



# TOWN OF OCCOQUAN

Town Hall, 314 Mill Street, Occoquan, VA 22125  
www.occoquanva.gov | info@occoquanva.gov | (703) 491-1918

## PLANNING COMMISSION MEETING

**Tuesday, July 24, 2018**

**7:00 PM**

**TOWN HALL - 314 MILL STREET**

1. Citizen Comments
2. Approval of Minutes of May 8, 2018 & June 26, 2018
3. Site Plan, 113 Poplar Lane (Pool) Approval
4. Recommendation of New Planning Commissioner
5. Chair/Town Council Report

**Eliot Perkins**  
Planning Commission Chair



**TOWN OF OCCOQUAN**  
**Town Hall - 314 Mill Street, Occoquan, VA 22125**  
**MEETING DATE: 2018-05-08**

**MEETING TIME: 6:30 PM**

**Staff Present:** Eliot Perkins, Ann Kisling, Ryan Somma, Joe McGuire

**Staff Absent:** Heather Ozuna

**1. Call to Order**

The Planning Commission Meeting was called to order by Eliot Perkins, on May 8<sup>th</sup>, 2018, at 6:30 p.m.

**Secretary for Meeting**

Ryan Somma took minutes for the meeting.

**2. Approval of Minutes of April 10, 2018**

Anne Kisling moved to approve the Planning Commission meeting minutes of April 10, 2018. Ryan Somma seconded the motion. The motion carried by poll vote, unanimously.

**3. Parking and Traffic Study Discussion**

Eliot Perkins opened the discussion by asking Joe McGuire for his thoughts on the study. McGuire said the priority was to extend, expand, and widen Commerce Street. He said the parking portion of the study was premature due to additional parking coming with the new construction planned on Mill Street.

Perkins said the Commission had found a need to improve signage in town, having observed people turning left when parking was to the right and that there was a need for big obvious signs.

Ryan Somma thanked Chis Coon for contacting google about marking parking on Google Map. Coon said parking was marked on two places in town and was visible in street view mode.

McGuire said that events at Madigan's Waterfront would take up parking under the bridge and at that end of town. Perkins said there was a need to maximize the parking the Town does have and that finding parking keeps customers in Occoquan.

Somma gave overview of the draft report, going over the priorities listed.

On the subject of Walk Occoquan McGuire said the problem was the cost of improving walkability. That crosswalks at two sidewalks would cost \$50k each. Coon said that the Town was working with Prince William County to share costs, walkability was a priority in the CIP, and that the speed study

on Washington St had resulted in a crosswalk being put in place. A similar study on Tanyard Hill is planned and the rumble strips being refreshed to reduce speeding.

Anne Kisling inquired about the length of such a study. Coon answered that it would be two to three days. There were concerns that such a short time period might not catch the times when people are speeding on the road.

On the subject of Cooperation with Private Parking Owners, Perkins said there has been discussion in the past about partnership with private parking. Having watched lots for six to seven days, he found much of the parking was not being used. McGuire said that private lot owners would not allow public parking on their lots.

Somma said the issue the Commission had discovered was not allowing public parking on private lots, but rather clearly marking private parking and customer parking. That there was confusion about where customer parking was due to a lack of signage or poorly worded signage. Coon said that private parking signage was a private issue. Somma asked if the Town could mandate signage the same way it mandated shop signage. Coon said if the signage was not visible from the public right-of-way, the Town would have issues with enforcement.

Somma said the other aspect of parking was that it only becomes an issue during special events and holidays. Having observed many people in town charging money for parking during events, that the Town could partner with the private lot owners. McGuire expressed concern about putting onerous regulations on citizens making use of their private lots. Somma clarified that the thinking is more of a partnership between the Town and lot owners to encourage and empower the practice. Coon said the Town has something like such a partnership with Patriot Scuba, which offers shuttle service during events and has been successful.

On the Bike Occoquan subject, Perkins said this was a safety issue and one that would grow more prominent as more bike trails run through the Town. Kisling said that she did finally find the bike racks, but that they were hidden in the park and not clearly marked. Perkins said that in planning for the future of Occoquan as a biking hub, bike racks should be in more obvious places, like under the 123 Bridge, and more visible.

Perkins asked McGuire for additional thoughts. McGuire said there were three bridges crossing the Occoquan River, Route 1, I-95, and the 123 Bridge, constricting traffic. VDOT has widened at Lorton Road to send traffic to 123 and towards Occoquan. VDOT will not redirect traffic around Town. He stressed the complexity and cost of making Commerce Street two-way. Asking if VDOT will pay for it and how will traffic be routed if Commerce Street is shut down.

Kisling added that the Town may have to take property to widen the road for two-way traffic. Somma said the road was historically two-way and made one-way to accommodate parking. Kisling said there may be new requirements when trying to restore traffic to two-way.

It was agreed that consulting the Town Engineer about the width of Commerce Street might help anticipate the complexity of the change. Coon said the report could be approved with an amendment to consult the Town Engineer.

Ryan Somma moved to approve report with amendment to consult town engineer on feasibility of Commerce Street width. Anne Kisling seconded. The motion carried by poll vote, unanimously.

## **5. Adjournment**

The meeting was adjourned at 7:06 p.m.

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Eliot Perkins  
Chair, Planning Commission

*Submitted by Ryan Somma, Planning Commission Member*



**TOWN OF OCCOQUAN**  
**Town Hall - 314 Mill Street, Occoquan, VA 22125**  
**MEETING DATE: 2018-06-26**

**MEETING TIME: 6:30 PM**

**Present:** Eliot Perkins, Ryan Somma,

**Absent:** Joe McGuire , Heather Ozuna, Ann Kisling

**1. Call to Order**

The Planning Commission Meeting was called to order by Eliot Perkins, on 2018-06-26, at 6:40 p.m.

**Secretary for Meeting**

Ryan Somma took minutes for the meeting.

**2. Agenda**

The meeting was closed due to a lack of quorum.

**5. Adjournment**

The meeting was adjourned at 6:52 p.m.

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Eliot Perkins  
Chair, Planning Commission

*Submitted by Ryan Somma, Planning Commission Member*



# TOWN OF OCCOQUAN

*Circa 1734 • Chartered 1804 • Incorporated 1874*  
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**TOWN COUNCIL**  
Elizabeth A. C. Quist, Mayor  
Patrick A. Sivigny, Vice Mayor  
J. Matthew Dawson  
Jim Drakes  
Cindy Fithian  
Joe McGuire

**TOWN MANAGER**  
Kirstyn Barr Jovanovich

## MEMORANDUM

**TO:** Planning Commission

**CC:** The Honorable Town Council  
Town Manager

**FROM:** Town Clerk

**DATE:** June 26, 2018

**SUBJECT:** Revised Site Plan, 113 Poplar Lane (Pool), SP2017-02

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The Planning Commission reviewed and approved a Site Plan for a pool installation at 113 Poplar Lane in October 2017. The site plan that was included in the Commission's agenda packet in October was not the revised site plan on which the staff report prepared by the Town Engineer and recommended for approval was based. In an effort to ensure the Town's record is accurate and correct, the Planning Commission is being provided with a copy of the correct site plan for this project and is requested to review and recommend approval of the correct site plan. The project is nearing completion and has been built utilizing the revised site plan dated September 12, 2017. This is an administrative correction.

Please do not hesitate to contact me should you have any questions.

Attachments (2) Revised Site Plan, SP2017-02 (Dated 9/12/2017)  
Staff Report, Dated 9/27/2017



# TOWN OF OCCOQUAN

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**TOWN COUNCIL**  
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Patrick A. Sivigny, Vice Mayor  
J. Matthew Dawson  
Jim Drakes  
Cindy Fithian  
Joe McGuire

**TOWN MANAGER**  
Kirstyn Barr Jovanovich

## STAFF REPORT 113 Poplar Lane, Swimming Pool - Site Plan

Applicant: James Yates

Date: September 27, 2017

Application Number: SP2017-01

### PART I

#### A. EXECUTIVE SUMMARY

The applicant proposes to construct an 18 foot x 36 foot swimming pool in the rear yard of their residence at 113 Poplar Lane, while adding a spa pool and an expanded patio area. The vast majority of the work will occur within the FEMA designated 100-year floodplain and within the Resource Protection Area associated with the Chesapeake Bay Preservation Ordinance. Given the sensitive environmental areas impacted, a Major Water Quality Impact Assessment was required.

#### B. DESCRIPTION OF PETITION

The applicant requests approval of the Site Plan for “113 Poplar Lane – Pool Improvement.” The plan is dated 8/18/17, last sealed 9/12/17.

#### C. APPLICABLE REGULATIONS

1. Chapter 18 – Environment
2. Chapter 26 – Floods
3. Chapter 46 – Site Plans
4. Chapter 66 – Zoning

### PART II

#### A. ANALYSIS OF EXISTING CONDITIONS

1. Site Area: ±0.4752 acres
2. Use: residential, accessory pool

3. Zone: R-1.
4. Location: The referenced property is located at 113 Poplar Lane (PWC GPIN 8393-73-6865).
5. Buildings/Structures: Single family detached home, adding swimming pool.
6. Access: Access is from the Poplar Lane.
7. Chesapeake Bay Preservation: This site is within the Chesapeake Bay Preservation Resource Protection Area (RPA).
8. Stormwater Management and Virginia Stormwater Management Program (VSMP): Stormwater Management for this project is accommodated through the purchase of phosphorus credits for water quality and proximity to the Occoquan River for water quantity. A VSMP permit and SWPPP will not be required.

## **B. ANALYSIS OF PROPOSED PLAN**

The applicant has submitted a site plan showing how the proposed improvement will be positioned on the lot, as well as the necessary computations to show compliance with the Town's various codes related to erosion and sediment control, stormwater management, flooding, site plans, and protections to the environment through the Chesapeake Bay Preservation Ordinance.

Upon approval of the site plan, the applicant can apply for a land disturbance permit, which will be granted after the posting of an erosion and sediment control surety, along with the execution of the appropriate agreements.

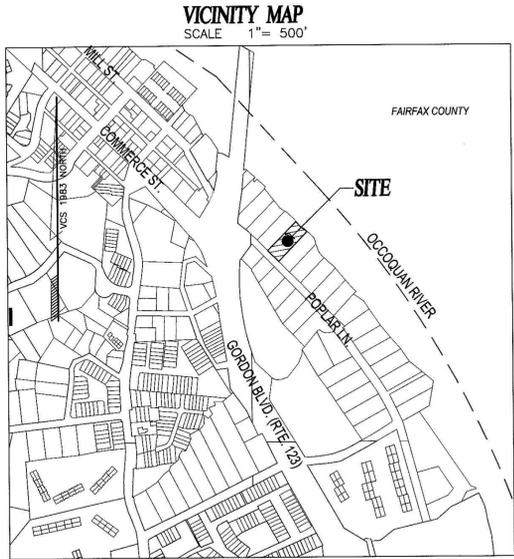
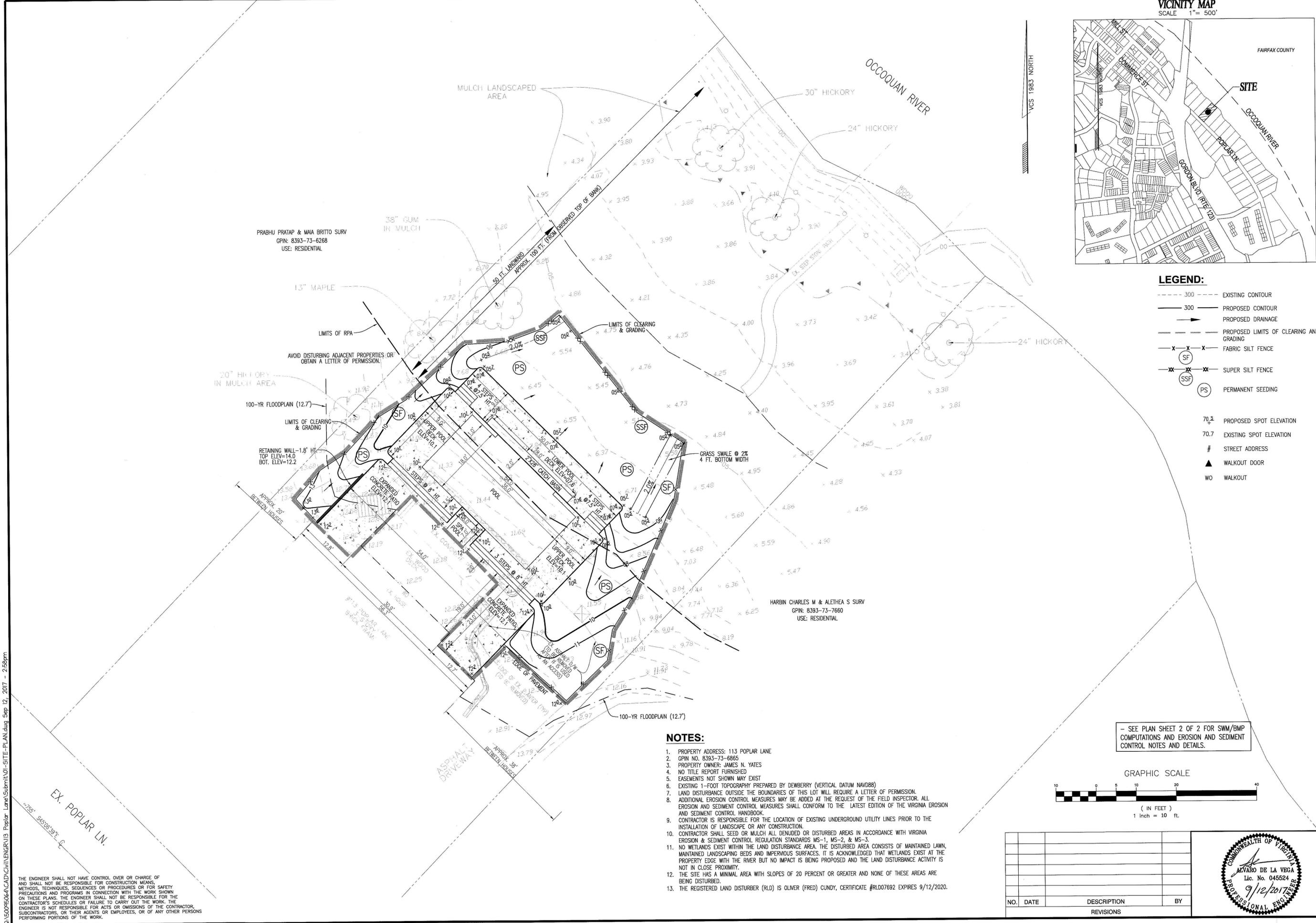
## PART III

### **STAFF CONCLUSIONS**

The proposed site plan, having been duly reviewed by Town Staff, has been deemed consistent with the applicable provisions of the Town Code. It is, therefore, Staff's recommendation to grant **approval** to the subject plan, subject to purchase of phosphorus credits from a bona fide phosphorus bank. It is suggested the Mayor's signature on the site plan be withheld until this item is accomplished and confirmed by the Town Engineer or Town Manager.

**PREPARED BY:** Bruce A. Reese, PE, LS - Town Engineer, September 26, 2017

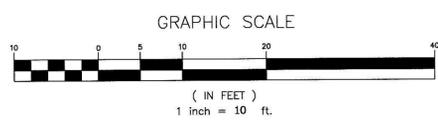




- LEGEND:**
- - - 300 - - - EXISTING CONTOUR
  - 300 — PROPOSED CONTOUR
  - PROPOSED DRAINAGE
  - - - - - PROPOSED LIMITS OF CLEARING AND GRADING
  - x — x — x — FABRIC SILT FENCE
  - x — x — x — SUPER SILT FENCE
  - (PS) PERMANENT SEEDING
  - 70.5 PROPOSED SPOT ELEVATION
  - 70.7 EXISTING SPOT ELEVATION
  - # STREET ADDRESS
  - ▲ WALKOUT DOOR
  - WO WALKOUT

- NOTES:**
1. PROPERTY ADDRESS: 113 POPLAR LANE
  2. GPIN NO. 8393-73-6865
  3. PROPERTY OWNER: JAMES N. YATES
  4. NO TITLE REPORT FURNISHED
  5. EASEMENTS NOT SHOWN MAY EXIST
  6. EXISTING 1-FOOT TOPOGRAPHY PREPARED BY DEWBERRY (VERTICAL DATUM NAVD88)
  7. LAND DISTURBANCE OUTSIDE THE BOUNDARIES OF THIS LOT WILL REQUIRE A LETTER OF PERMISSION.
  8. ADDITIONAL EROSION CONTROL MEASURES MAY BE ADDED AT THE REQUEST OF THE FIELD INSPECTOR. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
  9. CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITY LINES PRIOR TO THE INSTALLATION OF LANDSCAPE OR ANY CONSTRUCTION.
  10. CONTRACTOR SHALL SEED OR MULCH ALL DENUDED OR DISTURBED AREAS IN ACCORDANCE WITH VIRGINIA EROSION & SEDIMENT CONTROL REGULATION STANDARDS MS-1, MS-2, & MS-3.
  11. NO WETLANDS EXIST WITHIN THE LAND DISTURBANCE AREA. THE DISTURBED AREA CONSISTS OF MAINTAINED LAWN, MAINTAINED LANDSCAPING BEDS AND IMPERVIOUS SURFACES. IT IS ACKNOWLEDGED THAT WETLANDS EXIST AT THE PROPERTY EDGE WITH THE RIVER BUT NO IMPACT IS BEING PROPOSED AND THE LAND DISTURBANCE ACTIVITY IS NOT IN CLOSE PROXIMITY.
  12. THE SITE HAS A MINIMAL AREA WITH SLOPES OF 20 PERCENT OR GREATER AND NONE OF THESE AREAS ARE BEING DISTURBED.
  13. THE REGISTERED LAND DISTURBER (RLD) IS OLIVER (FRED) CUNDY, CERTIFICATE #RLD07692 EXPIRES 9/12/2020.

- SEE PLAN SHEET 2 OF 2 FOR SWM/BMP COMPUTATIONS AND EROSION AND SEDIMENT CONTROL NOTES AND DETAILS.



NO.	DATE	DESCRIPTION	BY
REVISIONS			



**Dewberry**  
 13275 HEATHCOTE BLVD.  
 SUITE 130  
 FARMERSVILLE, VA 20155-6689  
 PHONE: 703.488.2211  
 FAX: 703.488.2212

**SITE PLAN**

**113 POPLAR LANE  
 POOL IMPROVEMENT**  
 Town of Occoquan, Virginia

Plan Number: XX-XXXX  
 Drawn By: AD  
 Designed By: AD  
 Checked By:  
 Date: 8/18/2017  
 Scale: 1"=10'  
 Sheet: 1 of 2  
 File Number: DP-383

G:\500\8393-73\CAD\CIVIL\ENGR\113 Poplar Lane\Submit\01-SITE-PLAN.dwg Sep 12, 2017 - 2:58pm

THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.

**SWM/BMP COMPUTATIONS**

Project Name: 113 Poplar Lane, Town of Occoquan  
 Date: 9/11/2017  
 Linter Development Project? No

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) 0.31

Maximum reduction required: 0.05  
 TP Load Reduction Required for Site (lb/yr): 0.06

Pre-Development Land Cover (acres)

Soils	A Soils	B Soils	C Soils	D Soils	Total
Forest/Open Space (un disturbed)					2.09
Managed Turf (mowed)	0.09				0.09
Impervious Cover (concrete)					0.12
<b>Total</b>	<b>0.09</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.12</b>

Post-Development Land Cover (acres)

Soils	A Soils	B Soils	C Soils	D Soils	Total
Forest/Open Space (un disturbed)					2.09
Managed Turf (mowed)	0.08				0.08
Impervious Cover (concrete)					0.05
<b>Total</b>	<b>0.08</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.13</b>

Runoff Coefficients (Rv)

Soils	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.85	0.85	0.85	0.85

TP Load Reduction Required for Redesignated Area (lb/yr): 0.01  
 TP Load Reduction Required for New Impervious Area (lb/yr): 0.05

TP Load Reduction Required for Total Site (lb/yr): 0.06

Nitrogen Loads (Informational Purposes Only)

Pre-Development TN Load (lb/yr)	0.09	Final Post-Development TN Load (lb/yr)	1.04
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**res**

Date: September 12, 2017

To: Toni & Jim Yates  
 113 Poplar Lane  
 Occoquan, VA 22125

From: Claire Wolanski  
 Credit Sales Coordinator  
 Resource Environmental Solutions

Subject: Potomac Watershed - Nutrient Credit Availability

Project Reference: 113 Poplar Lane; 0.08 Credits Requested; HUC 02070010

This letter is to confirm the availability of 0.08 authorized nutrient credits ("Nutrient Credits") from one or more of Resource Environmental Solutions' ("RES") Potomac nutrient bank facilities for use by permit applicants within the Potomac watershed, including HUC 02070010, to compensate for nutrient loadings in excess of state or local regulations, as per Virginia Code § 62.1-44.15:35 and § 62.1-44.19:14 and Virginia Administrative Code 9 VAC 25-820-10 et seq. These Nutrient Credits are generated and managed under the terms of the Banking Instruments known as the Owl Run Nutrient Reduction Implementation Plan ("NRIP") and/or the Edgeliff NRIP.

Please feel free to contact me if you have any questions.

Sincerely,  
*Claire Wolanski*  
 Claire E. Wolanski  
 Resource Environmental Solutions  
 804-591-4060

CREDITS SUMMARY:

0.06 LBS - SITE RE-DEVELOPMENT CREDIT  
 0.02 LBS - RPA ENCROACHMENT CREDIT

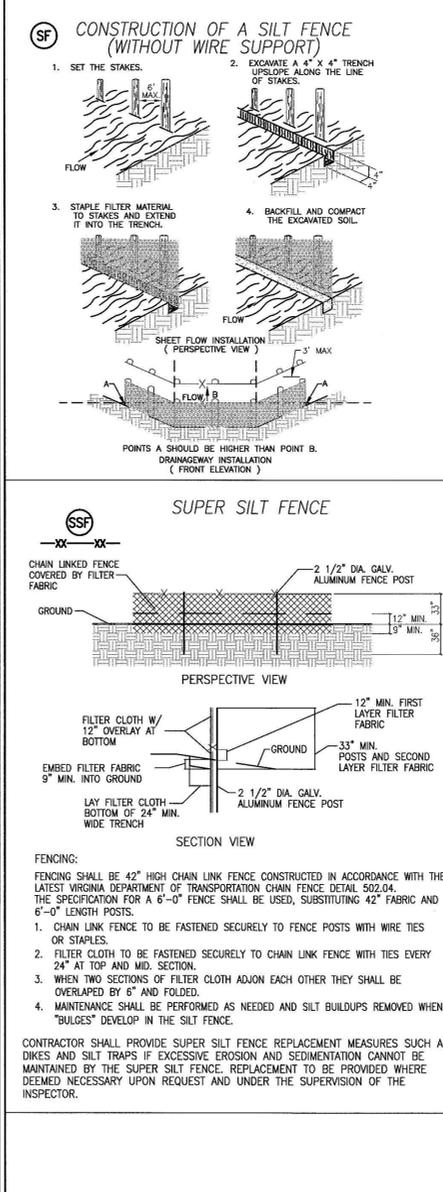
0.08 LBS - TOTAL CREDITS REQUESTED

**SWM/BMP NOTE:**

THIS SITE PLAN PROPOSES THE CONSTRUCTION OF A POOL, 3-TIER PATIO DECK AND ASSOCIATED GRADING, THE IMPROVEMENT IS BEING PROPOSED OVER THE REAR GRASS COVERED YARD OF THE PROPERTY AND WILL BE CONNECTED TO THE EXISTING PATIO. PER THE DEQ VIRGINIA RUNOFF REDUCTION METHOD (VRRM) FOR RE-DEVELOPMENT, THE PROPOSED IMPROVEMENTS REQUIRE A TP LOAD REDUCTION OF 0.06 LB/YR (AS SHOWN ON THIS SHEET). DUE TO THE SIZE OF THE PROPERTY AND INADEQUATE ONSITE AREA, THE NUTRIENT LOAD FOR THE SITE IS BEING ADDRESSED THROUGH THE PURCHASE OF NUTRIENT CREDITS WITHIN THE WATERSHED. ADDITIONALLY, IN ORDER TO MEET THE REQUIREMENT OF 40% BMP NUTRIENT REDUCTION FOR THE IMPACTED RPA BUFFER AREA APPROVED BY THE TOWN OF OCCOQUAN, THE VRRM CALCULATES THAT A 40% REDUCTION FOR THE DISTURBED RPA BUFFER AREA OF 0.06 ACRES IS EQUIVALENT TO 0.02 LB/YR LOAD REDUCTION. THIS REQUIRED NUTRIENT REDUCTION IS ALSO BEING ADDRESSED THROUGH THE PURCHASE OF NUTRIENT CREDITS. THE ATTACHED LETTER SHOWS THAT 0.08 LBS (0.06+0.02 LBS) OF NUTRIENT REDUCTION IS AVAILABLE TO MEET THE SWM/BMP REQUIREMENT FOR THIS PROPOSED IMPROVEMENT.

THE SMALL AMOUNT OF ADDITIONAL IMPERVIOUS AREA BEING PROPOSED WILL DRAIN TO THE OCCOQUAN RIVER LOCATED ADJACENT TO THE PROJECT SITE RESULTING IN A NEGLIGIBLE INCREASE IN PEAK FLOW. AS A PROTECTION MEASURE TO ATTENUATE ANY INCREASE IN PEAK FLOW BEFORE REACHING THE OCCOQUAN RIVER, A FLAT GRASS LINED SHEET FLOW AREA IS BEING PROPOSED BELOW THE PROPOSED PATIO.

**EROSION & SEDIMENT CONTROL NOTES AND DETAILS**



**EROSION CONTROL NARRATIVE**

**PROJECT DESCRIPTION**  
 THIS SITE PLAN PROPOSES AN EXTENSION OF THE REAR PATIO FOR A POOL IMPROVEMENT. THE LIMITS OF DISTURBANCE IS APPROXIMATELY 4,830 SF. THIS NARRATIVE INCLUDES THE DESCRIPTION OF THE EROSION AND SEDIMENT CONTROLS AND MAINTENANCE CONTROL PROGRAMS PERTAINING TO THIS PLAN.

**EXISTING SITE CONDITIONS**  
 THIS SITE CONSISTS OF GRASS COVERED LAWN.

**CRITICAL EROSION AREAS**  
 THE EXISTING OCCOQUAN RIVER AND RPA BUFFER ARE AREAS TO BE PROTECTED FROM EROSION. THE CONTRACTOR SHALL EXERCISE CARE IN PROTECTING THIS AREA FROM SILT AND EROSION.

**EROSION CONTROL MEASURES**  
 ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATION OF THE V.E.S.C.H. 3RD EDITION 1992 AND SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY THE TOWN INSPECTOR.

**PERMANENT STABILIZATION & SEEDING**  
 TO ESTABLISH A PERENNIAL COVER ON DISTURBED AREAS, ONCE GRADING OPERATIONS HAVE BEEN COMPLETED AND SLOPES HAVE BEEN STABILIZED, SEED SHALL BE PLANTED OR SOIL SHALL BE PLACED TO REDUCE EROSION AND SEDIMENT AND FACILITATE FINAL STABILIZATION. F SEED IS BEING PLANTED, ALL NEWLY GRASSED AREAS SHOULD BE COVERED WITH STRAW MULCH TO STABILIZE THE SOIL SURFACE WHILE GRASSES ARE BEING ESTABLISHED.

**STRUCTURAL PRACTICES**

1. TEMPORARY DIVERSION DIKE - 3.09  
 A SYSTEM OF DIVERSION DIKES TO DIRECT FLOW INTO SEDIMENT TRAPS AND DIVERSION CHANNELS WILL BE INSTALLED BELOW MAJOR GRADED AREAS AS INDICATED ON THE PHASE I & II EROSION & SEDIMENT CONTROL PLANS.
2. SILT FENCE BARRIER - 3.05 - SUPER SILT FENCE BARRIER  
 SILT FENCE BARRIERS WILL BE INSTALLED DOWN SLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM THE SHEET FLOW AS INDICATED ON THE PLANS.
3. TEMPORARY CONSTRUCTION ENTRANCE - 3.02  
 DUE TO THE SIZE OF THE PROJECT, A CONSTRUCTION ENTRANCE IS NOT PRACTICAL.
4. TEMPORARY SEDIMENT TRAP - 3.13  
 TEMPORARY PONING AREAS WILL BE FORMED BY CONSTRUCTING AN EARTHEN EMBANKMENT WITH A STONE OUTLET. SPECIFIC DETAILS OF THE SEDIMENT TRAPS ARE SHOWN ON THE PLANS SHEETS.
5. STORM DRAIN INLET PROTECTION - 3.07 AND CULVERT INLET PROTECTION - 3.08  
 ALL STORM SEWER INLETS AND CULVERTS SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT-LADEN WATER SHALL BE FILTERED BEFORE ENTERING THE STORM SEWER INLETS AND CULVERTS.
6. CHECK DAMS - 3.20  
 SEVERAL CHECK DAMS WILL BE INSTALLED TO REDUCE THE VELOCITY OF CONCENTRATED FLOWS IN NEWLY INSTALLED DITCHES.
7. PERMANENT SEEDING - 3.32  
 PLANTING SEED WILL BE INSTALLED ON DISTURBED AREAS TO REDUCE EROSION AND DECREASE SEDIMENT.

**VEGETATIVE PRACTICES**

1. TOPSOILING (STOCKPILE) - 3.30  
 TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS ARE TO BE STABILIZED WITH TEMPORARY VEGETATION. PRIOR TO LAND-DISTURBING ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION & SEDIMENT PLAN TO THE OWNER COVERING THE STOCKPILE AREA WHICH MAY HAVE TO BE APPROVED BY THE PLAN APPROVING AUTHORITY BEFORE ANY ACTIVITY COMMENCES.
2. TEMPORARY SEEDING - 3.31  
 ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME SHALL BE SEEDDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED.  
 TEMPORARY SEEDING WITH MULCHING IS REQUIRED FOR ALL DENUDED AREAS WHERE NO LAND DISTURBING ACTIVITIES TAKE PLACE FOR A PERIOD EXCEEDING 14 DAYS.

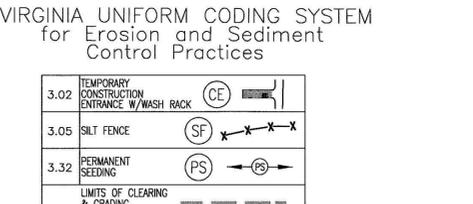
**MANAGEMENT STRATEGIES**

1. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE DUE TO THE SIZE AND SCOPE OF THE PROJECT, A ONE PHASE EKS PLAN IS PROPOSED.
2. INSTALL PERIMETER CONTROLS AS SHOWN TO INCLUDE DIVERSION DIKES, DIVERSIONS, SILT FENCE, SUPER SILT FENCE, DIVERSION DIKES, AND SILT TRAPS. THESE SEDIMENT TRAPPING MEASURES (3.13) SHALL BE INSTALLED AS A FIRST STEP IN GRADING PER THE PHASE I EROSION & SEDIMENT CONTROL PLAN AND WILL BE SEEDDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
3. GRADING OPERATIONS MAY COMMENCE ONCE THE INSPECTOR CONTROLS, DIVERSIONS AND TRAPPING MEASURES ARE INSTALLED TO THE SATISFACTION OF THE INSPECTOR.
4. FILL SLOPE SURFACES SHALL BE LEFT IN ROUGHENED CONDITION TO REDUCE SHEET AND RILL EROSION OF THE SLOPES. THE CONTRACTOR SHALL RE-DIRECT CONCENTRATED FLOW AWAY FROM THE FILL SLOPES BY INSTALLING EARTH BERMS AND DIRECT THE RUN-OFF TO STABILIZED OUTLET OR SEDIMENT BASIN AND TRAPPING DEVICES.
5. SEEDING OR OTHER STABILIZATION WILL FOLLOW IMMEDIATELY AFTER GRADING. FOR VEGETATIVE STABILIZATION OF ALL DENUDED AREAS SEE EROSION CONTROL MEASURES AND VEGETATIVE PRACTICES.
6. AREAS THAT ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.
7. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
8. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY EROSION & SILTATION CONTROLS WILL BE CLEANED UP AND REMOVED AT THE DIRECTION OF THE SITE INSPECTOR.

**MAINTENANCE**  
 IN GENERAL, ALL EROSION & SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL. REFER TO THE ATTACHED EROSION & SEDIMENT CONTROL STANDARD NOTES FOR DETAILED MAINTENANCE AND REVEGETATION/STABILIZATION REQUIREMENTS.

**EROSION & SEDIMENT CONTROL STANDARD NOTES**

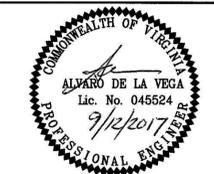
1. THE OWNER/DEVELOPER MUST NOTIFY THE TOWN OF OCCOQUAN AT (703)491-1918 AT LEAST 24 HOURS PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH APPLICABLE TOWN CODE AND POLICIES.
2. THE OWNER/DEVELOPER GRANTS THE RIGHT-OF-ENTRY ON TO THIS PROPERTY TO THE DESIGNATED TOWN OF OCCOQUAN PERSONNEL FOR THE PURPOSE OF INSPECTING AND MONITORING FOR COMPLIANCE WITH TITLE 10.01, CHAPTER 5, ARTICLE 4 OF THE CODE OF VIRGINIA, EROSION AND SEDIMENT CONTROL LAW AND THE TOWN CODE STANDARDS.
3. ALL EROSION CONTROL MEASURES SHOWN ON THE APPROVED PLAN MUST BE IN PLACE AND INSPECTED AND APPROVED BY THE TOWN OF OCCOQUAN PRIOR TO CLEARING, STRIPPING OF TOPSOIL OR GRADING.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE KEPT ON THE SITE AT ALL TIMES.
5. THE DEVELOPER/DEVELOPER'S REPRESENTATIVE IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE TOWN OF OCCOQUAN.
6. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL COMPLETE AND ADEQUATE STABILIZATION IS ACHIEVED.
7. WATER MUST BE PUMPED INTO AN APPROVED FILTERING DEVICE DURING DETAHERING OPERATIONS.
8. ALL EROSION AND SEDIMENT CONTROL PRACTICES MUST BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS AND TO THE TOWN CODE.
9. THE DEVELOPER/DEVELOPER'S REPRESENTATIVE WILL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES AT ALL TIMES.
10. THE DEVELOPER/DEVELOPER'S REPRESENTATIVE SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES DAILY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:
  - A. SEDIMENT BASINS WILL BE CLEANED UP WHEN THE LEVEL OF SEDIMENT BUILDUP REACHES THE CLEANOUT ELEVATION INDICATED ON THE RISER PIPE. SEDIMENT SHALL BE DISPOSED IN SUITABLE AREAS AND IN SUCH A MANNER THAT WILL NOTE ERODE OR CAUSE SEDIMENTATION PROBLEMS.
  - B. THE BASIN EMBANKMENT SHOULD BE CHECKED REGULARLY TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT.
  - C. EMERGENCY SPILLWAYS SHOULD BE CHECKED REGULARLY TO ENSURE THAT ITS LINING IS WELL ESTABLISHED AND EROSION RESISTANT.
  - D. SEDIMENT TRAPS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP WHICH WILL PREVENT DRAINAGE. IF THE GRAVEL IS CLOGGED BY SEDIMENT, IT SHALL BE REMOVED AND CLEANED OR REPLACED.
  - E. SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDDED AS NEEDED.
11. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES MUST BE MADE IMMEDIATELY AFTER THE INSPECTION.
12. SEDIMENT TRAPPING MEASURES WILL BE INSTALLED AS A FIRST STEP IN GRADING AND WILL BE SEEDDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
13. SEEDING AND SELECTION OF THE SEED MIXTURE SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK STANDARD AND SPECIFICATION 3.32.
14. AREAS WHICH ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.
15. RPA AND FLOODPLAIN LIMITS SHALL BE CLEARLY MARKED IN THE FIELD BY FLAGS, SIGNS, ETC.



**EROSION & SEDIMENT CONTROL COST ESTIMATE**

SILT FENCE	150 LF @ \$8.00/LF	\$ 1,200.00
SUPER SILT FENCE	70 LF @ \$20.00/LF	\$ 1,400.00
SEEDING, FERTILIZING AND MULCHING	430 SY @ \$1.50/SY	\$ 645.00
ADMINISTRATIVE COST (10%)		\$ 325.00
<b>TOTAL EROSION &amp; SEDIMENT CONTROL COST ESTIMATE</b>		<b>\$ 3,570.00</b>

NO.	DATE	DESCRIPTION	BY



**Dewberry**  
 1878 HEATHCOTE BLVD.  
 GAINESVILLE, VA 20155-6883  
 PHONE: 703-468-2211  
 FAX: 703-468-2212

**Dewberry Consultants LLC**

**SITE PLAN**  
**DETAILS AND COMPUTATIONS**

**113 POPLAR LANE**  
**POOL IMPROVEMENT**

Town of Occoquan, Virginia

Plan Number: XX-XXXXX  
 Drawn By: AD  
 Designed By: AD  
 Checked By:  
 Date: 8/18/2017  
 Scale: N/A  
 Sheet: 2 of 2  
 File Number: DP-383

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THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.