2	40.9	0.2	480.05	0.34
17.40	0.2	0.2	40.9	0.2	480.05	0.34
17.50	0.2	0.2	40.9	0.2	480.05	0.34
17.60	0.2	0.2	40.9	0.2	480.05	0.34
17.70	0.2	0.2	40.9	0.2	480.05	0.34
17.80	0.2	0.2	40.9	0.2	480.05	0.34
17.90	0.2	0.2	40.9	0.2	480.05	0.34
18.00	0.2	0.2	40.9	0.2	480.05	0.34

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

SHEET 20 OF

TYPE OF CALCULATION: STORM WATER MANAGEMENT

COMPUTED BY: JJC

COMMENTS: TYPE III DISTRIBUTION

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

POND ROUTING

HYDROGRAPH #BPR-10  
POND #POND2

STORM FREQUENCY: 10 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+O2/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
18.20	0.2	0.2	40.9	0.2	480.05	0.34
18.30	0.2	0.2	40.9	0.2	480.05	0.34
18.40	0.2	0.2	40.9	0.2	480.05	0.34
18.50	0.2	0.2	40.9	0.2	480.05	0.34
18.60	0.2	0.2	40.9	0.2	480.05	0.34
18.70	0.2	0.2	40.9	0.2	480.05	0.34
18.80	0.1	0.2	40.9	0.2	480.05	0.34
18.90	0.1	0.1	40.8	0.2	480.04	0.34
19.00	0.1	0.1	40.7	0.2	480.04	0.34
19.10	0.1	0.1	40.6	0.2	480.03	0.33
19.20	0.1	0.1	40.5	0.1	480.03	0.33
19.30	0.1	0.1	40.5	0.1	480.03	0.33
19.40	0.1	0.1	40.5	0.1	480.03	0.33
19.50	0.1	0.1	40.5	0.1	480.03	0.33
19.60	0.1	0.1	40.5	0.1	480.03	0.33
19.70	0.1	0.1	40.5	0.1	480.03	0.33
19.80	0.1	0.1	40.5	0.1	480.03	0.33
19.90	0.1	0.1	40.5	0.1	480.03	0.33
20.00	0.1	0.1	40.5	0.1	480.03	0.33
20.10	0.1	0.1	40.5	0.1	480.03	0.33
20.20	0.1	0.1	40.5	0.1	480.03	0.33
20.30	0.1	0.1	40.5	0.1	480.03	0.33
20.40	0.1	0.1	40.5	0.1	480.03	0.33
20.50	0.1	0.1	40.5	0.1	480.03	0.33
20.60	0.1	0.1	40.5	0.1	480.03	0.33
20.70	0.1	0.1	40.5	0.1	480.03	0.33
20.80	0.1	0.1	40.5	0.1	480.03	0.33
20.90	0.1	0.1	40.5	0.1	480.03	0.33
21.00	0.1	0.1	40.5	0.1	480.03	0.33

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 21 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

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HYDROGRAPH #BPR-10  
POND #POND2  
STORM FREQUENCY: 10 YRS.

SUMMARY OF POND ROUTING RESULTS

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PEAK INFLOW	:	6.7 CFS @ T = 12.20 HRS.
PEAK DISCHARGE	:	0.5 CFS @ T = 13.70 HRS.
PEAK STORAGE VOLUME	:	0.34 AC.FT.
PEAK STORAGE ELEVATION	:	480.10
FREEBOARD	:	0.90 FT.

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TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 04-27-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 8 OF

COMMENTS: TYPE III DISTRIBUTION

COMPUTED BY: JJC

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

Hydrograph Name : BPR-100

Storm Data

Frequency : 100 Yrs.  
Rainfall : 8.00 In.  
Runoff : 5.27 In.

Drainage Area Data

Area: 2.1 Ac. T.C.: 0.10 Hrs.  
CN : 77 Ia/P: 0.10  
\*\*\* Hydrograph Status: Valid \*\*\*

Time (Hrs)	Flow (CFS)						
11.00	0.5	13.60	1.0	16.20	0.4	18.80	0.2
11.10	0.6	13.70	1.0	16.30	0.4	18.90	0.2
11.20	0.6	13.80	1.0	16.40	0.4	19.00	0.2
11.30	0.7	13.90	0.9	16.50	0.4	19.10	0.2
11.40	0.8	14.00	0.9	16.60	0.4	19.20	0.2
11.50	0.9	14.10	0.8	16.70	0.4	19.30	0.2
11.60	1.0	14.20	0.8	16.80	0.4	19.40	0.2
11.70	1.7	14.30	0.8	16.90	0.4	19.50	0.2
11.80	2.4	14.40	0.8	17.00	0.4	19.60	0.2
11.90	3.0	14.50	0.7	17.10	0.4	19.70	0.2
12.00	4.2	14.60	0.7	17.20	0.4	19.80	0.2
12.10	7.5	14.70	0.7	17.30	0.4	19.90	0.2
12.20	11.7	14.80	0.7	17.40	0.3	20.00	0.2
12.30	9.4	14.90	0.7	17.50	0.3	20.10	0.2
12.40	6.1	15.00	0.7	17.60	0.3	20.20	0.2
12.50	4.7	15.10	0.6	17.70	0.3	20.30	0.2
12.60	3.4	15.20	0.6	17.80	0.3	20.40	0.2
12.70	2.3	15.30	0.6	17.90	0.3	20.50	0.2
12.80	1.8	15.40	0.6	18.00	0.3	20.60	0.2
12.90	1.6	15.50	0.6	18.10	0.3	20.70	0.2
13.00	1.5	15.60	0.5	18.20	0.3	20.80	0.2
13.10	1.3	15.70	0.5	18.30	0.3	20.90	0.2
13.20	1.2	15.80	0.5	18.40	0.3	21.00	0.2
13.30	1.1	15.90	0.5	18.50	0.3		
13.40	1.1	16.00	0.5	18.60	0.3		
13.50	1.1	16.10	0.5	18.70	0.3		

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 6 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

WORKING CURVE  
FOR POND NO.POND2

DT= 0.10 HRS

ELEV (FT)	DISC. (CFS)	STORAGE		O2/2 (CFS)	S2/DT (CFS)	S2/DT+O2/2 (CFS)
		S2 (AC FT)	S2 (CFS-HRS)			
476.50	0.0	0.00	0.0	0.0	0.0	0.0
477.00	0.0	0.03	0.4	0.0	4.0	4.0
478.00	0.0	0.12	1.5	0.0	15.0	15.0
479.00	0.0	0.22	2.7	0.0	27.0	27.0
480.00	0.0	0.33	4.0	0.0	40.0	40.0
481.00	4.8	0.46	5.6	2.4	56.0	58.4

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 7 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

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POND ROUTING

HYDROGRAPH #BPR-100  
POND #POND2  
STORM FREQUENCY: 100 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+O2/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
11.00	0.5	0.3	0.3	0.0	476.54	0.00
11.10	0.6	0.6	0.9	0.0	476.61	0.01
11.20	0.6	0.6	1.5	0.0	476.69	0.01
11.30	0.7	0.7	2.2	0.0	476.78	0.02
11.40	0.8	0.8	3.0	0.0	476.88	0.02
11.50	0.9	0.9	3.9	0.0	476.99	0.03
11.60	1.0	1.0	4.9	0.0	477.08	0.04
11.70	1.7	1.4	6.3	0.0	477.21	0.05
11.80	2.4	2.1	8.4	0.0	477.40	0.07
11.90	3.0	2.7	11.1	0.0	477.65	0.09
12.00	4.2	3.6	14.7	0.0	477.97	0.12
12.10	7.5	5.9	20.6	0.0	478.47	0.17
12.20	11.7	9.6	30.2	0.0	479.25	0.25
12.30	9.4	10.5	40.7	0.2	480.04	0.34
12.40	6.1	7.8	48.3	2.2	480.45	0.39
12.50	4.7	5.4	51.5	3.0	480.63	0.41
12.60	3.4	4.1	52.6	3.3	480.68	0.42
12.70	2.3	2.9	52.2	3.2	480.66	0.42
12.80	1.8	2.1	51.1	2.9	480.60	0.41
12.90	1.6	1.7	49.9	2.6	480.54	0.40
13.00	1.5	1.6	48.9	2.3	480.48	0.39
13.10	1.3	1.4	48.0	2.1	480.43	0.39
13.20	1.2	1.3	47.2	1.9	480.39	0.38
13.30	1.1	1.2	46.5	1.7	480.35	0.38
13.40	1.1	1.1	45.9	1.5	480.32	0.37
13.50	1.1	1.1	45.5	1.4	480.30	0.37
13.60	1.0	1.1	45.2	1.4	480.28	0.37
13.70	1.0	1.0	44.8	1.3	480.26	0.36
13.80	1.0	1.0	44.5	1.2	480.24	0.36
13.90	0.9	1.0	44.3	1.1	480.23	0.36
14.00	0.9	0.9	44.1	1.1	480.22	0.36
14.10	0.8	0.9	43.9	1.0	480.21	0.36
14.20	0.8	0.8	43.7	1.0	480.20	0.36
14.30	0.8	0.8	43.5	0.9	480.19	0.36
14.40	0.8	0.8	43.4	0.9	480.18	0.35

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 8 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

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POND ROUTING

HYDROGRAPH #BPR-100  
POND #POND2  
STORM FREQUENCY: 100 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DT+O2/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
14.60	0.7	0.7	43.1	0.8	480.17	0.35
14.70	0.7	0.7	43.0	0.8	480.16	0.35
14.80	0.7	0.7	42.9	0.8	480.16	0.35
14.90	0.7	0.7	42.8	0.7	480.15	0.35
15.00	0.7	0.7	42.8	0.7	480.15	0.35
15.10	0.6	0.7	42.8	0.7	480.15	0.35
15.20	0.6	0.6	42.7	0.7	480.15	0.35
15.30	0.6	0.6	42.6	0.7	480.14	0.35
15.40	0.6	0.6	42.5	0.7	480.14	0.35
15.50	0.6	0.6	42.4	0.6	480.13	0.35
15.60	0.5	0.6	42.4	0.6	480.13	0.35
15.70	0.5	0.5	42.3	0.6	480.13	0.35
15.80	0.5	0.5	42.2	0.6	480.12	0.35
15.90	0.5	0.5	42.1	0.5	480.11	0.35
16.00	0.5	0.5	42.1	0.5	480.11	0.35
16.10	0.5	0.5	42.1	0.5	480.11	0.35
16.20	0.4	0.5	42.1	0.5	480.11	0.35
16.30	0.4	0.4	42.0	0.5	480.11	0.35
16.40	0.4	0.4	41.9	0.5	480.10	0.34
16.50	0.4	0.4	41.8	0.5	480.10	0.34
16.60	0.4	0.4	41.7	0.4	480.09	0.34
16.70	0.4	0.4	41.7	0.4	480.09	0.34
16.80	0.4	0.4	41.7	0.4	480.09	0.34
16.90	0.4	0.4	41.7	0.4	480.09	0.34
17.00	0.4	0.4	41.7	0.4	480.09	0.34
17.10	0.4	0.4	41.7	0.4	480.09	0.34
17.20	0.4	0.4	41.7	0.4	480.09	0.34
17.30	0.4	0.4	41.7	0.4	480.09	0.34
17.40	0.3	0.4	41.7	0.4	480.09	0.34
17.50	0.3	0.3	41.6	0.4	480.09	0.34
17.60	0.3	0.3	41.5	0.4	480.08	0.34
17.70	0.3	0.3	41.4	0.4	480.08	0.34
17.80	0.3	0.3	41.3	0.3	480.07	0.34
17.90	0.3	0.3	41.3	0.3	480.07	0.34
18.00	0.3	0.3	41.3	0.3	480.07	0.34

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO. : 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE : 05-03-07

SHEET 9 OF

TYPE OF CALCULATION: STORM WATER MANAGEMENT

COMPUTED BY: JJC

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

POND ROUTING

HYDROGRAPH #BPR-100  
POND #POND2  
STORM FREQUENCY: 100 YRS.

TIME (HRS)	INFLOW (CFS)	AVG INFLOW (CFS)	S2/DI+O2/2 (CFS)	OUTFLOW (CFS)	WATER ELEV (FT)	STORAGE (AC FT)
18.20	0.3	0.3	41.3	0.3	480.07	0.34
18.30	0.3	0.3	41.3	0.3	480.07	0.34
18.40	0.3	0.3	41.3	0.3	480.07	0.34
18.50	0.3	0.3	41.3	0.3	480.07	0.34
18.60	0.3	0.3	41.3	0.3	480.07	0.34
18.70	0.3	0.3	41.3	0.3	480.07	0.34
18.80	0.2	0.3	41.3	0.3	480.07	0.34
18.90	0.2	0.2	41.2	0.3	480.07	0.34
19.00	0.2	0.2	41.1	0.3	480.06	0.34
19.10	0.2	0.2	41.0	0.3	480.05	0.34
19.20	0.2	0.2	40.9	0.2	480.05	0.34
19.30	0.2	0.2	40.9	0.2	480.05	0.34
19.40	0.2	0.2	40.9	0.2	480.05	0.34
19.50	0.2	0.2	40.9	0.2	480.05	0.34
19.60	0.2	0.2	40.9	0.2	480.05	0.34
19.70	0.2	0.2	40.9	0.2	480.05	0.34
19.80	0.2	0.2	40.9	0.2	480.05	0.34
19.90	0.2	0.2	40.9	0.2	480.05	0.34
20.00	0.2	0.2	40.9	0.2	480.05	0.34
20.10	0.2	0.2	40.9	0.2	480.05	0.34
20.20	0.2	0.2	40.9	0.2	480.05	0.34
20.30	0.2	0.2	40.9	0.2	480.05	0.34
20.40	0.2	0.2	40.9	0.2	480.05	0.34
20.50	0.2	0.2	40.9	0.2	480.05	0.34
20.60	0.2	0.2	40.9	0.2	480.05	0.34
20.70	0.2	0.2	40.9	0.2	480.05	0.34
20.80	0.2	0.2	40.9	0.2	480.05	0.34
20.90	0.2	0.2	40.9	0.2	480.05	0.34
21.00	0.2	0.2	40.9	0.2	480.05	0.34

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 10 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

=====

HYDROGRAPH #BPR-100  
POND #POND2  
STORM FREQUENCY: 100 YRS.

SUMMARY OF POND ROUTING RESULTS

-----

PEAK INFLOW	:	11.7 CFS	@	T =	12.20 HRS.
PEAK DISCHARGE	:	3.3 CFS	@	T =	12.60 HRS.
PEAK STORAGE VOLUME	:	0.42 AC.FT.			
PEAK STORAGE ELEVATION	:	480.68			
FREEBOARD	:	0.32 FT.			

-----

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD

DATE : 05-03-07

TOWN OF NEW WINDSOR, NY

SHEET 22 OF

TYPE OF CALCULATION: STORM WATER MANAGEMENT

COMPUTED BY: JJC

COMMENTS: TYPE III DISTRIBUTION

SOIL CONSERVATION SERVICE METHOD

CHECKED BY : CTB

Hydrograph Name: TR-10

Storm Data

Frequency : 10 Yrs.  
 Rainfall : 5.50 In.  
 Runoff : 0.00 In.

Drainage Area Data

Area: 3.3 Ac. T.C.: 0.00 Hrs.  
 CN : 0 Ia/P: 0.00  
 \*\*\*\* Hydrograph Status: Valid \*\*\*\*

Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)	Time (Hrs)	Flow (CFS)
11.00	0.0	13.60	0.4	16.20	0.5
11.10	0.0	13.70	0.5	16.30	0.5
11.20	0.0	13.80	0.6	16.40	0.5
11.30	0.0	13.90	0.6	16.50	0.4
11.40	0.0	14.00	0.6	16.60	0.4
11.50	0.0	14.10	0.6	16.70	0.4
11.60	0.0	14.20	0.6	16.80	0.3
11.70	0.0	14.30	0.6	16.90	0.3
11.80	0.0	14.40	0.6	17.00	0.3
11.90	0.0	14.50	0.5	17.10	0.3
12.00	0.0	14.60	0.5	17.20	0.3
12.10	0.0	14.70	0.5	17.30	0.3
12.20	0.0	14.80	0.5	17.40	0.3
12.30	0.0	14.90	0.5	17.50	0.3
12.40	0.0	15.00	0.5	17.60	0.3
12.50	0.0	15.10	0.5	17.70	0.3
12.60	0.0	15.20	0.5	17.80	0.3
12.70	0.0	15.30	0.5	17.90	0.3
12.80	0.0	15.40	0.5	18.00	0.3
12.90	0.0	15.50	0.5	18.10	0.3
13.00	0.0	15.60	0.5	18.20	0.3
13.10	0.0	15.70	0.4	18.30	0.3
13.20	0.0	15.80	0.4	18.40	0.3
13.30	0.1	15.90	0.4	18.50	0.3
13.40	0.3	16.00	0.5	18.60	0.3
13.50	0.3	16.10	0.5	18.70	0.3
				18.80	0.3
				18.90	0.3
				19.00	0.3
				19.10	0.3
				19.20	0.2
				19.30	0.2
				19.40	0.2
				19.50	0.2
				19.60	0.2
				19.70	0.2
				19.80	0.2
				19.90	0.2
				20.00	0.2
				20.10	0.2
				20.20	0.2
				20.30	0.2
				20.40	0.2
				20.50	0.2
				20.60	0.2
				20.70	0.2
				20.80	0.2
				20.90	0.2
				21.00	0.2

TACONIC DESIGN

PROJECT : SAND CASTLE HOMES

JOB NO.: 05450

LOCATION: RIVER ROAD  
TOWN OF NEW WINDSOR, NY

DATE :05-03-07

TYPE OF CALCULATION: STORM WATER MANAGEMENT

SHEET 11 OF

COMMENTS: TYPE III DISTRIBUTION  
SOIL CONSERVATION SERVICE METHOD

COMPUTED BY: JJC

CHECKED BY : CTB

Hydrograph Name: TR-100

Storm Data

Drainage Area Data

Frequency : 100 Yrs.  
Rainfall : 8.00 In.  
Runoff : 0.00 In.

Area: 3.3 Ac. T.C.: 0.00 Hrs.  
CN : 0 Ia/P: 0.00  
\*\*\*\* Hydrograph Status: Valid \*\*\*\*

Time (Hrs)	Flow (CFS)						
11.00	0.0	13.60	1.8	16.20	0.9	18.80	0.6
11.10	0.0	13.70	1.7	16.30	0.9	18.90	0.6
11.20	0.0	13.80	1.6	16.40	0.9	19.00	0.6
11.30	0.0	13.90	1.5	16.50	0.9	19.10	0.6
11.40	0.0	14.00	1.5	16.60	0.8	19.20	0.5
11.50	0.0	14.10	1.5	16.70	0.8	19.30	0.5
11.60	0.0	14.20	1.5	16.80	0.8	19.40	0.5
11.70	0.0	14.30	1.4	16.90	0.8	19.50	0.4
11.80	0.0	14.40	1.3	17.00	0.8	19.60	0.4
11.90	0.0	14.50	1.3	17.10	0.8	19.70	0.4
12.00	0.0	14.60	1.2	17.20	0.8	19.80	0.4
12.10	0.0	14.70	1.2	17.30	0.8	19.90	0.4
12.20	0.0	14.80	1.2	17.40	0.7	20.00	0.4
12.30	0.2	14.90	1.1	17.50	0.7	20.10	0.4
12.40	2.2	15.00	1.1	17.60	0.7	20.20	0.4
12.50	3.1	15.10	1.1	17.70	0.7	20.30	0.4
12.60	3.5	15.20	1.1	17.80	0.6	20.40	0.4
12.70	3.5	15.30	1.1	17.90	0.6	20.50	0.4
12.80	3.2	15.40	1.1	18.00	0.6	20.60	0.4
12.90	2.9	15.50	1.0	18.10	0.6	20.70	0.4
13.00	2.7	15.60	1.0	18.20	0.6	20.80	0.4
13.10	2.5	15.70	1.0	18.30	0.6	20.90	0.4
13.20	2.3	15.80	1.0	18.40	0.6	21.00	0.4
13.30	2.1	15.90	0.9	18.50	0.6		
13.40	1.9	16.00	0.9	18.60	0.6		
13.50	1.8	16.10	0.9	18.70	0.6		

## **POND VOLUME CALCULATIONS**

# Taconic Design CONSULTANTS

SITE PLANNING/SUB DIVISIONS  
RESIDENTIAL/COMMERCIAL DESIGN/SURVEYING  
PERMIT PREPARATION/HEALTH DEPT. APPROVAL  
STRUCTURAL ENGINEERING/SEPTIC DESIGN/CADD SERVICES

JOB: 05450-ABC "SAND CASTLE HOMES"  
SHEET NO. DRY SAMPLE VOL. 1 OF 2  
CALCULATED BY: [Signature] DATE: 5/2/07  
CHECKED BY: [Signature] DATE: \_\_\_\_\_  
SCALE: \_\_\_\_\_

ELEV	AREA	NO. TREES	MT.	VOL.	COM. VOL.	DISTANCE
	(FT <sup>2</sup> )	(FT <sup>2</sup> )	(FT)	(AC FT)	(AC FT)	(FT)
475	300	1,650	1	0.04	0.00	0.00
477	2,000	3,100	1	0.07	0.04	0.00
487	3,100	3,100	1	0.08	0.11	0.00
490	4,000	4,000	1	0.10	0.19	0.00
492	4,500	4,500	1	0.12	0.25	0.00
495	5,000	5,000	1	0.14	0.39	0.00
<p>NO. TREES: 11 TREES COM. VOL. AREA: 0.87 AC FT</p> <p>SET 12" DISTANCE: 0.79 AC FT TOTAL DISTANCE = 0.87 AC FT</p>						

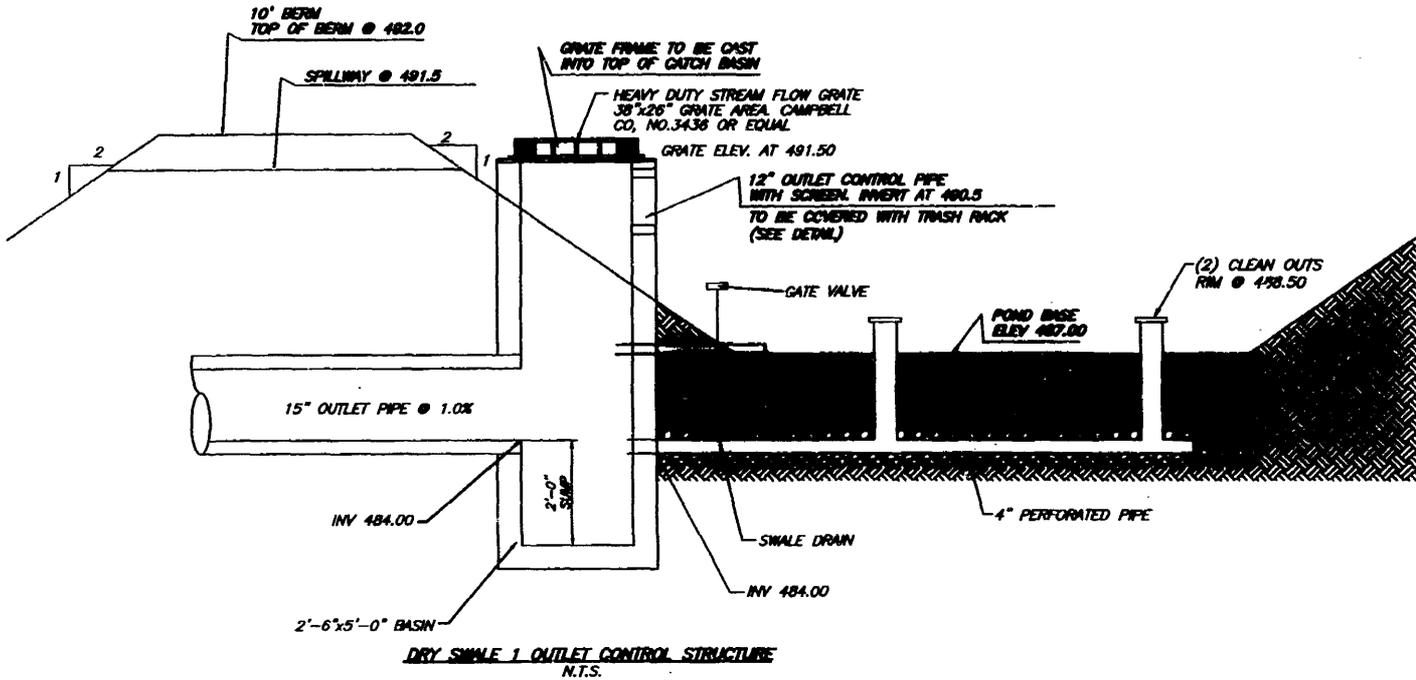
**Taconic Design**  
**CONSULTANTS**  
 SITE PLANNING/SUB DIVISIONS  
 RESIDENTIAL/COMMERCIAL DESIGN/SURVEYING  
 PERMIT PREPARATION/HEALTH DEPT. APPROVAL  
 STRUCTURAL ENGINEERING/SEPTIC DESIGN/CADD SERVICES

JOB: 05450-152 - 2000 CASTLE HOMES  
 SHEET NO. DR/SAMPLE VOL. 2 OF 2  
 CALCULATED BY: JAC  
 DATE: 5/3/07  
 CHECKED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 SCALE: \_\_\_\_\_

LINE	AREA (FT <sup>2</sup> )	MEASUREMENT (L.P.)	HT (FT)	VOL (CU YD)	CUT/BLD (CU YD)	OUTSIDE (CFS)
476.00	100	2500	0.8	0.08	0.00	0.00
477.00	3700	4,000	1.0	0.09	0.00	0.00
478.00	4700	4,500	1.0	0.10	0.00	0.00
479.00	4800	5,000	1.0	0.11	0.00	0.00
480.00	1200	5,200	1.0	0.12	0.00	0.00
481.00	1300				0.16	7.80

NOTE: ON AREA FEET  
 CIV = 1.0 / 27 CU YD  
 SET (D) 14" DIA @ 450.00  
 TOTAL VOLUME = 0.31 ACRES FEET

**OUTLET CONTROL STRUCTURE DETAIL**



**TACONIC DESIGN ENGINEERING, PLLC**  
 SUITE 201, 3125 ROUTE 9W  
 NEW WINDSOR, NY 12553  
 845-569-8400  
 845-569-4583 (fax)

ENGINEER

**CHARLES T. BROWN P.E.**  
**WILLIAM J. MOREAU, P.E.**  
 PO BOX 4470  
 NEW WINDSOR, NY 12553  
 (845)-561-2582

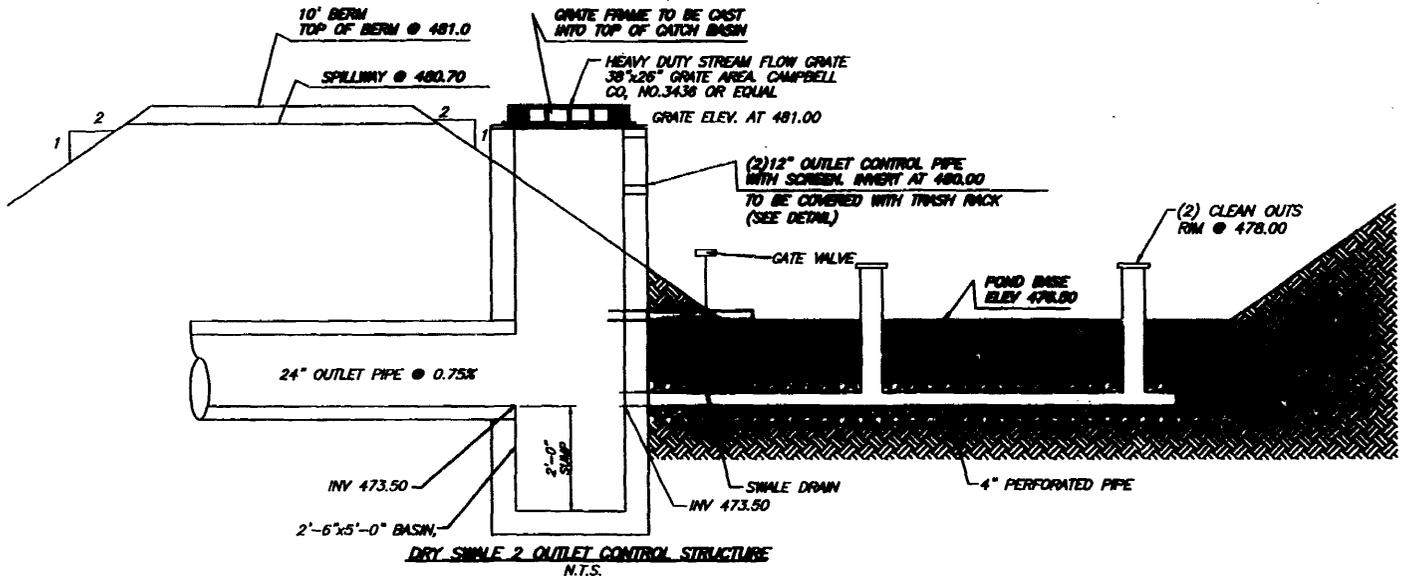
POUD "1" OUTLET CONTROL FOR:  
**SAND CASTLE HOMES**  
 S/B/L: 9-1-101  
 RIVER ROAD  
 TOWN OF NEW WINDSOR, ORANGE COUNTY, NY

DATE  
06/09/06

SCALE  
N.T.S.

JOB NUMBER  
05450 - AJC

SHEET NUMBER  
1 OF 1



**TACONIC DESIGN ENGINEERING, PLLC**  
**SUITE 201, 3125 ROUTE 9W**  
**NEW WINDSOR, NY 12553**  
 845-569-8400  
 845-569-4583 (fax)

**ENGINEER**

**CHARLES T. BROWN P.E.**  
**WILLIAM J. MOREAU, P.E.**  
 PO BOX 4470  
 NEW WINDSOR, NY 12553  
 (845)-561-2582

**POND "2" OUTLET CONTROL FOR:**  
**SAND CASTLE HOMES**  
 S/B/L: 9-1-101  
 RIVER ROAD  
 TOWN OF NEW WINDSOR, ORANGE COUNTY, NY

DATE 06/09/06	SCALE N.T.S.	JOB NUMBER 05450 - AJC	SHEET NUMBER 1 OF 1
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**PIPE CALCULATIONS**

# Taconic Design CONSULTANTS

1 GARDNERTOWN ROAD  
NEWBURGH, NY 12550

(845) 569-8400  
FAX (845) 569-4583

PROJECT SPRING CREEK ROAD  
LOCATION SPRING ROAD  
STORM FREQUENCY 50 YR

RAINFALL CURVE NEW YORK COUNTY  
REMARKS A-LINE

JOB NO. 25780-100  
DATE 10/13/10  
SHEET 1 OF 7  
COMPUTED BY JR  
CHECKED BY JR

LOCATION		ACRES		"C"	CA	ECA	TIME CONC.-MIN.			"i"	"Q"		PIPE				INV. UPPER	INV. LOWER	TOP ELEV. UPPER
FROM	TO	SUB.	TOTAL				INLET	PIPE	TOTAL		DES. CAP.	"n"	SIZE	VEL.	SLOPE	LGTH.			
CR1-5	CR1-4	0.02	0.02	1.50	0.02	0.02			1.50	1.50	0.011	15"	3.50	30'	1.05	500.25	499.20	503.00	
CR1-4	CR1-3	0.02	0.02	1.50	0.02	0.02			1.50	1.50	0.011	15"	3.00	75'	1.50	499.20	497.70	502.00	
CR1-3	CR1-2	0.02	0.02	1.50	0.02	0.02			1.50	1.50	0.011	15"	4.00	50'	2.00	497.70	495.70	502.00	
CR1-2	CR1-1	0.02	0.02	1.50	0.02	0.02			1.50	1.50	0.011	15"	5.00	40'	2.00	495.70	489.00	502.00	
YD1-4	CR1-1								1.50		8"		3.00	10'	0.30	500.00	499.20	502.00	
YD1-3	CR1-1								1.50		8"		3.00	10'	0.30	499.00	498.50	501.00	



# Taconic Design CONSULTANTS

1 GARDNERTOWN ROAD  
NEWBURGH, NY 12550

(845) 569-8400  
FAX (845) 569-4583

PROJECT DRIVE CENTER DRIVE

RAINFALL CURVE 0.40" 100%

LOCATION DRIVE DRIVE

REMARKS SEE PLAN

STORM FREQUENCY 2.0" 10"

JOB NO. 03/150/AVC  
DATE 12/13/00  
SHEET 2 OF 4  
COMPUTED BY T.M.  
CHECKED BY \_\_\_\_\_

LOCATION		ACRES		"C"	CA	ECA	TIME CONC.-MIN.			"i"	"Q"		PIPE					INV. UPPER	INV. LOWER	TOP ELEV. UPPER
FROM	TO	SUB.	TOTAL				INLET	PIPE	TOTAL		DES.	CAP.	"n"	SIZE	VEL.	SLOPE	LGTH.			
0806	0807										0.01	0.01	15"	6.50	110	1.15	478.25	478.10	478.00	
0807	0808	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.01	0.01	15"	4.00	55	2.2	478.10	478.00	478.00		
0808	0809	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.01	0.01	15"	5.00	35	1.70	478.00	478.25	478.50		
0809	0810	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.01	0.01	15"	2.75	80	3.00	478.25	478.25	478.00		
0810	0811	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.01	0.01	15"	2.00	40	0.8	478.25	478.25	478.25		
0811	0812	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.01	0.01	15"	0.5	150	3.75	478.75	478.00	478.50		
0812	0813	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.01	0.01	15"	2.00	10	0.00	478.05	478.05	478.00		
0813	0814	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.01	0.01	15"	1.00	90	0.90	478.05	478.15	478.25		
0814	0815	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.01	0.01	15"	1.00	85	0.85	478.00	478.65	479.25		



**POND CONSTRUCTION SPECIFICATIONS**

## POND CONSTRUCTION STANDARDS SPECIFICATIONS

### General

All references to ASTM and AASHTO specifications apply to the most recent version.

### **Site Preparation**

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the toe of the embankment.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry storm water management ponds, a minimum of a 25-foot radius around the outlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

### **Earth Fill**

**Material** - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, and stones greater than 6., frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30% passing the #200 sieve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer. Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

**Placement** - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8-inch thick (before compaction) layers, which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

**Compaction** - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out. When required by the reviewing agency the minimum required density shall not be less than 95% of maximum dry density with a moisture content within 2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

**Cut Off Trench** - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

**Embankment Core** - The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10-year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

#### **Structure Backfill**

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed eight inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 18 inches or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

#### **Pipe Conduits**

All pipes shall be circular in cross section, unless otherwise noted.

**Plastic Pipe** - The following criteria shall apply for plastic pipe:

1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241. Corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4" through 10" pipe shall meet the requirements of AASHTO M252 Type S, and 12" through 24" pipe shall meet the requirements of AASHTO M294 Type S.
2. Joints and connections to anti-seep collars shall be completely watertight.

3. Bedding -The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
4. Backfilling shall conform to **Structure Backfill** requirements.
5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

#### **Rock Riprap**

Rock riprap shall meet the requirements of the New York State Department of Transportation. Geotextile shall be placed under all riprap and shall meet the requirements of the New York State Department of Transportation.

#### **Care of Water During Construction**

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation.

#### **Stabilization**

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with local Natural Resources Conservation Service Standards and Specifications.

#### **Erosion and Sediment Control**

Constructions operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. Federal, State and local laws concerning pollution abatement will be followed. Project plans detail erosion and sediment control measures, which shall be strictly adhered to.

### **Operation and Maintenance**

An operation and maintenance plan in accordance with Local or State Regulations will be prepared for all ponds. As a minimum, a dam inspection checklist shall be included as part of the operation and maintenance plan and performed at least annually. Written records of maintenance and major repairs need to be retained in a file.

### **Supplemental Storm Water Pond Specifications**

1) A 4-inch layer of topsoil shall be placed on all disturbed areas of the dam embankment. Seeding, liming, fertilizing, mulching, etc. shall be in accordance with NRCS Soil Standards and Specifications or New York State Standards and Specifications for Soil Erosion and Sediment Control. The purpose of the topsoil is to establish a good growth of grass, which is not always possible with some of the materials that may be placed for the embankment fill.

2) Filter fabric placed beneath the riprap shall meet state or local department of transportation requirements for a Class .C. filter fabric. Some acceptable filter fabrics that meet the Class .C. criteria include:

Mirafi 180-N

Amoco 4552

Webtec N07

Geolon N70

Carthage FX-70S

3) Fill placement shall not exceed a maximum of 8-inch lift thickness. Each lift shall be continuous for the entire length of the embankment.

4) The embankment fill shall not be placed higher than the centerline of the principle spillway until after the principle spillway has been installed.

5) The side slopes of a cut to repair a dam, install a principle spillway for an excavated pond, or other repair work, shall be stepped and on an average slope of 2:1 or flatter.

**Owners Responsibility:**

This SWPPP and associated plans shall be kept on site at all times during construction and a copy shall be provided to all contractors and sub-contractors. It is the owner's responsibility to comply with conditions of this plan.

**Owners Certification:**

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge storm water. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for storm water discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

# **USB UNION STATE BANK**

Do business with us, do better with us.

Irrevocable Standby Letter of Credit No. 2231

Date: November 14, 2007

Beneficiary: Town of New Windsor  
555 Union Avenue  
New Windsor, N.Y. 12553

Accreditor: Nicholas J. Cardaropoli, Sr.  
Nicholas J. Cardaropoli, Jr.

Amount: \$93,900.00

Expiration: November 14, 2008

Dear Sir or Madam:

We hereby issue our Irrevocable Standby Letter of Credit No. 2231 in your favor for the account of Nicholas J. Cardaropoli, Sr. and Nicholas J. Cardaropoli, Jr. for an aggregate amount not to exceed ninety three thousand nine hundred and 00/100 (\$93,900.00) dollars available by your drafts at sight drawn on Union State Bank and accompanied by:

1. Your written statement signed by an authorized representative of The Town of New Windsor stating:

Nicholas J. Cardaropoli, Sr. and Nicholas J. Cardaropoli, Jr. have not completed the water main extension for the project known as Sandcastle River Road in the Town of New Windsor as outlined in Planning Board No. 05-24 dated September 4, 2007.

It is a condition of this letter of credit that it shall be deemed automatically extended without amendment for at least 12 months from the present or any future expiration date hereof, unless thirty (30) days prior to any such expiration date we shall notify the (Contractor/Accreditor) Nicholas J. Cardaropoli, Sr. and Nicholas J. Cardaropoli, Jr. and The Town of New Windsor (Beneficiary) by registered mail that we elect not to consider this Letter of Credit renewed for any such additional period.

Upon receipt by you of such notice, you may draw the full amount of the credit hereunder, by presentation of your sight draft, with the documentation mentioned herein.

---

#### Corporate Headquarters

##### USB Financial Center

100 Dutch Hill Road, Orangeburg, NY 10962

845-365-4600

[www.unionstate.com](http://www.unionstate.com)

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Irrevocable Letter of Credit No. 2231  
Page 2 of 2

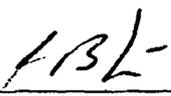
November 14, 2007

Drafts must be negotiated not later than the expiration date shown above, as may be extended, and must state "Drawn under Union State Bank Irrevocable Standby Letter of Credit No. 2231."

This Letter of Credit is subject to the "Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication No. 500."

We hereby agree with you that drafts drawn under and in compliance with the terms and conditions of this credit shall be duly honored upon due presentation.

Very truly yours,

  
\_\_\_\_\_  
Gregory B. Monteith  
Vice President

  
\_\_\_\_\_  
Francis X. Sansone  
Executive Vice President

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 11/16/2007

PAGE: 1

LISTING OF PLANNING BOARD FEES  
PERFORMANCE BND

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
11/15/2007	LETTER OF CREDIT	PAID		93900.00	
11/15/2007	BOND REQUIRED	CHG	93900.00		
		TOTAL:	93900.00	93900.00	0.00

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 11/16/2007

PAGE: 1

LISTING OF PLANNING BOARD **FEES**  
**APPROVAL**

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
11/14/2007	APPROVAL FEE	CHG	125.00		
11/15/2007	REC. CK. #814	PAID		125.00	
		TOTAL:	125.00	125.00	0.00

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 11/16/2007

PAGE: 1

LISTING OF PLANNING BOARD ACTIONS

STAGE: STATUS [Open, Withd]  
A [Disap, Appr]

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

--DATE--	MEETING-PURPOSE-----	ACTION-TAKEN-----
08/08/2007	P.B. APPEARANCE	APPROVED
10/25/2006	P.B. APPEARANCE - PUB HEAR	LA: CL PH - RETURN . NEED TO WORK OUT ENTRANCES WITH D.O.T. ADD MORE LANDSCAPING . - DUMPSTER SHOULD BE SAME MATERIAL AS BUILDING - ADDRESS . MARK'S COMMENTS OF 10/25/06 - NEED SKETCHES OF BUILDINGS - . AD SOME WALKWAYS BETWEEN BUILDINGS
07/27/2005	P.B. APPEARANCE	AUTH LA LETR . AUTHORIZED LEAD AGENCY COORD. LETTER - SCHED PUBLIC HEARING . AFTER PLANS CORRECTED - SEND TO OC PLANNING AND DOT - . ADDRESS MARK'S COMMENTS - ADDRESS DRAINAGE



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4689

## OFFICE OF THE PLANNING BOARD

November 14, 2007

Sandcastle Homes  
P.O. Box 487  
Cornwall-on-Hudson, NY 12520

ATTN: NICK CARDOROPOLI, JR.

SUBJECT: Fees Due - Planning Board #05-23 Subdivision & 05-24 Site Plan

Dear Nick:

Please find attached printouts of fees due for subject project.

Please submit in separate checks, payable to the Town of New Windsor, as follows:

**P.B. #05-23 (Subdivision)**

Check #1 - Approval Fee.....	\$	365.00
Check #2 - Amount over Escrow posted.....	\$	3,595.70

**P.B. #05-24 (Site Plan)**

Check #1 - Approval Fee.....	\$	125.00
Check #2 - Amount over Escrow posted.....	\$	2,591.30
Check #3 - 2% of Cost Est. \$396,737.90 inspect fee.....	\$	7,934.76
Check #4 - 4% of Cost Est \$93,900.00 inspect fee.....	\$	3,756.00

Upon receipt of these checks and posting of the Public Improvement Bond, I will have the plans stamped and signed approved.

At the time a Certificate of Occupancy is requested, the Private Improvement Bond will be required either in full or in an amount equal to unfinished site work.

If you have any questions in this regard, please contact my office.

Very truly yours,

  
Myra L. Mason, Secretary To The  
NEW WINDSOR PLANNING BOARD

MLM

**FAXED**  
*11/14/07 Nick Jr.*

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 11/14/2007

PAGE: 1

LISTING OF PLANNING BOARD FEES  
APPROVAL

FOR PROJECT NUMBER: 5-23

NAME: SANDCASTLE HOMES - RIVER ROAD - SUBDIVISION

APPLICANT: SANDCASTLE HOMES (CARDOROPOLI)

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
11/14/2007	APPROVAL FEE	CHG	365.00		
		TOTAL:	365.00	0.00	365.00

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 11/14/2007

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LISTING OF PLANNING BOARD **FEES**  
**ESCROW**

FOR PROJECT NUMBER: 5-23  
NAME: SANDCASTLE HOMES - RIVER ROAD - SUBDIVISION  
APPLICANT: SANDCASTLE HOMES (CARDOROPOLI)

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
07/20/2005	REC. CK. #7162	PAID		500.00	
07/27/2005	P.B. ATTY. FEE	CHG	35.00		
07/27/2005	P.B. MINUTES	CHG	21.00		
08/08/2007	P.B. MINUTES	CHG	63.00		
11/14/2007	P.B. ATTY	CHG	332.50		
11/14/2007	P.B. ENGINEER	CHG	3644.20		
		TOTAL:	4095.70	500.00	3595.70

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 11/14/2007

PAGE: 1

LISTING OF PLANNING BOARD **FEE**  
**APPROVAL**

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
11/14/2007	APPROVAL FEE	CHG	125.00		
		TOTAL:	125.00	0.00	125.00

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 11/14/2007

PAGE: 1

LISTING OF PLANNING BOARD FEES  
ESCROW

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
07/20/2005	REC. CK. #7188	PAID		750.00	
07/27/2005	P.B. ATTY. FEE	CHG	35.00		
07/27/2005	P.B. MINUTES	CHG	28.00		
10/25/2006	P.B. MINUTES	CHG	175.00		
11/01/2006	CORDISCO - FEES	CHG	755.00		
08/08/2007	P.B. MINUTES	CHG	63.00		
11/14/2007	P.B. ENGINEER FEE	CHG	2285.30		
		TOTAL:	3341.30	750.00	2591.30

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 11/14/2007

PAGE: 1

LISTING OF PLANNING BOARD FEES  
4% FEE

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
11/14/2007	2% OF\$396,737.90 PRIVATE	CHG	7934.76		
11/14/2007	4%OF \$93,900.00 PUBLIC IM	CHG	3756.00		
		TOTAL:	11690.76	0.00	11690.76

Project Name: Sandcastle River Road  
 Planning Board No.: 05-24

Municipality: New Windsor  
 Date: 9-4-07

**PRIVATE IMPROVEMENT  
 AND SITE PLAN UNIT PRICES  
 (Updated August 2007)**

<u>Description</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Qty</u>	<u>Total Cost</u>
<b><u>Roadway and Parking Lot</u></b>				
Erosion Control	AC	\$ 2,000.00	1 \$	2,000.00
Silt Fencing	LF	\$ 1.12	900 \$	1,008.00
Grading	SY	\$ 2.18	10000 \$	21,800.00
Paving & Base (regular construction)	SY	\$ 20.00	5200 \$	104,000.00
Paving & Base (heavy-duty construction)	SY	\$ 26.00	0 \$	-
Tack Coat	SY	\$ 0.50	0 \$	-
Overlay Existing Pavement (1.5")	SY	\$ 6.50	0 \$	-
Double Surface Treatment	SY	\$ 6.00	0 \$	-
			\$	-
Private Road (traveled way only)	SY	\$ 12.00	0 \$	-
Private Road (complete - swales etc)	LF	\$ 35.00	0 \$	-
Topsoil & Seeding	SY	\$ 6.00	3000 \$	18,000.00
Street Signs (Traffic Control)	EA	\$ 250.00	0 \$	-
Parking Space Striping	EA	\$ 10.30	83 \$	854.90
Handicap symbol	EA	\$ 54.00	6 \$	324.00
Parking & Lane Striping	LF	\$ 0.50	0 \$	-
Painted Striped Island	EA	\$ 40.00	0 \$	-
Site Plan Stop Bar	EA	\$ 85.00	0 \$	-
Handicapped Sign & Striping	EA	\$ 225.00	9 \$	2,025.00
Traffic Control Sign	EA	\$ 225.00	4 \$	900.00
Concrete Curbing	LF	\$ 18.00	2600 \$	46,800.00
Concrete Sidewalk	SY	\$ 40.00	211 \$	8,440.00
Timber Curbing	LF	\$ 13.00	0 \$	-
Curb (Precast) Bumpers	EA	\$ 75.00	0 \$	-
Shale Parking (Overflow) Area	SY	\$ 9.00	0 \$	-
Guiderail	LF	\$ 40.00	75 \$	3,000.00
<b><u>Drainage</u></b>				
Catch Basin	EA	\$ 2,700.00	13 \$	35,100.00
Connection to Existing Catch Basin	EA	\$ 500.00	1 \$	500.00
Stormwater Pipe (15") HDPE	LF	\$ 30.00	1045 \$	31,350.00
Stormwater Pipe (18") HDPE	LF	\$ 40.00	80 \$	3,200.00
Stormwater Pipe (24") HDPE	LF	\$ 45.00	110 \$	4,950.00
Stormwater Pipe (30") HDPE	LF	\$ 58.00	0 \$	-
Stormwater Pipe (36") HDPE	LF	\$ 76.00	0 \$	-
Stormwater Pipe (48") HDPE	LF	\$ 108.00	0 \$	-
End Section	EA	\$ 400.00	2 \$	800.00
Stormwater Pipe (15") RCP	LF	\$ 37.00	0 \$	-

2% of \$396,737.90 = \$7,934.76

Stormwater Pipe (18") RCP	LF	\$ 43.00	0 \$	-
Stormwater Pipe (24") RCP	LF	\$ 63.00	0 \$	-
Stormwater Pipe (30") RCP	LF	\$ 87.00	0 \$	-
Stormwater Pipe (36") RCP	LF	\$ 114.00	\$	-
Stormwater Pipe (48") RCP	LF	\$ 178.00	\$	-
Stormwater Pipe (15") CMP	LF	\$ 40.00	0 \$	-
Stormwater Pipe (18") CMP	LF	\$ 46.00	0 \$	-
Stormwater Pipe (24") CMP	LF	\$ 56.50	0 \$	-
Stormwater Pipe (30") CMP	LF	\$ 79.50	0 \$	-
Stormwater Pipe (36") CMP	LF	\$ 103.00	0 \$	-
Stormwater Pipe (48") CMP	LF	\$ 144.00	0 \$	-
Concrete Headwall	EA	\$ 4,000.00	0 \$	-
Rip Rap Drainage Channel	LF	\$ 16.00	30 \$	480.00
Non-lined Drainage Channel	LF	\$ 5.00	0 \$	-

**Utilities**

Watermain (8")	LF	\$ 50.00	158 \$	7,900.00
Gate Valve (8")	EA	\$ 1,000.00	0 \$	-
Tapping Sleeve and Valve (8")	EA	\$ 2,200.00	0 \$	-
Watermain (12")	LF	\$ 65.00	0 \$	-
Gate Valve (12")	EA	\$ 2,250.00	0 \$	-
Hydrant Assembly	EA	\$ 2,700.00	0 \$	-
Sewer Main (8")	LF	\$ 35.00	0 \$	-
Sewer Main (12")	LF	\$ 45.00	0 \$	-
Sewer Manholes	EA	\$ 2,300.00	3 \$	6,900.00
Septic Tank	EA	\$ 2,600.00	0 \$	-
Utility Trench (elec, phone, cable)	LF	\$ 10.00	300 \$	3,000.00

**Misc.**

Landscaping Trees	EA	\$ 250.00	47 \$	11,750.00
Landscaping Shrubs	EA	\$ 36.00	226 \$	8,136.00
Mulched surface	SY	\$ 3.00	200 \$	600.00
Chain link fence (4' black vinyl coated)	LF	\$ 20.00	0 \$	-
Split Rail Fence	LF	\$ 16.00	620 \$	9,920.00
Short Masonry Landscape Walls	LF	\$ 20.00	0 \$	-
Retaining Walls (modular) 4' height	LF	\$ 80.00	150 \$	12,000.00
Lamppost	EA	\$ 1,500.00	20 \$	30,000.00
Building Mtd. Light	EA	\$ 500.00	0 \$	-
Waste Enclosure (small)	EA	\$ 800.00	0 \$	-
Dumpster Enclosure (masonry/concrete)	EA	\$ 5,000.00	3 \$	15,000.00
Clear and Grub	AC	\$ 6,000.00	1 \$	6,000.00
Rock Excavation	CY	\$ 85.00	0 \$	-
Excavation	CY	\$ 12.00	0 \$	-
Erosion Control Matting	SY	1.75	0 \$	-
Bollards (Concrete filled)	EA	450	\$	-

Total \$ 396,737.90

396,737.90

OKed by  
Mark

Project Name: Sandeastle River Road  
 Planning Board No.: 05-24

Municipality: New Windsor  
 Date: 9-4-07

**PUBLIC IMPROVEMENT**  
**UNIT PRICES**  
**(Updated August 2007)**

<u>Description</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Qty</u>	<u>Total Cost</u>
<b><u>Roadway and Parking Lot</u></b>				
Clear and Grade ROW	SF	\$ 0.80	0 \$	-
Cut and Chip Trees	AC	\$ 6,500.00	0 \$	-
Stump removal and disposal	AC	\$ 4,500.00	0 \$	-
Erosion Control	AC	\$ 3,200.00	0 \$	-
Roadway Subbase	CY	\$ 42.00	0 \$	-
Roadway Subbase (8" Course)	SY	\$ 9.50	0 \$	-
Roadway Subbase (12" Course)	SY	\$ 14.00	0 \$	-
Roadway Subbase (15" Course)	SY	\$ 18.00	0 \$	-
Asphalt Pavement	TN	\$ 108.00	0 \$	-
Asphalt Pavement (1.5" top)	SY	\$ 9.00	0 \$	-
Asphalt Pavement (2" top)	SY	\$ 12.00	0 \$	-
Asphalt Pavement (3" course)	SY	\$ 18.00	0 \$	-
Asphalt Pavement (3.5" course)	SY	\$ 20.00	0 \$	-
Asphalt Pavement (4" course)	SY	\$ 22.00	750 \$	16,500.00
Asphalt Pavement (5" course)	SY	\$ 24.00	0 \$	-
Tack Coat	SY	\$ 0.60	0 \$	-
Double Surface Treatment	SY	\$ 7.50	0 \$	-
Roadway ROW Topsoil (6") & Seeding	SY	\$ 13.00	300 \$	3,900.00
Concrete Monuments	EA	\$ 145.00	0 \$	-
Roadway As-Builts (50' Wide)	LF	\$ 1.10	0 \$	-
Street Signs (Traffic Control)	EA	\$ 225.00	0 \$	-
Street ID	EA	\$ 250.00	0 \$	-
Concrete Curbing	LF	\$ 30.00	0 \$	-
Concrete Sidewalk	SY	\$ 77.00	0 \$	-
Concrete Sidewalk (4' Wide)	LF	\$ 34.00	0 \$	-
Concrete Sidewalk (5' Wide)	LF	\$ 43.00	0 \$	-
Street Trees (2.5" Cal; w/ frame and grate)	EA	\$ 1,100.00	0 \$	-
Street Trees (2.5" Cal)	EA	\$ 650.00	\$	-
Street Lights (std. luminair, u/g feed)	EA	\$ 7,500.00	0 \$	-

4% of \$93,900.00 = 3756.00

Guide Rail (W-Beam)	LF	\$ 45.00	\$	-
Guide Rail (Box Beam)	LF	\$ 70.00	0 \$	-
End Section (W-Beam)	EA	\$ 900.00	\$	-
End Section (Box Beam, Type 1, 9' taper)	EA	\$ 600.00	0 \$	-
End Section (Box Beam, Type 2, 18' taper)	EA	\$ 1,200.00	\$	-
Modular Block Retaining Wall (upto 6' High)	SF	\$ 33.00	0 \$	-
Modular Block Retaining Wall (over 6' High)	SF	\$ 38.00	\$	-
Concrete Retaining Wall (upto 6' High)	CY	\$ 800.00	pending	
Concrete Retaining Wall (over 6' High)	CY		pending	

**Drainage**

Catch Basin	EA	\$ 3,500.00	0 \$	-
Stormwater Manhole	EA	\$ 3,600.00	0 \$	-
Connection to Existing Catch Basin	EA	\$ 1,000.00	0 \$	-
Stormwater Pipe (CMP - 15" coated)	LF	\$ 65.00	0 \$	-
Stormwater Pipe (CMP - 18" coated)	LF	\$ 74.00	0 \$	-
Stormwater Pipe (CMP - 24" coated)	LF	\$ 90.00	0 \$	-
Stormwater Pipe (CMP - 30" coated)	LF	\$ 127.00	0 \$	-
Stormwater Pipe (CMP - 36" coated)	LF	\$ 150.00	0 \$	-
Stormwater Pipe (CMP - 48" coated)	LF	\$ 190.00	0 \$	-
End Section (CMP - coated)	EA	\$ 600.00	0 \$	-
Stormwater Pipe (HDPE - 15")	LF	\$ 55.00	0 \$	-
Stormwater Pipe (HDPE - 18")	LF	\$ 68.00	0 \$	-
Stormwater Pipe (HDPE - 24")	LF	\$ 75.00	0 \$	-
Stormwater Pipe (HDPE - 30")	LF	\$ 90.00	0 \$	-
Stormwater Pipe (HDPE - 36")	LF	\$ 105.00	0 \$	-
Stormwater Pipe (HDPE - 48")	LF	\$ 140.00	0 \$	-
End Section (HDPE)	EA	\$ 600.00	0 \$	-
Stormwater Pipe (RCP - 15")	LF	\$ 60.00	0 \$	-
Stormwater Pipe (RCP - 18")	LF	\$ 68.00	0 \$	-
Stormwater Pipe (RCP - 24")	LF	\$ 75.00	0 \$	-
Stormwater Pipe (RCP - 30")	LF	\$ 120.00	0 \$	-
Stormwater Pipe (RCP - 36")	LF	\$ 150.00	0 \$	-
Stormwater Pipe (RCP - 48")	LF	\$ 215.00	0 \$	-
End Section (RCP)	EA	\$ 750.00	0 \$	-
Concrete Headwall	EA	\$ 6,100.00	0 \$	-
Rip Rap Drainage Channel	LF	\$ 65.00	0 \$	-
Non-lined Drainage Channel	LF	\$ 12.00	0 \$	-
Preforated Pipe/Stone Underdrain	LF	\$ 26.00	0 \$	-
Concrete Box Culvert (6'x4') w/wingwalls	LF	\$ 2,300.00	0 \$	-
Concrete Box Culvert (3'x3'), w/wingwalls	LF	\$ 1,800.00	0 \$	-

**Water**

Watermain (DI - 8")	LF	\$ 75.00	692 \$	51,900.00
Gate Valve (8")	EA	\$ 1,500.00	0 \$	-
Tapping Sleeve and Valve (8")	EA	\$ 4,500.00	2 \$	9,000.00
Watermain (DI - 12")	LF	\$ 85.00	0 \$	-
Gate Valve (12")	EA	\$ 2,600.00	0 \$	-
Tapping Sleeve and Valve (12")	EA	\$ 5,600.00	0 \$	-
Hydrant Assembly	EA	\$ 3,300.00	2 \$	6,600.00
House service (w/out licensed plumber)	EA	\$ 1,400.00	0 \$	-
Air relief Valve & Vault	EA	\$ 5,000.00	0 \$	-
Pressure Reducing Valve & Vault	EA	\$ 10,500.00	0 \$	-
Watermain Offset (8")	EA	\$ 5,000.00	0 \$	-
Line Stop and Gate Valve installation (8")	EA	\$ 9,000.00	0 \$	-
Insertion Valve (8")	EA	\$ 11,000.00	0 \$	-

**Sewer**

Sewer Main PVC - 8")	LF	\$ 68.00	0 \$	-
Sewer Main (PVC - 12")	LF	\$ 84.00	0 \$	-
Sewer Manholes	EA	\$ 4,000.00	0 \$	-
Doghouse serew manholes	EA	\$ 6,000.00	1 \$	6,000.00
House service (w/out licensed plumber)	EA	\$ 1,300.00	0 \$	-

**Total:** \$

**93,900.00**

*OK by Mark*

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PUBLIC HEARINGS:

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SANDCASTLE HOMES SITE PLAN ((05-24))

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Mr. Anthony Coppola appeared before the board for this proposal.

MR. ARGENIO: This application proposes development of the three commercial lots of the Sandcastle subdivision. The plan was previously reviewed at the 27 July, 2005 planning board meeting. The application is before the board for a public hearing at this meeting. Representing this application is Mr. Coppola and folks what we're going to do we're going to review it as a board first and then we'll give everybody the opportunity to comment either for or against and then we'll close the public hearing and we'll review it again as a board. Mr. Coppola, what do you have for us this evening?

MR. COPPOLA: Thank you, Mr. Chairman. Just briefly what I'd like to do before I start going through the particulars of this site plan and this proposal is go back in time three to four years cause it's been a while and kind of remind everybody of what we originally had here. Approximately four years ago, through this planning board we had been involved with a proposal and an approval through this planning board for one large office building at this site. That office building was approximately 25, 26,000 square foot, it sat kind of if anybody knows the site it sat in the area where the grade transitions up the hill so it sat right kind of in that portion where it goes up the hill about 20 feet and that was reviewed and approved by this planning board like I said four years ago. It was also reviewed by DOT and I'm going to come back to that as far as our, what we're proposing now. So in the interim time, the owner, Sandcastle Homes, Mr. Cardaropoli tried to market that and didn't feel one large building was something that they wanted to

do, being a very large endeavor and trying to lease that so basically the idea came back to this board probably I would say about 18 months ago of dividing this site into three lots, it's three plus acre site so we're dividing it now into three separate building lots, three separate, proposal here is for three separate one story office buildings approximately just under 5,000 square foot each. So what was originally approved as part of that approval previously and then what we had to do basically to get this to this point as far as the storm water retention goes what happens here on this site is there's an outlet, there's a large outlet that goes underneath River Road and into a large structure and I assume that goes down to the river, that was previously, there was a previous storm water retention system with the older site plan that had to be completely revised because there new storm water regulations between now and four years ago. So there's a series of retention ponds on the upper lot and on the lower lot looking at that entire lot kind of as a whole. So that was addressed and that was reviewed and approved and sent through Mark and I think Orange County Health Department.

MR. ARGENIO: Do we have that here?

MR. COPPOLA: I have an older copy, I don't know if it's part of this submission, it's their, Taconic Engineering drawings, so it would probably be at the end of this set.

MR. ARGENIO: Go ahead, I interrupted.

MR. COPPOLA: You have to look hard at that but it shows all the grading and drainage, there's two retention ponds up above and one retention pond below. So all that's been figured out and that's all, it's not subsurface, it's all exposed. Briefly let me show what I'm proposing here lot number 1 is total of 59,000 square feet, that building is just under 4,000 square

feet that's going to have access off old Route 9W that will have a total of 24 parking spaces and we have shown a drive-thru there that might be a bank or a retail use like that. The two lots below they're basically just under 5,000 square feet each building, there's a center 30 foot, I'm sorry, 20, 25 foot wide shared access driveway and that leads to two separate parking lots, one fronting each building, one building, both buildings having 34 spaces each. So all the buildings of course meet the setbacks, those are shown on the drawings and we meet everything in terms of all the bulk area requirements for lot area, setbacks, developmental coverage, parking, all those types of things. Now specifically regarding the DOT access here that was kind of the last piece of the puzzle that we had to put together, this had been approved like I said four years ago as part of the larger building, actually, that building like I said was 24, 25,000 square feet whereas now we have basically 14 or 15,000 square feet but being as DOT has changed, the resident engineer has changed and we went basically through a reapproval process with them and the comment that I have here in their letter they have seen these plans their letter dated the end of August but they have asked basically to do this as a right in, right out access so that and that also would include and I can show anybody who's interested there's a triangular median that they want introduced in here so it would really prevent anybody from doing, they really don't want anybody coming in off Route 9W and then making a left-hand turn in here so anybody coming in I think would have to go around the block and then come back around that way you cannot come into this and make a left turn into here because this--

MR. SCHLESINGER: You mean River Road?

MR. COPPOLA: Well, yeah, but coming off 9W which I'm not really showing here that's up a little bit which I think is right up here.

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MR. MINUTA: Give me a quick orientation as to where 9W is now?

MR. COPPOLA: This curves around to the north so your sight distance here there's a mound here so the sight distance as you would go north on River Road is limited.

MR. MINUTA: Just my orientation just going down river Road we're going to end up at basically where all the terminals are?

MR. COPPOLA: You're going to pass all them, well, if you're traveling south, I'm sorry, if you're traveling north you're going to pass this site and then get to all the terminals.

MR. MINUTA: 9W here actually ties into 9W on this side?

MR. COPPOLA: That's correct, come back over here and this is the other site that they developed recently 306 9W.

MR. MINUTA: Thought it was, just wasn't sure.

MR. COPPOLA: You're talking about DOT letter.

MS. MASON: I don't think I have it.

MR. COPPOLA: I think I have a copy, I do.

MR. ARGENIO: Anthony, you have heard back from the DOT, correct?

MR. COPPOLA: Yeah, this letter.

MR. ARGENIO: We don't have a copy.

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MR. EDSALL: I had a copy, Myra's listed as carbon copy, maybe it didn't come through.

MR. COPPOLA: Yeah, she is, I can see it.

MR. ARGENIO: The changes that they had requested have they been incorporated into this plan?

MR. COPPOLA: No because we had given the plans to you so these changes have to be made as part of our last subdivision but I will just show you it's, can you see what they're showing, it's a triangular median in the center and they want me to change this radius on the upper lot to 25 feet.

MR. ARGENIO: I don't want to review that part, I want to review what you submitted at this meeting cause that's what we do.

MR. COPPOLA: So that's the input from the DOT, they really wanted to take a second look at this, they're concerned about the sight distance as you would a car coming south on River Road probably getting onto 9W they don't want people making left-hand turns in or out so this access is right in, right out and then you'd have the access to the upper lot here. These two lots these don't connect, there's too much of a grade difference.

MR. ARGENIO: Has DOT, have they expressed a concern about the DOT access?

MR. COPPOLA: Yeah, we had spoken to you about that and basically if people are coming north here I think that's gonna just require you to come around the block is really what it is going to require if you can picture that.

MR. MINUTA: How do we get there?

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MR. ARGENIO: That was my next question, how do we do that?

MR. COPPOLA: You're coming north on Route 9W.

MR. ARGENIO: Tell me about around the block.

MR. COPPOLA: You can't make a right-hand turn into here if you're coming to either of these two buildings this building doesn't matter.

MR. ARGENIO: So what would you do?

MR. COPPOLA: You'd come around and go in that way.

MR. MINUTA: So that roadway coming down on the bottom left would come back through there?

MR. COPPOLA: I'm sorry, you have to make a right into there.

MR. ARGENIO: You have to preemptively make a left U-turn on old 9W, correct?

MR. COPPOLA: Let me just orient myself, I'm coming and I think this intersection is here so you'd have to, you can't make a left-hand turn into here.

MR. ARGENIO: Before you get to the plaza you have to make a left.

MR. COPPOLA: Left here and--

MR. ARGENIO: And then a right and come around.

MR. COPPOLA: That's correct.

MR. MINUTA: We're looking at Plum Point being to the left.

MR. COPPOLA: Plum Point is down here, I, again, I'm not showing it but I'm pretty sure the access is right here, it's before old Route 9W would be to your left so you would have to make the left, come down old Route 9W, right-hand turn in.

MR. SCHLESINGER: You can make a right, you can make a right turn?

MR. COPPOLA: Right, yeah.

MR. SCHLESINGER: The guy says oops, I made a right turn, my mistake right now, what does he do?

MR. COPPOLA: Yeah, he's got to turn around because he cannot come back down here and go this way.

MR. ARGENIO: What do you think about this, this is the first you've seen this?

MR. EDSALL: Yeah, I wasn't aware of how the DOT was going to handle it until I got a copy of the letter from Anthony and one of my comments which is on the last page of my review sheet is just that point of a left restriction, I wasn't aware that they asked for a triangular median, I looked at it as being just the, configured as a full movement curb cut with signs.

MR. ARGENIO: Slip lane in and slip lane out.

MR. EDSALL: That restricts it but what it does it means you've got these gymnastics how to get around the neighborhood to get in.

MR. ARGENIO: I don't want to get hung up, it's an issue Joe Minuta everybody is probing you, it's something that we're going to have to talk about a little bit but there are a lot of things we have to talk about and what I want to do is I'd like to just touch on some of the high points first, allow me to hit

some of the high points and then if any of the members have high points certainly we'll hit them but guys keep in mind after we open it up to the public we'll be able to discuss it again. The document, Mark, question for you, I'll read your comment and again Mark previously requested a note that requires the site plan approval are applicable to each site individually and together relative, any improvements that cross the individual lines a note has been added and you want to change the note, Mark, is that your verbiage in these notes or is that Cordisco's.

MR. EDSALL: It's a starting point that I wrote and I appreciate any input from the board members, Dom, it doesn't have to be resolved tonight but I came up with something as a starting point.

MR. ARGENIO: Again, as previously noted some lettering on the light plan the one thing I want to probe a little bit there real quick again I'm trying to stick to the high points, the board should discuss whether a more creative effort should be made on the landscaping. Would you hold that landscaping plan up so everybody can take a quick look at that? I personally agree with Mark's comment, does anybody else have any input on that?

MR. MINUTA: Look into it further.

MR. COPPOLA: We could develop it a little further, that's fine, that's a fair comment.

MR. ARGENIO: Also, this is something that Joe Minuta picks up on a lot is you have to make sure unless you're told differently that the unfinished masonry block is not acceptable your enclosures should be in kind with the building whatever your finishes are.

MR. COPPOLA: For the--

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MR. ARGENIO: Be it block or--

MR. COPPOLA: For the refuse, sure, you just want it finished.

MR. ARGENIO: Okay, I'd like to open up to the public unless anybody else has something that they feel needs to be probed right now. Okay, on the 12th day of October, 2006, 12 addressed envelopes went out containing the notice of public hearing for the Sandcastle Homes site plan. At this point in time, if there's any member of the public that would like to comment on this application, these drawings either for or against, please raise your hand and be recognized by the chair and you'll be heard. Please state your name and your address.

MR. WILLIAMS: Kirk Williams, 394 Riley Road. Can I get a better description of where this is?

MR. ARGENIO: Do you know where Richard Osner lives? If you go down, do you know where St. Joseph's church is coming from 94, come down Union Avenue towards St. Joseph's Church, cross 9W on that spur road that bends off to the south, the property's right on the left side there.

MR. WILLIAMS: Triangle there?

MR. EDSALL: Yes, where there's been excavation years ago, kind of an excavation.

MR. WILLIAMS: A lot of fill has been put in.

MR. EDSALL: I think it was cut in fill cut, looks like they borrowed material.

MR. SCHLESINGER: They took out and put back, it's been changed so many times over the years.

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MR. WILLIAMS: Thank you.

MR. ARGENIO: Anybody else? Yes, sir?

MR. BRAUN: Leo Braun (phonetic), New Windsor.

MR. ARGENIO: What's your address?

MR. BRAUN: Burrows Lane.

MR. ARGENIO: Okay.

MR. BRAUN: I do work up and down Union Avenue on Route 32 and every time I go through Patriot Ridge onto Patriot Ridge I have to cross heading going northbound on 32 just before I come to the traffic light for Union Avenue I could not see a left-hand turn to go into the shopping center there. If you go up to Union Avenue heading west you do have an entrance and then if you want to go for the exit you can only make a left-hand turn, many a time I've seen people make the improper left-hand turn up Union Avenue westbound including two school buses. I'd like to know how this is going to be resolved, okay, with his situation and I know this is too far back now to have the Patriot Ridge revised for a new entrance and new exit.

MR. ARGENIO: We're not going to get into Patriot Ridge tonight but we'll certainly, Anthony, your opportunity is now to address his concerns cause he expressed the same concerns the board expressed.

MR. COPPOLA: I'm not a hundred percent sure I'm following you, it's the problem of making a left onto Union Avenue from Route 9W heading north?

MR. BRAUN: If you make, from Union Avenue heading westbound it's County 69.

MR. COPPOLA: Heading west on Union?

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MR. BRAUN: Correct.

MR. COPPOLA: Away from 9W?

MR. BRAUN: Away from 9W all the way down to the highway.

MR. COPPOLA: Down the hill.

MR. BRAUN: To the traffic light you have the new Hess there, keep going up the hill westbound you can make a left through the entrance.

MR. COPPOLA: I'm quite a distance from there.

MR. ARGENIO: Anthony, let me interrupt. I think what he's trying to do is make a parallel between a problem at Patriot Ridge and a problem that you may have here, that's the parallel he's trying to make.

MR. BRAUN: That's the reason I want to have this resolved in this situation where he's telling us you can't make the left off 9W.

MR. COPPOLA: Well, let me just say I can't address Patriot Ridge but--

MR. ARGENIO: I got deja vu.

MR. COPPOLA: We're locked into what the state almost mandates us to do. This was previously approved without a right in, right out access for a building that was almost twice as large as the square footage here that was approved about four years ago and I have that letter in my file. Why they decided now to change that I can only surmise those are the folks in the DOT office in Poughkeepsie.

MR. ARGENIO: Let me say this, sir, the problem that

you're enunciating is the same problem the board has with this, so I think we're all going in the same direction and it certainly is going to be addressed.

MR. BRAUN: Cause I don't want to have the Patriot Ridge situation on this situation.

MR. ARGENIO: The people on this board I think agree with you and I think that we started to probe it a little bit and it's something we're going to get into a little bit more on this application and as you heard earlier we just recently heard from DOT and the plans have just recently been, the DOT requirements have recently been incorporated into these plans and Mark's going to have to review this and we're going to take a look at this and for the record I agree with you, I agree with you and we're going to figure this out somehow, Mark, one way or another. As I've said a hundred times, we can't tell you whether you can or cannot build there but we certainly can tell you how. Okay, anybody else?

MR. SCHLESINGER: Make a motion to close the public hearing for the Sandcastle Homes site plan.

MR. MINUTA: Second it.

MR. ARGENIO: Motion has been made and seconded that the Town of New Windsor Planning Board close the public hearing for the Sandcastle Homes site plan.

ROLL CALL

MR. SCHEIBLE	AYE
MR. BROWN	AYE
MR. MINUTA	AYE
MR. SCHLESINGER	AYE
MR. ARGENIO	AYE

MR. ARGENIO: I'm going to open it back up here,

Anthony, one question I have is Mark has a comment, I want to read it, given the steep slopes behind building number 3 between sites 1 and 2 and 3 and other areas some landscaping should be considered and special surface treatment should be included in the erosion plan. Have you given that any thought?

MR. COPPOLA: No, I think I know what he means though and the grading is shown on the engineer's drawing there as far as the location of those retention ponds but we, you know, there's a way to treat those slopes.

MR. ARGENIO: What way?

MR. COPPOLA: What way, there's, I mean, there's landscaping mats that you can put down, I believe that would be one solution. There would be types of plantings that we could use to hold those slopes in place, I have to look at the slopes to see like the percent of the grade there to see what they were, I don't remember that, I mean, all I can tell you is what I do remember there's a 20 foot vertical difference between here and up to the top here so--

MR. ARGENIO: I like the idea of trying to work with plantings, I've seen the mats, I've installed them, there's certainly a lot of things out there, everybody claiming that their product is better than the next one so I'm personally partial to that.

MR. COPPOLA: Let us work on that, that's fine, I'm sure we can come up with something.

MR. ARGENIO: Just for everybody's information, we did send this out to Orange County and the response came back, Myra has a copy of it and they have graciously told us that it is up for local determination. I will paraphrase, project will have no major impact on state or county facilities nor have a significant impact on intermunicipal uses. It is consistent with the county

comprehensive plan and it's up to us. I'm going to go to my board members, the other members, if anybody, do you have any thoughts here? There's certainly quite a list of comments.

MR. SCHEIBLE: There is a lot of comments from this but it's a very noticeable spot in town, there's a lot of traffic that goes by it and we want to say welcome to New Windsor and leave something nice to see as they enter, that's almost an entranceway to New Windsor that area and when we're talking about the steep slope, right, personally, I'm going to go down and I'm going to take a look at it myself. What kind of a slope is in there, like a terraced 20 feet? That's quite a drop in there from what they're saying.

MR. COPPOLA: It is, if you go down and stand down at the bottom you'll see it.

MR. SCHEIBLE: Rather than just one slope if it can be terraced stone, you know, like I said, it's an entranceway to New Windsor, this is welcome to New Windsor, let's let the rest of the world know that we mean something nice to the town. I think there's been a problem with some of the other buildings being built around that neighborhood and I'd just like to see in that area, bring things back to the way they should be.

MR. ARGENIO: The public hearing is closed but sure, you are?

MR. CARDAROPOLI: I'm Nick from SandCastle Homes, the owner and I just want to mention I agree with you, I think we can do a lot better by developing it, make it look a lot nicer and especially we can do a lot but part of it means getting the buildings in, actually getting the foundations in which also become retainage, really grading up, we can really carve it out, make something nice out of it.

MR. ARGENIO: Your professional needs to give us a plan of what he has to do. Now certainly that doesn't mean that has to be to the, you have to install it to each leaf on each bush, but I think you should doll that thing up and show us something that's a real good suggestion.

MR. CARDAROPOLI: I think maybe a combination of the natural with some terracing maybe with some kind of walls I think it needs a little bit of that. The other thing too you don't realize how large that piece is until you get on it, we've all passed it a thousand times but it's a good chunk of land.

MR. ARGENIO: I'd like to see it developed, it's been sitting there foul for as long as I can remember.

MR. CARDAROPOLI: Me too.

MR. BROWN: Just have one question. You have a picture of what these buildings are going to look like?

MR. COPPOLA: If you can, funny you should mention that, two things, we don't normally bring drawings for architectural review, we haven't done that with this planning board in the past, that doesn't mean that you don't require it or whatever but we haven't done that. We did it on another project because we were within 300 feet of a historical site so another project that I'm involved with we did it. But what I can say to that effect is two things, number one, I believe that what Nick is going to do is similar to what you've done on the 9W property that he's developed and that's a separate parcel, you told me the address before.

MR. CARDAROPOLI: 3068-3062 Route 9W.

MR. COPPOLA: Which is a two story building, if you've seen that building I believe it's natural to think we're going to carry that type of vocabulary in here.

Having said that, if that's something that the board wants to see that's something that we can do.

MR. ARGENIO: We do not have an architectural review board in the Town of New Windsor but it certainly would be looked upon favorably, if I could have some type of colored elevation and I'm not telling you it has to be to the tenth power, but it would be good if you could bring us something just to give us a flavor of what you're going to do. I have Myra whispering that your other building is beautiful or Mr. Cardaropoli's building is beautiful. So I have every reason to believe but I think Howard Brown stole Joe Minuta's question so go ahead, Joe.

MR. MINUTA: If it's in keeping with the other buildings, I would agree I think the vocabulary that's been done there is nice. You have faux stone?

MR. COPPOLA: Cultured stone, yeah.

MR. MINUTA: No issues there with regard to those plans, you know, clearly we have huge grade slopes shown in this setting, it would be more beneficial than showing it as a grade plan, that way we get an understanding are we looking at the basement or the roof from a grade point standpoint. I think that from a planner's standpoint it looks great on paper. The only issue that I really do take issue with is the road access on River Road. I have lived here all my life, you drive up behind a tractor trailer coming northbound from River Road and you're doing five miles an hour up the road opposite way they're coming down a lot faster, this is a very, very bad access point in my opinion and if there's another way to access this site perhaps off old Route 9W that's a good spot to be able to que traffic, I realize there's a grade difficulty and challenge there but that would clearly be a much better location because even the location of Route 9W and River Road where it exists now is a difficult location

to get out of even though you have a clear shot for some portion of it, it's a strange intersection where cars seem to come up on you very quickly.

MR. COPPOLA: Well, just to address that, I mean, we've looked at--

MR. ARGENIO: You know what, let me just interrupt for one second to that end, I have something to say about the traffic too so maybe we'll come around and you can address the whole thing at once, go ahead, Joe.

MR. MINUTA: That's basically it, I think the layout and grouping these buildings as you have definitely makes it more palatable for the developer and owner to really market these buildings. I do agree with Mr. Scheible's comments that we have got an entryway or exitway from New Windsor to Newburgh and that should be somewhat of a calling card.

MR. SCHLESINGER: No, I don't have anything to say, I somewhat agree, I mean, I guess what the DOT is requiring is somewhat in stone and just from a business point of view, I think what Joe just said that I think it would make the project that much more marketable if you had better access.

MR. ARGENIO: Mark, can I hear from you on this access thing?

MR. EDSALL: I'm concerned and that's why I brought it up, I think they are trying to address a problem and the manner in which they are providing a solution may not function because I don't believe that the restrictions that they're proposing are going to stop people from attempting to make the maneuver which is actually going to be less safe than if they made it a full movement intersection.

MR. ARGENIO: Okay, Nick, I'm going to tell you this,

you gotta look at that.

MR. CARDAROPOLI: Originally, Mark remembers they fought it on the larger building we had three entrances and they only wanted two and we kind of stayed on them and we stayed the course and then they agreed to the three so sometimes they come out with this stuff and then we kind of say hey, listen, we have to lobby it a little bit.

MR. ARGENIO: This is not good and Anthony let me finish this you can take back to the Sibby or whoever you have to go to and the Town of New Windsor does not want this, this is unsafe and we don't have a problem with the development, Nick, I think you're getting that flavor here tonight but this access doesn't work for us and that's the way that is.

MR. EDSALL: And the internal traffic thing on building 1 which is the building up on the top of the plateau is it really your intent to have a clockwise movement? Is the drive-thru lane going to have two of those tubes on the island?

MR. COPPOLA: No, the second lane is a pass through.

MR. EDSALL: First lane is going to be just it won't have a window cause it's passenger side.

MR. ARGENIO: Interesting point.

MR. COPPOLA: I think we gotta change that.

MR. ARGENIO: Do you have a digital watch or regular watch?

MR. EDSALL: I was assuming you didn't want to have it conflict with your parking lot.

MR. COPPOLA: That could work, I've seen the one in

HSBC has that setup.

MR. EDSALL: There are a lot of banks that have just the tube, they don't use the window.

MR. COPPOLA: But the intent there irregardless of which way the second lane is a drive-thru so I have to take a look.

MR. ARGENIO: Planning board circulated lead agency coordination letter based on the responses, I suggest the board formally assume a position of lead agency. I'll accept that motion.

MR. MINUTA: So moved.

MR. SCHLESINGER: Second it.

MR. ARGENIO: Motion has been made and seconded that the Town of New Windsor declare itself lead agency for the Sandcastle Homes subdivision site. If there's no further discuss, roll call.

ROLL CALL

MR. SCHEIBLE	AYE
MR. BROWN	AYE
MR. MINUTA	AYE
MR. SCHLESINGER	AYE
MR. ARGENIO	AYE

MR. ARGENIO: Anthony, we're not going to, I don't want to take this any further, there's a lot of comments, you have to a lot of work to do.

MR. COPPOLA: I just have two questions and that I understand the most important thing is the DOT thing, I mean, what I'm going to do this is beyond Sibby, it goes to Poughkeepsie.

MR. ARGENIO: I believe that.

MR. COPPOLA: So I think the guy's name is Ursess (phonetic), we'll contact him directly, I will feel him out, I'm certainly going to tell him I feel basically the same way this planning board feels and we'll certainly give him the feeling of the planning board tonight.

MR. ARGENIO: And it's, there's no gray area.

MR. COPPOLA: Okay, I understand that. We'll see where that goes. And the other question I have is just kind of a procedural thing here, Mark, we have two things we're, we have subdivision and site plan and I guess I'm assuming that everything is running concurrent on both to the end here?

MR. EDSALL: Yes, when you get to the point that you're in the red zone as it may be and you're approaching the goal line, the key is to make sure you ask to have both applications on the agenda so they can act on subdivision application, create the lots and then work on the site plan approvals.

MR. SCHLESINGER: One approval or three approvals?

MR. COPPOLA: We're doing both tonight, I assume we're doing a public hearing?

MR. BABCOCK: One subdivision and three site plans but it's all one site plan.

MR. COPPOLA: Myra said we moved the subdivision.

MR. ARGENIO: Mark, could you stay with us on this?

MR. EDSALL: I'm just going, we just checked the record to make sure on the subdivision cause I did bring both files, the public hearing was waived on the subdivision

application since all the issues that were of any substantial nature so Dom just asked me where we stood on that.

MR. CORDISCO: I know he wants to move forward and process them concurrently.

MR. COPPOLA: At the end of the day we're going to get concurrent approvals?

MR. EDSALL: Yeah.

MR. ARGENIO: Neil's asking a procedural question.

MR. SCHLESINGER: Three approvals on the site plan or one?

MR. EDSALL: No, I think early on if you look at the second set of comments I asked the board that this is in my opinion was a very unique case where although it's three site plans I thought you should treat it as one application but effectively you're granting three site plan approvals, that's what part of my note is, the note was going to reflect that all three plans are subject to this one approval, it was because they were so interrelated it didn't make sense to have three applications.

MR. CORDISCO: Additionally--

MR. BABCOCK: Mr. Chairman, if this access isn't going to be suitable onto River Road or any access on River Road I could see the lot lines changing so--

MR. COPPOLA: There's no, we've looked at this internal access and that really doesn't work, we looked at that, that's not gonna work, it's too much of a grade change and it's unworkable because so that's not gonna work.

MR. MINUTA: Is it possible to bring out onto Route 9W

those two lots as an access or to Union Avenue, Union as an access rather than River Road? I know you have slope issues.

MR. COPPOLA: You're just in a pit there, you're literally in a pit down here so to get up and out--

MR. MINUTA: A lot of earth moving but it may be accomplished.

MR. SCHLESINGER: Let me just throw one other thing Mike just brought up, you maybe have lot line changes, right, why don't you have one big lot, why do you need to have lot lines?

MR. EDSALL: That doesn't change the access.

MR. SCHLESINGER: It doesn't change the access but it could change the whole layout of the whole flow.

MR. EDSALL: Problem is is that they have effectively two accesses to the site, one at the low level, one at the high level, they still need access to the low level.

MR. MINUTA: I think if I may, Neil, what Neil's trying to say why don't we keep it as one lot, then we don't have to worry about lot lane changes, you can reconfigure the lot however you need to.

MR. SCHLESINGER: Exactly.

MR. COPPOLA: The issue is not lot lines dealing with the geometry of the site.

MR. CORDISCO: Although you're processing these concurrently, my recommendation would be to process and pay most attention to the site plan and then once the and in fact you would approve the site plan first and it would be site plan for one lot and then you could

subdivide it thereafter and the subdivision of course will have to have cross-easements and roadway maintenance and all those things but then once you've got the approved site plan you also are going to know where the lot lines are going to go.

MR. BABCOCK: I think Hank had a good idea going to look at this if anybody on their own is going through this area because to get a road up onto old 9W from this is very difficult.

MR. EDSALL: One more thing on access. I think we're, Nick may have to look outside the box for the amount of money it takes to grade the site up, provide the access, then the two levels, the two tiers it maybe that you've got to go back to DOT and say if your problem is we have stopped vehicles coming north on River Road turning left maybe they just widen it and put a turning lane there, it may be cheaper to put a turning lane so the traffic goes through.

MR. ARGENIO: I appreciate you thinking out of the box but that's, I'm not going to tell you how to design it.

MR. EDSALL: I think they're concerned about somebody stopping there with the volume of traffic, maybe they need a turning lane.

MR. ARGENIO: I appreciate the suggestions, it's a good suggestion but you guys, I can tell you what you have here is not gonna work. Mark, the same as the discussion we had about that subdivision with the pond last week, what was your response? I'm not going to tell you how to do it, you know what you have to do.

MR. SCHEIBLE: I would be remiss if I didn't bring this up, quote unquote a walkway system amongst these buildings, quote unquote sidewalk, all right, I mean, I bring it up.

MR. ARGENIO: Again, Henry, I have--

MR. SCHEIBLE: This piece I know this piece of property, all right, on a piece of paper it looks very large on a piece of paper but when you're there and you see it and you're standing there it is not an extremely large piece of property from what we're going to be putting down here and you can have a dentist office here, doctor's office here, lawyer's office here, and they're all interconnected sometimes maybe somebody's got to walk from one to the other.

MR. ARGENIO: Let me respond to that, don't think I'm anti-sidewalk cause of that last meeting a few weeks ago, I think that's a capital idea, this is a little community and Hank, it may not work from the top of the site to the bottom just because of geometry but I think that's a good idea, I think it's a good idea. Okay?

MR. MINUTA: May I throw one more item out there? It is a large site, I know you discussed that the previous building was it considered to do lower level and upper level access there?

MR. COPPOLA: Yes, the thing about the large building while it may have not been economically feasible it fit the hole which was the problem and we had a large lower level of 16 or 18 feet where you could use as warehouse and then two stories from the upper level side.

MR. CARDAROPOLI: But we still had access from River Road, it was just a normal two-way access because there was a parking garage underneath and three stories, a middle story which was kind of like right at the grade split and two above that.

MR. ARGENIO: You felt there was a marketing and sales issue with that?

MR. CARDAROPOLI: It was a big building, the parking it

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was, you know, the parking garage was getting tricky three levels above it was a big building.

MR. COPPOLA: That's the thing this really frustrates me that was approved right, wrong or indifferent, I don't know how the DOT approved it.

MR. ARGENIO: It must have gone through their office when somebody was absent that week, unfortunately, that is the luck of the draw, another thing I can't help you with.

MR. COPPOLA: And I understand.

MR. ARGENIO: Okay, let's move on, thank you.

Date	Received From/Paid To	Che#	Repts	General	Fees	Bld		Trust Activity		Balance
						Inv#	Acc	Repts	Disbs	
Entry #	Explanation	Rec#		Diabs						
12132	TOWN OF NEW WINDSOR									
6044911	SAND CASTLE PB# 05-24									
Oct 20/2006	Town of New Windsor	024225	387.50							
51810	PMT - PAYMENT ON ACCOUNT									
Oct 23/2006	Lawyer: DRC 0.50 Hrs X 250.00				125.00		1636			
30151	REVIEW APPLICATION MATERIALS									
Oct 23/2006	Lawyer: DRC 0.30 Hrs X 250.00				75.00		1636			
30152	REVIEW M EDSALL'S COMMENTS PB# 05-24									
Oct 25/2006	Lawyer: DRC 0.75 Hrs X 250.00				187.50		1636			
31161	ATTEND PLANNING BOARD MEETING									
Nov 9/2006	Billing on Invoice 1636			0.00			1636			
33285	FEES 387.50									
Mar 25/2007	Lawyer: DRC 0.30 Hrs X 175.00				52.50		3303			
64149	REVIEW REVISED PLANS PB# 05-23									
Mar 27/2007	Lawyer: DRC 0.20 Hrs X 175.00				35.00		3303			
64150	REVIEW M EDSALL'S COMMENTS PB# 05-24									
Apr 13/2007	Billing on Invoice 3303			0.00			3303			
64222	FEES 87.50									
Apr 27/2007	Town of New Windsor	026039	87.50							
67010	PMT - PAYMENT ON ACCOUNT									
Aug 8/2007	Lawyer: DRC 0.20 Hrs X 175.00				35.00		4640			
86819	REVIEW M EDSALL'S COMMENTS PB# 05-24									
Aug 8/2007	Lawyer: DRC 0.80 Hrs X 175.00				140.00		4640			
86820	PREPARE RESOLUTIONS ADOPTING A NEGATIVE DECLARATION AND GRANTING APPROVAL PB# 05-24									
Aug 8/2007	Lawyer: DRC 0.30 Hrs X 175.00				52.50		4640			
86822	PREPARE NEGATIVE DECLARATION PB# 05-24									
Aug 8/2007	Lawyer: DRC 0.30 Hrs X 175.00				52.50		4640			
86832	ATTEND AUGUST PLANNING BOARD MEETING PB# 05-24									
Sep 10/2007	Billing on Invoice 4640			0.00			4640			
91920	FEES 280.00									
Oct 1/2007	TOWN OF NEW WINDSOR	011494	280.00							
95818	PMT - PAYMENT ON ACCOUNT									
Nov 8/2007	Lawyer: DRC 0.30 Hrs X 175.00				52.50					
104268	REVIEW DECLARATION OF RESTRICTIONS AND RELATED MATERIAL PB# 05-24									

TOTALS PERIOD	UNBILLED			= TOTAL	BILLED			BALANCES		TRUST
	CHE	+ RECOV	+ FEES		DISBS	+ FEES	+ TAX	- RECEIPTS	= A/R	
	0.00	0.00	52.50	52.50	0.00	755.00	0.00	755.00	0.00	0.00

REPORT SELECTIONS - Client Ledger

Layout Template Default  
 Requested by Rose Thoma  
 Finished Wednesday, November 14, 2007 at 11:37:56 AM  
 Ver 8.20c  
 Matters 6044911  
 Clients All  
 Major Clients All  
 Client Intro Lawyer All  
 Matter Intro Lawyer All  
 Responsible Lawyer All  
 Assigned Lawyer All  
 Type of Law All  
 Select From Active, Inactive Matters  
 Matters Sort by Default  
 New Page for Each Lawyer No  
 New Page for Each Matter No  
 No Activity Date Dec 31/2199  
 Firm Totals Only No  
 Totals Only No  
 Entries Shown - Billed Only No  
 Entries Shown - Disbursements Yes  
 Entries Shown - Receipts Yes  
 Entries Shown - Time or Fees Yes  
 Entries Shown - Trust Yes  
 Incl. Matters with Retainer Bal No  
 Incl. Matters with Neg Unbld Disb No  
 Trust Account All  
 Working Lawyer All  
 Include Corrected Entries No  
 Show Check # on Paid Payables No  
 Show Client Address No  
 Consolidate Payments No  
 Show Trust Summary by Account No  
 Printed from Register

SANDCASTLE\_HOMES\_SITE\_PLAN\_(05-24)

Mr. Mario Salpepi appeared before the board for this proposal.

MR. ARGENIO: We covered some things here already on site plan, next item is the Sandcastle Homes site plan on River Road. Application proposes development of three commercial lots of the Sandcastle subdivision, again, I'll read this into the minutes. The plan was previously reviewed at the 25 July, 2005, 25 October, 2006, 28 March, 2007 planning board meetings. And as I said earlier, I think it's more than that but Mark says no, so we're here to talk about this. Sir, could you please share with us some of the challenges of what you dealt with? Again, I want to reiterate in the quickest fashion that I can there are no entrances or exits on River Road which is a state highway, the entrances and exits are on the town road. Jen, what do you have from the town, Anthony Fayo specifically?

MS. GALLAGHER: That it was approved 10/20/2007.

MR. ARGENIO: What do you have from fire?

MS. GALLAGHER: Approved 10/13/2006.

MR. SALPEPI: At that last meeting in March the major issue was the DOT would not allow left turns in or out so--

MR. ARGENIO: Let's get passed that, I don't want to hear about that again.

MR. SALPEPI: So the major revision has been a shared entrance on Old Route 9W which accesses lots 2 and 3.

MR. ARGENIO: Mark, is this one of the easements you're referring to?

MR. EDSALL: Yes.

MR. SALPEPI: The buildings, the parking, the storm drainage, the retention, everything has remained basically the same.

MR. ARGENIO: Does your water go towards River Road? I assume the river is near River Road so your drainage goes that way, yes?

MR. SALPEPI: Yes, there's an existing culvert.

MR. ARGENIO: Any DOT issue?

MR. EDSALL: That was referred to them, they have on site both water quality treatment and detention, they have tied in with state culvert, the information was forwarded, we have heard no objection from DOT, their only objection was the turning movements so I am, again, keep in mind we reviewed the SWPPP in detail and after receive revisions we think it's in good shape now.

MR. VAN LEEUWEN: I've got a question. Where is the flag poles?

MR. ARGENIO: Good question.

MR. VAN LEEUWEN: They left the area.

MR. SALPEPI: Let's see, we detailed the flag pole, did we show it on the site plan?

MR. VAN LEEUWEN: It doesn't show it, just put three of them in.

MR. SALPEPI: Definitely got me here.

MR. VAN LEEUWEN: Thirty feet high.

MR. SALPEPI: One per building?

MR. VAN LEEUWEN: One per building.

MR. CARDAROPOLI: Can I fly the Italian flag?

MR. VAN LEEUWEN: No, go over to Italy and fly that.

MR. SALPEPI: To reiterate, no other changes have been made besides that entrance since our last meeting. Two buildings of approximately just under 5,000 square feet, one is under 4,000, all required parking.

MR. ARGENIO: Sir, you show flag poles.

MR. SALPEPI: I'm trying to find them.

MR. ARGENIO: It's listed as "A".

MR. SALPEPI: That might be a light fixture.

MR. ARGENIO: I'm sorry.

MR. EDSALL: I'll make sure they're on there, I made a note.

MR. VAN LEEUWEN: Has this gone out to the County?

MR. ARGENIO: Orange County Planning has responded and they have local determination, a public hearing was held on 10/25/06, it was opened and it was closed and I don't recall a lot of hoopla at the public hearing. We did assume lead agency. SWPPP submittals and several resubmittals with modifications and updates have been received by MH&E, they have accepted the SWPPP. If anybody sees fit, I'll accept a motion that we declare negative dec.

MR. VAN LEEUWEN: So moved.

MR. SCHLESINGER: Second it.

MR. ARGENIO: Motion has been made and seconded that the Town of New Windsor Planning Board declare negative dec on the Sandcastle Homes site plan and subdivision. Roll call.

ROLL CALL

MR. SCHLESINGER	AYE
MR. BROWN	AYE
MR. GALLAGHER	AYE
MR. VAN LEEWUEN	AYE
MR. ARGENIO	AYE

MR. ARGENIO: I do have one thing, sir, and this is kind of a pet peeve with me, I see your retaining wall on the, what would be the south end of the site and I see that relatively close to the DOT right-of-way.

MR. EDSALL: Town right-of-way.

MR. SALPEPI: Old Route 9W.

MR. ARGENIO: Without me thumbing through the plans, what type of wall are you proposing?

MR. SALPEPI: It is segmental block in our detailing.

MR. ARGENIO: Well, you're not going to do that.

MR. SALPEPI: Mr. Edsall made a comment, poured concrete wall.

MR. ARGENIO: Why did you say that?

MR. EDSALL: Just the proximity to the town highway or town road, the potential for heavy loads with vehicles, I also need to, although I think Anthony just missed our discussion we talked about a guide rail up there so

just final detail, it's more the longevity is greater and structurally it's a lot greater.

MR. ARGENIO: In retrospect knowing what I know now I would never vote in favor of those walls that are constructed up at Shop Rite in Vails Gate and I built them but I would never vote for them again, their reinforcing zone goes back into the town right-of-way, if they ever fall down which is a possibility, I built them, but if they ever did fall down for some other unknown reason it's a catastrophic collapse of the road. I don't want you to think I'm picking on you, you should put up a poured concrete wall, it would be great if you can put some facing on it, that would be great if you can and I want a P.E. stamped design delivered to the building inspector's office on that wall. Mark, you said a guardrail as well, how high is the wall?

MR. EDSALL: I think the wall is only five feet.

MR. SALPEPI: Three to four feet.

MR. ARGENIO: I see you have a fence on it.

MR. SALPEPI: Yes.

MR. ARGENIO: Split rail I would assume?

MR. SALPEPI: Yes.

MR. ARGENIO: Some chain link?

MR. SALPEPI: We have split rail and there will be a guardrail along the side.

MR. ARGENIO: What about the chain link, I want to talk about split rail with chain link on it.

MR. EDSALL: That's what's shown on the plans.

MR. ARGENIO: You guys are so smart.

MR. EDSALL: We'll make sure the other corrections are made.

MR. SALPEPI: There's a grading plan SP 6.

MR. ARGENIO: Mark, Neil had something.

MR. SCHLESINGER: Water purification?

MR. EDSALL: There are storm water basins for water quality treatment, those are in the plan and that's part of the SWPPP. There's two basins, one that serves the upper lot which is lot 1 and then there's one basin lower left-hand corner of the lanes that serve the two lower lots, again, that's another reason for the maintenance agreement cause that one basin is shared between those two lots.

MR. ARGENIO: That maintenance comment shows up on this too so make sure you guys have that covered.

MR. EDSALL: That's all been reviewed, Mr. Schlesinger, and it's fine.

MR. SCHLESINGER: Okay.

MR. ARGENIO: Planning board should determine if a maintenance bond will be required to guarantee the proper addition of the landscaping and other key site improvements. I don't think I have to ask these guys that, the answer is yes to that. Is that right, Howard, Neil?

MR. BROWN: Yes.

MR. SCHLESINGER: Yes.

MR. VAN LEEUWEN: Absolutely.

MR. ARGENIO: Yes, the same as the previous application, we shouldn't do one for one and do something different for another. Mark's comment bullet number 3 under 2, I don't know why you would comment on the dog house. Mark, that's Department of Health it's going to be?

MR. EDSALL: The sewer connection, it's the type of manhole I want to have them put dog house manhole rather than I think they show you a rectangular.

MR. ARGENIO: Storm water?

MR. EDSALL: Sanitary sewer.

MR. ARGENIO: Doesn't Department of Health inspect that?

MR. EDSALL: No, it's not an extension of the sewer therefore the town will review it.

MR. ARGENIO: What's the drop on the dog house?

MR. EDSALL: It's not a drop case over the existing line.

MR. ARGENIO: I'm sorry, correct.

MR. EDSALL: I just want to have that detail shown.

MR. ARGENIO: Can you put that on there please?

MR. SALPEPI: Yes.

MR. ARGENIO: Concrete slab on the bottom, set a structure with no bottom, two dog house holes in the end. What else guys? Somebody chime in.

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MR. VAN LEEUWEN: Highway's done? Make a motion to give final approval.

MR. SCHLESINGER: You have that design has a bank?

MR. CARDAROPOLI: Yeah.

MR. SCHLESINGER: Little rough in and out.

MR. CARDAROPOLI: Yeah, we calculated it all out, it just fits, I mean, we dressed up across the street, got rid of the shacks, we don't want to look at that hole anymore than you do.

MR. ARGENIO: Dumpster enclosure, what are they made out of?

MR. SALPEPI: Concrete block.

MR. ARGENIO: Split face block?

MR. SALPEPI: Yeah, colored block.

MR. VAN LEEUWEN: I made a motion to approve.

MR. ARGENIO: Neil had another question.

MR. SCHLESINGER: No, that's fine.

MR. VAN LEEUWEN: I make a motion we give final approval.

MR. SCHLESINGER: Second it.

MR. ARGENIO: Motion has been made and seconded that the Town of New Windsor Planning Board offer Sandcastle Homes site plan final approval subject to these bullets that we spoke of in the last few minutes, the maintenance bond, the maintenance instrument for the easement, cross easements and whatever else we see fit.

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How's that grab you?

MR. CARDAROPOLI: Not too good but--

MR. ARGENIO: Subject to, Mr. Cardaropoli, subject to Mark's comments. No heavy lifting here.

MR. CARDAROPOLI: No, I know Mark's worked very hard on this site plan.

MR. ARGENIO: As you have, sir, and I mean that in the most sincere sense, this thing has been round and round and round, it's a difficult site. I'd like to see those rateables on the books, I really would and I wish you the best of luck with your endeavor here. Roll call.

ROLL CALL

MR. SCHLESINGER	AYE
MR. BROWN	AYE
MR. GALLAGHER	AYE
MR. VAN LEEWUEN	AYE
MR. ARGENIO	AYE



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**PLANNING BOARD WORK SESSION  
 RECORD OF APPEARANCE**

05-23  
 05-24

TOWN / VILLAGE OF: New Windsor P/B APP. NO.: 100-3

WORK SESSION DATE: 6 June 2007 PROJECT: NEW OLD

REAPPEARANCE AT W/S REQUESTED: \_\_\_\_\_ RESUB. REQ'D: \_\_\_\_\_

PROJECT NAME: Sandcastle - 57P

REPRESENTATIVES PRESENT: Nick C. / Marco S

MUNICIPAL REPS PRESENT: BLDG INSP. \_\_\_\_\_ PB ATTY. \_\_\_\_\_  
 FIRE INSP. Bill H PLANNER \_\_\_\_\_  
 MHE REP (MJE) (Other) \_\_\_\_\_ P/B CHMN \_\_\_\_\_ OTHER \_\_\_\_\_

ITEMS DISCUSSED: \_\_\_\_\_ STND CHECKLIST: \_\_\_\_\_ PROJECT TYPE

\* Try to work with Glen B re getting access to River Rd.

- ck if JLS has SWPPP reviewed

- WAIT UNTIL WE SEE HOW THEY MAKE OUT WITH GLEN B -

DRAINAGE \_\_\_\_\_

DUMPSTER \_\_\_\_\_

SCREENING \_\_\_\_\_

LIGHTING \_\_\_\_\_

(streetlights) LANDSCAPING \_\_\_\_\_

BLACKTOP \_\_\_\_\_

ROADWAYS \_\_\_\_\_

APPROVAL BOX \_\_\_\_\_

PROJECT STATUS:  
 ZBA Referral: X Y \_\_\_\_\_ N

Ready For Meeting \_\_\_\_\_ Y \_\_\_\_\_ N

Recommended Mtg Date \_\_\_\_\_



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**TOWN OF NEW WINDSOR**  
**PLANNING BOARD**  
**REVIEW COMMENTS**

**PROJECT NAME:** SANDCASTLE HOMES SITE PLAN  
 (THREE DEVELOPMENT LOTS)  
**PROJECT LOCATION:** RIVER ROAD – OLD ROUTE 9W – UNION AVE.  
 SECTION 9 – BLOCK 1 – LOT 101  
**PROJECT NUMBER:** 05-24  
**DATE:** 25 OCTOBER 2006  
**DESCRIPTION:** THE APPLICATION PROPOSES THE DEVELOPMENT OF THE THREE  
 COMMERCIAL LOTS OF THE SANDCASTLE SUBDIVISION (APP.  
 NO. 05-23). THE PLAN WAS PREVIOUSLY REVIEWED AT THE  
 27 JULY 2005 PLANNING BOARD MEETING. THE APPLICATION IS  
 BEFORE THE BOARD FOR A PUBLIC HEARING AT THIS MEETING.

1. As previously discussed, this application is actually for three site plan approvals, since (following finalization of the subdivision 05-23) this property will be three individual lots. As previously decided, for this specific case, it appears appropriate that the Planning Board review this as a single application, notwithstanding the fact that it will end up as three lots.
2. I have reviewed these resubmitted plans and have the following comments:

*Sheet SP-1*

- The bulk table should be revised to have a separate net area row, and somewhere a specific listing of the easements subtracted for each lot (see next paragraph).

It is noted that the plans do not reflect an easement for the shared stormwater quality pond #2 (serving lots 2 & 3), nor the connection piping. Nor do the plans provide an easement for the outlet piping from lot #1 to the collection basin at the box culvert on River Road. Easements are missing; as such the area values indicated appear to be in error.

**REGIONAL OFFICES**

• 111 WHEATFIELD DRIVE – SUITE ONE • MILFORD, PENNSYLVANIA 18337 • 570-296-2765 •  
 • 540 BROADWAY • MONTICELLO, NEW YORK 12701 • 845-794-3399 •

- We previously requested a note that the requirements of the site plan approval are applicable to each site individually and together, relative to any improvements that cross the individual lot lines. A note has been added; however I suggest it be replaced with a more complete note. I provide the following draft note for consideration:

“The three sites shown hereon will be individual sites upon filing of the companion subdivision application. All improvements and requirements for each lot will be a condition of site plan approval individually, and jointly where the improvements cross onto another lot or are dependent upon the same. Appropriate cross-easements shall be prepared and filed at the Town and County Clerk’s office memorializing any access, utility or other easements. The provisions for the shared maintenance of any facilities shall be contained therein.”

The document should be submitted to the Attorney for the Planning Board and Engineer for the Planning Board for review.

- Regarding the previous comment, the applicant should insure that all easements and references are also shown on the final subdivision plat.
- Site Plan sheet SP1 should call out the location of the handicapped drops/ramps to the sidewalks.
- For site #1, I suggest a “Do Not Enter” sign be added on the “outlet” side of the drive thru lane. Also, as previously suggested, a directory sign (directing drive thru traffic) should be added.
- The plan should provide a reference to the source of the boundary survey data shown on this plan, and a copy of the survey should be provided to the Planning Board for file.
- No waste enclosure is provided for Site #1. It is assumed that there will be some type of waste generated.

***Sheet SP-2***

- The privately owned sanitary pump stations serving lots 2 & 3 should have a storage capacity of a minimum of 8 hours service, and shall have a duplex pump arrangement (alternating operation). A high level alarm shall be provided in the associated building. An appropriate note should be added to the plans.
- The water main feeding the hydrant on Old Rt. 9W (on site #1) must be 6” minimum (not 4”).
- The Sanitary Superintendent should verify that the lateral for site #1 could be tied directly into a manhole. Also, the method of connection for the two ejector lines (sites 2 & 3) into the system should be verified.

- There are several very steep areas adjoining parking lots and buildings (see grading plans, sheet SP-6). I am concerned stormwater and groundwater will surface at the bottom of these locations, and no provisions have been included to address this likelihood.

#### ***Sheet SP-3***

- As previously noted, some lettering on the lighting plan is mirrored, please fix.
- The lighting configuration and distribution appear reasonable.
- The landscaping appears very “regimented” along the perimeter. The Board should discuss whether a more creative effort should be made.
- Given the steep slopes behind building #3, between sites #1 and #2/3, and other areas, some landscaping should be considered in these steep areas, and special surface (stabilization) treatments included in the erosion plan.

#### ***Sheet SP-4***

- Please revise the Do Not Enter sign to the more recognizable DOT standard.
- The dumpster enclosure finish is noted “to match building foundation”. More information should be provided, as an unfinished masonry block would be unacceptable.
- The sewer connection detail is for a saddle connection to the system; the plan shows the gravity connection to the manhole (also see comment above under SP-2).

#### ***Sheet SP-5***

- I suggest the ROB pavement subbase be replaced with NYSDOT Item #4, or a better standard established.
- The handicapped sign should be on centerline with the parking space for the typical detail.

#### ***Sheet SP-6***

- The plans include slopes in several areas, which are 1:2, including adjacent to the water quality basins. Consideration should be given to the need for fences surrounding the water quality basins, given these designed slopes. An appropriate, aesthetically pleasing, fence should be selected.
- It is acknowledged that the notes on this sheet reference easements and maintenance. A properly prepared subdivision plat with easements shown thereon is necessary, as well as the easement and maintenance document requested elsewhere in these comments.

***Sheets SP-7 & SP-8***

- No comments.
3. The Planning Board circulated a Lead Agency Coordination letter on 9-21-05. Based on the responses, I suggest the Board formally assume the position of Lead Agency at this time.
  4. On 8-1-05 we forwarded this application to the NYSDOT. A response was received on 8-25-06, with the Department accepting the access in concept, with conditions as follows:
    - River Road Access must be right-in / right-out limited.
    - Full-depth shoulders 10' x 75' in dimension must be provided on both sides of the access.

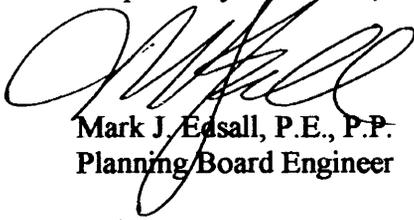
The plans provide signs limiting the movements; however, the curb configuration does not seem to promote the appropriate movements. I question whether the movements will actually end up limited.

Also, note that the shoulder dimensions on the plan are 9' x 50'. Why don't they conform to the DOT letter requirements?

The DOT response letter did not address the stormwater issues (discharge of all systems to a box culvert in the River Road), nor the utility crossing (sewer ejector lines) across Old Route 9W, nor the watermain to be installed along River Road. I have contacted the DOT Permit Engineer for a clarification.

5. As per New York State General Municipal Law (GML 239), this application was referred to the OCPD for review. That department returned a "Local Determination" response on 12-5-05.

Respectfully Submitted,



Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

MJE/st  
NW05-24-25Oct06.doc

CHRONOLOGICAL JOB STATUS REPORT

JOB: 87-56

NEW WINDSOR PLANNING BOARD (Chargeable to Applicant)

CLIENT: NEWWIN - TOWN OF NEW WINDSO

TASK: 5- 24

FOR ALL WORK ON FILE:

TASK-NO	RBC	--DATE--	TRAM	EMPL	ACT DESCRIPTION	RATE	HRS.	TIME	-----DOLLARS-----			
									EXP.	BILLED	BALANCE	
5-24	330761	03/26/07	TIME	MJE	PM SANDCASTLE W/JRS	119.00	0.40	47.60				
5-24	330766	03/26/07	TIME	MJE	MR SANDCASTLE SP REVIEW	119.00	1.50	179.50				
5-24	330789	03/27/07	TIME	MJE	MC SANDCASTLE W/GA	119.00	0.30	35.70				
5-24	334594	04/18/07	TIME	MJE	WS SANDCASTLE S/P	119.00	0.40	47.60				
								630.70				
5-24	334911	04/24/07			BILL 07-1120						-630.70	
											-630.70	
5-24	378954				FD/CR 07-1120	FD 05/09/07		630.70				
5-24	343328	06/06/07	TIME	MJE	WS SANDCASTLE	119.00	0.20	23.80				
5-24	343314	06/08/07	TIME	MJE	MC EMC MM: SANDCASTLE	119.00	0.20	23.80				
5-24	344461	06/15/07	TIME	MJE	MC MARIO: RIVER RD SITE	119.00	0.30	35.70				
5-24	345284	06/20/07	TIME	MJE	WS SANDCASTLE S/P	119.00	0.30	35.70				
								119.00				
5-24	349785	07/20/07			BILL 07-1914						-119.00	
											-119.00	
5-24	380214				FD/CR 07-1914	FD 06/06/07		119.00				
5-24	352036	08/04/07	TIME	MJE	MR SANDCASTLE S/P	119.00	1.50	178.50				
5-24	352043	08/05/07	TIME	MJE	MR SANDCASTLE S/P	119.00	0.40	47.60				
5-24	352466	08/08/07	TIME	MJE	MM Sandcastle SP CONDAP	119.00	0.10	11.90				
5-24	352932	08/08/07	TIME	MJE	MC SANDCASTLE COMM-ARCH	119.00	0.20	23.80				
5-24	352946	08/08/07	TIME	MJE	PM SANDCASTLE S/P W/GA	119.00	0.20	23.80				
5-24	352953	08/08/07	TIME	MJE	MM SANDCASTLE S/P	119.00	0.40	47.60				
5-24	360382	09/28/07	TIME	MJE	MC MM: CANTAROPOLI RIVER	119.00	0.30	35.70				
								368.90				
5-24	359818	09/27/07			BILL 07-2516						-333.20	
											-333.20	
5-24	381044				FD/CR 07-2516	FD 10/11/07		333.20				
5-24	381265	10/17/07	TIME	MJE	PM CLOSEOUT & T/E	119.00	0.20	23.80				
5-24	382726	10/23/07	TIME	MJE	MC REV STATUS/EMC-MM	119.00	0.40	47.60				
5-24	383809	11/05/07	TIME	MJE	MC emc/s re closeout	119.00	0.30	35.70				
5-24	383824	11/06/07	TIME	MJE	MC Closeout	119.00	0.30	35.70				
TASK TOTAL								2285.30			-2106.80	178.50
									0.00			
-----												
GRAND TOTAL								2285.30			-2106.80	178.50
									0.00			

CHRONOLOGICAL JOB STATUS REPORT

JOB: 87-56

NEW WINDSOR PLANNING BOARD (Chargeable to Applicant)

CLIENT: NEWWIN - TOWN OF NEW WINDSO

TASK: 5- 24

FOR ALL WORK ON FILE:

TASK-NO	REC	--DATE--	TRAN	EMPL	ACT	DESCRIPTION-----	RATE	HRS.	TIME	-----DOLLARS-----	
										EXP.	BILLED
5-24	242001	11/30/04	TIME	MJE	WS	SANDCASTLE RIVER RD	99.00	0.40	39.60		
5-24	248087	02/15/05	TIME	MJE	MC	EMC/WM	99.00	0.20	19.80		
5-24	262513	07/26/05	TIME	MJE	MR	SANDCASTLE RIVER S/P	99.00	1.00	99.00		
5-24	262516	07/27/05	TIME	MJE	MC	SANDCASTLE RIVER S/P	99.00	0.30	29.70		
5-24	262509	07/29/05	TIME	MJE	MC	SANDCASTLE L/A COORD	99.00	0.40	39.60		
5-24	262510	07/29/05	TIME	MJE	MC	SANDCASTLE L/A COORD	99.00	0.40	39.60		
									267.30		
5-24	265471	08/30/05				BILL 05-1154					-267.30
											-267.30
5-24	373008					FD/CR 05-1154	FD 09/22/05	267.30			
5-24	275892	12/07/05	TIME	MJE	WS	SANDCASTLE RIVER SP	99.00	0.40	39.60		
									39.60		
5-24	279013	12/31/05				BILL 06-292 1/17/06					-39.60
											-39.60
5-24	374022					FD/CR 06-292	FD 01/30/06	39.60			
5-24	280650	01/30/06	TIME	MJE	MC	EMC/RIVER RD S/P	115.00	0.20	23.00		
5-24	295876	06/21/06	TIME	MJE	WS	CARDAROPOLI RVR S/P	115.00	0.40	46.00		
5-24	300701	07/31/06	TIME	MJE	MC	AJC: CARDAROPOLI APP	115.00	0.30	34.50		
5-24	310053	10/18/06	TIME	MJE	MC	MM: SANDCASTLE	115.00	0.20	23.00		
5-24	310065	10/20/06	TIME	MJE	MR	SANDCASTLE SITE PLAN	115.00	1.80	207.00		
5-24	310069	10/21/06	TIME	MJE	MR	SANDCASTLE S/P	115.00	0.80	92.00		
5-24	310857	10/23/06	TIME	MJE	MR	SANDCASTLE S/P	115.00	0.30	34.50		
5-24	310863	10/24/06	TIME	MJE	PM	MFS GA: SANDCASTLE	115.00	0.30	34.50		
5-24	310869	10/25/06	TIME	MJE	MC	SIBY: SANDCASTLE UTIL	115.00	0.30	34.50		
									529.00		
5-24	310343	10/25/06				BILL 06-2640					-425.50
											-425.50
5-24	377108					FD/CR 06-2640	FD 11/09/06	425.50			
5-24	314436	11/21/06				BILL 06-2933					-103.50
											-103.50
5-24	377273					FD/CR 06-2933	FD 12/06/06	103.50			
5-24	315925	12/06/06	TIME	MJE	WS	SANDCASTLE RIVER RD S/P	115.00	0.30	34.50		
5-24	318202	12/27/06	TIME	MJE	MC	RIVER RD CARDAROPOLI	115.00	0.30	34.50		
5-24	321206	01/17/07	TIME	MJE	WS	SANDCASTLE	119.00	0.40	47.60		
5-24	323774	01/31/07	TIME	MJE	MC	MM: SANDCASTLE	119.00	0.30	35.70		
5-24	324382	02/06/07	TIME	MJE	MC	TC-?: CARDAROPOLI RVR	119.00	0.30	35.70		
									188.00		
5-24	324818	02/20/07				BILL 07-584					-188.00
											-188.00
5-24	378293					FD/CR 07-584	FD 03/07/07	188.00			
5-24	330943	03/21/07	TIME	MJE	MR	SANDCASTLE S/P	119.00	0.40	47.60		
5-24	330944	03/21/07	TIME	MJE	MC	DISC SANDCASTLE/GA	119.00	0.30	35.70		
5-24	330951	03/25/07	TIME	MJE	MR	SANDCASTLE S/P	119.00	2.00	238.00		

State of New York  
County of Orange, ss:  
Patricia Quill being duly sworn  
disposes and says that she is  
the Supervisor of Legal Dept. of the  
E.W. Smith Publishing Company; Inc.,  
a weekly newspaper published and of  
general circulation in the Town of New  
Windsor, Town of Newburgh and City  
of Newburgh and that the notice of which  
the annexed is a true copy was  
published 1X in said newspaper,  
commencing on  
the 13 day of Oct A.D., 2006  
and ending on the 13 day of Oct  
A.D. 2006

**LEGAL NOTICE**  
NOTICE IS HEREBY GIVEN that the Planning  
BOARD of the TOWN OF NEW WINDSOR, County of  
Orange, State of New York will hold a Public Hearing  
at Town Hall, 555 Union Avenue, New Windsor,  
New York on OCTOBER 25, 2006 at 7:30 P.M. on the  
approval of the proposed Site Plan for SANDCASTLE  
HOMES SITE PLAN Located at RIVER ROAD  
(Tax Map #Section 9, Block 1, Lot 101). Map of the  
proposed project is on file and may be inspected at the  
Planning Board Office, Town Hall, 555 Union Avenue,  
New Windsor, NY prior to the Public Hearing.  
Date: SEPTEMBER 21, 2006  
By Order of  
TOWN OF NEW WINDSOR PLANNING BOARD

*Patricia Quill*

Subscribed and shown to before me  
this 24<sup>th</sup> day of Oct, 2006

*Deborah Green*

Notary Public of the State of New York  
County of Orange.

DEBORAH GREEN  
Notary Public, State of New York  
Qualified in Orange County  
# 4954065  
Commission Expires July 15, 07

My commission expires \_\_\_\_\_



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

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WILLIAM J. HAUSER, P.E. (NY & NJ)  
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*Writer's e-mail address:*  
JSzarowski@mhepc.com

**TOWN OF NEW WINDSOR**  
**PLANNING BOARD**  
**SWPPP COMMENTS**

**PROJECT NAME:** SANDCASTLE HOMES - COMMERCIAL  
**PROJECT LOCATION:** S/B/L 9-01-101  
**P.B. PROJECT NO.:** 05-23  
**APPLICANT'S REPRESENTATIVE:** TACONIC DESIGN  
**PREPARATION DATE:** 20 JUNE 2007  
**MEETING DATE:** TBD

Our office has reviewed the Stormwater Pollution Prevention Plan (SWPPP), received 7 June 2007, with regard to the subject project. Upon our review of the aforementioned revised SWPPP, we find the plan to be in substantial compliance with the New York State Department of Environmental Conservation "SPDES" General Permit for Stormwater Discharges from Construction Activities, Permit GP-02-01. As such, this office takes no exception to the SWPPP as submitted.

Respectfully submitted,

**MCGOEY, HAUSER & EDSALL  
CONSULTING ENGINEERS, P.C.**

  
**John Szarowski**  
Senior Engineer

**REGIONAL OFFICES**

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- 540 Broadway • Monticello, New York 12701 • 845-794-3399 •



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Writer's E-mail Address:  
mje@mhepc.com

**PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE**

TOWN / VILLAGE OF: NEW WINDSOR P/B APP. NO.: 100-3 05-24

WORK SESSION DATE: 20 JUNE 2007 PROJECT: NEW OLD X

REAPPEARANCE AT W/S REQUESTED: \_\_\_\_\_ RESUB. REQ'D: \_\_\_\_\_

PROJECT NAME: Sandcastle (River Rd)

REPRESENTATIVES PRESENT: Nick/Mario

MUNICIPAL REPS PRESENT: BLDG INSP. \_\_\_\_\_ PB ATTY. \_\_\_\_\_  
FIRE INSP. Bill H. PLANNER \_\_\_\_\_  
MHE REP (MJE) (Other) \_\_\_\_\_ P/B CHMN \_\_\_\_\_ OTHER \_\_\_\_\_

ITEMS DISCUSSED: WE OK - move hydrant to driveway  
finalize plans - coordinate  
now two separate apps  
COORDINATE PLANS

STND CHECKLIST: DRAINAGE \_\_\_\_\_  
DUMPSTER \_\_\_\_\_  
SCREENING \_\_\_\_\_  
LIGHTING \_\_\_\_\_  
(Streetlights) LANDSCAPING \_\_\_\_\_  
BLACKTOP \_\_\_\_\_  
ROADWAYS \_\_\_\_\_  
APPROVAL BOX \_\_\_\_\_

PROJECT TYPE  
SITE PLAN  
SPEC PERMIT  
L L CHG.  
SUBDIVISION  
OTHER

PROJECT STATUS:  
ZBA Referral: \_\_\_\_\_ Y X N  
Ready For Meeting X Y \_\_\_\_\_ N  
Recommended Mtg Date next  
avail



RESULTS OF P.B. MEETING OF: October 25, 2006

PROJECT: Sandcastle Homes - River Rd - Site Plan P.B.# 05-24

**LEAD AGENCY:**

**NEGATIVE DEC:**

AUTHORIZE COORD. LETTER: Y      N     

M)      S)      VOTE: A      N     

TAKE LEAD AGENCY: Y ✓ N     

CARRIED: Y      N     

M) M S) Schl VOTE: A 5 N 0

CARRIED: Y ✓ N     

PUBLIC HEARING: WAIVED:      CLOSED: ✓

M) Schless) Min VOTE: A 5 N 0 SCHEDULE P.H.: Y      N     

SEND TO O.C. PLANNING: Y       
SEND TO DEPT. OF TRANSPORTATION: Y     

REFER TO Z.B.A.: M)      S)      VOTE: A      N     

RETURN TO WORK SHOP: Y      N     

**APPROVAL:**

M)      S)      VOTE: A      N      APPROVED:     

NEED NEW PLANS: Y      N     

*DOT in Poughkeepsie is handling this*

**CONDITIONS - NOTES:**

- |  |
|--|
| <i>Need to work out Entrances + Exits</i>              |
| <i>Add More Landscaping</i>                            |
| <i>Wumpster should be like Bldg</i>                    |
| <i>Kirk Williams - Asked where this is?</i>            |
| <i>Leo Braun - Burroughs Lane - Spoke re-Entrances</i> |
| <i>Address Mark's Comments</i>                         |
| <i>Need Sketches of Bldgs to be built</i>              |
| <i>Add some walkways</i>                               |

*10-25-06 meeting*



STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
112 DICKSON STREET  
NEWBURGH, NY 12550-5324  
(845) 562-8368  
<http://www.dot.state.ny.us>

ROBERT A. DENNISON, III, P. E.  
REGIONAL DIRECTOR

THOMAS J. MADISON, JR.  
COMMISSIONER

August 25, 2006

Anthony J. Coppola, R.A.  
Coppola Associates  
3 Washington Center, 2<sup>nd</sup> Floor  
Newburgh, NY 12550

**RE: 3-LOT COMMERCIAL SUBDIVISION for Property of  
SANDCASTLE HOMES, Installation of Entrances on  
River Road (Route 880T) and Old Route 9W,  
Town of New Windsor, Orange County**

Dear Mr. Coppola:

The Department is in receipt of your preliminary plans for the above referenced project. We have reviewed it and conceptually, it is acceptable. We have the following comments regarding the proposed entrances.

You have proposed two full movement entrances; one on Old Route 9W and the other on River Road. The Department prefers only one full movement access for the entire property. Since you have presented the difficulty in providing one access due to the natural elevation differences between the lots, the Department will allow two separate accesses.

The Department will permit the full movement access proposed on Old Route 9W. However, the full movement access proposed on River Road will not be permitted due to the limited sight distance to the north. The Department will only allow a right-in/rights-out access with a 10-foot wide full-depth shoulder on either side of the entrance at a minimum length of 75 feet each.

Enclosed please find the plan with our comments red-lined. Please make the necessary changes using NYSDOT's current standards and specifications and resubmit for our final approval prior to the permitting process. If you have any questions, please feel free to call me. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Siby Mary Zaeharish-Carbone".

Siby Mary Zaeharish-Carbone  
Permit Engineer, Orange County East

Encl.

Cc: Richard Gaupman, P.E., R.E., Res. 8-4  
Glenn Boucher, P.E., Permit Coordinator, R-8 Permits  
Myra Mason, Town of New Windsor Planning & Eng. Dept.  
sja



McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.

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Writer's E-mail Address:  
mje@mhepc.com

PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE

05-23  
05-24

TOWN / VILLAGE OF: New Windsor P/B APP. NO.: 100-3

WORK SESSION DATE: 6 June 2007 PROJECT: NEW OLD

REAPPEARANCE AT W/S REQUESTED: \_\_\_\_\_ RESUB. REQ'D: \_\_\_\_\_

PROJECT NAME: Sandcastle - 57p

REPRESENTATIVES PRESENT: Nick C. / Marco S

MUNICIPAL REPS PRESENT: BLDG INSP. \_\_\_\_\_ PB ATTY. \_\_\_\_\_  
FIRE INSP. Bill H PLANNER \_\_\_\_\_  
MHE REP (MJE) (Other) \_\_\_\_\_ P/B CHMN \_\_\_\_\_ OTHER \_\_\_\_\_

ITEMS DISCUSSED: \_\_\_\_\_ STND CHECKLIST: \_\_\_\_\_ PROJECT TYPE

\* Try to work w/ Glen B re getting access to River Rd.

- ck if JKS has SWPPP revised

- WAIT UNTIL WE SEE HOW THEY MAKE OUT WITH GLEN B-

- DRAINAGE \_\_\_\_\_
- DUMPSTER \_\_\_\_\_
- SCREENING \_\_\_\_\_
- LIGHTING \_\_\_\_\_
- (Streetlights) LANDSCAPING \_\_\_\_\_
- BLACKTOP \_\_\_\_\_
- ROADWAYS \_\_\_\_\_

- SITE PLAN
- SPEC PERMIT
- L L CHG.
- SUBDIVISION
- OTHER

APPROVAL BOX  
~~PROJECT STATUS:  
ZBA Referral: Y N  
Ready For Meeting Y N  
Recommended Mtg Date \_\_\_\_\_~~



**McGOEY, HAUSER and EDSALL**  
**CONSULTING ENGINEERS P.C.**

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 WILLIAM J. HAUSER, P.E. (NY & NJ)  
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 JAMES M. FARR, P.E. (NY & PA)

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 E-MAIL: MHENT@MHEPC.COM

**WRITER'S E-MAIL ADDRESS:**  
 MJE@MHEPC.COM

**TOWN OF NEW WINDSOR**  
**PLANNING BOARD**  
**REVIEW COMMENTS**

**PROJECT NAME:** SANDCASTLE HOMES SITE PLAN  
 (THREE DEVELOPMENT LOTS)  
**PROJECT LOCATION:** RIVER ROAD – OLD ROUTE 9W – UNION AVE.  
 SECTION 9 – BLOCK 1 – LOT 101  
**PROJECT NUMBER:** 05-24  
**DATE:** 8 AUGUST 2007  
**DESCRIPTION:** THE APPLICATION PROPOSES THE DEVELOPMENT OF THE THREE  
 COMMERCIAL LOTS OF THE SANDCASTLE SUBDIVISION (APP.  
 NO. 05-23). THE PLAN WAS PREVIOUSLY REVIEWED AT THE  
 27 JULY 2005, 25 OCTOBER 2006 AND 28 MARCH 2007 PLANNING  
 BOARD MEETINGS.

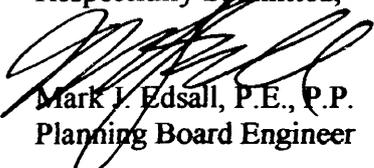
1. As previously discussed, this application is actually for three site plan approvals, since (following finalization of the subdivision 05-23) this property will be three individual lots. As previously decided, for this specific case, it appears appropriate that the Planning Board review this as a single application, notwithstanding the fact that it will end up as three lots.
  
2. I have reviewed these “final” plans. The following items must be addressed on the final plans and submittal for stamp of approval:
  - The Planning Board had previously requested sidewalks between sites #2 and #3. The applicant has indicated difficulty in meeting this request.
  
  - A final review is needed of the curb-cut to Old Rt. 9W and access drive for site #2 and #3, to insure that turning radius is acceptable for fire vehicles (worst case would be an increase in the curb radius).
  
  - The new sewer manhole in Old Rt. 9W would need to be a “doghouse” manhole (it should be so identified on the utility plan). A detail will be required on the plans.
  
  - The applicant’s consultants may wish to consider additional catch basins in the access drive to sites 2/3 (at minimum another c/b opposite the one shown at elev. 494).

**REGIONAL OFFICES**

• 111 WHEATFIELD DRIVE – SUITE ONE • MILFORD, PENNSYLVANIA 18337 • 570-296-2765 •  
 • 540 BROADWAY • MONTICELLO, NEW YORK 12701 • 845-794-3399 •

- The retaining wall along the access drive is immediately adjacent to a town roadway. Subject to verification from the Highway Superintendent, it is my belief a reinforced concrete retaining wall will be required in this location. As well, guide rail along the top appears appropriate.
  - The maintenance for all the shared improvements must be clarified (benefitted lot must be referenced for each easement area), and then all appropriate information incorporated into an instrument that records the rights and maintenance obligations. The applicant should submit a copy of the aforementioned maintenance instrument to the Attorney for the Planning Board and Engineer for the Planning Board for review.
  - The Applicant must submit a bond estimate be submitted for this Site Plan in accordance with Chapter 137 of the Town Code.
  - The applicant must submit the Public Improvement Bond Estimate to the Engineer for the Planning Board for review, and subsequent approval of the Town Board.
3. The Planning Board should determine if a Maintenance Bond will be required for this Site Plan to guarantee the proper condition of the landscaping and other key site improvements of the site. If so required, the term of the bond shall be three years from the date of the Certificate of Occupancy of the completed site (as per Code Section 300-86 C-11).
4. Toward the goal of consideration of approval, note the following status for various aspects of the application:
- Orange County Planning (GML 239) Referral - was referred to the OCPD on 11-1-05. The County returned a letter on 12-5-05 "Local Determination".
  - Public Hearing - held on 10-25-06 and closed.
  - SEQRA Lead Agency - Planning Board assumed position of Lead Agency on 10-25-06.
  - SWPPP - Submittals and several resubmittals received. MHE accepted on 6-20-07.
  - SEQRA Determination - The Planning Board may wish to classify this action as an "unlisted action" under SEQRA, and consider a "negative declaration" of environmental significance, based on the information presented and reviewed.
  - DOT Referral - sent on 8-1-05. Access to State road subsequently removed.
5. If the board believes the application is in final form, I recommend the Board authorize the Attorney for the Planning Board to prepare a "negative declaration" resolution and Conditional Final Site Plan Approval resolution, and authorize the Chairman to sign such resolutions.

Respectfully Submitted,

  
Mark J. Edsall, P.E., P.P.  
Planning Board Engineer

P.B. #05-23

cc: M.E.  
D.C.



STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
112 DICKSON STREET  
NEWBURGH, NY 12550-5324  
(845) 562-8368  
<http://www.dot.state.ny.us>

ROBERT A. DENNISON, III, P. E.  
REGIONAL DIRECTOR

THOMAS J. MADISON, JR.  
COMMISSIONER

September 20, 2007

Anthony J. Coppola, R.A.  
Coppola Associates  
3 Washington Center, 2<sup>nd</sup> Floor  
Newburgh, NY 12550

RE: 3-LOT COMMERCIAL SUBDIVISION for Property of  
SANDCASTLE HOMES, Drainage Connection to  
NYS DOT System, River Road (Rte 980T) and Old  
Route 9W, Town of New Windsor, Orange County

Dear Mr. Coppola:

The Department has reviewed the Stormwater Management Report you submitted for the above referenced project. Our design engineers had the following comments regarding the proposed connection.

1. The Summary Table is not clear as to the pre-existing and post-construction stormwater management volumes.
2. The final report should be stamped by a Professional Engineer.
3. An Inspection & Maintenance Schedule for the detention ponds is needed.

Please revise the drainage report, incorporating the comments above, and resubmit for approval. Once the Department has given final approval, the property owner may then proceed with the permitting process. If you have any questions, please feel free to call me. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Siby Mary Zachariah-Carbone".

Siby Mary Zachariah-Carbone  
Permit Engineer, Orange County East

Cc: Richard Gaupman, P.E., R.E., Res. 8-4  
Glenn Boucher, P.E., Permit Coordinator, R-8 Permits  
Myra Mason, Town of New Windsor Planning & Eng. Dept.  
file





McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

□ Main Office  
33 Airport Center Drive  
Suite #202  
New Windsor, New York 12553  
(845) 567-3100  
e-mail: mheny@mhepc.com

□ Regional Office  
507 Broad Street  
Milford, Pennsylvania 18337  
(570) 296-2765  
e-mail: mhepa@mhepc.com

Writer's E-mail Address:  
mje@mhepc.com

PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE

05-23

05-24

TOWN/VILLAGE OF: New Windsor P/B APP. NO.: 100-3

WORK SESSION DATE: 18 APRIL 2007 PROJECT: NEW OLD X

REAPPEARANCE AT W/S REQUESTED: not now RESUB. REQ'D: new plans

PROJECT NAME: Sandcastle S/P + Sub.

REPRESENTATIVES PRESENT: Mario/Anthony/Mick Jr/John (Facilitator)

MUNICIPAL REPS PRESENT: BLDG INSP. \_\_\_\_\_ PB ATTY. \_\_\_\_\_  
FIRE INSP. \_\_\_\_\_ PLANNER \_\_\_\_\_  
MHE REP (MJE) (Other) \_\_\_\_\_ P/B CHMN \_\_\_\_\_ OTHER \_\_\_\_\_

ITEMS DISCUSSED:

items resolved & v/p must be checked.  
JRS - slope of barrier - prev. ok'd by BMM  
ck DOT referral.  
Drainage + hill set (2 sets) need letter to Dittman - ref from address being moved one set for DOT one for MJE

STND CHECKLIST:

PROJECT TYPE

DRAINAGE \_\_\_\_\_  
DUMPSTER \_\_\_\_\_  
SCREENING \_\_\_\_\_  
LIGHTING \_\_\_\_\_  
(Streetlights)  
LANDSCAPING \_\_\_\_\_  
BLACKTOP \_\_\_\_\_  
ROADWAYS \_\_\_\_\_  
APPROVAL BOX \_\_\_\_\_

SITE PLAN  
SPEC PERMIT  
L L CHG.  
SUBDIVISION  
OTHER

PROJECT STATUS:

ZBA Referral: \_\_\_ Y \_\_\_ N  
Ready For Meeting \_\_\_ Y \_\_\_ N  
Recommended Mtg Date WILL ADVISE

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 10/25/2006

PAGE: 1

LISTING OF PLANNING BOARD AGENCY APPROVALS

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

	DATE-SENT	AGENCY-----	DATE-RECD	RESPONSE-----
REV2	10/12/2006	MUNICIPAL HIGHWAY	10/20/2006	APPROVED
REV2	10/12/2006	MUNICIPAL WATER	/ /	
REV2	10/12/2006	MUNICIPAL SEWER	/ /	
REV2	10/12/2006	MUNICIPAL FIRE	10/13/2006	APPROVED
REV2	10/12/2006	NYS DOT	/ /	
REV1	07/13/2006	MUNICIPAL HIGHWAY	07/25/2006	APPROVED
REV1	07/13/2006	MUNICIPAL WATER	10/12/2006	SUPERSEDED BY REV2
REV1	07/13/2006	MUNICIPAL SEWER	10/12/2006	SUPERSEDED BY REV2
REV1	07/13/2006	MUNICIPAL FIRE	07/13/2006	APPROVED
REV1	07/13/2006	NYS DOT	10/12/2006	SUPERSEDED BY REV2
ORIG	07/20/2005	MUNICIPAL HIGHWAY	07/13/2006	SUPERSEDED BY REV1
ORIG	07/20/2005	MUNICIPAL WATER	07/13/2006	SUPERSEDED BY REV1
ORIG	07/20/2005	MUNICIPAL SEWER	07/13/2006	SUPERSEDED BY REV1
ORIG	07/20/2005	MUNICIPAL FIRE	07/13/2006	SUPERSEDED BY REV1
ORIG	07/20/2005	NYS DOT	07/13/2006	SUPERSEDED BY REV1

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 10/25/2006

PAGE: 1

LISTING OF PLANNING BOARD SEQRA ACTIONS

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

	DATE-SENT	ACTION-----	DATE-RECD	RESPONSE-----
ORIG	07/20/2005	EAF SUBMITTED	07/20/2005	WITH APPLICAT
ORIG	07/20/2005	CIRCULATE TO INVOLVED AGENCIES	07/27/2005	AUTH LETTR
ORIG	07/20/2005	LEAD AGENCY DECLARED	/ /	
ORIG	07/20/2005	DECLARATION (POS/NEG)	/ /	
ORIG	07/20/2005	SCHEDULE PUBLIC HEARING . AFTER PLANS CORRECTED	07/27/2005	SCHED PH
ORIG	07/20/2005	PUBLIC HEARING HELD	/ /	
ORIG	07/20/2005	WAIVE PUBLIC HEARING	/ /	
ORIG	07/20/2005	PRELIMINARY APPROVAL	/ /	
ORIG	07/20/2005		/ /	
ORIG	07/20/2005	LEAD AGENCY LETTER SENT	/ /	

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 10/25/2006

PAGE: 1

LISTING OF PLANNING BOARD ACTIONS

STAGE: STATUS [Open, Withd]  
O [Disap, Appr]

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

--DATE-- MEETING-PURPOSE-----ACTION-TAKEN-----

07/27/2005 P.B. APPEARANCE AUTH LA LETR  
. AUTHORIZED LEAD AGENCY COORD. LETTER - SCHED PUBLIC HEARING  
. AFTER PLANS CORRECTED - SEND TO OC PLANNING AND DOT -  
. ADDRESS MARK'S COMMENTS - ADDRESS DRAINAGE



**LEGAL NOTICE**

NOTICE IS HEREBY GIVEN that the PLANNING BOARD of the TOWN OF  
NEW WINDSOR, County of Orange, State of New York will hold a PUBLIC  
HEARING at Town Hall, 555 Union Avenue, New Windsor, New York on  
**OCTOBER 25, 2006** at 7:30 P.M. on the approval of the proposed Site Plan for  
**SANDCASTLE HOMES SITE PLAN**

Located at **RIVER ROAD**

( Tax Map #Section 9, Block 1, Lot 101) . Map of the proposed project is on  
file and may be inspected at the **Planning Board Office**, Town Hall, 555  
Union Avenue, New Windsor, NY prior to the Public Hearing.

**Date: SEPTEMBER 21, 2006**

By Order of

TOWN OF NEW WINDSOR PLANNING BOARD



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4631  
Fax: (845) 563-3101

## Assessors Office

September 20, 2006

Anthony Coppola  
3 Washington Center 2<sup>nd</sup> Floor  
Newburgh, NY 12550

Re: 9-1-101

P.B.#:05-24 (12)

Dear Mr. Coppola:

According to our records, the attached list of property owners are abutting and across any street of the above referenced property.

The charge for this service is \$35.00 minus your deposit of \$25.00.

Please remit the balance of \$10.00 to the Town Clerk's Office.

Sincerely,

J. Todd Wiley, IAO  
Sole Assessor

JTW/rah  
Attachments

CC: Myra Mason, Zoning Board

81-1-100  
PLUM POINT HOME OWNER ASSOC.  
C/O MID VALLEY PROP.MAN. INC.  
114 ROUTE 17 K  
NEWBURGH, NY 12550

20-3-11  
GEORGE TORRES  
6 UNION AVE.  
NEW WINDSOR, NY 12553

9-1-100  
WAREX TERMINALS CORPORATION  
PO BOX 488  
NEWBURGH, NY 12553

20-4-10  
ROY & MARGARET BOURNE  
PO BOX 699  
CORNWALL, NY 12518

9-2-1 & 9-2-2  
CENTRAL VALLEY REAL ESTATE  
INC.  
PO BOX 487  
CORNWALL ON HUD, NY 12520

-2-3  
ERIC & MELISSA LLC  
26 MT. AIRY RD.  
NEW WINDSOR, NY 12553

9-2-4  
CAROLLEE CURRI  
67 OLD RT. 9W  
NEW WINDSOR, NY 12553

9-2-7.1  
ST. THOMAS EPISCOPAL CHURCH  
PO BOX 4221  
NEW WINDSOR, NY 12553

20-2-62  
ANNETTE ESTELA  
8 UNION AVE.  
NEW WINDSOR, NY 12553

20-2-65  
TIMOTHY TYRELL  
12 UNION AVE.  
NEW WINDSOR, NY 12553

20-2-67 & 20-2-68  
JOHN & JOAN MORSE  
171 SKYVIEW DR.  
GREENVILLE, NY 12083

20-2-69  
ASAL REALTY INC.  
6 GRANDVIEW AVE.  
CORNWALL-ON-HUD., NY  
12520



05-23 Sub.  
05-24 S.P.



**COUNTY OF ORANGE**

**DEPARTMENT OF PLANNING**

**EDWARD A. DIANA**  
COUNTY EXECUTIVE

124 MAIN STREET  
GOSHEN, NEW YORK 10924-2124  
TEL: (845)291-2318 FAX: (845)291-2533  
www.orangecountygov.com/planning

**DAVID CHURCH, A.I.C.P.**  
COMMISSIONER

**ORANGE COUNTY DEPARTMENT OF PLANNING**  
**239 L, M OR N REPORT**

**This proposed action is being reviewed as an aid in coordinating such action between and among governmental agencies by bringing pertinent inter-community and countywide considerations to the attention of the municipal agency having jurisdiction.**

**Referred by:** New Windsor Planning Board

**Reference/County ID No.:** NWT19-05N&M  
**Tax Parcel ID:** 9-1-101

**Applicant:** Sandcastle Homes Inc

**Proposed Action:** 3 Lot subdivision & Site Plan

**Reason for Review:** Within 500' NYS Route 9W

**Date of Full Statement:** November 10, 2005

**Comments:**

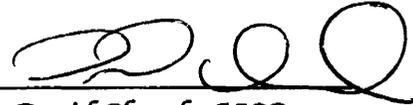
The Department has received the above application for a 3-lot subdivision and site plan, and offers the following;

- This project will have no major impact upon State or County facilities nor have any significant inter-municipal issues.
- It is also consistent with the County Comprehensive Plan and local laws.
- Having no further comments, from a County perspective, the Department recommends that the Planning Board proceed with its decision-making review process.

**County Recommendation: Local Determination**

**\*Approved subject to the following modifications and/or conditions:**

**Date:** December 5, 2005

  
*David Church, AICP*  
**Commissioner of Planning**

**"IMPORTANT NOTE: As per NYS General Municipal Law 239-m(6), within 30 days of municipal final action on the above referred project, the referring board must file a report of the final action taken with the County Planning Department. For such filing, please use the final action report form attached to this review or available on-line at www.orangecountygov.com/planning."**

cc: M.E.

**ORANGE COUNTY DEPARTMENT OF PLANNING**

124 Main Street  
Goshen, NY 10924-2124

**APPLICATION FOR MANDATORY COUNTY REVIEW  
OF LOCAL PLANNING ACTION**

(Variances, Zone Changes, Special Permits, Subdivisions, Site Plans)

Local File No. 05-24 (Please include this number on any correspondence)

1. Municipality Town of New Windsor Public Hearing Date: not set

City, Town or Village Board \_\_\_\_\_ Planning Board X Zoning Board \_\_\_\_\_

2. Owner: Name: Sandcastle Homes Inc.  
Address: P.O. Box 487 Cornwall-on-Hudson, NY 12520

3. Applicant \* Name: same  
Address: \_\_\_\_\_

**\*If applicant is owner, leave blank**

4. Location of Site: River Road and Old Rt. 9W  
(Street or highway, plus nearest intersection)

Tax Map Identification: Section: 9 Block: 1 Lot: 101

Present Zoning District: NC Size of Parcel: 3.23 Acres

5. Type of Review:

**\*\*\*Site Plan**

Zone Change: From    To:   

Zoning Amendment: To Section \_\_\_\_\_

\*\*Subdivision: Number of Lots/Units 3 Commercial Buildings

\*\*\*Site Plan: Use \_\_\_\_\_

Date: 11-1-05

Signature & Title: Mark J. Edsall, P.E.  
**Mark J. Edsall, P.E.,**  
**Planning Board Engineer**



**COUNTY OF ORANGE**

**EDWARD A. DIANA**  
COUNTY EXECUTIVE

**DEPARTMENT OF PLANNING**

124 MAIN STREET  
GOSHEN, NEW YORK 10924-2124  
TEL: (845)291-2318 FAX: (845)291-2533  
www. orangecountygov.com  
planning@co.orange.ny.us

**DAVID E. CHURCH, AICP**  
COMMISSIONER

05-23 Sub.  
05-24 S.P.

December 5, 2005

Attention: Mr. Mark Edsall, P.E., P.P. Planning Board Engineer  
555 Union Ave  
New Windsor, NY 12553

RE: Lead Agency Sandcastle Homes

Dear Mr. Edsall:

Our office is in receipt of a lead agency coordination request. We have no permitting authority; therefore we have no interest in becoming the lead agency on this project. We would, however like the opportunity to review any additional SEQR information that is provided by the applicant of this project.

Thank you for giving us the opportunity to respond to your request and look forward to reviewing the application when it is referred to us for our comments.

Sincerely,

*David Church, Commissioner*

JULY 27, 2005

SANDCASTLE HOMES SITE PLAN (05-24)

MR. PETRO: This application proposes the development of three commercial lots on the Sandcastle Subdivision. You realize that we are going to review this plan only subject to you getting the subdivision so.

MR. COPPOLA: I guess like a procedural move because now we are going to do the public hearing with the site plan.

MR. PETRO: Now I'm going to, I don't know how far we're going to get tonight, we're going to review it just letting you know and the applicant know that if you don't get your subdivision for any reason, this board is not accountable. Do you know what I'm saying. The odds of that are very slim but, I want to make you aware of it.

MR. EDSALL: Mr. Chairman, one procedural issue. This is kind of a unique situation that we have three adjoining lots that all part of common ownership all proposed a part of a subdivision and then in turn being submitted at the same time for site plan approval. Normally, you get an application for each site plan. I think this is one of the unique cases where the town is asked in... because you have the benefit of looking at all one plan when to proceed as the applicant has submitted them and also because there are utilities that cross lines. It would make it difficult to review it as three pieces. I'm suggesting that you just go on the record as saying you will make one application notwithstanding the fact that it is three separate sites and will need .....

MR. PETRO: Okay. Let's go briefly, what is the size of the building. I'm just curious.

MR. COPPOLA: There is three one-story buildings and they're all less than 5,000 square feet. One would be publicly set up with a drive-thru, possibly for a bank. Just a couple of things real briefly. The look back on the last plan that was approved two years ago. That plan had three entrances, one on each street. We kept the entrance to River Road the same and the entrance to Old Rt. 9W the same and we eliminated the entrance on Union Avenue. So, what was previously approved by the DOT is essentially in the same spot. Actually, it's smaller now. Same thing with storm drainage. We had done perc tests and done a storm water management report for the larger building the four story building that was reviewed and approved several years ago. That's all in the same spot. So that's part of what Mark spoke to that we are collecting all the rain water all the storm water it's still going into that same collection area which is underneath the parking lot and then out across the street off River Road. But, essentially these are three fairly feasibly sized office buildings, like I said they are all one story,

JULY 27, 2005

they all have parking directly adjacent to the building, there will be one shared-use driveway for the two lower buildings. You know, we are dealing with the topography of the site, it's very unusual. There's a twenty foot difference between the top of the site and the bottom so these two lower buildings will be more or less, they are almost tucked into the hill on the topography and the building on the upper side will be just pretty much a one-story building, that's all you will see from the top of the site. So, we worked out everything else, the landscaping, the dumpster location.

MR. PETRO: There's a note here from Mark, I don't want to interrupt you, the site plan for lot 1 is indicated as an office with a drive-thru feature. The NC zone does permit banks, fast food establishments, both would normally have drive-thru's however, the parking requirements are not the same as office. The applicant's consultant should revise the parking requirement if this is what's proposed. So, if you will look at that and get that straightened out. You're now, unfortunately, Nick, you didn't build this a couple of years ago, you are now under the SP4 regulation with the water requirement so you are going to have to come up with a plan.

MR. COPPOLA: Yeah, we'll look at that again and conform to the regulations that are required right now.

MR. PETRO: Now, I guess what we're going to do is kind of review all three of these at the same time as one parcel and then do the subdivision so, it's kind of against what I said earlier but it still holds true what I said earlier, if you don't get the subdivision..

MR. CARDOROPOLI: Everything is off.

MR. PETRO: Well, you still have the site plan because we're reviewing it that way. It will all be on one site that's all.

MR. CARDOROPOLI: It's better to break it down with the terrain and everything. We're actually getting less space, it was hard.

MR. PETRO: Yeah, the side yards and that.

MR. CARDOROPOLI: It's easier to build and it's easier to rent.

MR. PETRO: All right there's a number of comments from Mark, I don't want to go over every one of them, it's getting late, we have a lot to do. You can take that with you, we'll take a motion for lead agency.

JULY 27, 2005

MR. ARGENIO: I'll make the motion to circulate a Lead Agency Coordination Letter for Sandcastle Homes Site Plan.

MR. SCHLESINGER: Second.

MR. PETRO: Motion has been made and seconded the New Windsor Planning Board issue a Lead Agency Coordination Letter for the project to begin the SEQRA review process for Sandcastle Homes Site Plan on River Road. Any discussion from the Board, if not roll call.

ROLL CALL:

MR. SCHLESINGER: AYE  
MR. KARNAVEZOS: AYE  
MR. GALLAGHER: AYE  
MR. ARGENIO: AYE  
MR. PETRO: AYE

MR. PETRO: Anything else we can do tonight to facilitate this.

MR. ARGENIO: Can you set it up for a public hearing Mr. Chairman. You had mentioned that earlier.

MR. PETRO: Well, I definitely want to have a public hearing on this. Is the plan ready, you have a lot of comments here.

MR. ARGENIO: I agree.

MR. EDSALL: If you authorize it, we can make sure that the plans are ready.

MR. PETRO: I'll authorize the public hearing so that you don't have to come back but, you have to go to another work shop. Okay, when he's ready at the workshop we will set the public hearing.

MR. CARDOROPOLI: That sounds great.

MR. PETRO: Okay, motion to have the public hearing.

MR. ARGENIO: I'll make the motion.

MR. SCHLESINGER: Second it.

JULY 27, 2005

MR. PETRO: Motion has been made and seconded to have the public hearing for the Sandcastle Homes Site Plan on River Road. Any further comments from the Board, if not roll call.

ROLL CALL:

MR. SCHLESINGER:	AYE
MR. KARNAVEZOS:	AYE
MR. GALLAGHER:	AYE
MR. ARGENIO:	AYE
MR. PETRO:	AYE

MR. EDSALL: Mr. Chairman, I'll also be sending this to the Orange County Planning Department.



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

**MAIN OFFICE**  
33 Airport Center Drive  
Suite 202  
New Windsor, New York 12553

(845) 567-3100  
fax: (845) 567-3232  
e-mail: mheny@mhepc.com

*Writer's e-mail address:*  
*mje@mhepc.com*

**TOWN OF NEW WINDSOR**  
**PLANNING BOARD**  
**REVIEW COMMENTS**

**PROJECT NAME:** SANDCASTLE HOMES SITE PLAN  
(THREE DEVELOPMENT LOTS)  
**PROJECT LOCATION:** RIVER ROAD – OLD ROUTE 9W – UNION AVE.  
SECTION 9 – BLOCK 1 – LOT 101  
**PROJECT NUMBER:** 05-24  
**DATE:** 27 JULY 2005  
**DESCRIPTION:** THE APPLICATION PROPOSES THE DEVELOPMENT OF THE THREE  
COMMERCIAL LOTS OF THE SANDCASTLE SUBDIVISION (APP.  
NO. 05-23). THE PLAN WAS REVIEWED ON A CONCEPT BASIS  
ONLY.

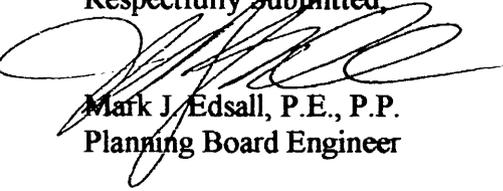
1. The application is actually for three site plan approvals, since (following the subdivision) this will be three individual lots. For this specific case, it appears appropriate that the Planning Board review this as a single site, notwithstanding the fact that it will end up as three lots. If the Board agrees, it would seem counterproductive to break this into three applications.
2. I have reviewed this initial plan and have the following comments:
  - The site plan should include a note that the requirements of the site plan approval are applicable to each site individually and together relative to any improvements that cross the individual lot lines.
  - The plan depicts an access/utility easement. The subsurface stormwater system is outside the easement area. As well, stormwater piping for lot #1 discharges onto lot #2. The easement area should be expanded to cover common improvements.
  - The applicant's attorney should provide a copy of the access/utility easement document for lots 2 & 3 for review by the Town Attorney. The easement should clearly indicate maintenance responsibilities.

**REGIONAL OFFICES**

- 507 Broad Street • Milford, Pennsylvania 18337 • 570-296-2765 •
- 540 Broadway • Monticello, New York 12701 • 845-794-3399 •

- I have concerns regarding the access configuration for the shared access of lots 2 & 3. The medians between the shared access drive and the front row of parking is too narrow, vehicles will overhang into the driveway. The median should be a minimum of 5 feet. In addition, the access lane to each site (lots 2 & 3) should be curbed on each side and should have appropriate turning radii.
  - Related to the previous comment, access to lots 2 & 3 for emergency vehicles may be hampered by the configuration indicated.
  - The plan depicts back-to-back 90-degree parking with an overall 63' dimension. The code requires minimum 64 feet. The 24' aisle width must be 25'.
  - The site plan for lot #1, which is indicated as an office, depicts a drive thru feature. The NC zone does permit banks and fast food establishments (both which normally have drive thru's), however, the parking requirements are not the same as an office. The applicant's consultant should revise the parking requirements if this is what is proposed.
  - The plan for lot #1 will require additional detail for traffic control signage (one way, do not enter, and directory signage) if the one way configuration for the drive thru is pursued.
  - The application is subject to the State and Town regulations as they pertain to Stormwater Pollution Prevention Plans (SWPPPs). A full submittal is required.
  - The site utility plan includes lighting information. This should be added to the landscaping plan (and the text reversed so it is readable).
  - Per new code requirements, a sign is require in front of the cross-hatched access lane of the handicapped parking space. The sign must read "No Parking – Any Time".
3. The Planning Board may wish to authorize the issuance of a Lead Agency Coordination letter for the project, to begin the SEQRA review process. The applicant should submit six (6) sets of drawings (folded) and the environmental form for this purpose.
  4. The Planning Board should determine, for the record, if a Public Hearing will be required for these Site Plans, per its discretionary judgment under Paragraph 300-86 (C) of the Town Zoning Local Law.
  5. As per New York State General Municipal Law (GML 239), this plan must be referred to the OCPD for review.

Respectfully Submitted,



Mark J. Edsall, P.E., P.P.  
Planning Board Engineer



**Town of New Windsor**  
555 Union Avenue  
New Windsor, NY 12553  
(845) 563-4611

**RECEIPT**  
**#680-2005**

07/25/2005

Sandcastle Homed *DB 05-24*

Received \$ 125.00 for Planning Board Fees, on 07/25/2005. Thank you for stopping by the Town Clerk's office.

As always, it is our pleasure to serve you.

Deborah Green  
Town Clerk

PLANNING BOARD  
TOWN OF NEW WINDSOR

AS OF: 07/22/2005

PAGE: 1

LISTING OF PLANNING BOARD FEES  
ESCROW

FOR PROJECT NUMBER: 5-24  
NAME: SANDCASTLE HOMES SITE PLAN  
APPLICANT: SANDCASTLE HOMES

--DATE--	DESCRIPTION-----	TRANS	--AMT-CHG	-AMT-PAID	--BAL-DUE
07/20/2005	REC. CK. #7188	PAID		750.00	
		TOTAL:	0.00	750.00	-750.00

*Hein*  
*7/25/05*



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4693

## OFFICE OF THE PLANNING BOARD

### PROJECT REVIEW SHEET

**TO: HIGHWAY DEPARTMENT**

P.B. FILE #05-24      DATE RECEIVED: 10-10-06      TAX MAP #9-1-101

**PLEASE RETURN COMPLETED FORM TO MYRA  
BY: 10-23-06 TO BE ON AGENDA FOR THE 10-25-06 PLANNING BOARD  
MEETING.**

THE MAPS AND/OR PLANS FOR:

### SANDCASTLE HOMES SITE PLAN

Applicant or Project Name

SITE PLAN XXX, SUBDIVISION \_\_\_\_\_, LOT LINE CHANGE \_\_\_\_\_,  
SPECIAL PERMIT \_\_\_\_\_

HAVE BEEN REVIEWED BY THE UNDERSIGNED AND ARE:

**APPROVED:**

Notes: Subject to field changes.

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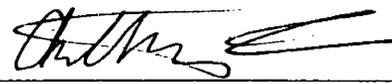
**DISAPPROVED:**

Notes: \_\_\_\_\_

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Signature:  10-20-06  
Reviewed by \_\_\_\_\_ date

**FIRE INSPECTOR'S  
INTER-OFFICE CORRESPONDENCE**

**TO: Genaro Argenio, Planning Board Chairman**

**FROM: Kenneth Schermerhorn, Asst. Fire Inspector**

**SUBJECT: PB-05-24  
Sandcastle Homes  
SBL: 9-1-101**

**DATE: October 13, 2006**

**Fire Prevention Reference Number: FPS-06-048**

**A review of the above referenced site plan has been conducted and is approved.**

**FIRE INSPECTOR'S  
INTER-OFFICE CORRESPONDENCE**

**TO: Genaro Argenio, Planning Board Chairman**

**FROM: Francis Bedetti, Asst. Fire Inspector**

**SUBJECT: PB-05-24  
Sandcastle Homes  
SBL: 9-1-101**

**DATE: July 13, 2006**

**Fire prevention Reference Number: FPS-06-034**

**A review of the above referenced site plan has been conducted and is acceptable.**



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4693

## OFFICE OF THE PLANNING BOARD

### PROJECT REVIEW SHEET

TO: HIGHWAY DEPARTMENT

P.B. FILE #05-24 DATE RECEIVED: 07-12-06 TAX MAP #9-1-101

PLEASE RETURN COMPLETED FORM TO MYRA  
BY: 07-24-06 TO BE ON AGENDA FOR THE 07-26-06 PLANNING BOARD  
MEETING.

THE MAPS AND/OR PLANS FOR:

#### SANDCASTLE HOMES SITE PLAN

Applicant or Project Name

RECEIVED

JUL 13 2006

N.W. HIGHWAY DEPT.

SITE PLAN XXX, SUBDIVISION \_\_\_\_\_, LOT LINE CHANGE \_\_\_\_\_,  
SPECIAL PERMIT \_\_\_\_\_

HAVE BEEN REVIEWED BY THE UNDERSIGNED AND ARE:

APPROVED:

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DISAPPROVED:

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: [Signature] 7/25/06  
Reviewed by \_\_\_\_\_ date



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4693

## OFFICE OF THE PLANNING BOARD

### PROJECT REVIEW SHEET

TO: E 911 COORDINATOR

P.B. FILE #05-24 DATE RECEIVED: 07-12-06 TAX MAP #9-1-101

PLEASE RETURN COMPLETED FORM TO MYRA  
BY: 07-24-06 TO BE ON AGENDA FOR THE 07-26-06 PLANNING BOARD  
MEETING.

THE MAPS AND/OR PLANS FOR:

#### SANDCASTLE HOMES SITE PLAN

Applicant or Project Name

SITE PLAN XXX, SUBDIVISION \_\_\_\_\_, LOT LINE CHANGE \_\_\_\_\_,  
SPECIAL PERMIT \_\_\_\_\_

HAVE BEEN REVIEWED BY THE UNDERSIGNED AND ARE:

APPROVED:

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DISAPPROVED:

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: McDonald 7/19/06  
Reviewed by \_\_\_\_\_ date



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

Main Office  
33 Airport Center Drive  
Suite #202  
New Windsor, New York 12553  
(845) 587-3100  
e-mail: mhery@mhepc.com

Regional Office  
507 Broad Street  
Millford, Pennsylvania 18337  
(570) 298-2765  
e-mail: mhpc@mhepc.com

Writer's E-mail Address:  
mje@mhepc.com

**PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE**

TOWN / VILLAGE OF: New Windsor P/B APP. NO.: 05-24

WORK SESSION DATE: 21 June 06 PROJECT: NEW OLD X

REAPPEARANCE AT W/S REQUESTED: NO RESUB. REQ'D: replan

PROJECT NAME: Sandcastle

REPRESENTATIVES PRESENT: Anthony C

MUNICIPAL REPS PRESENT:

BLDG INSP.	<u>      </u>	FIRE INSP.	<u>BB</u>
ENGINEER	<u>X</u>	PLANNER	<u>      </u>
P/B CHMN	<u>      </u>	OTHER	<u>      </u>

ITEMS DISCUSSED:

- change VG to ponds due to DEC
- enjg vs arch plan - dot north bldg size + flipped.
- cross easements + navat resp.
- ck dimr.
- BB to verify upon rec'd.

STND CHECKLIST:

DRAINAGE	<u>      </u>	<u>PROJECT TYPE</u>
DUMPSTER	<u>      </u>	SITE PLAN
SCREENING	<u>      </u>	SPEC PERMIT
LIGHTING (Streetlights)	<u>      </u>	L L CHG.
LANDSCAPING	<u>      </u>	SUBDIVISION
BLACKTOP	<u>      </u>	OTHER
ROADWAYS	<u>      </u>	
APPROVAL BOX	<u>      </u>	

PROJECT STATUS:

ZBA Referral:        Y X N

Ready For Meeting X Y        N

Recommended Mtg Date next avail



**McGOEY, HAUSER and EDSALL  
CONSULTING ENGINEERS P.C.**

RICHARD D. McGOEY, P.E. (NY & PA)  
WILLIAM J. HAUSER, P.E. (NY & NJ)  
MARK J. EDSALL, P.E. (NY, NJ & PA)  
JAMES M. FARR, P.E. (NY & PA)

□ Main Office  
33 Airport Center Drive  
Suite #202  
New Windsor, New York 12553  
(845) 567-3100  
e-mail: mheny@mhepc.com

□ Regional Office  
507 Broad Street  
Milford, Pennsylvania 18337  
(570) 296-2765  
e-mail: mhpa@mhepc.com

Writer's E-mail Address:  
mje@mhepc.com

**PLANNING BOARD WORK SESSION  
RECORD OF APPEARANCE**

**TOWN/ VILLAGE OF:** New Windsor **P/B APP. NO.:** 0524

**WORK SESSION DATE:** Dec 7 2005 **PROJECT:** NEW      OLD X

**REAPPEARANCE AT W/S REQUESTED:** No **RESUB. REQ'D:** Yes

**PROJECT NAME:** Sandcastle

**REPRESENTATIVES PRESENT:** Joe Sanders + Mario

**MUNICIPAL REPS PRESENT:**  
BLDG INSP.      FIRE INSP.       
ENGINEER X PLANNER       
P/B CHMN      OTHER     

**ITEMS DISCUSSED:**

ck status OCDP + DOT

ck OCDP or DOT for  
either old GW or lower

ck County  
Map.

**STND CHECKLIST:**

- DRAINAGE
- DUMPSTER
- SCREENING
- LIGHTING       
(Streetlights)
- LANDSCAPING
- BLACKTOP
- ROADWAYS
- APPROVAL BOX

**PROJECT TYPE**

- SITE PLAN
- SPEC PERMIT
- L L CHG.
- SUBDIVISION
- OTHER

**PROJECT STATUS:**

ZBA Referral:      Y      N  
Ready For Meeting X Y      N  
Recommended Mtg Date: 1/11



# Town of New Windsor

555 Union Avenue  
New Windsor, New York 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4693

RECEIVED

JUL 25 2005

## OFFICE OF THE PLANNING BOARD

N.W. HIGHWAY DEPT.

### PROJECT REVIEW SHEET

TO: **HIGHWAY DEPARTMENT**

P.B. FILE #05-24      DATE RECEIVED: 07-20-05      TAX MAP #9-1-101

**PLEASE RETURN COMPLETED FORM TO MYRA  
BY: A.S.A.P. TO BE ON AGENDA FOR THE 07-27-05 PLANNING BOARD  
MEETING.**

THE MAPS AND/OR PLANS FOR:

### SANDCASTLE HOMES SITE PLAN - RIVER ROAD

Applicant or Project Name

SITE PLAN XXX, SUBDIVISION     , LOT LINE CHANGE     ,  
SPECIAL PERMIT     

HAVE BEEN REVIEWED BY THE UNDERSIGNED AND ARE:

**APPROVED:**

Notes: Drainage at entrances should be addressed.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**DISAPPROVED:**

Notes: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature: *Henry J. K...*  
Reviewed by \_\_\_\_\_ date \_\_\_\_\_

# TOWN OF NEW WINDSOR

555 UNION AVENUE  
NEW WINDSOR, NEW YORK 12553  
Telephone: (845) 563-4615  
Fax: (845) 563-4695

## PLANNING BOARD APPLICATION

### TYPE OF APPLICATION (check appropriate item):

Subdivision \_\_\_\_\_ Lot Line Change \_\_\_\_\_ Site Plan  Special Permit \_\_\_\_\_

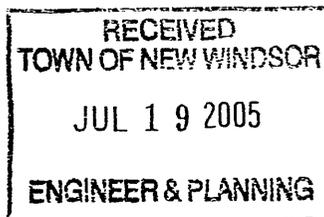
Tax Map Designation: Sec. 9 Block 1 Lot 101

**BUILDING DEPARTMENT PERMIT NUMBER** PA - \_\_\_\_\_

- Name of Project Sandcastle Homes - River Road
- Owner of Record Sandcastle Homes, Inc. Phone (845) 565-6690  
Address: c/o Nick Cardaropoli, Jr., P.O. Box 487, Cornwall-on-Hudson, New York 12520  
(Street Name & Number) (Post Office) (State) (Zip)
- Name of Applicant Sandcastle Homes, Inc. Phone (845) 565-6690  
Address: c/o Nick Cardaropoli, Jr., P.O. Box 487, Cornwall-on-Hudson, New York 12520  
(Street Name & Number) (Post Office) (State) (Zip)
- Person Preparing Plan Coppola Associates Phone (845) 561-3559  
Address: 3 Washington Center, Maple Building, Second Floor, Newburgh, New York 12550  
(Street Name & Number) (Post Office) (State) (Zip)
- Attorney \_\_\_\_\_ Phone \_\_\_\_\_  
Address \_\_\_\_\_  
(Street Name & Number) (Post Office) (State) (Zip)
- Person to be notified to appear at Planning Board meeting:  
Anthony J. Coppola, R.A. (845) 561-3559 (845) 561-2051  
(Name) (Phone) (fax)
- Project Location: On the Northerly side of River Road  
(Direction) (Street)
- Project Data: Acreage 3.23 +/- Zone NC School Dist. Newburgh Enlarged

PAGE 1 OF 2

(PLEASE DO NOT COPY 1 & 2 AS ONE PAGE TWO-SIDED)



05-24

9. Is this property within an Agricultural District containing a farm operation or within 500 feet of a farm operation located in an Agricultural District? Yes \_\_\_\_\_ No X

\*This information can be verified in the Assessor's Office.

\*If you answer yes to question 9, please complete the attached Agricultural Data Statement.

10. Detailed description of Project: (Use, Size, Number of Lots, etc.) We are proposing to erect a commercial building on each of the 3 lots previously approved by the Town of New Windsor Planning Board.

11. Has the Zoning Board of Appeals Granted any Variances for this property? yes \_\_\_\_\_ no X  
12. Has a Special Permit previously been granted for this property? yes \_\_\_\_\_ no X

**IF THIS APPLICATION IS SIGNED BY ANYONE OTHER THAN THE PROPERTY OWNER, A SEPARATE NOTARIZED STATEMENT OR PROXY STATEMENT FROM THE OWNER MUST BE SUBMITTED, AT THE TIME OF APPLICATION, AUTHORIZING THIS APPLICATION.**

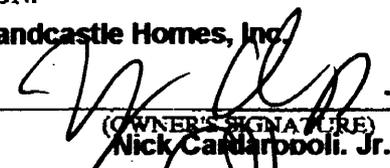
STATE OF NEW YORK)  
SS.:  
COUNTY OF ORANGE)

THE UNDERSIGNED APPLICANT, BEING DULY SWORN, DEPOSES AND STATES THAT THE INFORMATION, STATEMENTS AND REPRESENTATIONS CONTAINED IN THIS APPLICATION AND SUPPORTING DOCUMENTS AND DRAWINGS ARE TRUE AND ACCURATE TO THE BEST OF HIS/HER KNOWLEDGE AND/OR BELIEF. THE APPLICANT FURTHER ACKNOWLEDGES RESPONSIBILITY TO THE TOWN FOR ALL FEES AND COSTS ASSOCIATED WITH THE REVIEW OF THIS APPLICATION.

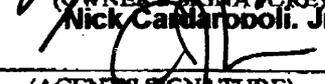
SWORN BEFORE ME THIS:

11th DAY OF July 20 05

Sandcastle Homes, Inc.

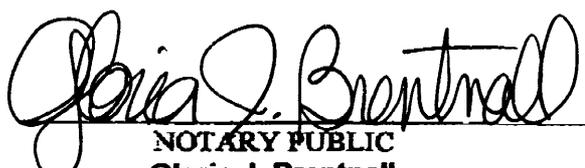
By: 

(OWNER'S SIGNATURE)  
Nick Carandoli, Jr.

  
(AGENT'S SIGNATURE)

**Anthony J. Coppola, R.A.**

Please Print Agent's Name as Signed

  
NOTARY PUBLIC  
Gloria J. Brentnall

\*\*\*\*\*  
TOWN USE ONLY:

JUL 19 2005

DATE APPLICATION RECEIVED

05-24

APPLICATION NUMBER

GLORIA J. BRENTNALL  
Notary Public, State of New York  
No. 01BR6039818  
Qualified in Orange County  
Commission Expires April 10, 2006



**TOWN OF NEW WINDSOR PLANNING BOARD**

**SITE PLAN CHECKLIST**

**ITEM**

1.   X   Site Plan Title
2.   X   Provide 4" wide X 2" high box **(IN THE LOWEST RIGHT CORNER OF THE PLAN)** for use by Planning Board in affixing Stamp of Approval **(ON ALL PAGES OF SITE PLAN)**.

**SAMPLE:**



3.   X   Applicant's Name(s)
4.   X   Applicant's Address
5.   X   Site Plan Preparer's Name
6.   X   Site Plan Preparer's Address
7.   X   Drawing Date
8.   X   Revision Dates
9.   X   Area Map Inset and Site Designation
10.   X   Properties within 500' of site
11.   X   Property Owners (Item #10)
12.   X   Plot Plan
13.   X   Scale (1" = 50' or lesser)
14.   X   Metes and Bounds
15.   X   Zoning Designation
16.   X   North Arrow
17.   X   Abutting Property Owners
18.   X   Existing Building Locations
19.   X   Existing Paved Areas
20.   X   Existing Vegetation
21.   X   Existing Access & Egress

**PROPOSED IMPROVEMENTS**

22.	<u>X</u>	Landscaping
23.	<u>X</u>	Exterior Lighting
24.	<u>X</u>	Screening
25.	<u>X</u>	Access & Egress
26.	<u>X</u>	Parking Areas
27.	<u>X</u>	Loading Areas
28.	<u>X</u>	Paving Details (Items 25 - 27)
29.	<u>X</u>	Curbing Locations
30.	<u>X</u>	Curbing through section
31.	<u>X</u>	Catch Basin Locations
32.	<u>X</u>	Catch Basin Through Section
33.	<u>X</u>	Storm Drainage
34.	<u>X</u>	Refuse Storage
35.	<u>X</u>	Other Outdoor Storage
36.	<u>X</u>	Water Supply
37.	<u>X</u>	Sanitary Disposal System
38.		Fire Hydrants
39.	<u>X</u>	Building Locations
40.	<u>X</u>	Building Setbacks
41.		Front Building Elevations
42.	<u>X</u>	Divisions of Occupancy
43.	<u>X</u>	Sign Details
44.	<u>X</u>	Bulk Table Inset
45.	<u>X</u>	Property Area (Nearest 100 sq. ft.)
46.	<u>X</u>	Building Coverage (sq. ft.)
47.		Building Coverage (% of total area)
48.	<u>X</u>	Pavement Coverage (sq. ft.)
49.		Pavement Coverage (% of total area)
50.	<u>X</u>	Open Space (sq. ft.)
51.		Open Space (% of total area)
52.	<u>X</u>	No. of parking spaces proposed
53.	<u>X</u>	No. of parking spaces required

REFERRING TO QUESTION 9 ON THE APPLICATION FORM, AIS THIS PROPERTY WITHIN AN AGRICULTURAL DISTRICT CONTAINING A FARM OPERATION OR WITHIN 500 FEET OF A FARM OPERATION LOCATED IN AN AGRICULTURAL DISTRICT, PLEASE NOTE THE FOLLOWING:

- 54. \_\_\_\_\_ Referral to Orange County Planning Dept. is required for all applicants filing AD Statement.
- 55. \_\_\_\_\_ A disclosure Statement, in the form set below, must be inscribed on all site plan maps prior to the affixing of a stamp of approval, whether or not the Planning Board specifically requires such a statement as a condition of approval.

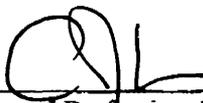
APrior to the sale, lease, purchase, or exchange of property on this site which is wholly or partially within or immediately adjacent to or within 500 feet of a farm operation, the purchaser or leasee shall be notified of such farm operation with a copy of the following notification.

It is the policy of this State and this community to conserve, protect and encourage the development and improvement of agricultural land for the production of food, and other products, and also for its natural and ecological value. This notice is to inform prospective residents that the property they are about to acquire lies partially or wholly within an agricultural district or within 500 feet of such a district and that farming activities occur within the district. Such farming activities may include, but not be limited to, activities that cause noise, dust and odors.

This list is provided as a guide only and is for the convenience of the Applicant. The Town of New Windsor Planning Board may require additional notes or revisions prior to granting approval.

**PREPARER'S ACKNOWLEDGMENT:**

THE PLAT FOR THE PROPOSED SITE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THIS CHECKLIST AND THE TOWN OF NEW WINDSOR ORDINANCES, TO THE BEST OF MY KNOWLEDGE.

BY:  7/11/05  
Licensed Professional Date

**⌘ ⌘ ⌘ ⌘ ⌘ ⌘ PLEASE NOTE: ⌘ ⌘ ⌘ ⌘ ⌘ ⌘**

**THE APPLICANT OR THEIR REPRESENTATIVE IS RESPONSIBLE TO KEEP TRACK OF ALL EXPIRATION DATES FOR ANY AND ALL APPROVALS GRANTED TO A PROJECT. EXTENSIONS MUST BE APPLIED FOR PRIOR TO EXPIRATION DATE.**

2001/05/07  
"XX"

## ATTACHMENTS

- A. Flood Hazard Area Development Permit Application Form.
- B. Certificate of Compliance

PLEASE NOTE: IF PROPERTY IS NOT IN A FLOOD ZONE, PLEASE INDICATE THAT ON THIS FORM AND SIGN YOUR NAME. RETURN FORM WITH PLANNING BOARD APPLICATION.

IF PROPERTY IS LOCATED IN A FLOOD ZONE, PLEASE COMPLETE THE ATTACHED (LEGAL SIZE) PAPERS AND RETURN WITH PLANNING BOARD APPLICATION.

Dated: July 11, 2005

Sandcastle Homes, Inc.

By: 

Nick Cardaropoli, Jr.

PROJECT I.D. NUMBER

617.20

SEQR

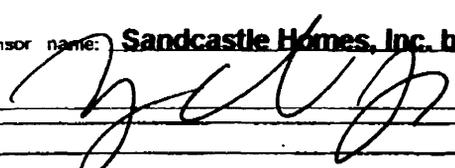
Appendix C

State Environmental Quality Review

**SHORT ENVIRONMENTAL ASSESSMENT FORM**

For UNLISTED ACTIONS Only

**PART I—PROJECT INFORMATION** (To be completed by Applicant or Project sponsor)

1. APPLICANT /SPONSOR <b>Sandcastle Homes, Inc.</b>	2. PROJECT NAME <b>Sandcastle Homes, Inc. - River Road</b>
3. PROJECT LOCATION: Municipality <b>Town of New Windsor</b> County <b>Orange</b>	
4. PRECISE LOCATION (Street address and road intersections, prominent landmarks, etc., or provide map) <b>River Road at Intersections of Union Street and Old Route 9W.</b>	
5. IS PROPOSED ACTION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Expansion <input type="checkbox"/> Modification/alteration	
6. DESCRIBE PROJECT BRIEFLY: <b>(3) Commercial Buildings, Office Occupancy, 1 Story, Wood Framed, Less than 5000 SF each.</b>	
7. AMOUNT OF LAND AFFECTED: Initially <u>3.23</u> acres    Ultimately <u>2.5</u> acres	
8. WILL PROPOSED ACTION COMPLY WITH EXISTING ZONING OR OTHER EXISTING LAND USE RESTRICTIONS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No    If No, describe briefly	
9. WHAT IS PRESENT LAND USE IN VICINITY OF PROJECT? <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Agriculture <input type="checkbox"/> Park/Forest/Open space <input type="checkbox"/> Other Describe:	
10. DOES ACTION INVOLVE A PERMIT APPROVAL, OR FUNDING, NOW OR ULTIMATELY FROM ANY OTHER GOVERNMENTAL AGENCY (FEDERAL, STATE OR LOCAL)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    If yes, list agency(s) and permit/approvals	
11. DOES ANY ASPECT OF THE ACTION HAVE A CURRENTLY VALID PERMIT OR APPROVAL? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No    If yes, list agency name and permit/approval	
12. AS A RESULT OF PROPOSED ACTION WILL EXISTING PERMIT/APPROVAL REQUIRE MODIFICATION? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE	
Applicant/sponsor name: <b>Sandcastle Homes, Inc. by Nick Cardaropoli, Jr.</b>	Date: <b>July 11, 2006</b>
Signature: 	

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment

OVER

1

**PART II—ENVIRONMENTAL ASSESSMENT (To be completed by Agency)**

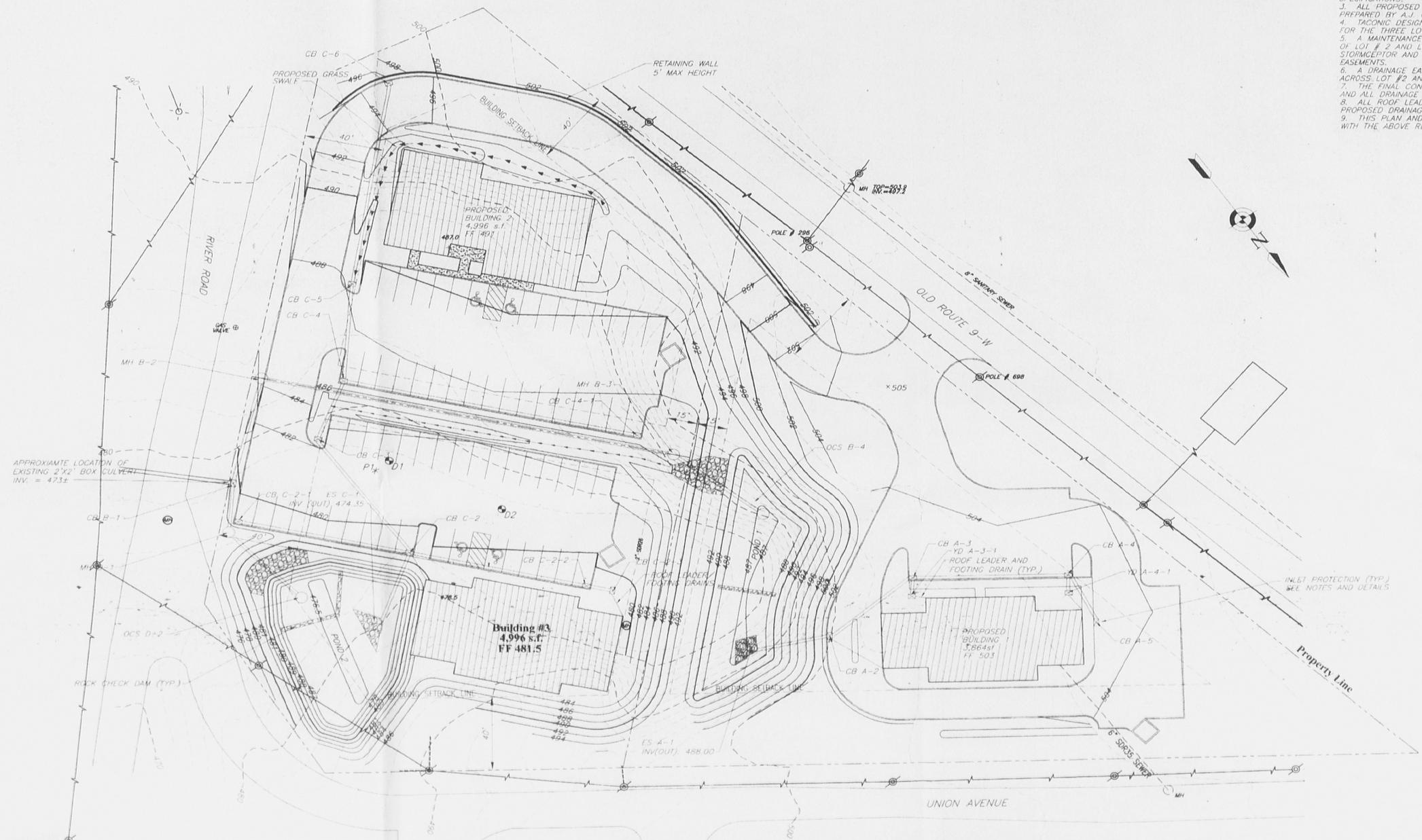
<p>A. DOES ACTION EXCEED ANY TYPE I THRESHOLD IN 6 NYCRR. PART 617.4? <span style="float: right;">if yes, coordinate the review process and use the FULL EAF.</span>  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
<p>B. WILL ACTION RECEIVE COORDINATED REVIEW AS PROVIDED FOR UNLISTED ACTIONS IN 6 NYCRR. PART 617.6? <span style="float: right;">If No, a negative declaration may be superseded by another involved agency.</span>  <input type="checkbox"/> Yes    <input type="checkbox"/> No</p>
<p>C. COULD ACTION RESULT IN ANY ADVERSE EFFECTS ASSOCIATED WITH THE FOLLOWING: (Answers may be handwritten, if legible)</p> <p>C1. Existing air quality, surface or groundwater quality or quantity, noise levels, existing traffic patterns, solid waste production or disposal, potential for erosion, drainage or flooding problems? Explain briefly</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">No</p> <p>C2. Aesthetic, agricultural, archaeological, historic, or other natural or cultural resources; or community or neighborhood character? Explain briefly:</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">No</p> <p>C3. Vegetation or fauna, fish, shellfish or wildlife species, significant habitats, or threatened or endangered species? Explain briefly</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">No</p> <p>C4. A community's existing plans or goals as officially adopted, or a change in use or intensity of use of land or other natural resources? Explain briefly.</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">No</p> <p>C5. Growth, subsequent development, or related activities likely to be induced by the proposed action? Explain briefly.</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">No</p> <p>C6. Long term, short term, cumulative, or other effects not identified in C1-C5? Explain briefly.</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">No</p> <p>C7. Other impacts (including changes in use of either quantity or type of energy)? Explain briefly.</p> <p style="text-align: center; font-weight: bold; font-size: 1.2em;">No</p>
<p>D. WILL THE PROJECT HAVE AN IMPACT ON THE ENVIRONMENTAL CHARACTERISTICS THAT CAUSED THE ESTABLISHMENT OF A CEA?  <input type="checkbox"/> Yes    <input checked="" type="checkbox"/> No</p>
<p>E. IS THERE, OR IS THERE LIKELY TO BE, CONTROVERSY RELATED TO POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS?  <input type="checkbox"/> Yes    <input checked="" type="checkbox"/> No    If Yes, explain briefly</p>

**PART III—DETERMINATION OF SIGNIFICANCE (To be completed by Agency)**

**INSTRUCTIONS:** For each adverse effect identified above, determine whether it is substantial, large, important or otherwise significant. Each effect should be assessed in connection with its (a) setting (i.e. urban or rural); (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude. If necessary, add attachments or reference supporting materials. Ensure that explanations contain sufficient detail to show that all relevant adverse impacts have been identified and adequately addressed. If question D of Part II was checked yes, the determination and significance must evaluate the potential impact of the proposed action on the environmental characteristics of the CEA.

<p><input type="checkbox"/> Check this box if you have identified one or more potentially large or significant adverse impacts which <b>MAY</b> occur. Then proceed directly to the FULL EAF and/or prepare a positive declaration.</p>	
<p><input type="checkbox"/> Check this box if you have determined, based on the information and analysis above and any supporting documentation, that the proposed action <b>WILL NOT</b> result in any significant adverse environmental impacts <b>AND</b> provide on attachments as necessary, the reasons supporting this determination:</p>	
<p>_____</p> <p style="text-align: center; font-size: 0.8em;">Name of Lead Agency</p>	
<p>_____</p> <p style="text-align: center; font-size: 0.8em;">Print or Type Name of Responsible Officer in Lead Agency</p>	<p>_____</p> <p style="text-align: center; font-size: 0.8em;">Title of Responsible Officer</p>
<p>_____</p> <p style="text-align: center; font-size: 0.8em;">Signature of Responsible Officer in Lead Agency</p>	<p>_____</p> <p style="text-align: center; font-size: 0.8em;">Signature of Preparer (if different from responsible officer)</p>
<p>_____</p> <p style="text-align: center; font-size: 0.8em;">Date</p>	

**NOTES:**  
 1. CATCH BASIN CB C-2 IS A STORMCEPTOR MODEL STC-900, WHICH IS REQUIRED TO PROVIDE FOR THE WATER QUALITY IS REQUIRED BY THE NYSDEC. SEE PAGE SP 7 FOR DETAILS.  
 2. ALL AREAS WITH FINISHED SLOPES EXCEEDING 30% SHALL BE STABILIZED UTILIZING LANDLOK TRM 450 AS MANUFACTURED BY CONTECH. THIS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.  
 3. ALL PROPOSED PARKING AND BUILDINGS ARE PER SITE PLANS PREPARED BY A.J. COPPOLA, R.A.  
 4. TACONIC DESIGN CONSULTANTS HAS PREPARED STORMWATER MANAGEMENT FOR THE THREE LOTS.  
 5. A MAINTENANCE AGREEMENT SHALL BE REQUIRED BETWEEN THE OWNERS OF LOT # 2 AND LOT # 3 FOR THE UPKEEP AND MAINTENANCE OF THE STORMCEPTOR AND POND SERVICING THOSE LOTS WITH APPROPRIATE EASEMENTS.  
 6. A DRAINAGE EASEMENT WILL BE PROVIDED FOR LOT # 1 OVER AND ACROSS LOT # 2 AND # 3.  
 7. THE FINAL CONSTRUCTION SEQUENCE SHALL STIPULATE THAT THE PARKING AND ALL DRAINAGE FOR LOT # 2 AND # 3 BE CONSTRUCTED CONCURRENTLY.  
 8. ALL ROOF LEADERS AND FOOTING DRAINS SHALL BE TIED INTO THE PROPOSED DRAINAGE SYSTEMS SERVICING THE LOT.  
 9. THIS PLAN AND CORRESPONDING DETAIL SHEET SHALL BE USED IN CONJUNCTION WITH THE ABOVE REFERENCED SITE PLANS.



**DRAINAGE STRUCTURE INFORMATION**

DRAINAGE NETWORK	FROM	TO	RIM	PIPE	LENGTH	SLOPE	INVERT (UPPER)	INVERT (LOWER)	INVERT (LOWER)
A-LINE	CB A-5	CB A-4	503.00	15"	30 LF	3.50%	500.25	500.25	499.20
	CB A-4	CB A-3	502.00	15"	75 LF	2.00%	499.20	499.20	497.70
									499.20
	CB A-3	CB A-2	502.00	15"	50 LF	4.00%	497.70	497.70	495.70
	CB A-2	ES A-1	501.00	15"	40 LF	5.00%	495.70	491.00	489.00
	YD A-4-1	CB A-4	502.00	8"	10 LF	8.00%	500.00	500.00	499.20
YD A-3-1	CB A-3	501.00	8"	10 LF	5.00%	499.00	499.00	498.50	
B-LINE	OCS B-4	MH B-3	491.50	15"	45 LF	4.13%	490.50	484.00	482.05
									484.00
	MH B-3	MH B-2	487.00	15"	205 LF	3.00%	482.05	482.05	475.90
	MH B-2	CB B-1	484.00	15"	55 LF	5.00%	475.90	475.90	473.00
C-LINE	CB C-6	CB C-5	495.00	15"	110 LF	6.50%	492.25	492.25	485.10
	CB C-5	CB C-4	488.00	15"	55 LF	4.00%	485.10	485.10	482.90
	CB C-4	CB C-3	486.50	15"	35 LF	5.00%	482.90	480.00	478.25
									480.00
	CB C-3	CB C-2	482.00	18"	80 LF	3.75%	478.25	478.25	475.25
	CB C-2	ES C-1	479.25	24"	40 LF	2.00%	475.25	475.15	474.35
									475.15
	CB C-4-1	CB C-4	486.50	15"	150 LF	2.50%	483.75	483.75	480.00
	CB C-2-1	CB C-2	479.25	15"	85 LF	1.00%	476.50	476.50	475.65
	CB C-2-3	CB C-2	479.00	15"	10 LF	2.00%	476.25	476.25	476.05
CB C-2-2	CB C-1	479.25	15"	90 LF	1.00%	476.05	476.05	475.15	
D-LINE	OCS D-2	MH D-1	481.00	24"	45 LF	0.75%	480.00	473.50	473.15
									473.50
	MH D-1	CB B-1	477.00	24"	25 LF	0.50%	473.15	473.15	473.00

ABBREVIATIONS:  
 CB = CATCH BASIN  
 MH = MAN HOLE  
 YD = YARD DRAIN  
 OCS = OUTLET CONTROL STRUCTURE

**LEGEND**  
 - - - - - PROPERTY LINE EXISTING  
 - - - - - EXISTING CONTOURS (2')  
 - - - - - EXISTING CONTOURS (10')  
 - - - - - CONTOURS PROPOSED (2')  
 - - - - - CONTOURS PROPOSED (10')  
 - - - - - SETBACKS  
 - - - - - WALL PROPOSED



**REVISIONS**

REV.	DATE	BY	DESCRIPTION
5	05/02/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
4	02/12/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
3	01/15/07	J.J.C.	PER PARKING LOT REVISIONS
2	02/11/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS
1	06/14/05	J.J.C.	PER TOWN ENGINEER'S COMMENTS

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

**TACONIC DESIGN ENGINEERING, PLLC**  
 SUITE 201  
 3125 ROUTE 9W  
 NEW WINDSOR, N.Y. 12553  
 (845)-569-8400  
 (FAX)(845)-569-4583

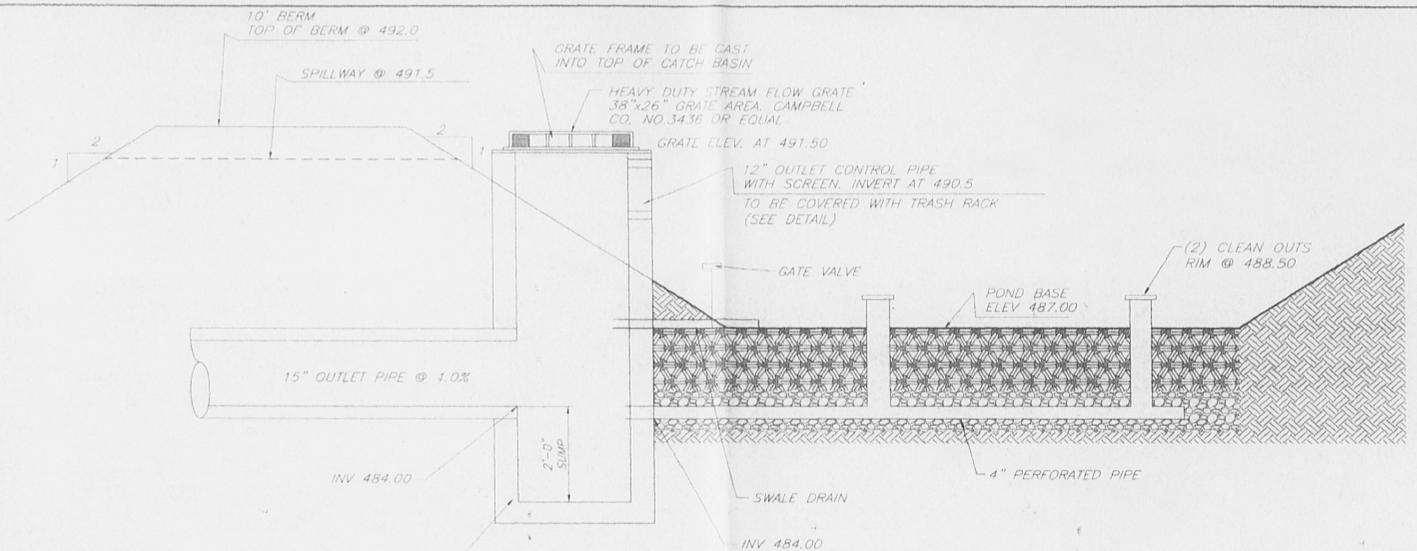
**ENGINEER**  
**CHARLES T. BROWN, P.E.**  
**WILLIAM J. MOREAU, P.E.**

P.O. BOX 4470  
 NEW WINDSOR, N.Y. 12553  
 (845)-561-2582

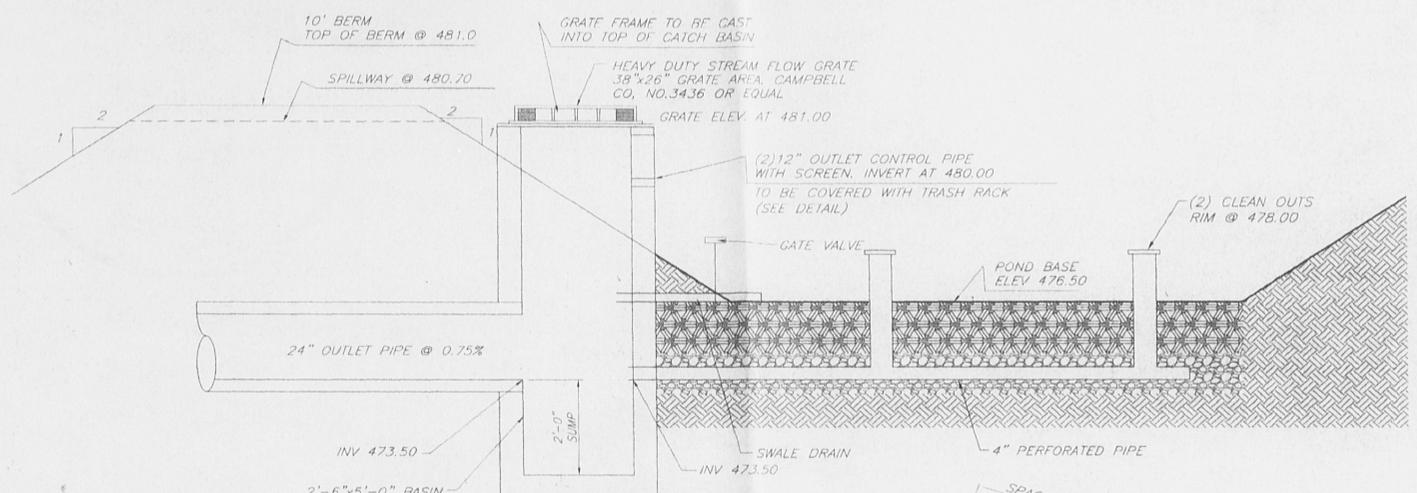
**GRADING AND DRAINAGE PLAN**  
**COMMERCIAL SUBDIVISION FOR:**  
**SANDCASTLE HOMES**  
**RIVER ROAD (S/B/L: 9-1-101)**  
**TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK**

DATE: 12/02/05  
 SCALE: 1"=30'  
 JOB NUMBER: 05450 - A/C  
 SHEET NUMBER: SP 6

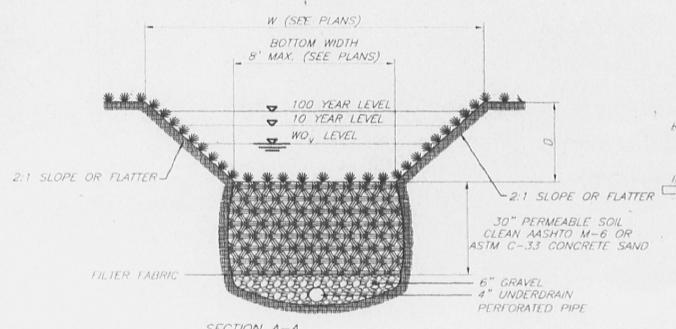
CALL BEFORE YOU DIG... IT'S THE LAW  
 WHETHER YOU'RE LAYING A FOUNDATION FOR A BUILDING OR PLANTING A TREE, YOU MUST FIRST CHECK FOR THE EXISTENCE OF UNDERGROUND UTILITY LINES AND CABLES. IF YOU OR YOUR CONTRACTOR DISRUPT ANY OF THESE LINES, THE RESULTS CAN BE DANGEROUS AND COSTLY TO EVERYONE. CALL BEFORE YOU DIG. TOLL FREE: 1-800-472-3445 (IN NEW YORK CITY AND LONG ISLAND) OR 1-800-926-2962 (IN ALL OTHER AREAS OF THE STATE.)



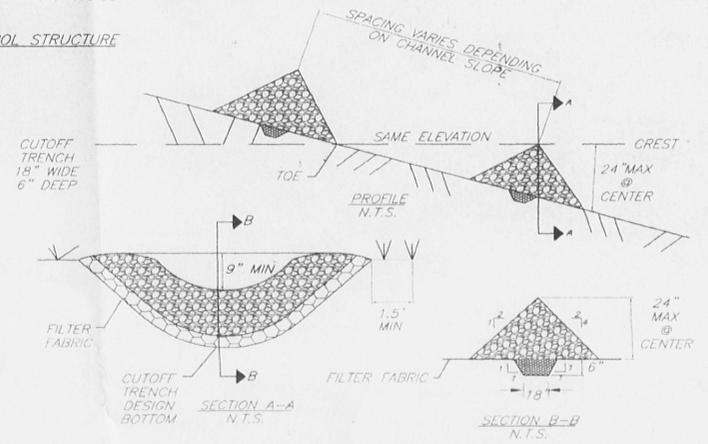
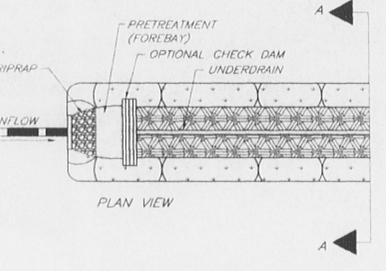
**DRY SWALE 1 OUTLET CONTROL STRUCTURE**  
N.T.S.



**DRY SWALE 2 OUTLET CONTROL STRUCTURE**  
N.T.S.

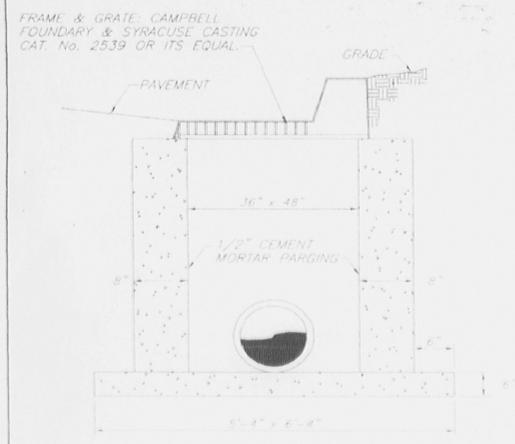


**STANDARD DRY SWALE**  
N.T.S.



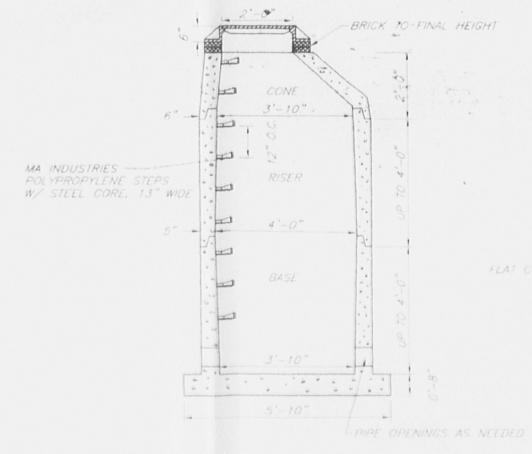
**ROCK DAMS FOR SILTATION CONTROL**  
N.T.S.

- CHECK DAM CONSTRUCTION SPECIFICATIONS**
- STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
  - SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATIONS OF THE TOE OF THE UPSTREAM DAM.
  - EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
  - PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
  - ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.



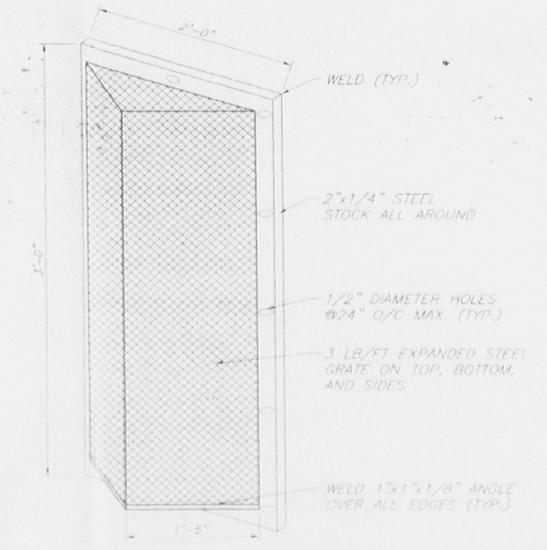
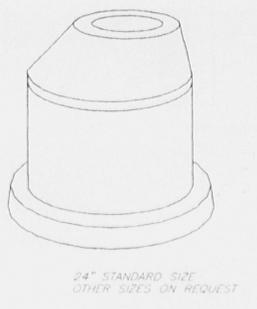
**CURB-TYPE CATCH BASIN**  
N.T.S.

- CATCH BASIN AND DROP INLETS MAY BE CONSTRUCTED OF CLASS "A" CONCRETE, SOLID CONCRETE BLOCK, OR PRECAST CONCRETE SECTIONS.
- ALL CATCH BASINS AND DROP INLETS OVER 6\"/>



**WOODARD'S PRECAST MANHOLE, 4' I.D. BASE AND FLAT TOP**  
N.T.S.

- SPECIFICATIONS**
- CONCRETE MINIMUM STRENGTH - 4,000 PSI AT 28 DAYS
  - REINFORCEMENT - ASTM A428, #6 MESH, #4 REBAR
  - AIR ENTRAPMENT - 5%
  - CONSTRUCTION JOINT - BUTYL RUBBER SEALANT
  - PIPE CONNECTION - POLYLOC SEAL (PATENTED)
  - LOAD RATING - 120, TRUCK TRAFFIC



**TRASH RACK PROTECTION FOR LOW FLOW ORIFICE**

- NOTES:**
- TRASH RACK TO BE CENTERED OVER OPENING.
  - STEEL TO CONFORM TO ASTM A-36.
  - ALL SURFACES TO BE COATED WITH ZRC COLD GALVANIZING COMPOUND AFTER WELDING.



**GRASS SWALE DETAIL**  
N.T.S.

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

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**ENGINEER**  
**CHARLES T. BROWN, P.E.**  
**WILLIAM J. MOREAU, P.E.**  
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NEW WINDSOR, N.Y. 12553  
(845)-561-2582

**DRAINAGE AND EROSION & SEDIMENTATION CONTROL DETAILS**  
**COMMERCIAL SUBDIVISION FOR:**  
**SANDCASTLE HOMES**  
**RIVER ROAD (S/B/L: 9-1-101)**  
**TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK**

DATE: 12/02/05  
SCALE: AS NOTED  
JOB NUMBER: 05450 - A/C  
SHEET NUMBER: 37-7

REV.	DATE	BY	DESCRIPTION
6	05/02/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
5	02/12/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
4	02/08/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
3	01/15/07	J.J.C.	PER PARKING LOT REVISIONS
2	07/11/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS
1	06/24/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS

**CALL BEFORE YOU DIG... IT'S THE LAW**

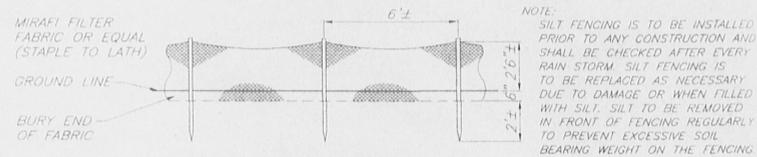
WHETHER YOU'RE LAYING A FOUNDATION FOR A BUILDING OR PLANTING A TREE, YOU MUST FIRST CHECK FOR THE EXISTENCE OF UNDERGROUND UTILITY LINES AND CABLES. IF YOU OR YOUR CONTRACTOR DISRUPT ANY OF THESE LINES, THE RESULTS CAN BE DANGEROUS AND COSTLY - TO EVERYONE. CALL BEFORE YOU DIG. TOLL FREE 1-800-422-4489 (IN NEW YORK CITY AND LONG ISLAND) OR 1-800-926-7822 IN ALL OTHER AREAS OF THE STATE.

**TEMPORARY VEGETATION NOTES:**

- TEMPORARY VEGETATION SHALL BE USED TO PROTECT AREAS IN EXCESS OF 1/2 AC. EXPOSED FOR A PERIOD OVER (2) WEEKS BEFORE OR DURING DEVELOPMENT.
- (50) LBS. OF NITROGEN, (50) POUNDS OF APPROVED GRAIN SEED AND (2) TONS OF HAY MULCH PER ACRE OR
  - ON AREAS THAT WILL BE EXPOSED FOR SHORT PERIODS OF TIME AND WHERE WEATHER CONDITIONS ARE CONDUCTIVE TO AIRBORNE SAND TRAPS TO CONTROL SUCH SAND SHALL BE INSTALLED AS DIRECTED.
  - ON AREAS SUCH AS TEMPORARY ROADWAYS, WHEN DRY CONDITIONS PREVAIL, THE CONTRACTOR SHALL BE REQUIRED TO APPLY WATER OR CALCIUM CHLORIDE AS REQUIRED TO PREVENT DUST DURING CONSTRUCTION ACTIVITIES.

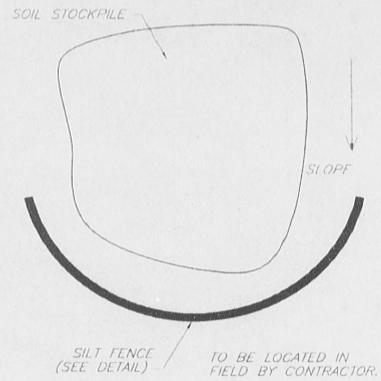
**EROSION CONTROL STANDARD NOTES**

- EXCAVATION, FILLING, GRADING AND STRIPPING SHALL BE PERMITTED TO BE UNDERTAKEN ONLY IN SUCH LOCATIONS AND IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL OF EROSION AND SEDIMENT AND THE THREAT TO THE HEALTH, SAFETY AND WELFARE OF NEIGHBORING PROPERTY OWNERS AND THE GENERAL PUBLIC.
- SITE PREPARATION AND CONSTRUCTION SHALL BE FITTED TO THE VEGETATION, TOPOGRAPHY AND OTHER NATURAL FEATURES OF THE SITE AND SHALL PRESERVE AS MANY OF THESE FEATURES AS FEASIBLE.
- THE CONTROL OF EROSION AND SEDIMENT SHALL BE A CONTINUOUS PROCESS UNDERTAKEN AS NECESSARY PRIOR TO, DURING AND AFTER SITE PREPARATION AND CONSTRUCTION.
- THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED BY SITE PREPARATION AT ANY GIVEN TIME.
- THE EXPOSURE OF AREAS BY SITE PREPARATION SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME PRIOR TO THE CONSTRUCTION OF STRUCTURES OR IMPROVEMENTS OR THE RESTORATION OF THE EXPOSED AREAS TO AN ATTRACTIVE NATURAL CONDITION.
- MULCHING OR TEMPORARY VEGETATION SUITABLE TO THE SITE SHALL BE USED WHERE NECESSARY TO PROTECT AREAS EXPOSED BY SITE PREPARATION, AND PERMANENT VEGETATION WHICH IS WELL ADAPTED TO THE SITE SHALL BE INSTALLED AS SOON AS PRACTICAL.
- WHERE SLOPES ARE TO BE REVEGETATED IN AREAS EXPOSED BY SITE PREPARATION, THE SLOPES SHALL NOT BE OF SUCH STEEPNESS THAT VEGETATION CANNOT BE READILY ESTABLISHED OR THAT PROBLEMS OF EROSION OR SEDIMENT MAY RESULT.
- SITE PREPARATION AND CONSTRUCTION SHALL NOT ADVERSELY AFFECT THE FREE FLOW OF WATER BY ENCROACHING ON, BLOCKING OR RESTRICTING WATER FLOWS.
- ALL FILL MATERIAL SHALL BE COMPOSITION SUITABLE FOR THE ULTIMATE USE OF THE FILL, FREE OF RUBBISH AND CAREFULLY RESTRICTED IN ITS CONTENT OF BRUSH, STUMPS, TREE DEBRIS, ROCKS, FROZEN MATERIAL AND SOFT OR EASILY COMPRESSIBLE MATERIAL.
- FILL MATERIAL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT PROBLEMS OF EROSION, AND WHERE THE MATERIAL IS TO SUPPORT STRUCTURES, IT SHALL BE COMPACTED TO A MINIMUM OF NINETY PERCENT (90%) OF STANDARD PROCTOR WITH PROPER MOISTURE CONTROL.
- ALL TOPSOIL WHICH IS EXCAVATED FROM A SITE SHALL BE STOCKPILED AND USED FOR THE RESTORATION OF THE SITE, AND SUCH STOCKPILES, WHERE NECESSARY, SHALL BE SEEDED OR OTHERWISE TREATED TO MINIMIZE THE EFFECTS OF EROSION.
- PRIOR TO, DURING AND AFTER SITE PREPARATION AND CONSTRUCTION, AN INTEGRATED DRAINAGE SYSTEM SHALL BE PROVIDED WHICH AT ALL TIMES MINIMIZES EROSION, SEDIMENT, HAZARDS OF SLOPE INSTABILITY AND ADVERSE EFFECT ON NEIGHBORING PROPERTY OWNERS.
- THE NATURAL DRAINAGE SYSTEM SHALL GENERALLY BE PRESERVED IN PREFERENCE TO MODIFICATIONS OF THIS SYSTEM, EXCEPTING WHERE SUCH MODIFICATIONS ARE NECESSARY TO REDUCE LEVELS OF EROSION AND SEDIMENT AND ADVERSE EFFECTS ON NEIGHBORING PROPERTY OWNERS.
- ALL DRAINAGE SYSTEMS SHALL BE DESIGNED TO HANDLE ADEQUATELY ANTICIPATED FLOWS, BOTH WITHIN THE SITE AND FROM THE ENTIRE UPSTREAM DRAINAGE BASIN.
- SUFFICIENT GRADES AND DRAINAGE FACILITIES SHALL BE PROVIDED TO PREVENT THE PONDING OF WATER, UNLESS SUCH PONDING IS PROPOSED WITHIN SITE PLANS WHICH EVEN THERE SHALL BE SUFFICIENT WATER FLOW TO MAINTAIN PROPOSED WATER LEVELS AND TO AVOID STAGNATION.
- THERE SHALL BE PROVIDED WHERE NECESSARY TO MINIMIZE EROSION AND SEDIMENT SUCH MEASURES AS BENCHES, BERMS, TERRACES, DIVERSIONS AND SEDIMENT, DEBRIS AND RETENTION BASINS.
- DRAINAGE SYSTEMS, PLANTINGS AND OTHER EROSION OR SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED AS FREQUENTLY AS NECESSARY TO PROVIDE ADEQUATE PROTECTION AGAINST EROSION AND SEDIMENT AND TO ENSURE THAT THE FREE FLOW OF WATER IS NOT OBSTRUCTED BY THE ACCUMULATION OF SILT, DEBRIS OR OTHER MATERIAL OR BY STRUCTURAL DAMAGE.



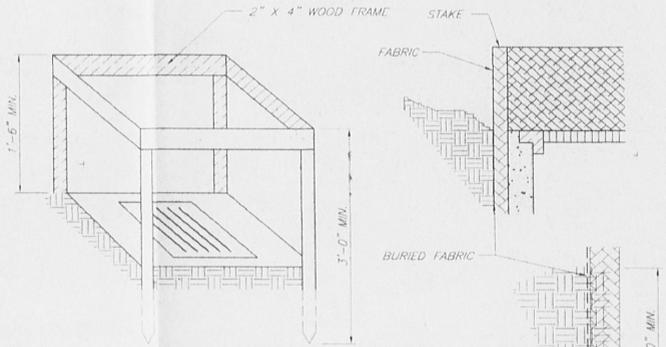
**SILT FENCE DETAIL**  
N.T.S.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND INITIALIZE EROSION CONTROL MEASURES. SILT FENCING IS TO BE USED FOR SILTATION CONTROL AROUND ALL AREAS THAT WILL BE DISRUPTED DURING CONSTRUCTION. SILT FENCES ARE TO BE MAINTAINED TO THE SATISFACTION OF THE ENGINEER AND WILL BE REMOVED BY THE CONTRACTOR ONCE GROUND COVER IS REESTABLISHED.

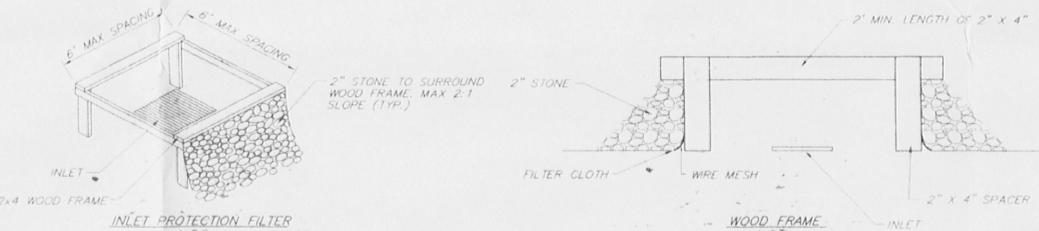


**SOIL STOCKPILE DETAIL**  
N.T.S.

- FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
- CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- STAKE MATERIALS WILL BE STANDARD 2" X 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
- SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPACES GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- A 2" X 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

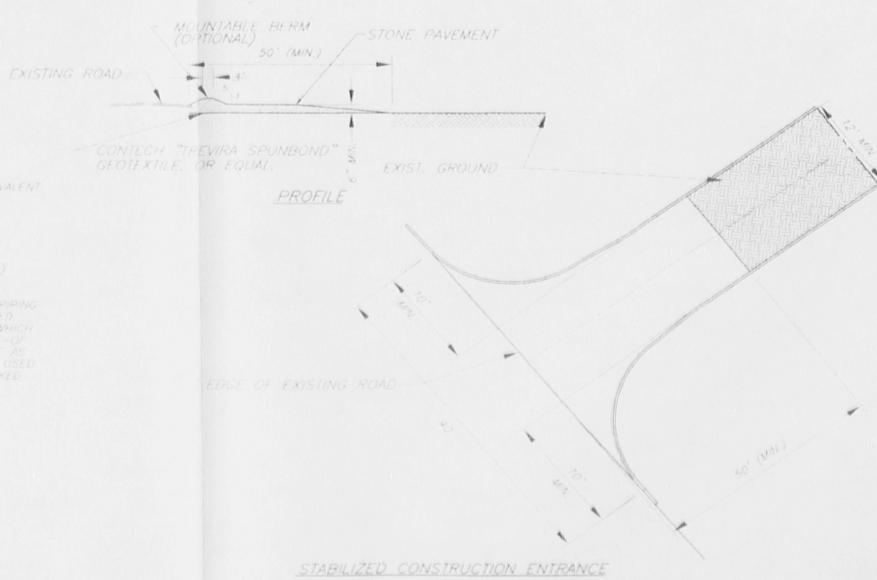


**FILTER FABRIC DROP INLET PROTECTION DETAIL**  
N.T.S.



**INLET PROTECTION FILTER**  
N.T.S.

- FILTER FABRIC SHALL HAVE AN EOS OF 40-85.
- WOODEN FRAME SHALL BE CONSTRUCTED OF 2" X 4" CONSTRUCTION GRADE LUMBER.
- CLOTH TO BE INSTALLED ON TOP OF WIRE MESH.

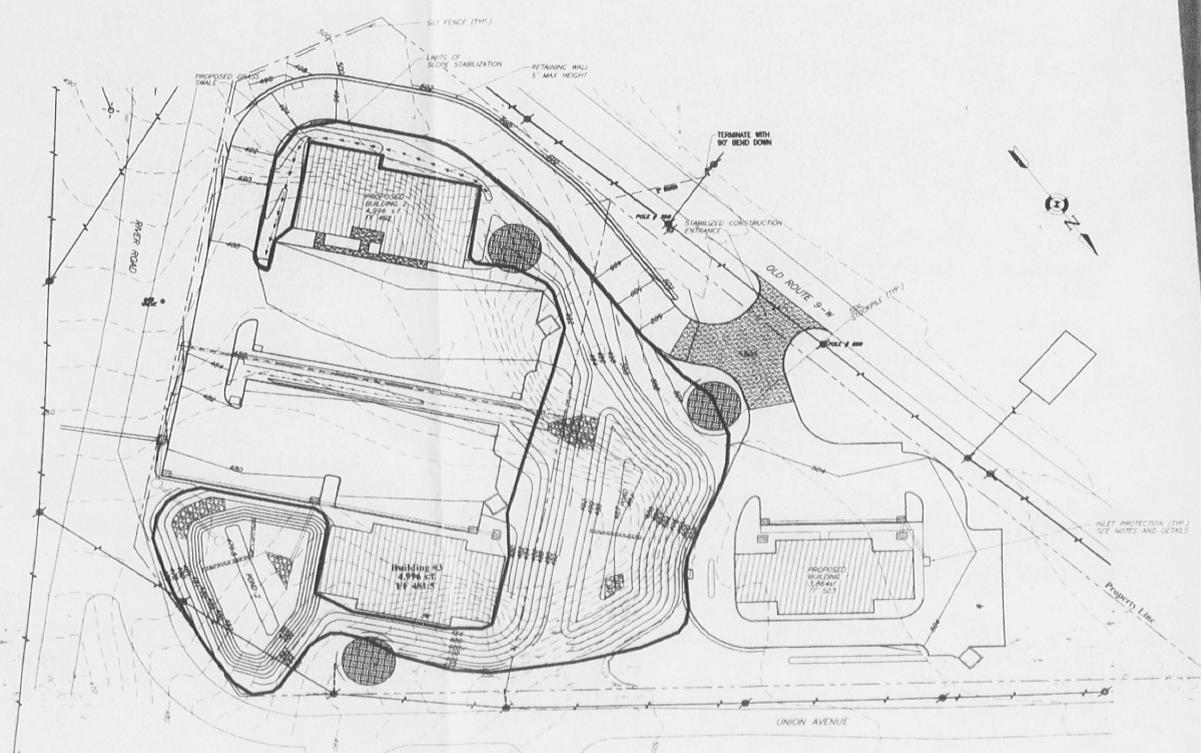


**STABILIZED CONSTRUCTION ENTRANCE**  
N.T.S.

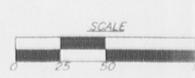
- NOTES:
- STONE SIZE SHALL BE 2" OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  - LENGTH - NOT LESS THAN 50 FEET EXCEPT ON A SINGLE RESIDENCE WHERE A 30' MINIMUM LENGTH WOULD APPLY.
  - THICKNESS - NOT LESS THAN 6 INCHES.
  - WIDTH - TWELVE (12') MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS, TWENTY FOUR (24') FOOT IF SINGLE ENTRANCE SITE.
  - FILTER CLOTH - 'TREVIRA SPUNBOND' GEOTEXTILE OR EQUAL SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
  - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE FIRED ACROSS THE ENTRANCE OR WIPING IS IMPRACTICAL, A MOUNTAIN BERM WITH 5:1 SLOPES WILL BE PERMITTED.
  - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
  - WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
  - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**STABILIZED CONSTRUCTION ENTRANCE**  
N.T.S.

**SLOPE STABILIZATION NOTE:**  
ALL AREAS WITH FINISHED SLOPES EXCEEDING 30% SHALL BE STABILIZED UTILIZING LANDLOK TRM 450 AS MANUFACTURED BY CONTECH. THIS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.



**LEGEND**



**INLET PROTECTION NOTE**  
EITHER FILTER FABRIC OR INLET PROTECTION FILTER SHALL BE USED AROUND ALL CATCH BASINS THROUGHOUT THE CONSTRUCTION PROCESS. FILTER FABRIC SHALL BE USED UNTIL SUBBASE FOR PARKING LOTS IS PLACED. AT THIS POINT AND FORWARD DROP INLET PROTECTION SHALL BE USED.

REV	DATE	BY	DESCRIPTION
3	05/03/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
4	05/12/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
3	01/15/07	J.J.C.	PER PARKING LOT REVISIONS
2	03/11/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS
1	06/14/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS

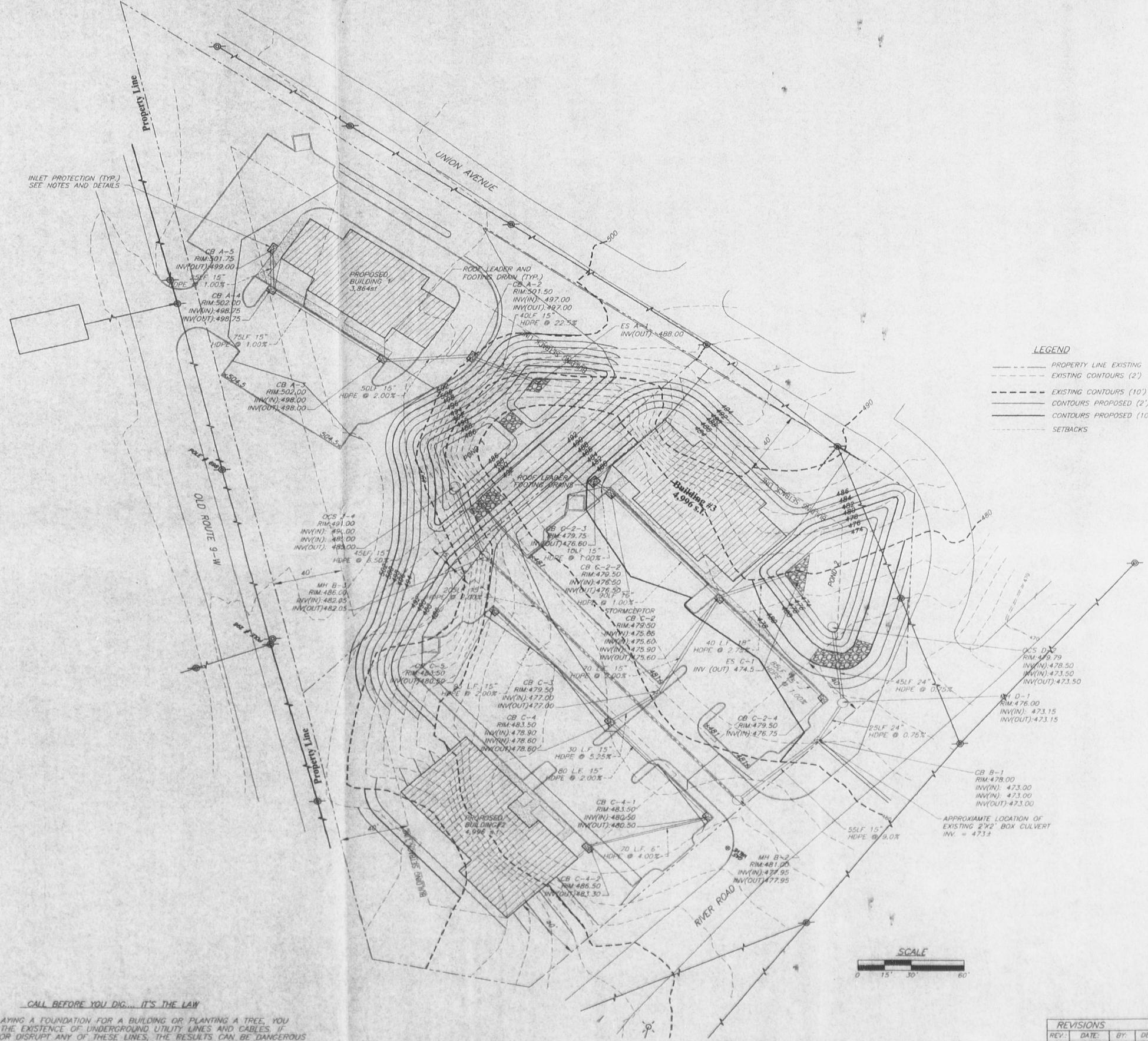
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**TACONIC DESIGN ENGINEERING, PLLC**  
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**WILLIAM J. MOREAU, P.E.**  
P.O. BOX 4470  
NEW WINDSOR, N.Y. 12553  
(845) 561-2582

**EROSION & SEDIMENTATION CONTROL PLAN & DETAILS**  
**COMMERCIAL SUBDIVISION FOR:**  
**SANDCASTLE HOMES**  
**RIVER ROAD (S/B/L: 9-1-101)**  
**TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK**

DATE	SCALE	JOB NUMBER	SHEET NUMBER
12/02/05	AS NOTED	05450 - A/C	SP 8

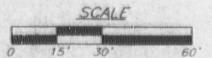


**LEGEND**

- PROPERTY LINE EXISTING
- - - - - EXISTING CONTOURS (2')
- - - - - EXISTING CONTOURS (10')
- CONTOURS PROPOSED (2')
- CONTOURS PROPOSED (10')
- - - - - SETBACKS

**NOTES:**

1. CATCH BASIN CB C-2 IS A STORMCEPTOR MODEL STC-900, WHICH IS REQUIRED TO PROVIDE FOR THE WATER QUALITY AS REQUIRED BY THE NYSDEC. SEE PAGE 2 FOR DETAILS.
2. ALL AREAS WITH FINISHED SLOPES EXCEEDING 30% SHALL BE STABILIZED UTILIZING LANDLOK TRM 450 AS MANUFACTURED BY CONTECH. THIS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.
3. ALL PROPOSED PARKING AND BUILDINGS ARE PER SITE PLANS PREPARED BY A.J. COPPOLA, R.A.
4. TACONIC DESIGN CONSULTANTS HAS PREPARED STORMWATER MANAGEMENT FOR THE THREE LOTS.
5. A MAINTENANCE AGREEMENT SHALL BE REQUIRED BETWEEN THE OWNERS OF LOT # 2 AND LOT # 3 FOR THE UPKEEP AND MAINTENANCE OF THE STORMCEPTOR AND POND SERVICING THOSE LOTS WITH APPROPRIATE EASEMENTS.
6. A DRAINAGE EASEMENT WILL BE PROVIDED FOR LOT # 1 OVER AND ACROSS LOT # 2 AND # 3.
7. THE FINAL CONSTRUCTION SEQUENCE SHALL STIPULATE THAT THE PARKING AND ALL DRAINAGE FOR LOT # 2 AND # 3 BE CONSTRUCTED CONCURRENTLY.
8. ALL ROOF LEADERS AND FOOTING DRAINS SHALL BE TIED INTO THE PROPOSED DRAINAGE SYSTEMS SERVICING THE LOT.
9. THIS PLAN AND CORRESPONDING DETAIL SHEET SHALL BE USED IN CONJUNCTION WITH THE ABOVE REFERENCED SITE PLANS.



**CALL BEFORE YOU DIG... IT'S THE LAW**

WHETHER YOU'RE LAYING A FOUNDATION FOR A BUILDING OR PLANTING A TREE, YOU MUST FIRST CHECK FOR THE EXISTENCE OF UNDERGROUND UTILITY LINES AND CABLES. IF YOU OR YOUR CONTRACTOR DISRUPT ANY OF THESE LINES, THE RESULTS CAN BE DANGEROUS - AND COSTLY - TO EVERYONE. CALL BEFORE YOU DIG, TOLL FREE, 1-800-272-4480 (IN NEW YORK CITY AND LONG ISLAND) OR 1-800-926-7962 (IN ALL OTHER AREAS OF THE STATE.)

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

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ENGINEER

**CHARLES T. BROWN, P.E.**  
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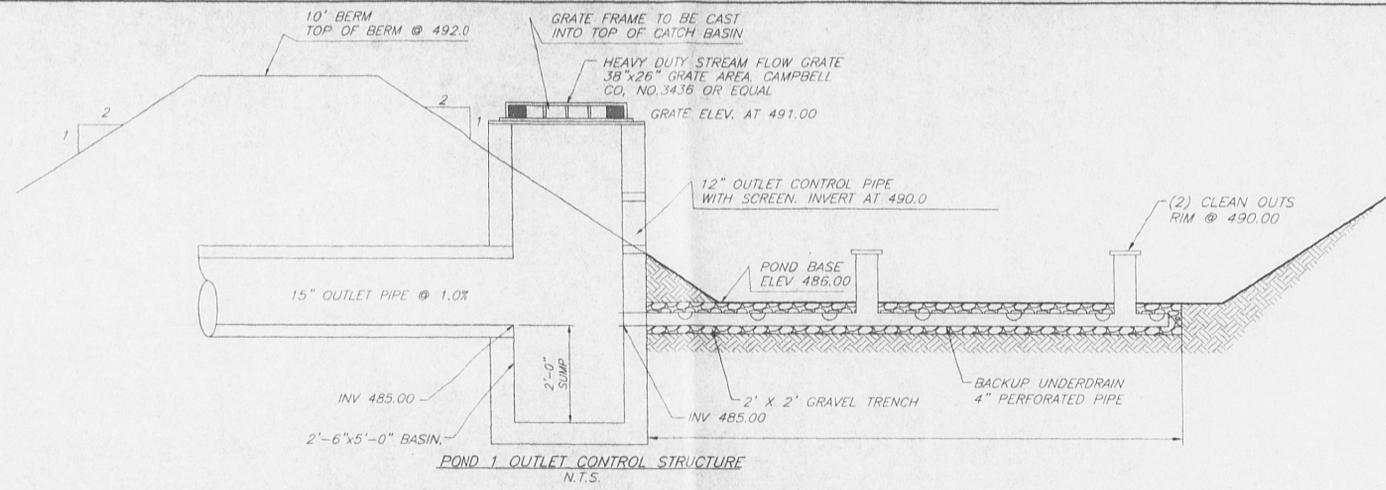
**DRAINAGE PLAN**

**COMMERCIAL SUBDIVISION FOR:  
SANDCASTLE HOMES**

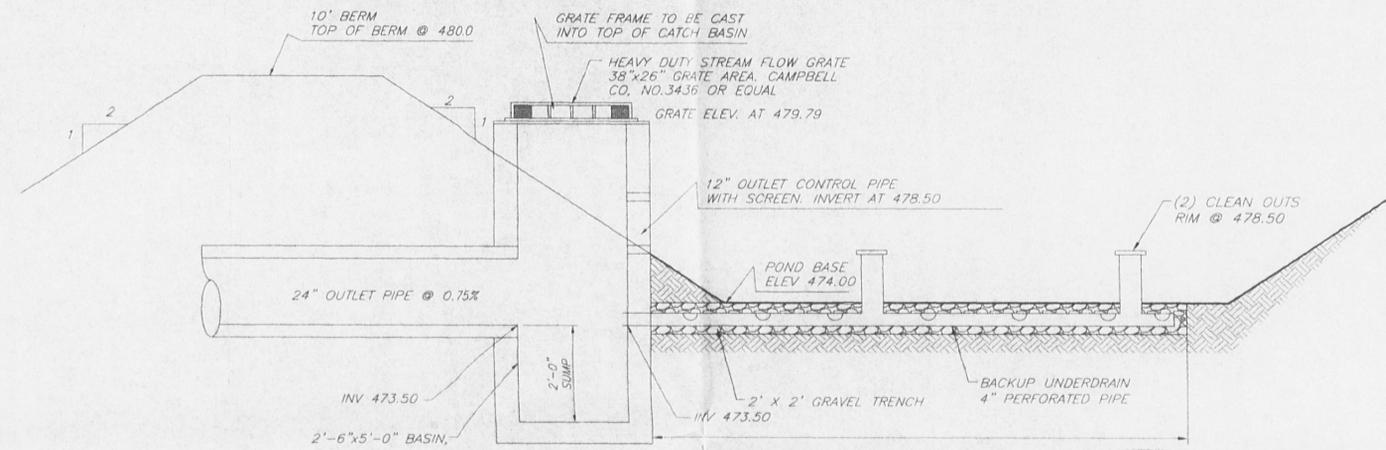
RIVER ROAD (S/B/L: 9-1-101)  
TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK

REVISIONS			
REV.	DATE	BY	DESCRIPTION
1	06/14/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS

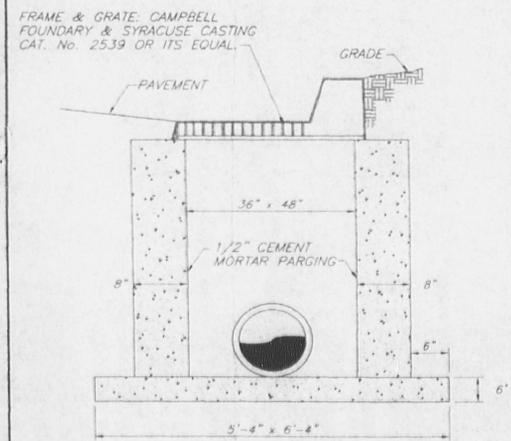
DATE	SCALE	JOB NUMBER	SHEET NUMBER
12/02/05	1"=30'	05450 - A/JC	SP 6



POND 1 OUTLET CONTROL STRUCTURE  
N.T.S.



POND 2 OUTLET CONTROL STRUCTURE  
N.T.S.

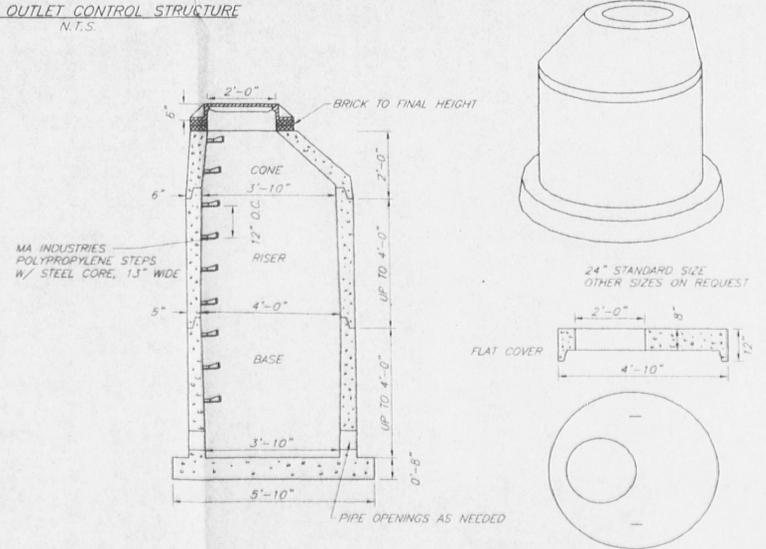


CURB-TYPE CATCH BASIN  
N.T.S.

1. CATCH BASIN AND DROP INLETS MAY BE CONSTRUCTED OF CLASS "A" CONCRETE, SOLID CONCRETE BLOCK, OR PRECAST CONCRETE SECTIONS
2. ALL CATCH BASINS AND DROP INLETS OVER 6" IN DEPTH SHALL BE CONSTRUCTED OF 8" REINFORCED CONCRETE 12" OF BLOCK OR SUITABLE PRECAST CONCRETE SECTIONS BELOW 6"

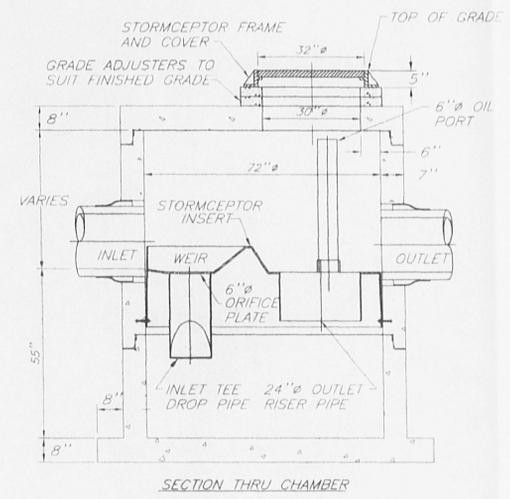
CALL BEFORE YOU DIG... IT'S THE LAW

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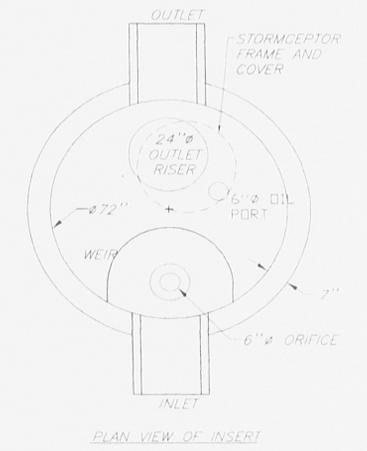
**SPECIFICATIONS**  
 CONCRETE MINIMUM STRENGTH- 4,000 PSI AT 28 DAYS  
 REINFORCEMENT- ASTM C478, 6X6 MESH, #4 REBAR  
 AIR ENTRAPMENT- 5%  
 CONSTRUCTION JOINT- BUTYL RUBBER SEALANT  
 PIPE CONNECTION- POLYLOC SEAL (PATENTED)  
 LOAD RATING- H20, TRUCK TRAFFIC

WOODARD'S PRECAST MANHOLE, 4' I.D. BASE AND FLAT TOP  
N.T.S.

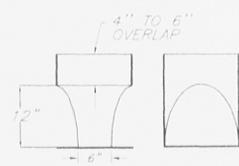


STC 900 PRECAST CONCRETE STORMCEPTOR

- NOTE:
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
  2. THE COVER SHOULD BE POSITIONED OVER THE 24" OUTLET RISER PIPE AND THE 6" OIL PORT.
  3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181.



PLAN VIEW OF INSERT



ENLARGED INLET TEE DROP PIPE

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

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**DRAINAGE AND EROSION & SEDIMENTATION CONTROL DETAILS**  
 COMMERCIAL SUBDIVISION FOR:  
 SANDCASTLE HOMES  
 RIVER ROAD (S/B/L: 9-1-101)  
 TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK

DATE: 12/02/05 SCALE: AS NOTED JOB NUMBER: 05450 - AJC SHEET NUMBER: SP 7

REV.	DATE	BY	DESCRIPTION
1	06/14/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS

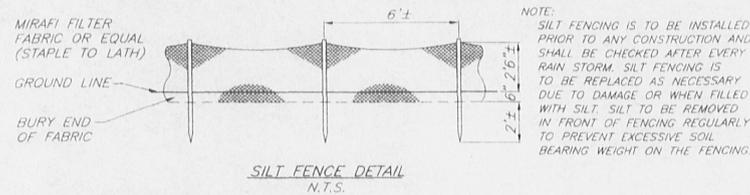
**TEMPORARY VEGETATION NOTES:**

TEMPORARY VEGETATION SHALL BE USED TO PROTECT AREAS IN EXCESS OF 1/2 AC. EXPOSED FOR A PERIOD OVER (2) WEEKS BEFORE OR DURING DEVELOPMENT.

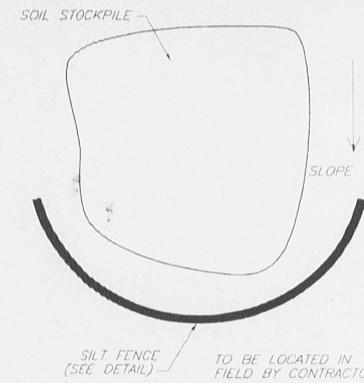
- A. (50) LBS. OF NITROGEN, (50) POUNDS OF APPROVED GRAIN SEED AND (2) TONS OF HAY MULCH PER ACRE OR ON AREAS THAT WILL BE EXPOSED FOR SHORT PERIODS OF TIME AND WHERE WEATHER CONDITIONS ARE CONDUCTIVE TO AIRBOURNE SAND, TRAPS TO CONTROL SUCH SAND SHALL BE INSTALLED AS DIRECTED.
- C. ON AREAS SUCH AS TEMPORARY ROADWAYS, WHEN DRY CONDITIONS PREVAIL, THE CONTRACTOR SHALL BE REQUIRED TO APPLY WATER OR CALCIUM CHLORIDE AS REQUIRED TO PREVENT DUST DURING CONSTRUCTION ACTIVITIES.

**EROSION CONTROL STANDARD NOTES**

- 1. EXCAVATION, FILLING, GRADING AND STRIPPING SHALL BE PERMITTED TO BE UNDERTAKEN ONLY IN SUCH LOCATIONS AND IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL OF EROSION AND SEDIMENT AND THE THREAT TO THE HEALTH, SAFETY AND WELFARE OF NEIGHBORING PROPERTY OWNERS AND THE GENERAL PUBLIC.
- 2. SITE PREPARATION AND CONSTRUCTION SHALL BE FITTED TO THE VEGETATION, TOPOGRAPHY AND OTHER NATURAL FEATURES OF THE SITE AND SHALL PRESERVE AS MANY OF THESE FEATURES AS FEASIBLE.
- 3. THE CONTROL OF EROSION AND SEDIMENT SHALL BE A CONTINUOUS PROCESS UNDERTAKEN AS NECESSARY PRIOR TO, DURING AND AFTER SITE PREPARATION AND CONSTRUCTION.
- 4. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED BY SITE PREPARATION AT ANY GIVEN TIME.
- 5. THE EXPOSURE OF AREAS BY SITE PREPARATION SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME PRIOR TO THE CONSTRUCTION OF STRUCTURES OR IMPROVEMENTS OR THE RESTORATION OF THE EXPOSED AREAS TO AN ATTRACTIVE NATURAL CONDITION.
- 6. MULCHING OR TEMPORARY VEGETATION SUITABLE TO THE SITE SHALL BE USED WHERE NECESSARY TO PROTECT AREAS EXPOSED BY SITE PREPARATION, AND PERMANENT VEGETATION WHICH IS WELL ADAPTED TO THE SITE SHALL BE INSTALLED AS SOON AS PRACTICAL.
- 7. WHERE SLOPES ARE TO BE REVEGETATED IN AREAS EXPOSED BY SITE PREPARATION, THE SLOPES SHALL NOT BE OF SUCH STEEPNESS THAT VEGETATION CANNOT BE READILY ESTABLISHED OR THAT PROBLEMS OF EROSION OR SEDIMENT MAY RESULT.
- 8. SITE PREPARATION AND CONSTRUCTION SHALL NOT ADVERSELY AFFECT THE FREE FLOW OF WATER BY ENCROACHING ON, BLOCKING OR RESTRICTING WATERCOURSES.
- 9. ALL FILL MATERIAL SHALL BE COMPOSITION SUITABLE FOR THE ULTIMATE USE OF THE FILL, FREE OF RUBBISH, STUMPS, TREE DEBRIS, RESTRICTED IN ITS CONTENT OF BRUSH, STUMPS, TREE DEBRIS, ROCKS, FROZEN MATERIAL AND SOFT OR EASILY COMPRESSIBLE MATERIAL.
- 10. FILL MATERIAL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT PROBLEMS OF EROSION, AND WHERE THE MATERIAL IS TO SUPPORT STRUCTURES, IT SHALL BE COMPACTED TO A MINIMUM OF NINETY PERCENT (90%) OF STANDARD PROCTOR WITH PROPER MOISTURE CONTROL.
- 11. ALL TOPSOIL WHICH IS EXCAVATED FROM A SITE SHALL BE STOCKPILED AND USED FOR THE RESTORATION OF THE SITE, AND SUCH STOCKPILES, WHERE NECESSARY, SHALL BE SEEDED OR OTHERWISE TREATED TO MINIMIZE THE EFFECTS OF EROSION.
- 12. PRIOR TO, DURING AND AFTER SITE PREPARATION AND CONSTRUCTION, AN INTEGRATED DRAINAGE SYSTEM SHALL BE PROVIDED WHICH AT ALL TIMES MINIMIZES EROSION, SEDIMENT, HAZARDS OF SLOPE INSTABILITY AND ADVERSE EFFECT ON NEIGHBORING PROPERTY OWNERS.
- 13. THE NATURAL DRAINAGE SYSTEM SHALL GENERALLY BE PRESERVED IN PREFERENCE TO MODIFICATIONS OF THIS SYSTEM EXCEPT WHERE SUCH MODIFICATIONS ARE NECESSARY TO REDUCE LEVELS OF EROSION AND SEDIMENT AND ADVERSE EFFECTS ON NEIGHBORING PROPERTY OWNERS.
- 14. ALL DRAINAGE SYSTEMS SHALL BE DESIGNED TO HANDLE ADEQUATELY ANTICIPATED FLOWS, BOTH WITHIN THE SITE AND FROM THE ENTIRE UPSTREAM DRAINAGE BASIN.
- 15. SUFFICIENT GRADES AND DRAINAGE FACILITIES SHALL BE PROVIDED TO PREVENT THE PONDING OF WATER, UNLESS SUCH PONDING IS PROPOSED WITHIN SITE PLANS, IN WHICH EVENT THERE SHALL BE SUFFICIENT WATER FLOW TO MAINTAIN PROPOSED WATER LEVELS AND TO AVOID STAGNATION.
- 16. THERE SHALL BE PROVIDED WHERE NECESSARY TO MINIMIZE EROSION AND SEDIMENT SUCH MEASURES AS BENCHES, BERMS, TERRACES, DIVERSIONS AND SEDIMENT TRAPS AND RETENTION BASINS.
- 17. DRAINAGE SYSTEMS, PLANTINGS AND OTHER EROSION OR SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED AS FREQUENTLY AS NECESSARY TO PROVIDE ADEQUATE PROTECTION AGAINST EROSION AND SEDIMENT AND TO ENSURE THAT THE FREE FLOW OF WATER IS NOT OBSTRUCTED BY THE ACCUMULATION OF SILT, DEBRIS OR OTHER MATERIAL OR BY STRUCTURAL DAMAGE.

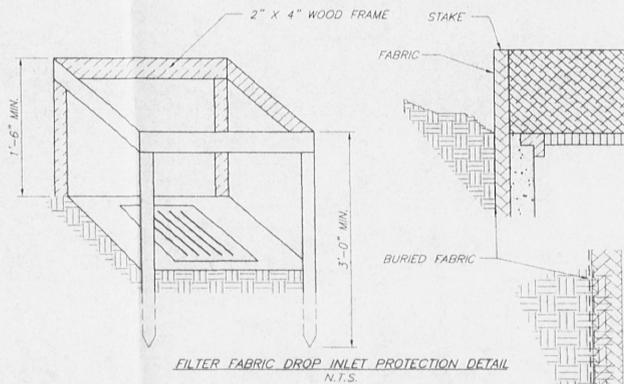


IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND INITIALIZE EROSION CONTROL MEASURES, SILT FENCING IS TO BE USED FOR SILTATION CONTROL AROUND ALL AREAS THAT WILL BE DISRUPTED DURING CONSTRUCTION. SILT FENCES ARE TO BE MAINTAINED TO THE SATISFACTION OF THE ENGINEER AND WILL BE REMOVED BY THE CONTRACTOR ONCE GROUND COVER IS REESTABLISHED.

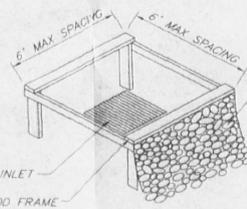


SOIL STOCKPILE DETAIL N.T.S.

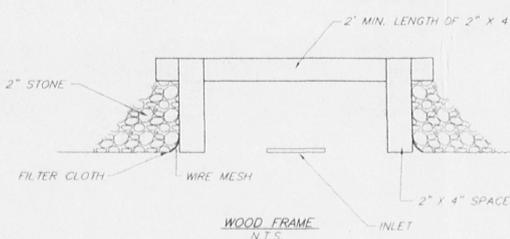
- 1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
- 2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- 3. STAKE MATERIALS WILL BE STANDARD 2" X 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
- 4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- 5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- 6. A 2" X 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.



FILTER FABRIC DROP INLET PROTECTION DETAIL N.T.S.



INLET PROTECTION FILTER N.T.S.

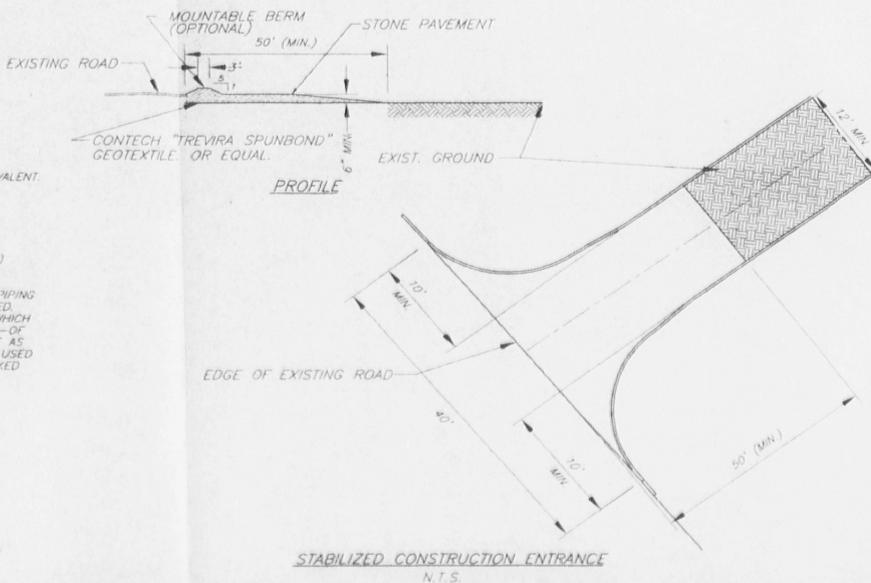


WOOD FRAME N.T.S.

- 1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85.
- 2. WOODEN FRAME SHALL BE CONSTRUCTED OF 2" X 4" CONSTRUCTION GRADE LUMBER.
- 3. CLOTH TO BE INSTALLED ON TOP OF WIRE MESH.

**INLET PROTECTION NOTE**

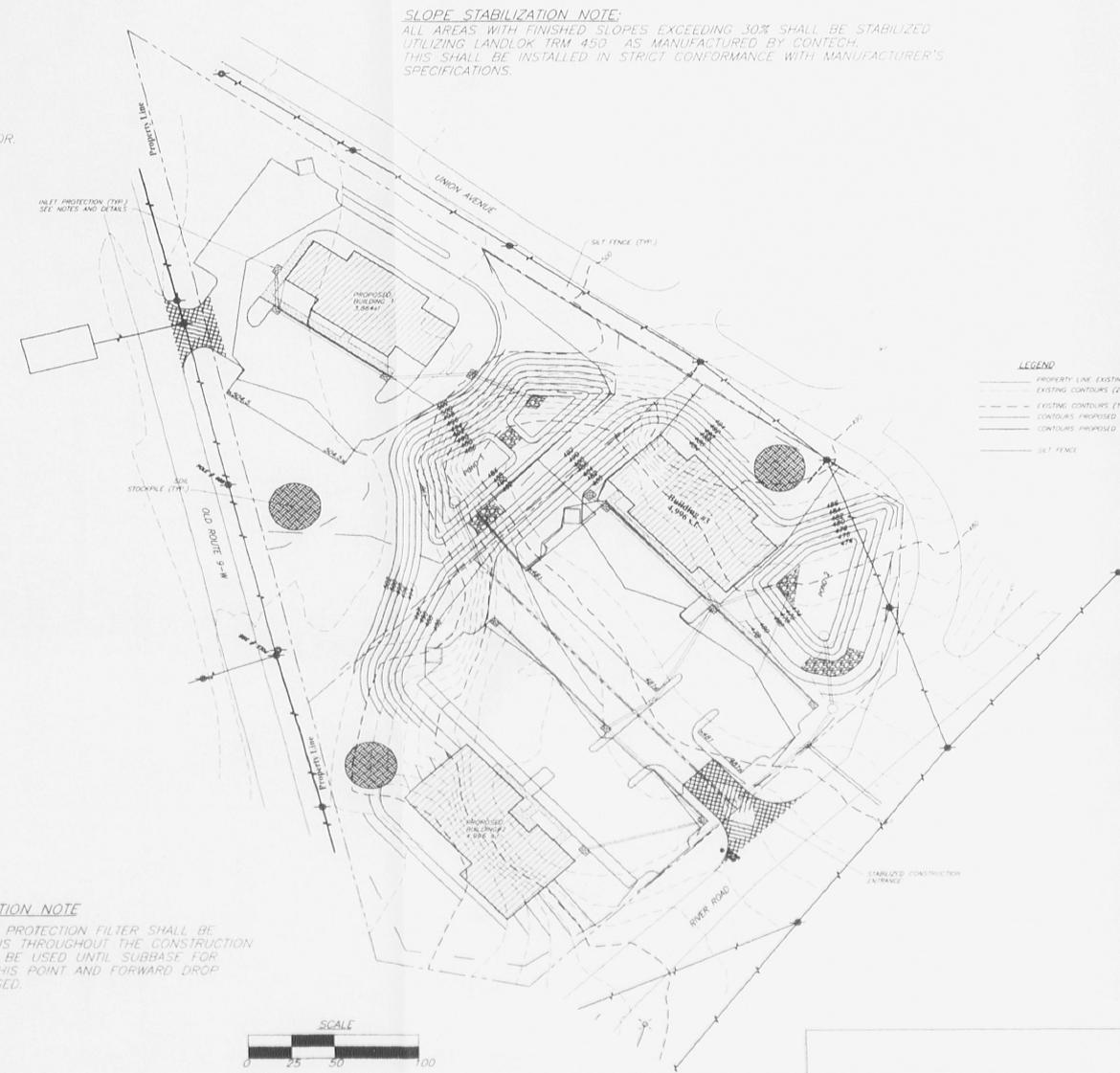
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STABILIZED CONSTRUCTION ENTRANCE N.T.S.

- NOTES:
- 1. STONE SIZE SHALL BE 2" OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
  - 2. LENGTH - NOT LESS THAN 50 FEET EXCEPT ON A SINGLE RESIDENCE WHERE A 30' MINIMUM LENGTH WOULD APPLY.
  - 3. THICKNESS - NOT LESS THAN 6 INCHES.
  - 4. WIDTH - TWELVE (12') MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24') FOOT IF SINGLE ENTRANCE SITE.
  - 5. FILTER CLOTH - (CONTECH 'TREVIRA SPUNBOND' GEOTEXTILE OR EQUAL) SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
  - 6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
  - 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
  - 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
  - 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE N.T.S.



LEGEND  
 - - - - - PROPERTY LINE EXISTING  
 - - - - - EXISTING CONTOURS (10')  
 - - - - - EXISTING CONTOURS (10')  
 - - - - - CONTOURS PROPOSED (10')  
 - - - - - CONTOURS PROPOSED (10')  
 - - - - - SILT FENCE

REVISIONS			
REV.	DATE	BY	DESCRIPTION
1	06/14/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

**TACONIC DESIGN CONSULTANTS**  
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**ENGINEER**  
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**EROSION & SEDIMENTATION CONTROL PLAN & DETAILS**  
 COMMERCIAL SUBDIVISION FOR:  
**SANDCASTLE HOMES**  
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 TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK

DATE: 12/02/05 SCALE: AS NOTED JOB NUMBER: 05450 - A/C SHEET NUMBER: 57-B



Design, Architecture & Planning

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 Second Floor  
 Newburgh, NY 12550  
 TEL: 845-561-3559  
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 coppolaassociates@verizon.net



LICENSE NUMBER: 018849

Proposed Office Buildings for  
 Sandcastle Homes at

River Road

New Windsor, New York

SITE UTILITY PLAN

REVISIONS

DATE

8/27/07

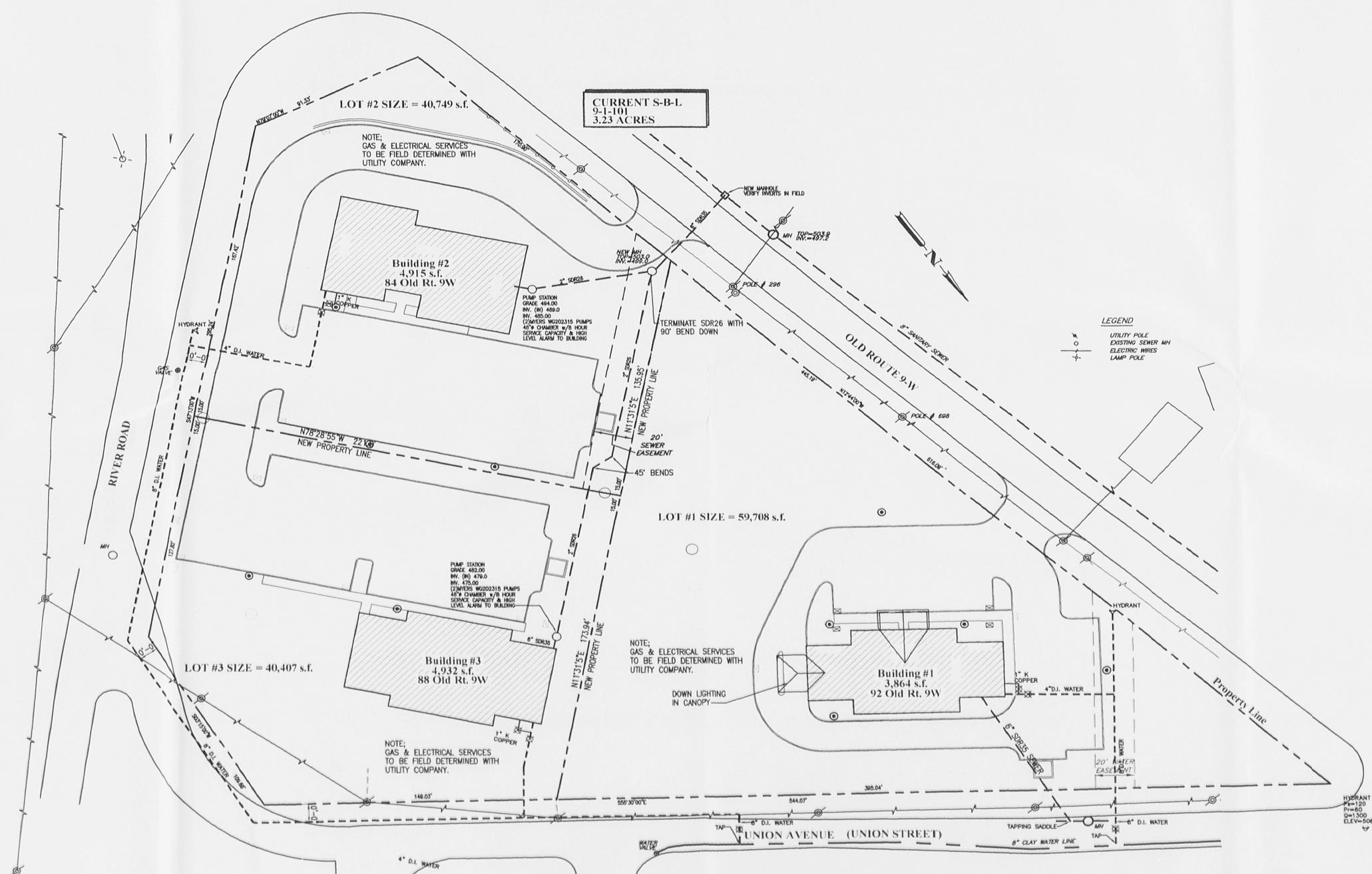
PROJECT NUMBER

04-114

SHEET NUMBER

SP2

of 9

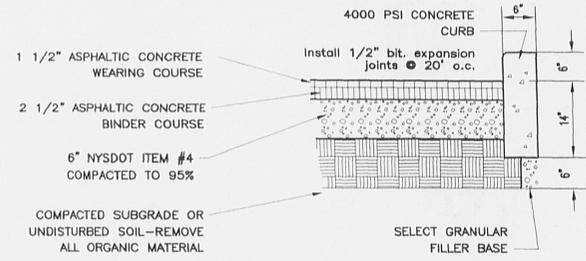


**1 Site Utility Plan**  
 SP2 1"=30'-0"

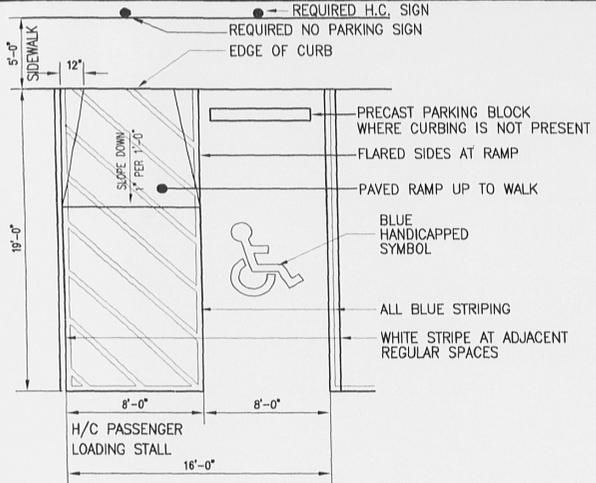
APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
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 By: [Signature]  
 Title: [Title]



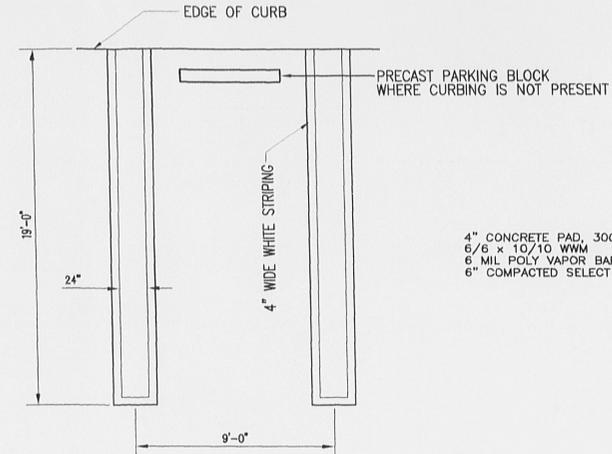




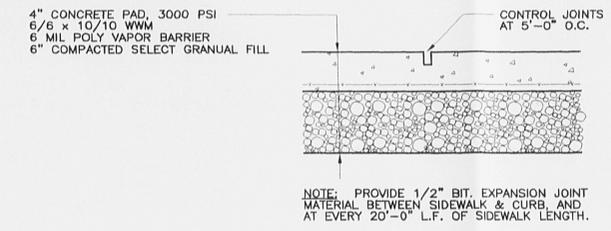
**1 Pavement & Curb Detail**  
SP5 Scale: 1"=1'-0"



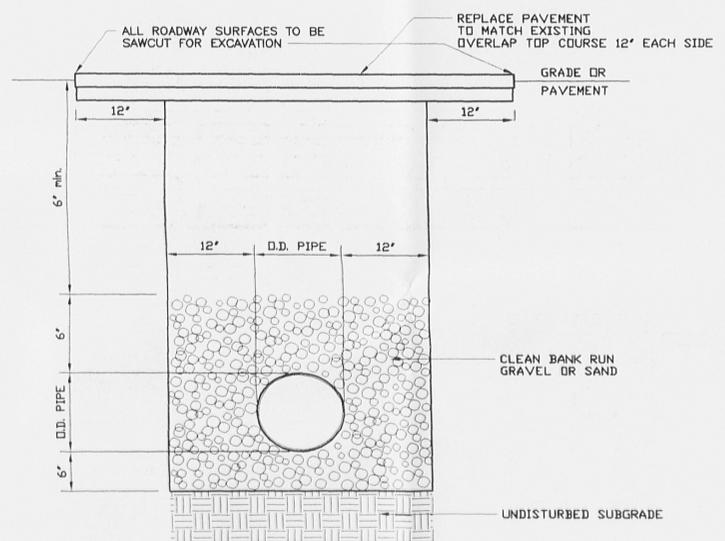
**2 HC Space Detail**  
SP5 NTS



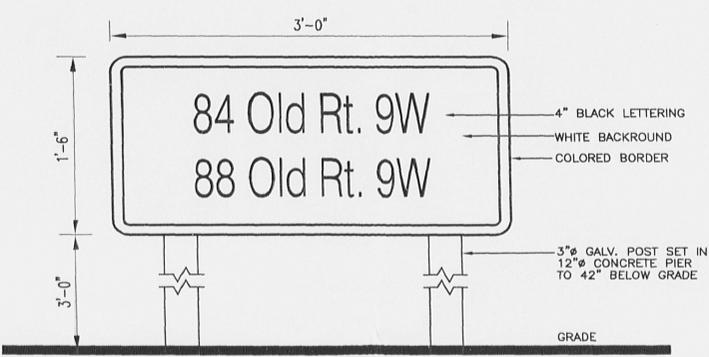
**3 Typical Parking Space**  
SP5 NTS



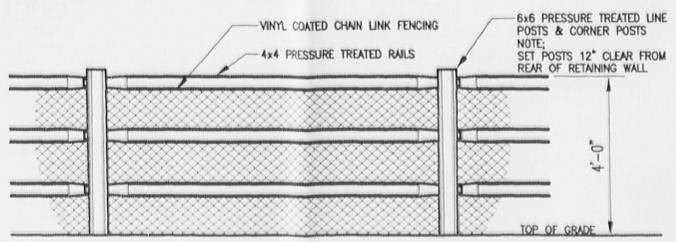
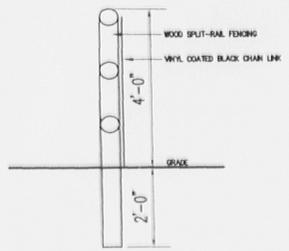
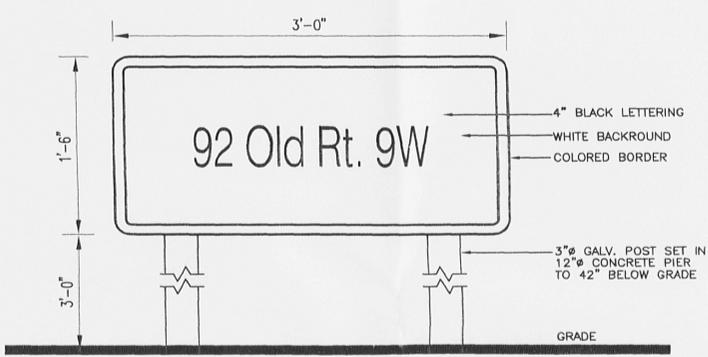
**4 Walkway Detail**  
SP5 Scale: 1"=1'-0"



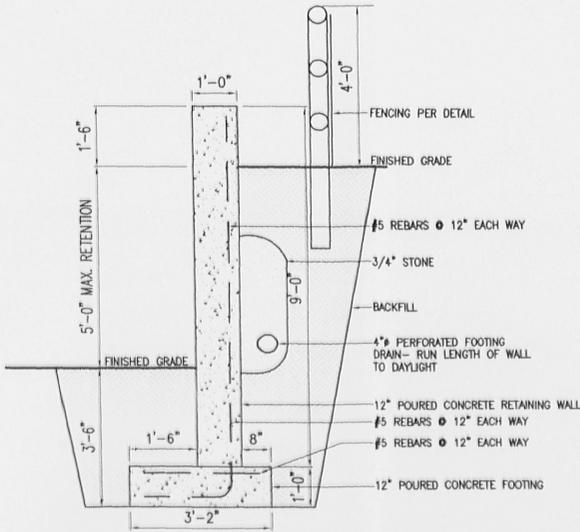
**5 Typical Trench Detail**  
SP5 Scale: 1-1/2"=1'-0"



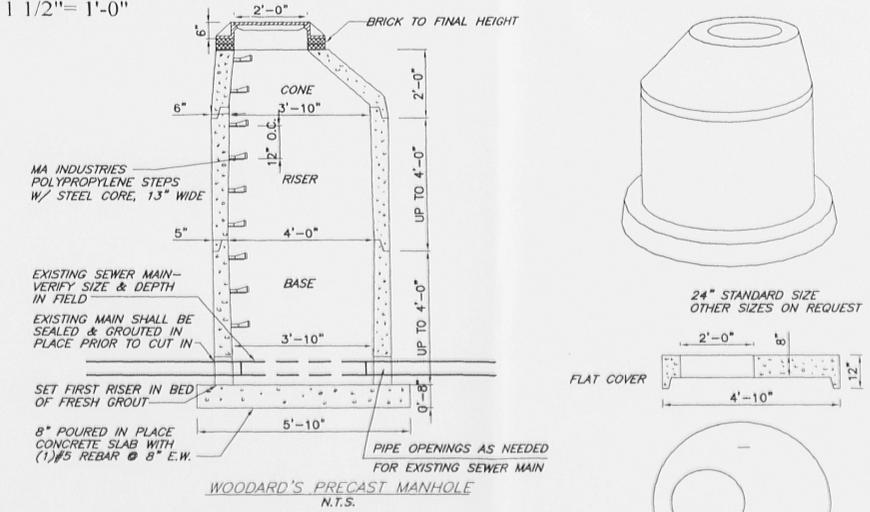
**6 Directory Sign Details**  
SP6 Scale: 1 1/2"= 1'-0"



**7 Site Fencing Detail**  
SP6 Scale: 1 1/2"= 1'-0"

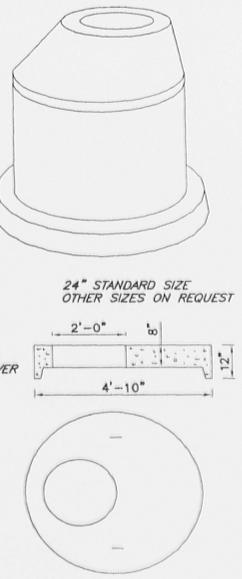


**8 Retaining Wall Detail**  
SP6 Scale: 1/2"= 1'-0"



**SPECIFICATIONS**  
Concrete Minimum Strength: 4,000 psi at 28 days  
Reinforcement: 6"x6"x6 ga. Wire Mesh  
Air Entrainment: 5%  
Construction Joint: Butyl Rubber Sealant  
Pipe Connections: Rubber Boots available  
Load Rating: H20, truck traffic

**9 Sanitary Manhole Detail**  
SP6 NTS



APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
NOV 14 2002  
By: [Signature]  
For: [Signature]

Design, Architecture & Planning  
3 Washington Center  
Second Floor  
Newburgh, NY 12550  
TEL: 845-561-3559  
FAX: 845-561-2051  
coppolassociates@verizon.net



Proposed Office Buildings for Sandcastle Homes at

River Road

New Windsor, New York

SITE DETAILS

REVISIONS

DATE

8/27/07

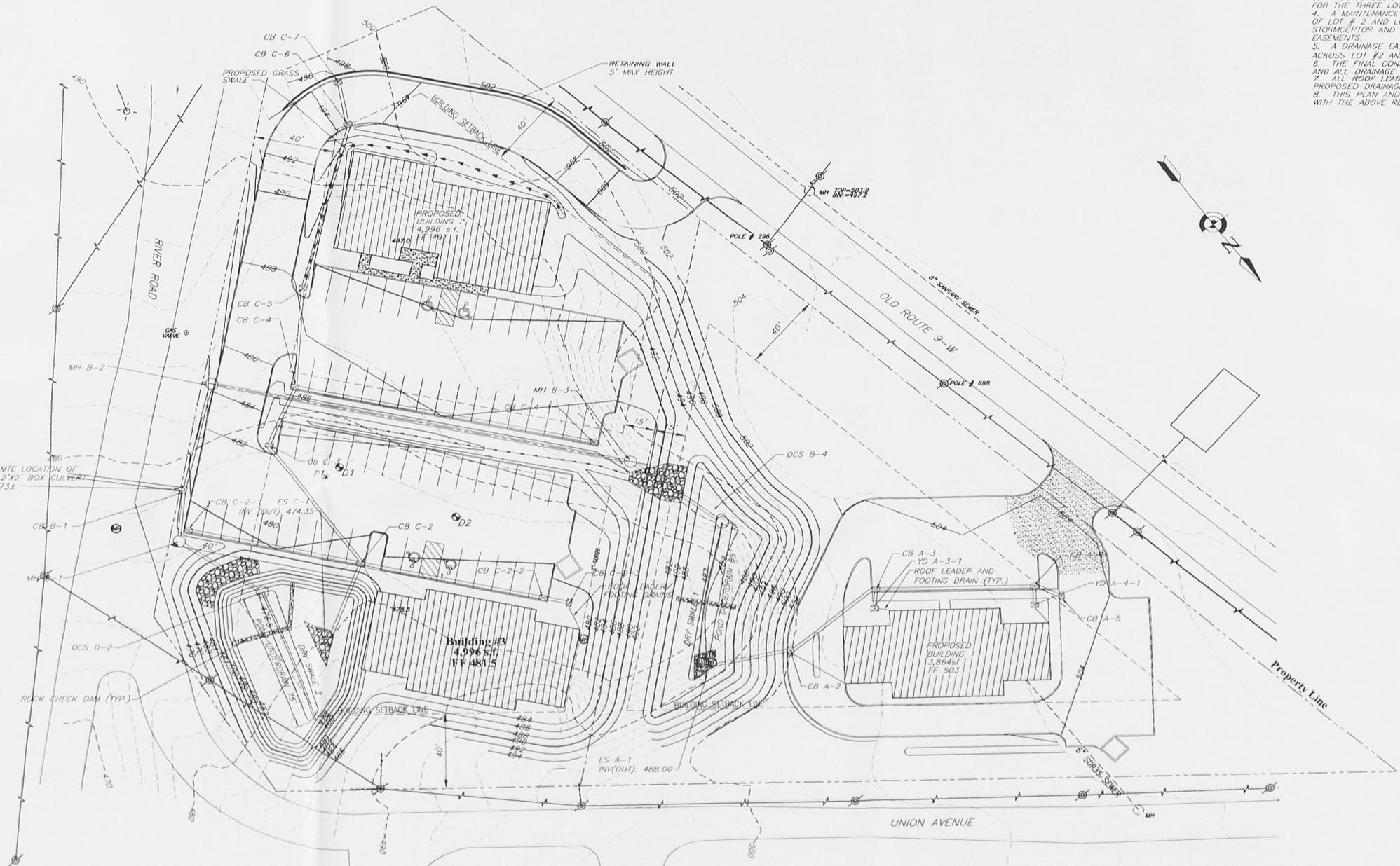
PROJECT NUMBER

04-114

SHEET NUMBER

SP5

**NOTES:**  
 1. ALL AREAS WITH FINISHED SLOPES EXCEEDING 30% SHALL BE STABILIZED UTILIZING LANDLOK TRM 450 AS MANUFACTURED BY CONTECH. THIS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.  
 2. ALL PROPOSED PARKING AND BUILDINGS ARE PER SITE PLANS PREPARED BY A.J. COPPOLA, P.E.  
 3. TACONIC DESIGN CONSULTANTS HAS PREPARED STORMWATER MANAGEMENT FOR THE THREE LOTS.  
 4. A MAINTENANCE AGREEMENT SHALL BE REQUIRED BETWEEN THE OWNERS OF LOT # 2 AND LOT # 3 FOR THE UPKEEP AND MAINTENANCE OF THE STORMCEPTOR AND POND SERVICING THOSE LOTS WITH APPROPRIATE EASEMENTS.  
 5. A DRAINAGE EASEMENT WILL BE PROVIDED FOR LOT # 1 OVER AND ACROSS LOT # 2 AND # 3.  
 6. THE FINAL CONSTRUCTION SEQUENCE SHALL STIPULATE THAT THE PARKING AND ALL DRAINAGE FOR LOT # 2 AND # 3 BE CONSTRUCTED CONCURRENTLY.  
 7. ALL ROOF LEADERS AND FOOTING DRAINS SHALL BE TIED INTO THE PROPOSED DRAINAGE SYSTEMS SERVICING THE LOT.  
 8. THIS PLAN AND CORRESPONDING DETAIL SHEET SHALL BE USED IN CONJUNCTION WITH THE ABOVE REFERENCED SITE PLANS.



**DRAINAGE STRUCTURE INFORMATION**

DRAINAGE NETWORK	FROM	TO	RIM	PIPE	LENGTH	SLOPE	INVERT (UPPER)	INVERT OUT	INVERT (LOWER)	
A-LINE	CB A-5	CB A-4	503.00	15"	15 LF	7.00%	500.25	500.25	499.20	
	CB A-4	CB A-3	502.00	15"	75 LF	2.00%	499.20	499.20	497.70	
							499.70			
	CB A-3	CB A-2	502.00	15"	50 LF	4.00%	497.70	497.70	495.70	
							497.70			
	CB A-2	ES A-1	501.00	15"	40 LF	5.00%	495.70	491.00	489.00	
YD A-LINE	YD A-4-1	CB A-4	502.00	15"	10 LF	1.00%	499.30	499.30	499.20	
	YD A-3-1	CB A-3	501.00	15"	10 LF	5.50%	498.25	498.25	497.70	
	<b>DRAINAGE NETWORK B-LINE</b>									
	OCS B-4	MH B-3	491.50	15"	45 LF	4.33%	490.50	484.00	482.05	
						484.00				
MH B-3	MH B-2	487.00	15"	205 LF	3.00%	482.05	482.05	475.90		
MH B-2	CB B-1	484.00	15"	55 LF	5.00%	475.90	475.90	473.00		
<b>DRAINAGE NETWORK C-LINE</b>										
CB C-7	CB C-6	495.00	15"	25 LF	3.50%	492.25	492.25	491.40		
CB C-6	CB C-5	494.50	15"	90 LF	7.00%	491.40	491.40	485.10		
CB C-5	CB C-4	488.00	15"	55 LF	4.00%	485.10	485.10	482.90		
CB C-4	CB C-3	486.50	15"	35 LF	5.00%	482.90	480.00	478.25		
						480.00				
CB C-3	CB C-2	482.00	18"	80 LF	3.75%	478.25	478.25	475.25		
CB C-2	ES C-1	479.25	24"	40 LF	2.00%	475.25	475.15	474.35		
						475.15				
CB C-4-1	CB C-4	486.50	15"	150 LF	2.50%	483.75	483.75	480.00		
CB C-2-1	CB C-2	479.25	15"	85 LF	1.00%	476.50	476.50	475.65		
CB C-2-3	CB C-2-2	479.00	15"	10 LF	2.00%	476.25	476.25	476.05		
CB C-2-2	CB C-1	479.25	15"	90 LF	1.00%	476.05	476.05	475.15		
<b>DRAINAGE NETWORK D-LINE</b>										
OCS D-2	MH D-1	481.00	24"	45 LF	0.75%	480.00	473.50	473.15		
						473.50				
MH D-1	CB B-1	477.00	24"	25 LF	0.50%	473.15	473.15	473.00		

ABBREVIATIONS  
 CB = CATCH BASIN  
 MH = MAN HOLE  
 YD = YARD DRAIN  
 OCS = OUTLET CONTROL STRUCTURE

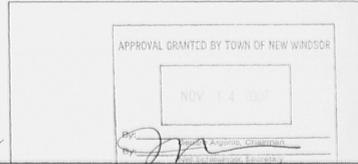
- LEGEND**
- PROPERTY LINE EXISTING
  - EXISTING CONTOURS (2')
  - EXISTING CONTOURS (10')
  - CONTOURS PROPOSED (2')
  - CONTOURS PROPOSED (10')
  - SETBACKS
  - SWALE PROPOSED



**REVISIONS**

REV.	DATE	BY	DESCRIPTION
8	08/27/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
7	06/21/07	J.J.C.	REVISED PARKING LOT ACCESS PER CLIENT
6	06/07/07	J.J.C.	PER TOWN ENGINEER'S DRAINAGE COMMENTS
5	05/02/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
4	02/12/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
3	01/15/07	J.J.C.	PER PARKING LOT REVISIONS
2	07/11/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS
1	06/14/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.



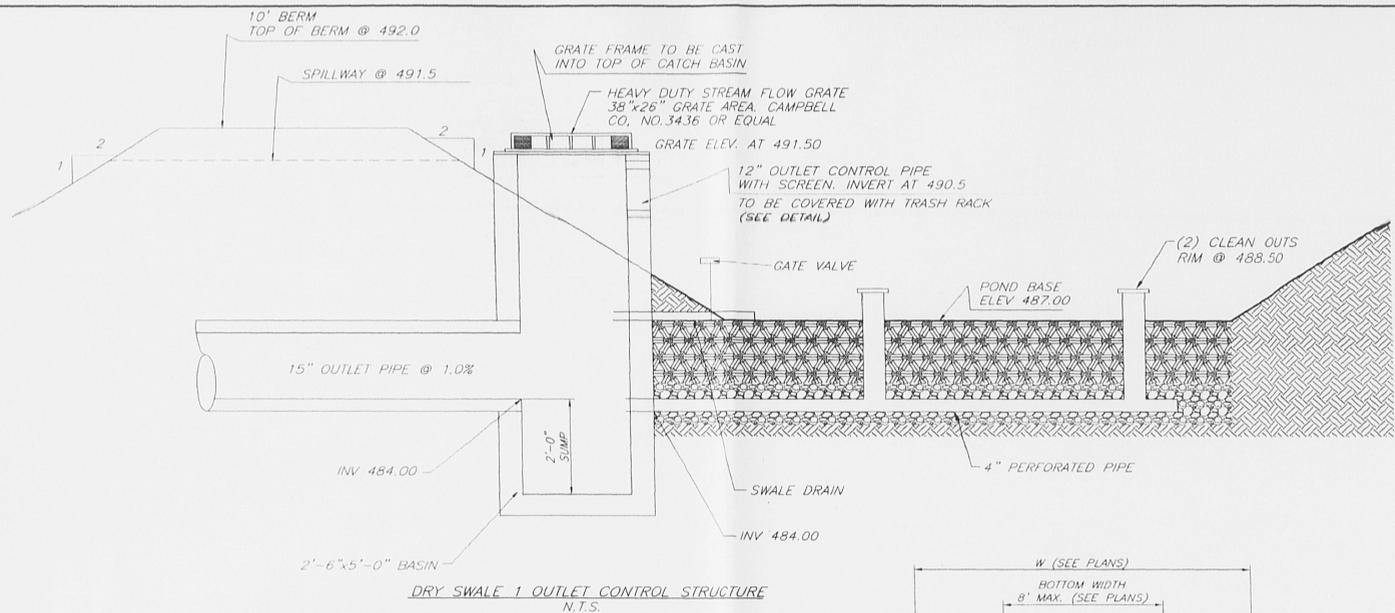
**TACONIC DESIGN ENGINEERING, PLLC**  
 SUITE 201  
 3125 ROUTE 9W  
 NEW WINDSOR, N.Y. 12553  
 (845)-569-8400  
 (FAX)(845)-569-4583

**ENGINEER**  
**CHARLES T. BROWN, P.E.**  
**WILLIAM J. MOREAU, P.E.**  
 P.O. BOX 4470  
 NEW WINDSOR, N.Y. 12553  
 (845)-561-2582

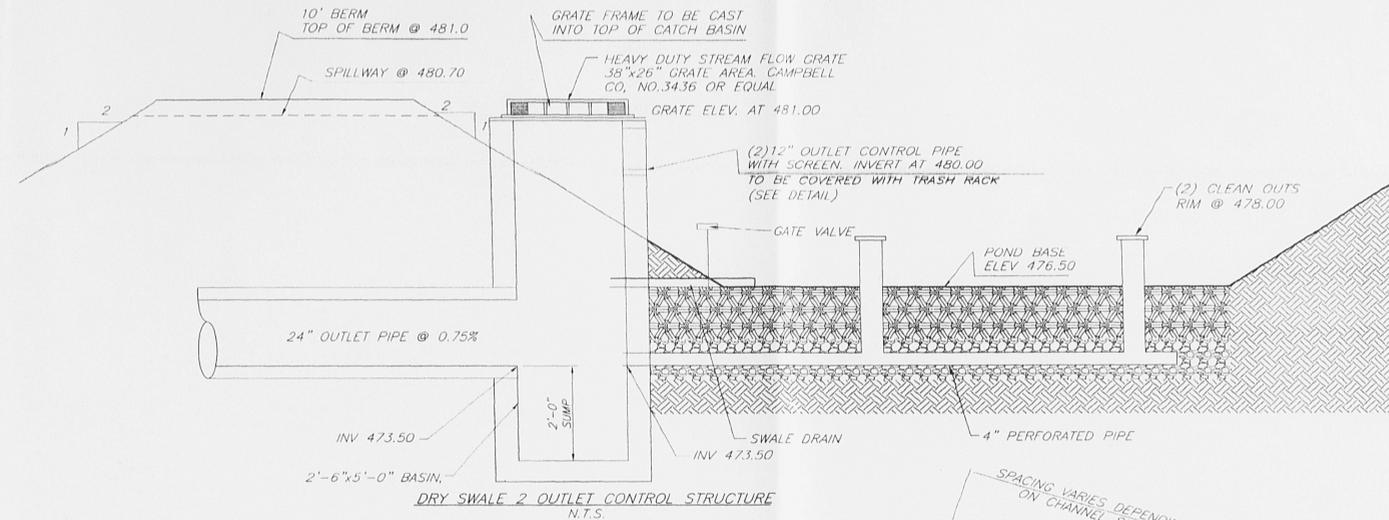
**GRADING AND DRAINAGE PLAN**  
**COMMERCIAL SUBDIVISION FOR:**  
**SANDCASTLE HOMES**  
 RIVER ROAD (S/B/L: 9-1-101)  
 TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK

DATE: 12/02/05 SCALE: 1"=30' JOB NUMBER: 05450 - A/C SHEET NUMBER: SP 6

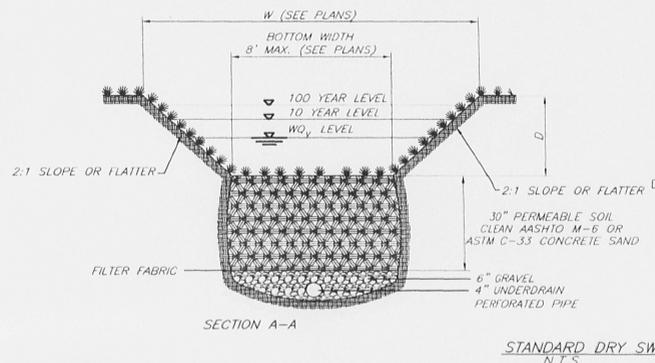
CALL BEFORE YOU DIG... IT'S THE LAW  
 WHETHER YOU'RE LAYING A FOUNDATION FOR A BUILDING OR PLANTING A TREE, YOU MUST FIRST CHECK FOR THE EXISTENCE OF UNDERGROUND UTILITY LINES AND CABLES. IF YOU OR YOUR CONTRACTOR DISRUPT ANY OF THESE LINES, THE RESULTS CAN BE DANGEROUS - AND COSTLY - TO EVERYONE. CALL BEFORE YOU DIG, TOLL FREE, 1.800.222-4480 (IN NEW YORK CITY AND LONG ISLAND) OR 1.800.926-7962 (IN ALL OTHER AREAS OF THE STATE.)



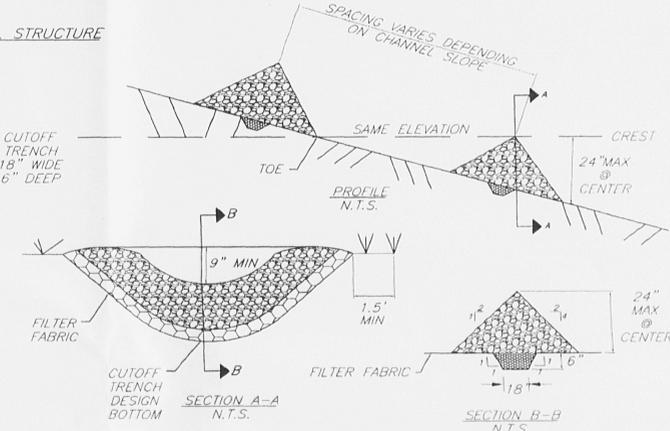
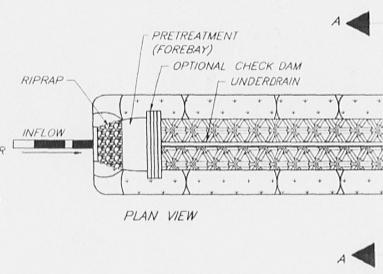
DRY SWALE 1 OUTLET CONTROL STRUCTURE  
N.T.S.



DRY SWALE 2 OUTLET CONTROL STRUCTURE  
N.T.S.

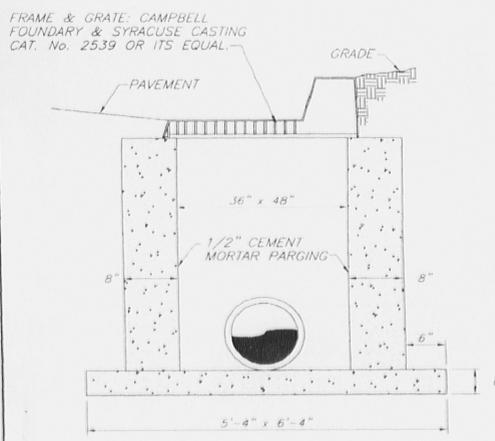


STANDARD DRY SWALE  
N.T.S.



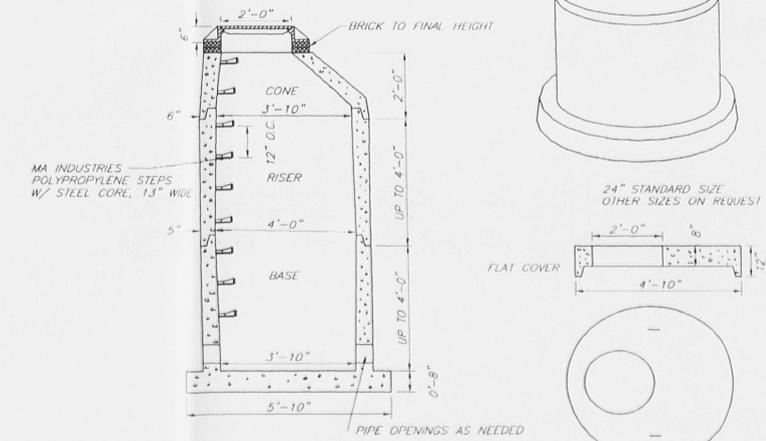
ROCK DAMS FOR SILTATION CONTROL  
N.T.S.

- CHECK DAM CONSTRUCTION SPECIFICATIONS**
- STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
  - SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATIONS OF THE TOE OF THE UPSTREAM DAM.
  - EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
  - PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
  - ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.



CURB-TYPE CATCH BASIN  
N.T.S.

- CATCH BASIN AND DROP INLETS MAY BE CONSTRUCTED OF CLASS "A" CONCRETE, SOLID CONCRETE BLOCK, OR PRECAST CONCRETE SECTIONS.
- ALL CATCH BASINS AND DROP INLETS OVER 6" IN DEPTH SHALL BE CONSTRUCTED OF 8" REINFORCED CONCRETE 12" OF BLOCK OR SUITABLE PRECAST CONCRETE SECTIONS BELOW 6".

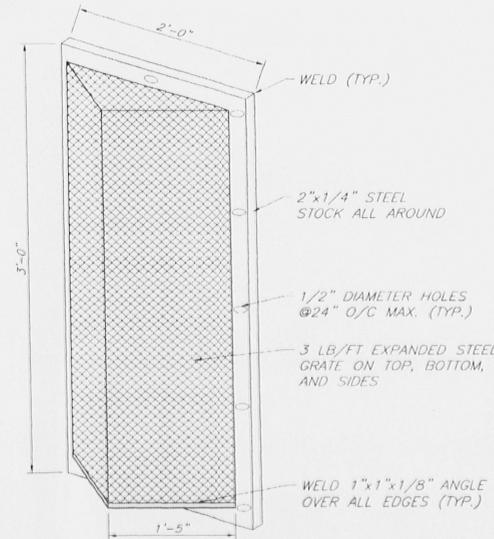


WOODARD'S PRECAST MANHOLE, 4' I.D. BASE AND FLAT TOP  
N.T.S.

**SPECIFICATIONS**  
 CONCRETE MINIMUM STRENGTH- 4,000 PSI AT 28 DAYS  
 REINFORCEMENT- ASTM C478, 6X6 MESH, #4 REBAR  
 AIR ENTRAPMENT- 5%  
 CONSTRUCTION JOINT- BUTYL RUBBER SEALANT  
 PIPE CONNECTION- POLYLOC SEAL (PATENTED)  
 LOAD RATING- H20, TRUCK TRAFFIC

TRASH RACK PROTECTION FOR LOW FLOW ORIFICE  
N.T.S.

- NOTES:
- TRASH RACK TO BE CENTERED OVER OPENING.
  - STEEL TO CONFORM TO ASTM A-36.
  - ALL SURFACES TO BE COATED WITH ZRC COLD GALVANIZING COMPOUND AFTER WELDING.



GRASS SWALE DETAIL  
N.T.S.

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
 NOV 14 2005  
 [Signature]



**TACONIC DESIGN ENGINEERING, PLLC**  
 SUITE 201  
 3125 ROUTE 9W  
 NEW WINDSOR, N.Y. 12553  
 (845)-569-8400  
 (TAX)(845)-569-4583

**CHARLES T. BROWN, P.E.**  
**WILLIAM J. MOREAU, P.E.**

**DRAINAGE AND EROSION & SEDIMENTATION CONTROL DETAILS**

**COMMERCIAL SUBDIVISION FOR: SANDCASTLE HOMES**  
 RIVER ROAD (S/B/L: 9-1-101)

**TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK**

REV.	DATE	BY	DESCRIPTION
8	06/21/07	J.J.C.	REVISED PARKING LOT ACCESS PER CLIENT
7	06/07/07	J.J.C.	PER TOWN ENGINEER'S DRAINAGE COMMENTS
6	05/02/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
5	02/12/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
4	02/08/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
3	01/15/07	J.J.C.	PER PARKING LOT REVISIONS
2	07/11/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS
1	06/14/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS

DATE	SCALE	JOB NUMBER	SHEET NUMBER
12/02/05	AS NOTED	05450 - AJC	SP 7

**CALL BEFORE YOU DIG... IT'S THE LAW**  
 WHETHER YOU'RE LAYING A FOUNDATION FOR A BUILDING OR PLANTING A TREE, YOU MUST FIRST CHECK FOR THE EXISTENCE OF UNDERGROUND UTILITY LINES AND CABLES. IF YOU OR YOUR CONTRACTOR DISRUPT ANY OF THESE LINES, THE RESULTS CAN BE DANGEROUS - AND COSTLY - TO EVERYONE. CALL BEFORE YOU DIG, TOLL FREE, 1 800 272-4480 (IN NEW YORK CITY AND LONG ISLAND) OR 1 800 926-7962 (IN ALL OTHER AREAS OF THE STATE.)

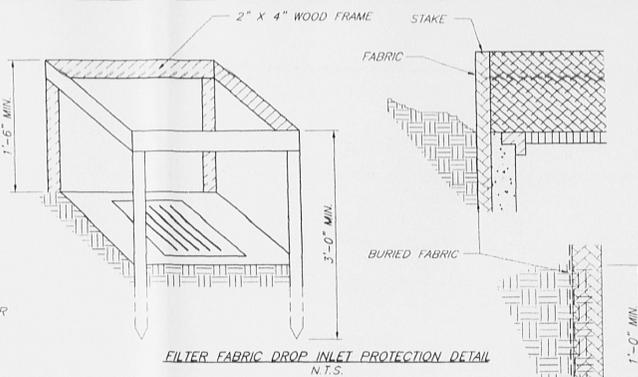
**TEMPORARY VEGETATION NOTES:**

TEMPORARY VEGETATION SHALL BE USED TO PROTECT AREAS IN EXCESS OF 1/2 AC. EXPOSED FOR A PERIOD OVER (2) WEEKS BEFORE OR DURING DEVELOPMENT.

- (50) LBS. OF NITROGEN, (50) LBS. OF PHOSPHORUS, (50) LBS. OF POTASH PER ACRE OR
- ON AREAS THAT WILL BE EXPOSED FOR SHORT PERIODS OF TIME AND WHERE WEATHER CONDITIONS ARE CONDUCTIVE TO AIRBOURNE SAND, TRAPS TO CONTROL SUCH SAND SHALL BE INSTALLED AS DIRECTED.
- ON AREAS SUCH AS TEMPORARY ROADWAYS, WHEN DRY CONDITIONS EXIST, THE CONTRACTOR SHALL BE REQUIRED TO APPLY WATER OR CALCIUM CHLORIDE AS REQUIRED TO PREVENT DUST DURING CONSTRUCTION ACTIVITIES.

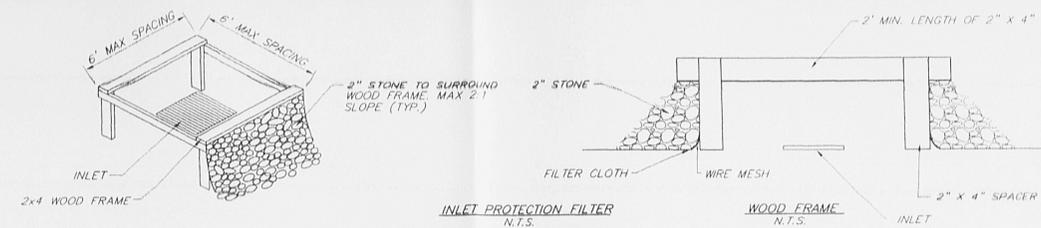
**EROSION CONTROL STANDARD NOTES:**

- EXCAVATION, FILLING, GRADING AND STRIPPING SHALL BE PERMITTED TO BE UNDERTAKEN ONLY IN SUCH LOCATIONS AND IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL OF EROSION AND SEDIMENT AND THE THREAT TO THE HEALTH, SAFETY AND WELFARE OF NEIGHBORING PROPERTY OWNERS AND THE GENERAL PUBLIC.
- SITE PREPARATION AND CONSTRUCTION SHALL BE FITTED TO THE VEGETATION, TOPOGRAPHY AND OTHER NATURAL FEATURES OF THE SITE AND SHALL PRESERVE AS MANY OF THESE FEATURES AS FEASIBLE.
- THE CONTROL OF EROSION AND SEDIMENT SHALL BE A CONTINUOUS PROCESS UNDERTAKEN AS NECESSARY PRIOR TO, DURING AND AFTER SITE PREPARATION AND CONSTRUCTION.
- THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED BY SITE PREPARATION AT ANY GIVEN TIME.
- THE EXPOSURE OF AREAS BY SITE PREPARATION SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME PRIOR TO THE CONSTRUCTION OF STRUCTURES OR IMPROVEMENTS OR THE RESTORATION OF THE EXPOSED AREAS TO AN ATTRACTIVE NATURAL CONDITION.
- MULCHING OR TEMPORARY VEGETATION SUITABLE TO THE SITE SHALL BE USED WHERE NECESSARY TO PROTECT AREAS EXPOSED BY SITE PREPARATION, AND PERMANENT VEGETATION WHICH IS WELL ADAPTED TO THE SITE SHALL BE INSTALLED AS SOON AS PRACTICAL.
- WHERE SLOPES ARE TO BE REVEGETATED IN AREAS EXPOSED BY SITE PREPARATION, THE SLOPES SHALL NOT BE OF SUCH STEEPNESS THAT VEGETATION CANNOT BE READILY ESTABLISHED OR THAT PROBLEMS OF EROSION OR SEDIMENT MAY RESULT.
- SITE PREPARATION AND CONSTRUCTION SHALL NOT ADVERSELY AFFECT THE FREE FLOW OF WATER BY ENCROACHING ON, BLOCKING OR RESTRICTING WATERCOURSES.
- ALL FILL MATERIAL SHALL BE COMPOSITION SUITABLE FOR THE ULTIMATE USE OF THE FILL, FREE OF RUBBISH AND CAREFULLY RESTRICTED IN ITS CONTENT OF BRUSH, STUMPS, TREE DEBRIS, ROCKS, FROZEN MATERIAL AND SOFT OR EASILY COMPRESSIBLE MATERIAL.
- FILL MATERIAL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT PROBLEMS OF EROSION, AND WHERE THE MATERIAL IS TO SUPPORT STRUCTURES, IT SHALL BE COMPACTED TO A MINIMUM OF NINETY PERCENT (90%) OF STANDARD PROCTOR WITH PROPER MOISTURE CONTROL.
- ALL TOPSOIL WHICH IS EXCAVATED FROM A SITE SHALL BE STOCKPILED AND USED FOR THE RESTORATION OF THE SITE, AND SUCH STOCKPILES, WHERE NECESSARY, SHALL BE SEEDED OR OTHERWISE TREATED TO MINIMIZE THE EFFECTS OF EROSION.
- PRIOR TO DURING AND AFTER SITE PREPARATION AND CONSTRUCTION, AN INTEGRATED DRAINAGE SYSTEM SHALL BE PROVIDED WHICH AT ALL TIMES MINIMIZES EROSION, SEDIMENT, HAZARDS OF SLOPE INSTABILITY AND ADVERSE EFFECT ON NEIGHBORING PROPERTY OWNERS.
- THE NATURAL DRAINAGE SYSTEM SHALL GENERALLY BE PRESERVED IN PREFERENCE TO MODIFICATIONS OF THIS SYSTEM, EXCEPTING WHERE SUCH MODIFICATIONS ARE NECESSARY TO REDUCE LEVELS OF EROSION AND SEDIMENT AND ADVERSE EFFECTS ON NEIGHBORING PROPERTY OWNERS.
- ALL DRAINAGE SYSTEMS SHALL BE DESIGNED TO HANDLE ADEQUATELY ANTICIPATED FLOWS, BOTH WITHIN THE SITE AND FROM THE ENTIRE UPSTREAM DRAINAGE BASIN.
- SUFFICIENT GRADES AND DRAINAGE FACILITIES SHALL BE PROVIDED TO PREVENT THE PONDING OF WATER, UNLESS SUCH PONDING IS PROPOSED WITHIN PLANS, IN WHICH CASE THERE SHALL BE SUFFICIENT WATER FLOW TO MAINTAIN PROPOSED WATER LEVELS AND TO AVOID STAGNATION.
- THERE SHALL BE PROVIDED WHERE NECESSARY TO MINIMIZE EROSION AND SEDIMENT SUCH MEASURES AS BENCHES, BERMS, TERRACES, DIVERSIONS AND SEDIMENT, DEBRIS AND RETENTION BASINS.
- DRAINAGE SYSTEMS, PLANTINGS AND OTHER EROSION OR SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED AS FREQUENTLY AS NECESSARY TO PROVIDE ADEQUATE PROTECTION AGAINST EROSION AND SEDIMENT AND TO ENSURE THAT THE FREE FLOW OF WATER IS NOT OBSTRUCTED BY THE ACCUMULATION OF SILT, DEBRIS OR OTHER MATERIAL OR BY STRUCTURAL DAMAGE.



**FILTER FABRIC DROP INLET PROTECTION DETAIL**  
N.T.S.

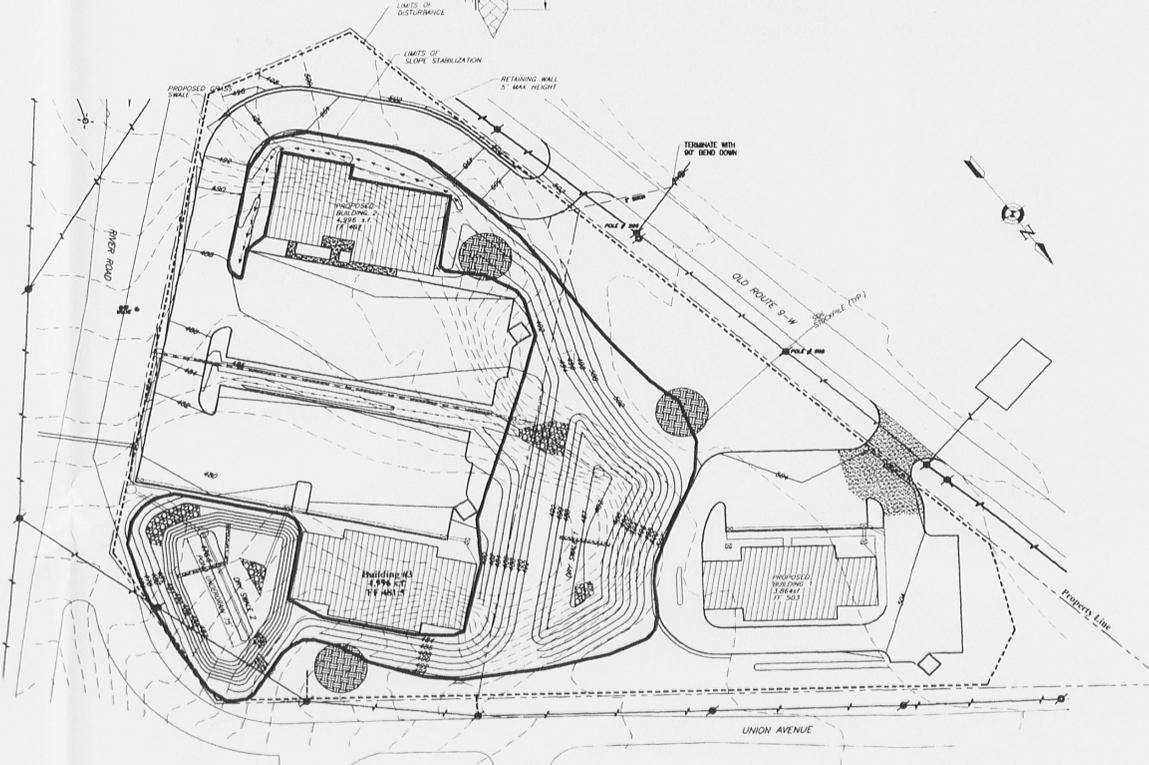
- FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
- CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- STAKE MATERIALS WILL BE STANDARD 2" X 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
- SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- A 2" X 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.



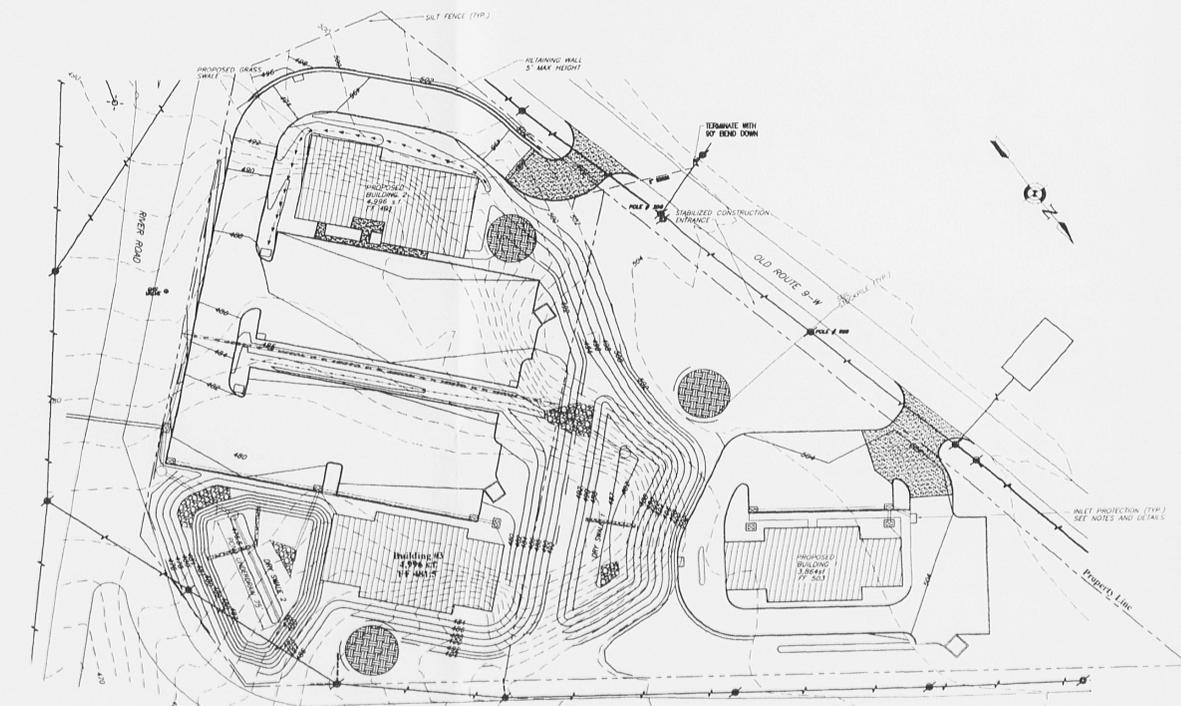
**INLET PROTECTION FILTER**  
N.T.S.

**WOOD FRAME**  
N.T.S.

- FILTER FABRIC SHALL HAVE AN EOS OF 40-85.
- WOODEN FRAME SHALL BE CONSTRUCTED OF 2" X 4" CONSTRUCTION GRADE LUMBER.
- CLOTH TO BE INSTALLED ON TOP OF WIRE MESH.



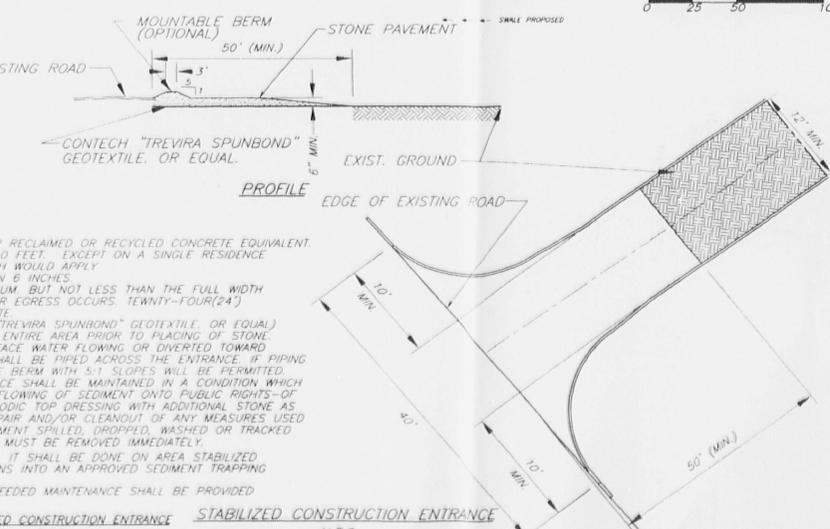
**EROSION AND SEDIMENTATION CONTROL PLAN**  
SCALE  
0 25 50 100



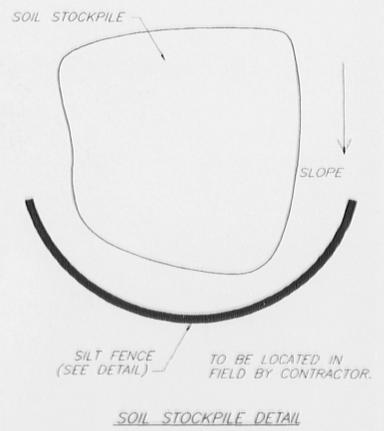
**INLET PROTECTION NOTE**  
SCALE  
0 25 50 100

LEGEND  
 - - - - - PROPERTY LINE EXISTING  
 - - - - - EXISTING CONTOURS (2')  
 - - - - - EXISTING CONTOURS (10')  
 - - - - - CONTOURS PROPOSED (2')  
 - - - - - CONTOURS PROPOSED (10')  
 - - - - - SHALE PROPOSED

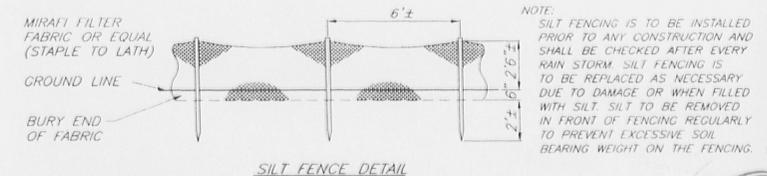
**SLOPE STABILIZATION NOTE:**  
ALL AREAS WITH FINISHED SLOPES EXCEEDING 30% SHALL BE STABILIZED UTILIZING LANDLOK TRM 450 AS MANUFACTURED BY CONTECH. THIS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.



**STABILIZED CONSTRUCTION ENTRANCE**  
N.T.S.



**SOIL STOCKPILE DETAIL**  
N.T.S.



**SILT FENCE DETAIL**  
N.T.S.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND INITIALIZE EROSION CONTROL MEASURES. SILT FENCING IS TO BE USED FOR SILTATION CONTROL AROUND ALL AREAS THAT WILL BE DISRUPTED DURING CONSTRUCTION. SILT FENCES ARE TO BE MAINTAINED TO THE SATISFACTION OF THE ENGINEER AND WILL BE REMOVED BY THE CONTRACTOR ONCE GROUND COVER IS REESTABLISHED.

THIS SHEET IS INVALID AND VOID UNLESS ACCOMPANIED BY REMAINING SHEETS IN SET.

APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
 NOV 18 2005  
 TOWN ENGINEER

**TACONIC DESIGN ENGINEERING, PLLC**  
 5015 ROUTE 201  
 3129 ROUTE 9W  
 NEW WINDSOR, N.Y. 12553  
 (845)-569-8100  
 (FAX)(845)-569-4583

**CHARLES T. BROWN, P.E.**  
**WILLIAM J. MOREAU, P.E.**

P.O. BOX 4470  
 NEW WINDSOR, N.Y. 12553  
 (845)-561-2582

**EROSION & SEDIMENTATION CONTROL PLAN & DETAILS**

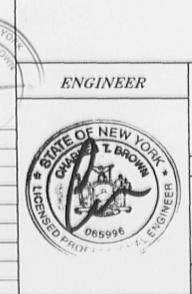
**COMMERCIAL SUBDIVISION FOR: SANDCASTLE HOMES**

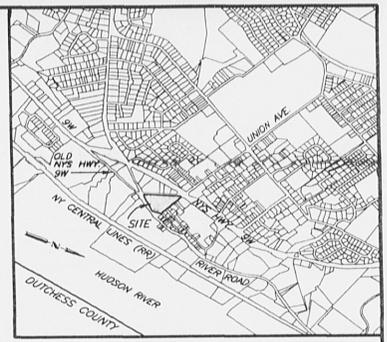
RIVER ROAD (S/B/L: 9-1-101)

TOWN OF NEW WINDSOR, ORANGE COUNTY, NEW YORK

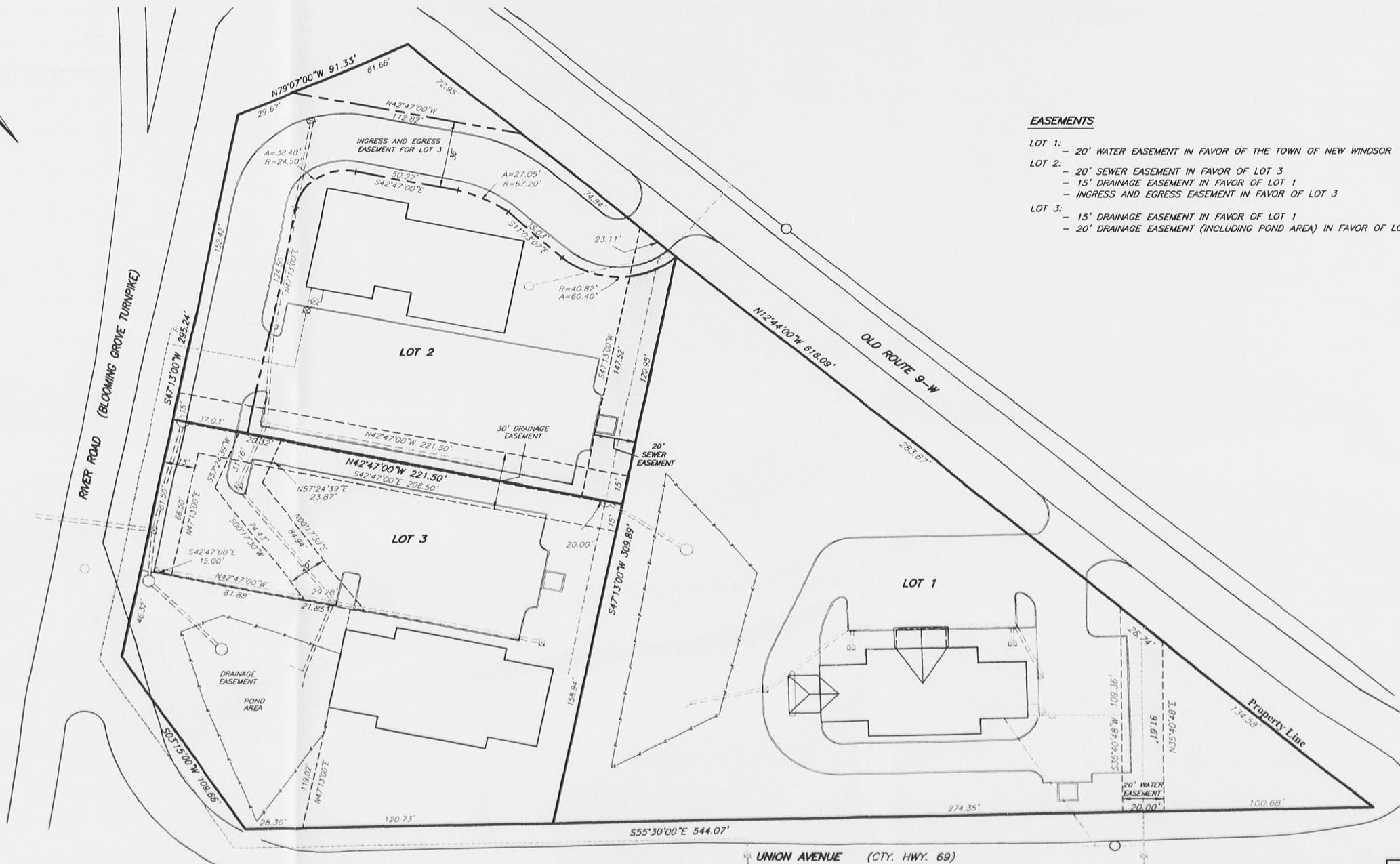
DATE: 12/02/05 SCALE: AS NOTED JOB NUMBER: 05450 - AJC SHEET NUMBER: SP 8

REV.	DATE	BY	DESCRIPTION
7	06/21/07	J.J.C.	REVISED PARKING LOT ACCESS PER CLIENT
6	06/02/07	J.J.C.	PER TOWN ENGINEER'S DRAINAGE COMMENTS
5	05/03/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
4	02/12/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
3	01/15/07	J.J.C.	PER TOWN ENGINEER'S COMMENTS
2	07/11/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS
1	06/14/06	J.J.C.	PER TOWN ENGINEER'S COMMENTS





LOCATION PLAN



**EASEMENTS**

- LOT 1:
  - 20' WATER EASEMENT IN FAVOR OF THE TOWN OF NEW WINDSOR
- LOT 2:
  - 20' SEWER EASEMENT IN FAVOR OF LOT 3
  - 15' DRAINAGE EASEMENT IN FAVOR OF LOT 1
  - INGRESS AND EGRESS EASEMENT IN FAVOR OF LOT 3
- LOT 3:
  - 15' DRAINAGE EASEMENT IN FAVOR OF LOT 1
  - 20' DRAINAGE EASEMENT (INCLUDING POND AREA) IN FAVOR OF LOT 2

**AREA: S.F.**

- 2,010 S.F.
- 2,835 S.F.
- 3,323 S.F.
- 13,268 S.F.
- 4,320 S.F.
- 12,046 S.F.

**LEGEND**

- EXISTING UTILITY POLE
- ELECTRIC WIRES
- LAMP POLE
- EXISTING SEWER MH
- EXISTING WATER MAIN
- EXISTING HYDRANT

**NOTES:**

1. T.M. #9-1-101
2. ZONE: NC
3. TOTAL AREA OF PARCEL: 3.23± ACRES.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS PLAN BEARING A LICENSED PROFESSIONAL'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW  
 ONLY COPIES FROM THE ORIGINAL OF THIS PLAN MARKED WITH AN ORIGINAL PROFESSIONAL'S SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES.



REVISED	NATURE OF REVISION	CK	REVISED	NATURE OF REVISION	CK
7/20/07	R.O.W. EASEMENT REVISED & MISC.				

**EASEMENT PLAN**  
FOR  
**SANDCASTLE HOMES**

TOWN OF NEW WINDSOR      ORANGE COUNTY, N.Y.  
SCALE: 1"= 30'      FEBRUARY 20, 2007

SP-9

DRAWN BY: *RL*      EUSTANCE & HOROWITZ, P.C.      DWG.# C5505D  
 CHKD BY:      P. O. BOX 42 CIRCLEVILLE, NEW YORK 10919      DISK # 050023

APPROVAL GRANTED BY TOWN OF NEW WINDSOR  
NOV 14 2007

