



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) _____ TEST TIME _____ CAP 5 28415
 AGENCY REVIEW: _____ DATE 12/20/07

DO NOT WRITE ABOVE THIS LINE

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S) TO:

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH 4 PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE **UNKNOWN** IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) Brock Morgan & Jessica Privler
 DAYTIME PHONE 910-246-8206 CELL 443-220-5503 FAX _____
 MAILING ADDRESS 2833 Profit Path Edgewood MD 21040
STREET CITY/TOWN STATE ZIP

APPLICANT Brock Morgan
 DAYTIME PHONE 910-246-8206 CELL 443-220-5503 FAX _____
 MAILING ADDRESS 2833 Profit Path Edgewood MD 21040
STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE: DEVELOPER BUILDER BUYER RELATIVE/FRIEND REALTOR CONSULTANT

PROPERTY LOCATION
 SUBDIVISION/PROPERTY NAME Lennox Park Elkridge MD LOT NO. 640
 PROPERTY ADDRESS 7078 Lennox Ave Elkridge
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 43 GRID 6 PARCEL(S) 698 PROPOSED LOT SIZE 10,215

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

TEST RESULTS WILL BE MAILED TO APPLICANT. BML 12-18-07
SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
 7178 COLUMBIA GATEWAY DRIVE COLUMBIA, MARYLAND 21046 (410) 313-2640 FAX (410) 313-2648
 TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

A/P _____

DATE	TEST #	DEPTH	START	BREAK 1' DROP	STOP 2' DROP	TIME OF 2ND INCH	P/F/H

REMARKS _____

SANITARIAN _____ BACKHOE _____ OTHERS _____

TEST HOLES USED IN SDA _____ AVG. PERC TIME _____ SQ. FT/BR _____

TRENCH WIDTH _____ INLET DEPTH _____ MAX. BOT DEPTH _____ EFFECTIVE SW _____

Memorandum

To: Carletta McKnight

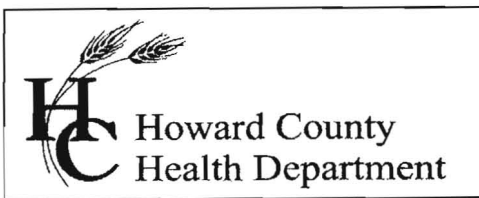
From: Michael J. Davis *mjd*

Date: 8/14/2008

Re: Refund for Perc Test Fee (7078 Lennox Avenue, Lot 640, Lennox Park)

On August 14, 2008, Brock Morgan paid the perc fee for 7078 Lennox Avenue with a check in the amount of \$506.00. Subsequently, Mr. Morgan discussed the property with his engineer and he decided against doing the perc testing on this lot. Therefore, Brock Morgan has requested a refund in the amount of \$506.00. The receipt number is 528415, and copies of the receipt and request letter are attached. Please send the refund to Brock Morgan, 2833 Profitt Path, Edgewood, MD 21040.

Thank you for your assistance in this matter.



Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

December 17, 2007

Mr. Brock Morgan
2833 Profitt Path
Edgewood, MD 21040

RE: Lennox Park
Lots 640 & 641

Mr. Morgan:

This office has received your letter dated December 19, 2007. I have reviewed your request and discussed the issues with Mr. Lieu. It is my "*opinion*" that an on-site well and septic system may not work on this property based on the following reasons. Lot 641 is large swale created by the natural contour on the lots serving 7064 Cedar Avenue and the fill material placed on the warehouse property. A septic system may not be located within 25 feet of a slope greater than 25 %. Therefore, the majority of lot 641 is not suitable on-site sewage disposal. It is possible that lot 640 may be suitable for on-site sewage disposal, but a well that is located on the property must be a minimum of 200 feet from an up gradient septic system and your proposed house location is located in the area that would most likely be required for on-site sewage disposal. I suggest that you contact planning and zoning to determine what the building setbacks are. It may not be possible to meet setbacks and designate enough area for sewage disposal. Furthermore, soils in this area may have seasonally high water tables or perched water conditions that are not suitable for on-site sewage disposal.

If you choose to pursue perc testing this property, it must be performed in wet season. Due to a dry summer and fall it is not clear when wet season conditions will exist. You will be contacted when a starting date for wet season is established. In order to schedule the testing the property must be professionally staked and you must develop a testing plan that illustrates the area to be tested that meets all of the setbacks mentioned above.

Respectfully,

A handwritten signature in cursive script, appearing to read 'Michael J. Davis'.

Michael J. Davis
Well and Septic Program Manager

c: Don Lieu
file

Michael J. Davis
Bureau of Environmental Health
7178 Columbia Gateway Drive
Columbia, MD 21046

Re: Lennox Park Lots 640 and 641

Hello Mr. Davis,

I am requesting a refund for a Perq Application fee associated with the above mentioned property, which has also been referred to as 7078 Lennox Ave, Lot 640, Lennox Park.

After reviewing your response to the original perq application, in January, and after speaking with an engineer about my situation, I have decided not to continue with the perq testing of our property.

Thank you for your assistance in the matter. Please let me know if this is sufficient for your department to process a refund of the application fee.

The original check #1042 was written for \$506.00 on 12-20-07. The Howard county receipt # is 28415.

Sincerely,



8-14-2008

Brock Morgan
2833 Profitt Path
Edgewood, MD 21040

640, for location and topography logistics. Hopefully we can talk sometime next week. Maybe you can explain the order in which things would need to happen if all is OK after speaking with Utilities.

Thank you again,

Brock

--- On Fri, 10/2/09, Sara Sappington <

From: Sara Sappington
Subject: RE: 7057 Lennox Ave
To: "Brock Morgan"
Date: Friday, October 2, 2009, 3:54 PM

Hi Mr. Morgan,

Sorry for the delay in responding back to you. It appears your lots (640 and 641) are in the 0-5 year service area for public utilities. I am waiting for confirmation from Utilities. Assuming this is correct, a well could be entertained; however, the requirements explained in my previous email must be met. Also, since the house is to be built on Lot 640, the wells must be located on that lot. We would need to see this arrangement.

I will be in touch once I hear back from Utilites. Any questions feel free to contact me.

Sara

Howard County Health Department

Bureau of Environmental Health

Well and Septic Program

From: Brock Morgan |
Sent: Monday, September 28, 2009 10:30 PM
To: Sara Sappington
Cc: jim ruff
Subject: Re: 7057 Lennox Ave

Dear Ms. Sappington,

Thank you for your help in this matter.

I would like to know what criteria were used in making the decision on my request for a well permit.

I do not believe that the court proceedings I have filed against an un-cooperative neighbor are relevant to obtaining a well permit, nor should permission for obtaining the permit be conditional to the outcome of the case. My court proceedings were filed as a last resort, as water and sewer connections are a necessity to obtain building permits on this lot.

Since that time, I have found an alternative that would allow for gravity sewer connection through the neighboring business park. I am having engineering work done now to pursue this connection route. Because I now have found an alternative sewer access, I would like to be able to drop my easement court case. For this to happen, I need permission from the county to drill a well for my water needs at 7057 Lennox Ave. I see this as a better option than continuing to bring costly litigation against a future neighbor.

I would like the Health Department to lay out the criteria that they are using as a condition for my permit approval. My current legal costs are escalating, and will only cost me more if I am forced to bring this case to trial. I do not want to continue suing my neighbor if there is another option for water. In my worst case scenario under the Health Department's decision, I must follow through with my court case and then loose, before a well permit will be issued. This will not happen before Jan 07, 2010, the scheduled court date. Because this easement is not an absolute necessity for water and sewer, I don't think the county should force me to finance a potentially losing court case as a condition for approval.

2833 Profitt Path
Edgewood, MD 21040

Howard County Health Department
Bureau of Environmental Health, Well, and Septic Program
7178 Columbia Gateway Drive
Columbia, MD 21046

December 19, 2007

To Whom It May Concern:

Please consider my application for well and septic at my property in Elkridge, Maryland. The property is located in the Lennox Park neighborhood, and is referred to as Lot # 640 or 7078 Lennox Avenue. This is the site on which I am planning to build a house. I also own lot #641, or 7074 Cedar Avenue. The two lots share a boundary line halfway between the two parallel streets of Cedar and Lennox Avenues. At this time, I do not have plans to build on lot # 641 (the lower lot), rather I am planning to use this lot as an offsite septic easement for lot # 640 (the upper lot). Part of lot 640 will also have to be used as an onsite septic easement, because the lower lot only accounts for 9,448 square feet of area, where 10,000 square feet is required.

Public water and sewer would be ideal for new construction although there are several obstacles in the way of connecting. The largest obstacle is the lack of water and sewer frontage to the property. This property is in the 0-5 year plan for Howard County public water and sewer, but no future plans have been made to make water and sewer accessible to our property. Because lots 640 and 641 are each approved for single house construction, any extension of service should serve both lots with gravity sewer service. Obtaining gravity sewer service with existing sewer lines in Lennox Park may not be possible, because of the elevation of existing sewer lines. Public water service is in place on Lennox and Cedar Avenues. Public water on Lennox Avenue would require construction of approximately 300 feet of 8" water main, before the lines gave frontage to lot 640. Public water on Cedar Avenue terminates in front of the neighboring property. This connection would only require approximately 140 feet of 8" water main before the

line gave frontage to lot 641. In addition to extension of the water mains, deeds of easement would need to be created before construction could begin. Easement along Cedar Avenue would also involve crossing a neighbor's driveway and quit claim deeds for the section of Cedar Ave, beyond the current termination of Cedar Avenue. Gravity sewer access could be achieved for both lots through connecting to an existing sewer line in the neighboring Howard Business Park. This would require a deed of easement on platted property, which would need to be re-platted to include easement. Part of the easement would cross a forest conservation easement, which would require a variance.

The costs involved in extending the water lines, engineering work, drawing legal documents, obtaining permission from neighbors, and additional steps in re-plating platted property would create a hardship that does not justify the means.

I have met twice with Don Lieu, Chief of Howard County Public Works utility design division, to discuss different options concerning the connection of water and sewer. In our second meeting, Mr. Lieu suggested well and septic as the most cost-effective way to begin construction on our new house. The water and sewer options I have listed were generated from these discussions with Mr. Lieu. Once construction of my house is completed, the county will then make a more timely effort to bring water and sewer to us. For the time being, well and septic will make the most sense for my construction. As soon as public water and sewer become available, I plan to connect.

I can request a Capitol Project to bring water and sewer to my property, but because there is no existing house on the property, the funding for a project may not be approved until the 2009 budget at the earliest and actual construction might not begin until 2010.

The land that abuts southeast boundary line is actually a paper street called Locust Avenue. This street accounts for a 50-foot wide road access, but this road was never developed, and the original developer did not retain ownership. With the purchase of my property, the previous owners transferred ownership of a Quit Claim that transferred ownership to this unclaimed land alongside the eastern half of Locust Ave. Although this

property does not add to the square footage of lots 640 and 641, it does add a 50-foot buffer to lot 641 and a 25-foot buffer to lot 640. This may only be useful if there are some concerns with the proximity to neighboring property and buildings, for construction of a septic system.

None of the surrounding households are currently using well water or septic fields, as they all have sufficient access to public water and sewer.

Taking into consideration all of the existing circumstances, interpretations of the existing code should allow me a temporary well and septic permit. If setbacks or distances need slight variances, please keep me aware of any needed follow up. Knowing that well and septic will be a short term solution, I welcome any help or suggestions in meeting all of the county's requirements.

I also understand that my property falls within an area that requires wet season testing. I would like to begin the perk testing as soon as possible to speed up the building process come this spring 2008. Please contact me however convenient with any questions or need for follow up on my end. Thank you.

Sincerely,



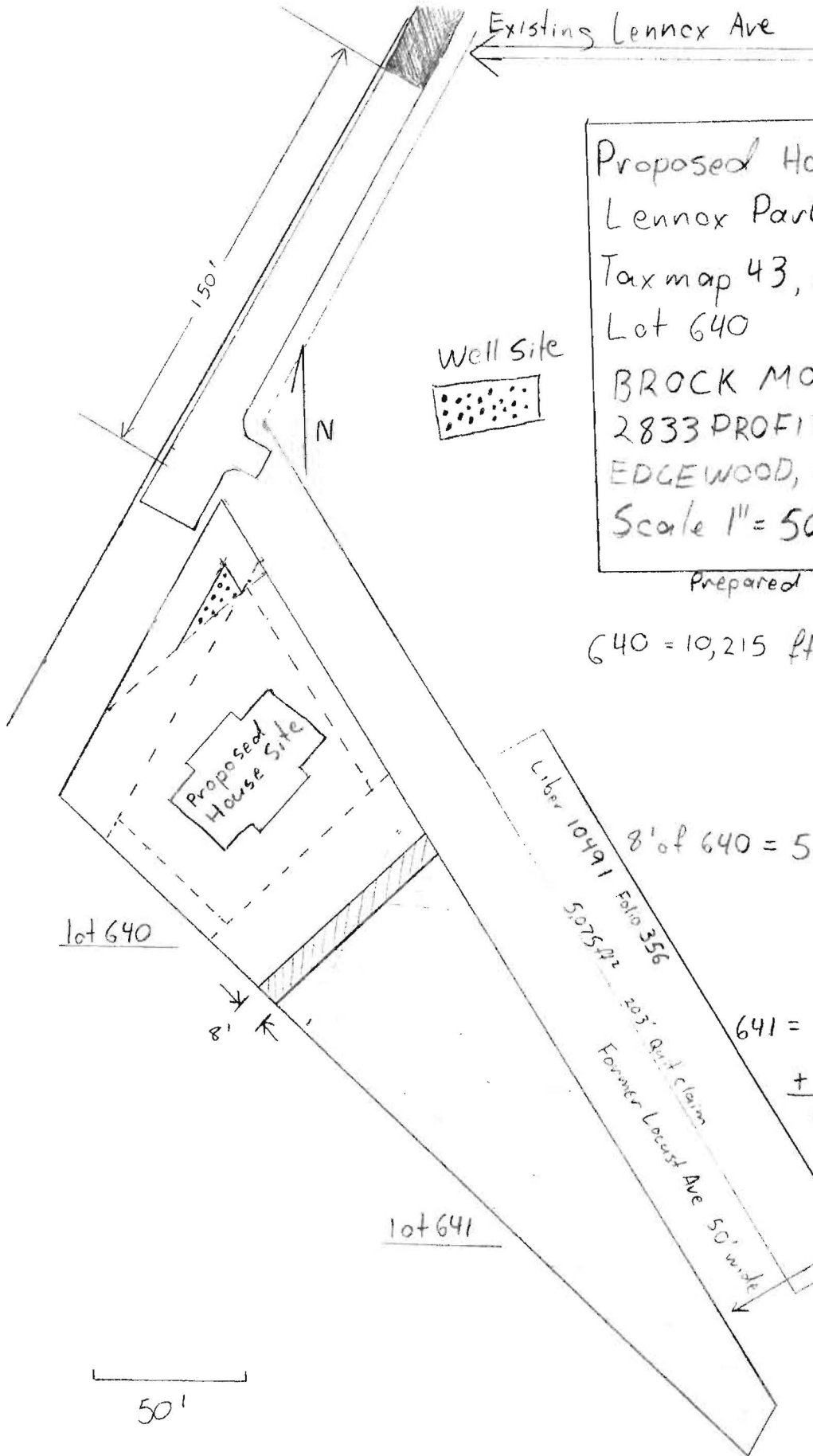
12-19-2007

Brock Morgan

Cell 443-220-5503

Home 910-246-8206

Email bman611@yahoo.com



Existing Lennox Ave

Proposed House 7078 Lennox Ave
 Lennox Park, Elkridge MD
 Tax map 43, Grid 6, Parcel 698,
 Lot 640
 BROCK MORGAN
 2833 PROFITT PATH
 EDGEWOOD, MD 21040
 Scale 1" = 50'

Prepared by Brock Morgan 12-18-2007

640 = 10,215 ft²

8' of 640 = 590 ft²

Liber 10491 Folio 356
 5075 ft²
 203' quit claim
 Former Locust Ave 50' wide

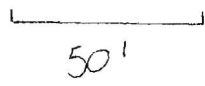
641 = 9,448 ft² (offsite)
 + 590 ft² (onsite)
 10,038 ft²

Septic Easement



lot 640

lot 641



Sara Sappington

From: Sara Sappington
Sent: Wednesday, September 30, 2009 8:08 AM
To: 'Brock Morgan'
Subject: RE: 7057 Lennox Ave

Hi Mr. Morgan,

Thank you for explaining the situation in writing. My understanding in speaking with you was that you were going to go forward with the lawsuit and the well was a temporary situation until you could get public water. I forwarded him your reply email.

If a well is to be drilled on the property you must have two additional well replacement areas on your property. They must be sited 50' apart or a 1500 square foot well box must be proposed. The well cannot be sited in a swale and must meet the 30' setback to a structure, 10' to a driveway, 15' to road R/W, and 10' from the property line and any other site specific situations.

I am hoping to further discuss this tomorrow with my supervisor. He is out of the office today.

Sara
Howard County Health Department
Bureau of Environmental Health

From: Brock Morgan
Sent: Monday, September 28, 2009 10:30 PM
To: Sara Sappington
Cc: jim ruff
Subject: Re: 7057 Lennox Ave

Dear Ms. Sappington,

Thank you for your help in this matter.

I would like to know what criteria were used in making the decision on my request for a well permit.

I do not believe that the court proceedings I have filed against an un-cooperative neighbor are relevant to obtaining a well permit, nor should permission for obtaining the permit be conditional to the outcome of the case. My court proceedings were filed as a last resort, as water and sewer connections are a necessity to obtain building permits on this lot.

Since that time, I have found an alternative that would allow for gravity sewer connection through the neighboring business park. I am having engineering work done now to pursue this connection route. Because I now have found an alternative sewer access, I would like to be able to drop my easement court case. For this to happen, I need permission from the county to drill a well for my water needs at 7057 Lennox Ave. I see this as a better option than continuing to bring costly litigation against a future neighbor.

I would like the Health Department to lay out the criteria that they are using as a condition for my permit

approval. My current legal costs are escalating, and will only cost me more if I am forced to bring this case to trial. I do not want to continue suing my neighbor if there is another option for water. In my worst case scenario under the Health Department's decision, I must follow through with my court case and then loose, before a well permit will be issued. This will not happen before Jan 07, 2010, the scheduled court date. Because this easement is not an absolute necessity for water and sewer, I don't think the county should force me to finance a potentially losing court case as a condition for approval.

I know that there are approvals for well permits granted on the basis of financial hardship. Please let me know who I can contact regarding this option.

Thank you for your help in this matter, and I look forward to your suggestions at finding an alternative resolution.

Sincerely,

Brock Morgan

443-220-5503

--- On **Mon, 9/28/09, Sara Sappington** <_____>

From: Sara Sappington <_____>
Subject: 7057 Lennox Ave
To: "
Date: Monday, September 28, 2009, 2:22 PM

Hi Mr. Morgan,

In response to our discussion last week, until judgment over the easement for public water access has been declared, the Health Department can not approve a well on the property. If you need a comment letter from us indicating this in order to submit revisions of the SDP please let me know. Feel free to contact me with any questions.

Sara

Howard County Health Department

Bureau of Environmental Health

Well and Septic Program

Sara Sappington

From: Jim Ruff [j]
Sent: Monday, December 21, 2009 8:27 AM
To: Sara Sappington
Subject: SDP-09-026 comments for 7057 Lennox Ave.
Attachments: SDP-10-026 Extension.pdf

Sara,

We were not able to meet the required well circles for the project. Mr. Morgan decided to let the court system play out and hopefully connect to public water. I think he made a good decision. However, this will cause a delay.

The County has given him a 6 month extension (see attached letter). We will not be making a direct submission by the 22nd as indicated in the 12-8-09 letter.

Thanks

James A Ruff, P.E.
Robert H. Vogel Engineering
8407 Main Street
Ellicott City, Md 21043

From: Sara Sappington [
Sent: Monday, December 14, 2009 8:21 AM
To: Jim Ruff
Subject: RE: SDP comments for 7057 Lennox Ave.

Hi Jim,

As long as the rain garden is downgrade of the well, has an underdrain leading to a closed pipe. and has an impermeable lining (shown in the detail on the plan) you can keep 50' from the well.

From: Jim Ruff [mailto:jruff@vogeleng.com]
Sent: Monday, December 14, 2009 8:10 AM
To: Sara Sappington
Subject: RE: SDP comments for 7057 Lennox Ave.

Sara,

If a small rain garden is down grade of a well can the distance to the well be reduced to something less than 100'? The rain garden is small, sized for the roof only.

James A Ruff, P.E.
Robert H. Vogel Engineering
8407 Main Street
Ellicott City, Md 21043

To: Sara Sappington
Subject: RE: SDP comments for 7057 Lennox Ave.

Hey Sara,

One question, the setbacks listed under 3.808 are for establishing setbacks to private sewage disposal facilities. Since this property is served by public sewer and is not being plated do we need 3 well locations 50' apart? This is really a policy question, I can show 2 more well locations on the rear of the property 50' apart if need be.

Holding 15' from Lennox, 10 off the driveway and 30' off the house at the front location can be addressed.

Thanks.

James A Ruff, P.E.
Robert H. Vogel Engineering
8407 Main Street
Ellicott City, Md 21043
410-461-7666

From: Sara Sappington [i]
Sent: Wednesday, December 02, 2009 11:14 AM
To: Brock Morgan
Cc: jim ruff
Subject: SDP comments for 7057 Lennox Ave.

Here are my comments that I am sending to DPZ

From: Brock Morgan [i] [mailto:brm@dpz.com]
Sent: Tuesday, December 01, 2009 6:01 PM
To: Sara Sappington
Cc: jim ruff
Subject: Well for 7057 Lennox Ave. Elkridge, MD

Hello Sara,

I wanted to follow up with you on our previous request for drilling a well for our new house at 7057 Lennox Ave, in Elkridge MD. Since we last spoke, we have acquired our easements, and had the engineering and plans modified to demonstrate our planned sewer connection and intent to drill a private well.

We have also submitted our copies of the SDP to the different departments for final rounds of comments.

One of the requests from the Howard County engineering development is some sort of letter, or recognition of our approval, to drill a well in the 0-5 year water and sewer district. I know there are multiple requirements for the well application to be approved, but a short note about the health departments tentative approval if all setback requirements are met would be helpful.

I have copied our engineer Jim Ruff at Vogel engineering, if you could send a response to all, he can forward your answer to any potential concerned department.

Thank you again for your help with this, I appreciate the time you have taken so far to help make our plans



HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
3430 Courthouse Drive ■ Ellicott City, Maryland 21043 ■ 410-313-2350

Marsha S. McLaughlin, Director

www.howardcountymd.gov
FAX 410-313-3467
TDD 410-313-2323

December 17, 2009

Mr. Brock Morgan & Mrs. Jessica Privier
2833 Profit Path
Edgewood, MD 21040

RE: SDP-09-026, Lennox Park, Lot 640
Extension Request


Dear Mr. Morgan & Mrs. Jessica Privier:

This letter is in response to your email regarding an extension to your January 15, 2010 deadline date to submit the original mylars to the Department of Planning and Zoning on the basis of government delay. Justification for your request is derived on the availability of scheduling a trial with the Howard County Civil Court system. This trial is warranted in order to settle a civil dispute with the adjoining neighbor to acquire an easement to connect to public water.

Based on the above explanation, the Department of Planning and Zoning has granted your request for an extension to your January 15, 2010 deadline date to submit the Site Development Plan originals to the Department of Planning and Zoning for signature. The new deadline date will be 6-months from your previous due date, or on or before **July 15, 2010**.

If you have any further questions, please contact Julia Boone at (410) 313-2350 or by email at jboone@howardcountymd.gov.

Sincerely,


Kent Sheubrooks, Acting Chief
Division of Land Development

KS/JB:jb

cc: DED
Research
Robert H. Vogel Engineering

Sara Sappington

From: Sara Sappington
Sent: Wednesday, November 04, 2009 9:25 AM
To: 'Brock Morgan'
Subject: RE: 7057 Lennox Ave

We will not require a perc cert plan, the SDP plan will suffice showing the three well sites and proper setbacks. Once the SDP plan is signed then the well can be drilled.

Sara
Howard County Health Department
Bureau of Environmental Health
Well and Septic Program

From: Brock Morgan
Sent: Tuesday, November 03, 2009 9:18 PM
To: Sara Sappington
Cc: Jessica Privler; Mark Kappus; jim ruff
Subject: RE: 7057 Lennox Ave

Hello Sara,

I have been busy lately, so sorry for not getting back to you sooner.

I regards to your most recent email, maybe I wasn't clear about our request. We are in the middle of negotiating a sewer easement from one of our cooperative neighbors.

Unfortunately there is still no public water connection available in the forth coming easement.

So our hope is to drill a well for water, and connect to sewer rather than install a septic system.

With that said, do we need a percolation certification plan for well placement, or just need to meet all required set backs for a well?

Thank you again for your help with this.

Once we have the sewer easement, I can forward it to you to demonstrate our ability to connect to sewer.

Best regards,

Brock Morgan

--- On Tue, 10/13/09, Sara Sappington <sappington@hcd.howardcountymd.gov>

From: Sara Sappington <sappington@hcd.howardcountymd.gov>
Subject: RE: 7057 Lennox Ave
To: "Brock Morgan" <brockm@hcd.howardcountymd.gov>

Date: Tuesday, October 13, 2009, 9:53 AM

Hi Mr. Morgan,

I received the confirmation I needed. We will need a percolation certification plan in order to certify the well locations.

Thanks.

Sara

Howard County Health Department

Bureau of Environmental Health

Well and Septic Program

410-313-4

From: Brock Morgan ↓
Sent: Friday, October 02, 2009 8:51 PM
To: Sara Sappington
Subject: RE: 7057 Lennox Ave

Hello Ms. Sappington,

Thank you again for your work on our request.

I have been in touch with a Don Lieu in Howard County Utility Design since purchasing the property. He was actually the first person to suggest looking into a well and septic for our needs before we had any easement trouble. He is quite familiar with our lot, and would be a good person to talk to if you don't want to give a lot of background story.

I think we can find a way to meet the offsets laid out in your previous [REDACTED] check with our engineer to see if he can provide a plat demonstrating potential well sites. We were planning on keeping the well on lot

I know that there are approvals for well permits granted on the basis of financial hardship. Please let me know who I can contact regarding this option.

Thank you for your help in this matter, and I look forward to your suggestions at finding an alternative resolution.

Sincerely,

Brock Morgan

--- On **Mon, 9/28/09**, Sara Sappington

From: Sara Sappington <ssappington@howardcountymd.gov>

Subject: 7057 Lennox Ave

To: "

Date: Monday, September 28, 2009, 2:22 PM

Hi Mr. Morgan,

In response to our discussion last week, until judgment over the easement for public water access has been declared, the Health Department can not approve a well on the property. If you need a comment letter from us indicating this in order to submit revisions of the SDP please let me know. Feel free to contact me with any questions.

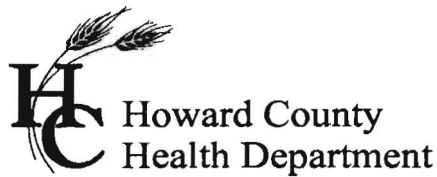
Sara

Howard County Health Department

Bureau of Environmental Health

Well and Septic Program

410-313-



7178 Columbia Gateway Drive, Columbia MD 21046
(410) 313-2640 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Peter L. Beilenson, M.D., M.P.H., Health Officer

MEMORANDUM

TO: Kent Sheubrooks,
Acting Chief, Division of Land Development

FROM: Sara Sappington, R.S.
Well and Septic Program

RE: File Number: SDP-09-026
Title: Lennox Park, Lot 640

DATE: December 2, 2009

The following comments apply to the plan prepared by Vogel Engineering, Inc. Revised plans requested.

1. Only one well is shown; three well sites 50' apart or a 1500 square foot well box need to be shown.
2. Wells need to be 15' from road (Lennox Ave)
3. A signature block stating "Approved: For private water and public sewer" needs to be added to the plan for the Health Dept signature
4. Rain gardens need to be 100' from a well. If the well is upgradient of the raingarden, the raingarden can be 50' away as long as an impermeable lining is used and shown in the plan details.
5. The well symbol needs to be shown in the legend.
6. Note #11 needs to be changed, it should state private water
7. Add the all wells drilled statement; the statement should indicate the well to be drilled prior to building permit approval.

-76°45'5."



Conrad W&R

39°10'34"

** utility would have to provide
* cost/decide this will be State responsibility*

*# man hole 7
right below corner lot
37-75*

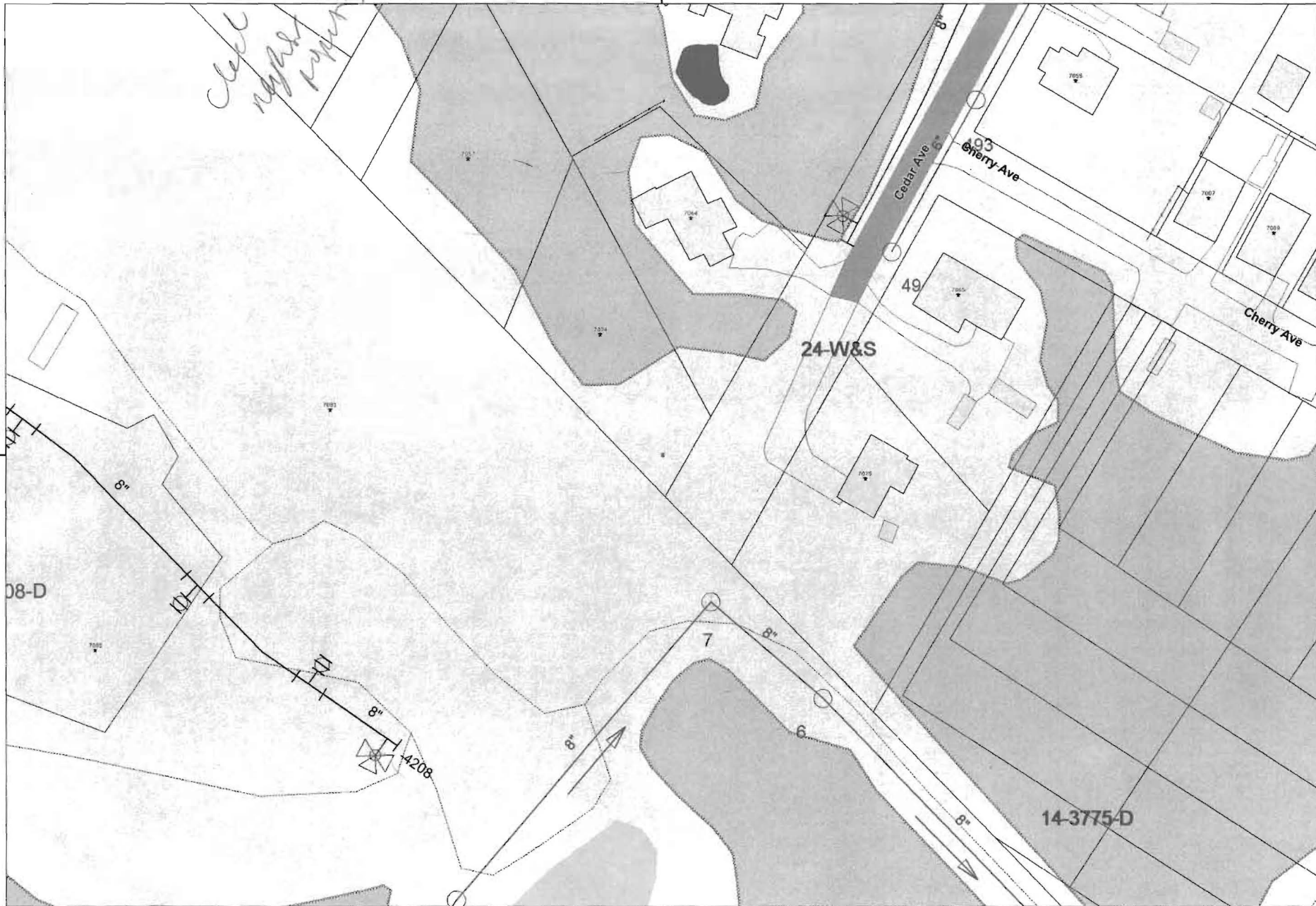
39°10'34"

Disclaimer: Howard County, Maryland assumes no responsibility for the accuracy of this report or the information contained herein or derived therefrom. The user assumes all risks and liabilities whatsoever resulting from or arising out of the use of this information. There are no oral agreements or warranties relating to the use of this report.

-76°45'5."



-76°45'30"



39°10'33"

39°10'33"

-76°45'30"

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1/3/08 Landscape position
bad.

Existing Water and Sewer

Lennox Park Elkridge, MD

Lennox Avenue

Cedar Ave.

Cherry

335 W&S

24-W&S

7021

7025

7040

7053

7045

7055

7065

7084

7075

7078

7074

Locust Paper Rd

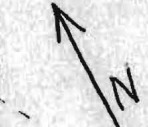
Blue = water
Red = sewer

150'

20'

7.5'

30'



493

494

492

9

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Division of Land Development

DATE: November 25, 2009

DPZ File No. SDP-09-026

Department of Planning and Zoning

- Transportation Planning
- Resource Conservation (Historic/Ag Pres)
- Public Service and Zoning Administration
- Research -
- Address Coordinator

- Comprehensive & Community Planning
- Development Engineering Division
- Other
- File

Agencies

- Soil Conservation District
- Department of Inspections, Licenses & Permits
- Department of Fire and Rescue Services
- State Highway Administration
- Health Department
- Public School System
- Recreation and Parks
- WSSC (Non-Residential Only)
- MD Aviation Administration

- Tax Assessment
- Verizon
- BGE
- Cable TV
- Police
- MTA
- Finance
- DPW, Real Estate Services
- DPW, Construction and Inspection
- DPW, Bureau of Utilities

Revised
NOV 25 2009
DPZ - Land Dev

RE: Lennox Park, Lot 640

ENCLOSED FOR YOUR Signature Approval Review & Comments Files

THE ENCLOSED Original Pre-Packaged Plan Set

Plans	# of Sheets	Supplemental Documents
<input type="checkbox"/> Sketch Plan	<input type="checkbox"/>	<input type="checkbox"/> Wetlands Report
<input type="checkbox"/> Prel Equiv Sketch Plan	<input type="checkbox"/>	<input type="checkbox"/> Soils/Topo Map/Drain Area Map
<input type="checkbox"/> Preliminary Plan	<input type="checkbox"/>	<input type="checkbox"/> FSD/FCP/Worksheet and Application
<input type="checkbox"/> Final Plat/Plat of Easement/RE Plat	<input type="checkbox"/>	<input type="checkbox"/> Declaration of Intent (Forest Cons)
<input type="checkbox"/> Final Constr Plans (RDS)	<input type="checkbox"/>	<input type="checkbox"/> Drainage and/or Computation/Pond Safety Comps
<input type="checkbox"/> Final Development Plan	<input type="checkbox"/>	<input type="checkbox"/> Preliminary Road Profiles
<input type="checkbox"/> Site Development Plan	<input type="checkbox"/>	<input type="checkbox"/> APFO Roads Test/Mitigation Plan/Traffic Study
<input type="checkbox"/> Landscape Plan/Supplemental Plan	<input type="checkbox"/>	<input type="checkbox"/> Noise Study
<input type="checkbox"/> Grading Plan	<input type="checkbox"/>	<input type="checkbox"/> Sight Distance Analysis/Speed Flow Study
<input type="checkbox"/> House Type Revision/Walk-Thru Red-Line	<input type="checkbox"/>	<input type="checkbox"/> Floodplain Study
<input type="checkbox"/> Water and Sewer Plan	<input type="checkbox"/>	<input type="checkbox"/> Stormwater Management Comps/Geo-Tech Report
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Industrial Waste Survey (DPW)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Road Poster Form Letter
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Response Letter
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Perc Plat
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Scenic Road Exhibits
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Deed
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Photographs
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Retaining Wall Comps/Details
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Poster/Community or HDC Meeting Information
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Route 1 Details/Summary

WAS: Received Tentatively Approved Recorded

Received and Revised Approved On November 25, 2009

COMMENTS: Letter TC on 11/16/09. Made significant changes since then. Please see revision & provide comments log Due-12 Working Days: December 9, 2009

Check, initial and return to the Department of Planning and Zoning if plan is approved with no comments.

Originals due 1/15/10 * The Health Dept needs to sign the my laws. Thank you, Julia Boone

DPZ STAFF INITIALS: JB

ex-4342

AGREEMENT OF EASEMENT

THIS AGREEMENT OF EASEMENT is made this 19TH day of OCTOBER, 2009, by and between **Ronald Salisbury and Margaret Salisbury**, husband and wife residing in Howard County, Maryland (the "Grantors") and **Brock Morgan and Jessica Privler**, husband and wife (the "Grantees").

WHEREAS, the Grantees require the use of a portion of the undeveloped half of Lennox Avenue, owned by the Grantors herein for the construction of a private driveway to the property owned by them and described in a Deed dated October 31, 2006 and recorded among the Land Records of Howard County, Maryland in Liber MDR No. 10491, folio 356 and

WHEREAS, the location of the driveway and improvements requires access in, across, and through a portion of the Easement Area hereinafter described; and

WHEREAS, the Grantors are the owners of the property as described in Exhibit A attached hereto, lying adjacent to the hereinafter described Easement Area is willing to grant an Agreement of Easement, a non-exclusive easement for the purpose of ingress and egress.

20
20
4

NOW, THEREFORE, in consideration of the mutual premises of the Grantors and Grantees herein, the receipt and sufficiency of which are hereby acknowledge, the Grantors hereby grant and convey an easement to the Grantees to lay, construct, maintain the driveway, and to use the same for ingress and egress in, on, over, across, and through a portion of the Grantors' property which is described in Exhibit B attached hereto.

AND THE GRANTORS do hereby agree that the Grantees, their successors and assigns, and their employees, agents, and representatives shall have the right and privilege of entering upon the aforesaid Easement Area, whenever it may be necessary to construct, repair, replace, and maintain the improvements constructed within the Easement Area.

IT IS FURTHER AGREED that no fences, buildings, or structures of any kind shall be erected in, on, or over and no trees shall be planted within the said Easement Area by the Grantors or their respective successors or assigns. The Grantors for themselves, their successors and assigns further agree not to do any act and to not permit others to do any act which will adversely affect the improvements to the Property constructed by the Grantees.

All references herein to "Grantors" shall be deemed plural if more than one person has an interest in the property herein conveyed to the Grantees. Any pronoun reference herein shall be deemed to apply the appropriate gender or person, as the case may be. The term "Grantors" shall mean its respective successors and assigns.

IN WITNESS WHEREOF, the Grantors have executed this Agreement of Easement on the date hereinabove written.

WITNESS:

[Handwritten signature]

[Handwritten signature] (SEAL)
Ronald Salisbury

[Handwritten signature] ^{10/21/09} (SEAL)
Margaret Salisbury

STATE OF MARYLAND, HOWARD COUNTY, TO WIT:

I HEREBY CERTIFY, that on this 19 day of October, 2009, before me, the subscriber, a Notary Public of the State of Maryland, in and for the County of Howard, personally appeared RONALD SALISBURY and MARGARET SALISBURY, the Grantors named in the within Agreement of Easement, and each acknowledged the same to be his or her respective act.

AS WITNESS my Hand and Notarial Seal,

[Handwritten signature]
Notary Public

ARGEMIL ROMERO-VEGUILLA
Notary Public-Maryland
Howard County
My Commission expires
November 17, 2012

My Commission Expires:

Sworn and subscribed before me
in my presence. This 21 day of October, 2009,
a Maryland Notary Public, in and for
Anne Arundel County/City.

[Handwritten signature]
GLENDIA P. SANCHEZ
NOTARY PUBLIC
ANNE ARUNDEL COUNTY
MARYLAND
MY COMMISSION EXPIRES SEPT. 09, 2012

GLENDIA P. SANCHEZ
NOTARY PUBLIC
ANNE ARUNDEL COUNTY, MD

RECEIVED
HOWARD COUNTY REGISTER
ENVIRONMENTAL DEPT

2009 NO 30 PM 12:52

EXHIBIT "A" Grantors property

All that lot of ground shown on Lot No. 1 in the Plat entitled, Shanes Corner, Lot 1 and 2 which Plat is recorded among the Land Records of Howard County as Plat No. 9215. The lot is bordered by Lennox Avenue on its west side and all access to the lot is by Lennox Avenue which is county owned and maintained road for a distance of 1120' southerly from its intersection Dorsey Road (MD 176). Grantors have an interest in the eastern one-half of Lennox Avenue in the undeveloped portion of Lennox Avenue that borders Lot 1 further to the South and West from county owned and developed portion of Lennox Avenue and extends 135' more or less, South and West and is 25' wide.

The Grantors acquired the property by a Deed dated February 18, 1988 and recorded among the Land Records of Howard County, Maryland in Liber CMP No. 1791, folio 523 from Frank Stephen Coniglio and wife.

EXHIBIT "B" Easement Area

The easement area is to include the undeveloped half of Lennox Avenue that borders Lot 1, the Grantors property. The area of the easement is 25' wide by approximately 135' long to Locust Avenue. The easement is to be used to build a driveway for ingress and egress to the property of the Grantees beyond the current county portion. Any improvements to the property are to be made with minimal impact to trees and vegetation during the construction period.

All as shown in the hatched area on the plat attached hereto as Exhibit "C".

RECEIVED
SAND COUNTY HEALTH
ENVIRONMENTAL HEALTH

2009 NO 30 PH12:52

I would like to know what criteria were used in making the decision on my request for a well permit.

I do not believe that the court proceedings I have filed against an un-cooperative neighbor are relevant to obtaining a well permit, nor should permission for obtaining the permit be conditional to the outcome of the case. My court proceedings were filed as a last resort, as water and sewer connections are a necessity to obtain building permits on this lot.

Since that time, I have found an alternative that would allow for gravity sewer connection through the neighboring business park. I am having engineering work done now to pursue this connection route. Because I now have found an alternative sewer access, I would like to be able to drop my easement court case. For this to happen, I need permission from the county to drill a well for my water needs at 7057 Lennox Ave. I see this as a better option than continuing to bring costly litigation against a future neighbor.

I would like the Health Department to lay out the criteria that they are using as a condition for my permit approval. My current legal costs are escalating, and will only cost me more if I am forced to bring this case to trial. I do not want to continue suing my neighbor if there is another option for water. In my worst case scenario under the Health Department's decision, I must follow through with my court case and then lose, before a well permit will be issued. This will not happen before Jan 07, 2010, the scheduled court date. Because this easement is not an absolute necessity for water and sewer, I don't think the county should force me to finance a potentially losing court case as a condition for approval.

I know that there are approvals for well permits granted on the basis of financial hardship. Please let me know who I can contact regarding this option.

ref to look ^{up} when it becomes available

if existing

"adequate + available" detail ~~is~~

*

Don Lill

→ other report.

* existing or

0-5 yr. planned area ^{service} = yes to well, if bit

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS

November 25, 2009

Ms. Julia Boone
Division of Land Development
Howard County Department of Planning and Zoning
3430 Courthouse Drive
Ellicott City, Maryland 21043

Re: SDP-09-026
Lennox Park Lot 640

Dear Ms. Boone:

The owner's of lot 640 Lennox Park were not able to acquire the necessary easement for the construction of the pressure sewer connection and water connection to the public mains in Cedar Avenue. As an alternative they contacted the owner of Parcel B4 who has granted a private sewer connection easement to a public sewer located on parcel B4. The easement was recorded this week and is referenced on the plan.

The attached plans have been revised to reflect the gravity sewer connection and a well for water supply. The well is located at the front of the property. It is our understanding the owner has discussed this with both Public Works and the Health Department.

As indicated in your recent email (attached) we are providing 7 copies of the plan for final review by the County. We are also providing a copy of the access easement (attached) granted by the owners of lot 1. Should you have any questions regarding this matter, please do not hesitate to contact this office.

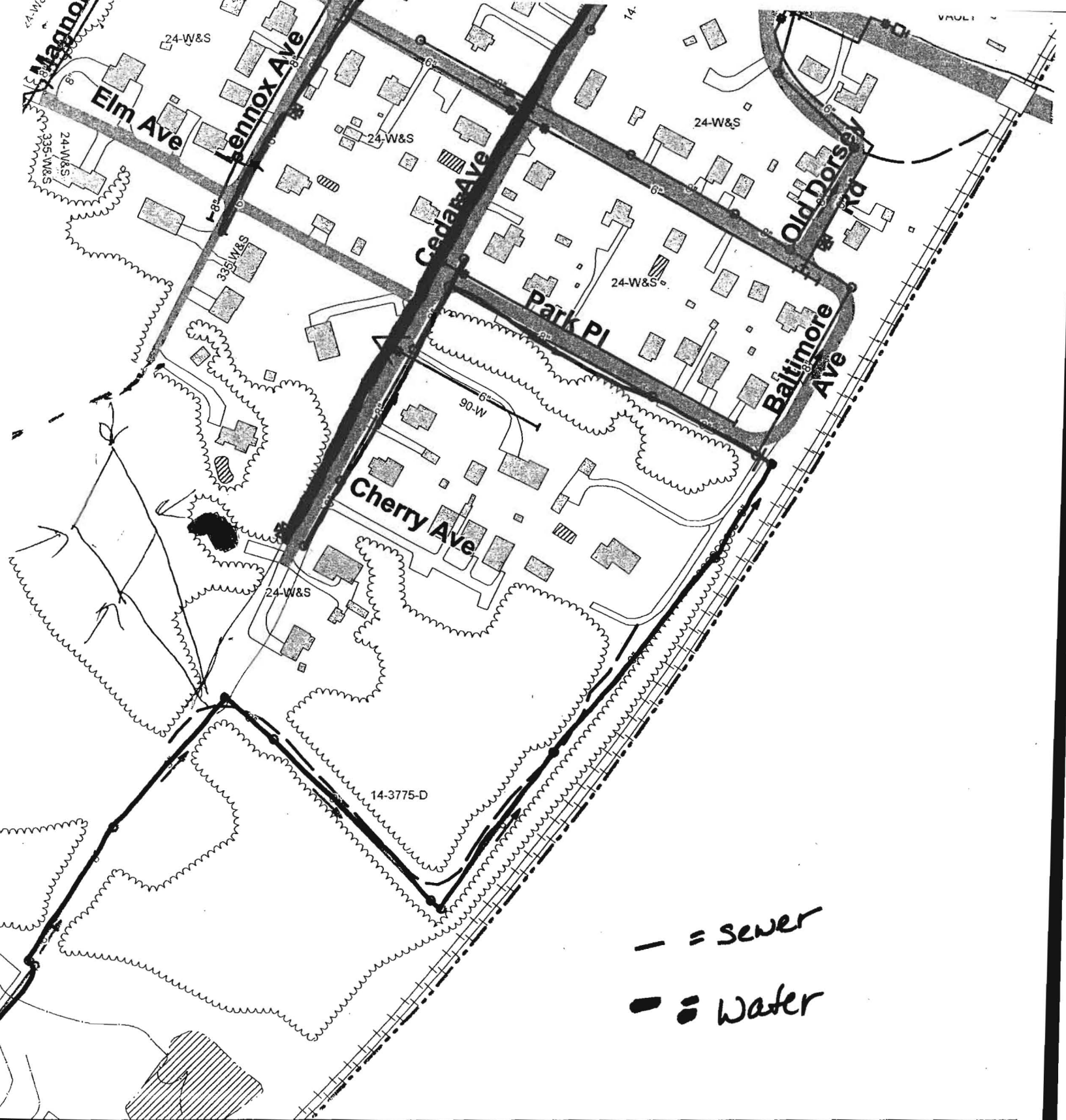
Sincerely,
ROBERT H. VOGEL ENGINEERING, INC.



James R. Ruff, P.E.
Project Manager

Attachments

8407 Main Street • Ellicott City • Maryland 21043
Tel 410.461.7666 • Fax 410.461.8961



DISCLAIMER:

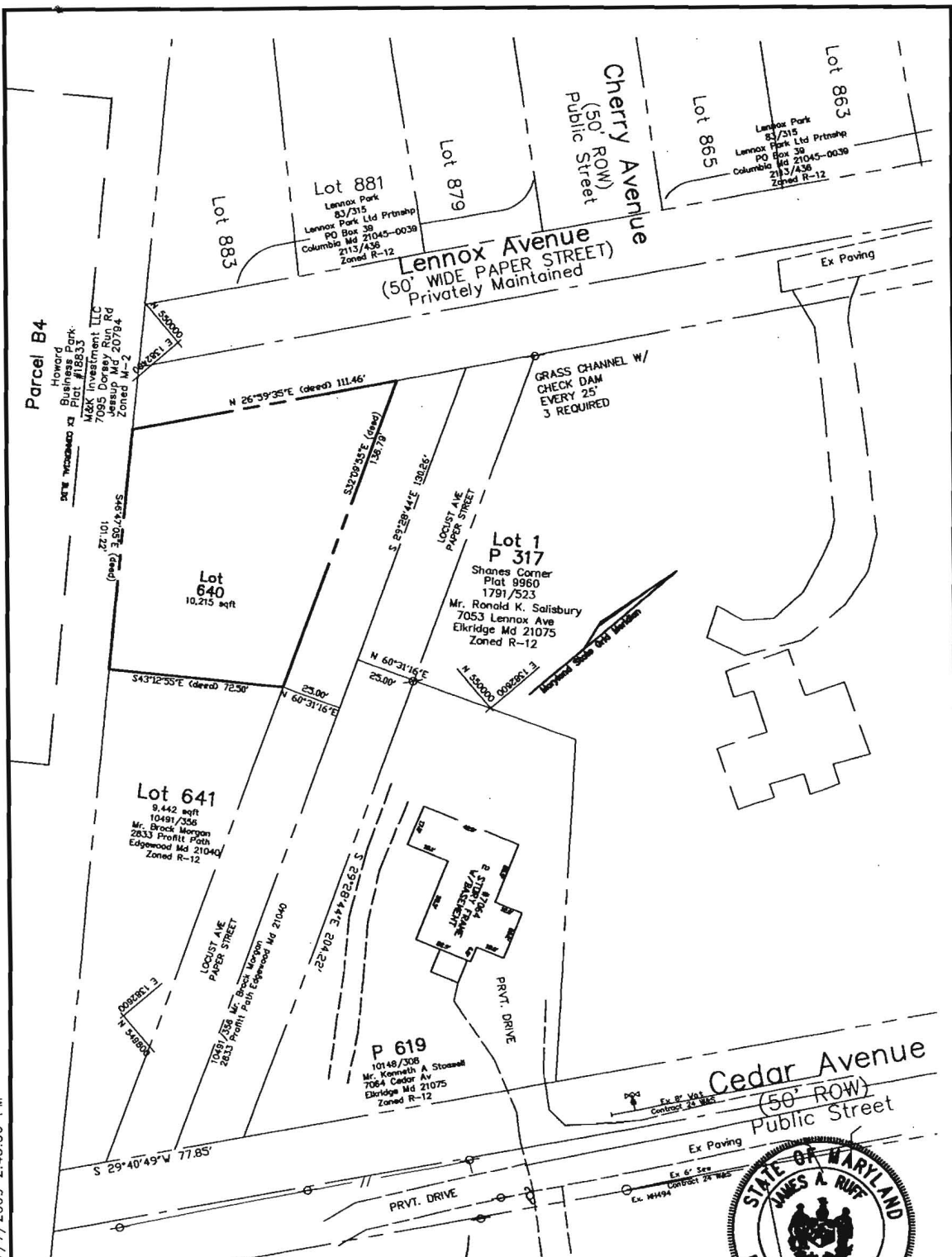
Howard County, Maryland assumes no responsibility for the accuracy of this map or the information contained herein or derived therefrom. The buyer and / or user assumes all risks and liabilities whatsoever resulting from or arising out of the use of this map. There are no oral agreements or warranties relating to this sale and / or use of this map.

Howard County

* 7057 Lennox Ave
declared present
over eminent report
of PL19 + drive
(7000 + Cedar Ave). Court det
in Jan. wants to put
a well in court
sever by right
- one court declared = will go next
to Mexico

BROCK MORGAN
(443)-220-5503
1909 Stone Castle Dr.
Severn MD 21144
SDP-09-026
bman611@yahoo.com

K:\Projects\08-24\ENGR\dwg\SDP\Exhibit.dwg, 7/7/2009 2:43:36 PM



ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961



JAMES A. RUFF, PE No. 21774
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 21774 EXPIRATION DATE 11-10-2009

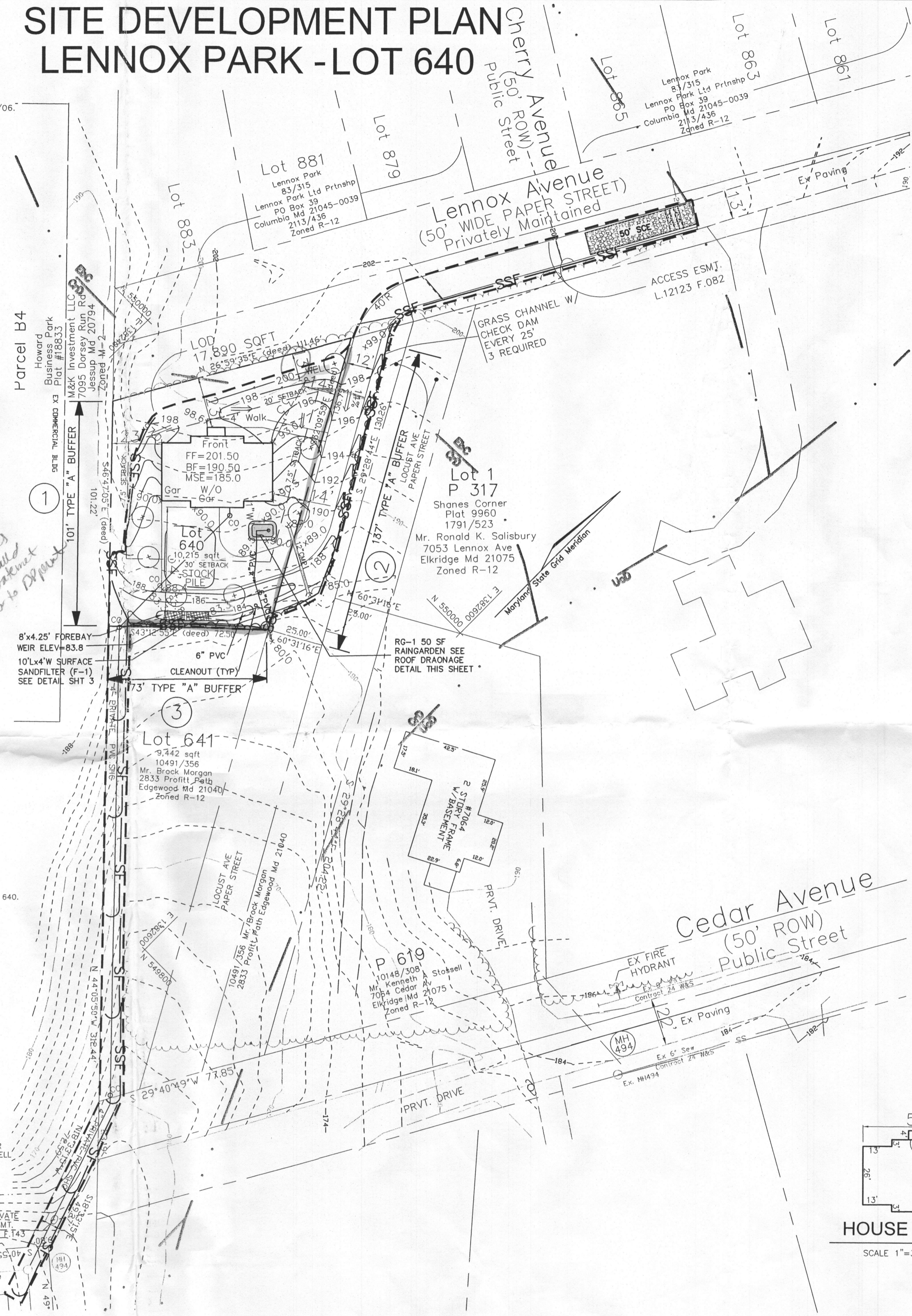
SCALE: 1"=50'
 DRAWN BY: JAR
 CHECKED BY:
 DATE: JULY 2009
 PROJECT #: 08.24
 SHEET#: 1 OF 1

PROPERTY EXHIBIT
LENNOX PARK LOT 640/641
 TAX MAP 43 GRID 6 PARCEL 698
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

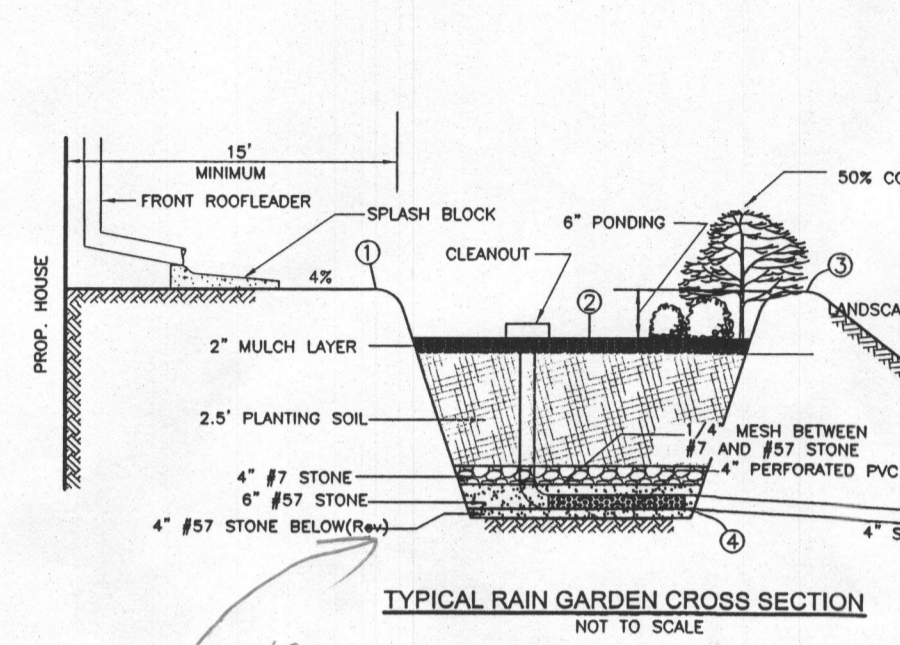
GENERAL NOTES

- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- DEED REFERENCE: 10491/356 SUBJECT PROPERTY ZONED R-12 PER 02/02/04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING AMENDMENTS EFFECTIVE 7/28/06.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 - MISS UTILITY 1-800-257-7777
 - BELL ATLANTIC TELEPHONE CO. 725-9976
 - HOWARD COUNTY BUREAU OF UTILITIES: 313-2366
 - VERIZON CABLE LOCATION DIVISION: 393-3553
 - B.G. & E. CO. CONTRACTOR SERVICES: 850-4620
 - B.G. & E. CO. UNDERGROUND DAMAGE CONTROL: 787-4620
 - STATE HIGHWAY ADMINISTRATION: 531-5533
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY ROBERT H. VOGEL ENGINEERING INC JULY 2008. THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC DATED JULY 2008.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 43CB, 43CC AND WERE USED FOR THIS PROJECT.
- STORMWATER MANAGEMENT WQV AND Rev ARE REQUIRED FOR THIS LOT. TWO RAIN GARDENS AND A SURFACE SAND FILTER WILL BE INSTALLED TO PROVIDE THE REQUIRED WQV AND Rev. Cpv IS NOT REQUIRED SINCE THE 1-YR RUNOFF IS LESS THAN 2 CFS. THE SURFACE SAND FILTER WILL BE PRIVATELY OWNED AND MAINTAINED BY OWNER OF LOT.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.05.
- WATER AND SEWER FOR THIS PROJECT WILL BE PUBLIC.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- NO HISTORIC STRUCTURES EXIST ON THIS SITE.
- A TRAFFIC STUDY IS NOT REQUIRED FOR THIS SITE.
- STREET LIGHTING IS NOT REQUIRED FOR THIS SITE.
- STREET TREES ARE NOT REQUIRED FOR THIS SUBDIVISION IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL/CEMETERY LOCATIONS ON SITE.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - A. WIDTH - 12' (16' FOR SERVING MORE THAN ONE RESIDENCE)
 - B. SURFACE - 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN)
 - C. GEOMETRY - MAX 14% GRADE, MAX 10% GRADE CHANGE, AND MIN 45" TURNING RADIUS
 - D. STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H2S LOADING)
 - E. DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT OF DEPTH OVER DRIVEWAY SURFACE
 - F. MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS. OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- THERE ARE NO EXISTING STRUCTURES TO REMAIN OR TO BE REMOVED FROM LOT 640.
- NO WETLANDS EXIST ON SITE PER A FIELD INSPECTION MADE IN JULY 2008 BY ROBERT H. VOGEL, INC.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE OCTOBER 7, 2007. THE DEVELOPER SHALL APPLY FOR BUILDING PERMITS FOR ALL LOTS AS SHOWN ON THIS SITE DEVELOPMENT PLAN WITHIN ONE YEAR OF SIGNATURE APPROVAL OF THIS PLAN.
- THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.
- THERE ARE NO PREVIOUS DPZ FILES.
- FINANCIAL SURETY FOR THE REQUIRED PERIMETER LANDSCAPING IS IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE, LANDSCAPE MANUAL, SURETY IN THE AMOUNT OF \$2,100.00 FOR THE 7 SHADE TREES AS A PART OF DEVELOPER'S AGREEMENT FOR PERIMETER LANDSCAPING.
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1202(b)(1)(i) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS FOR FOREST CONSERVATION BECAUSE IT IS A SITE DEVELOPMENT PLAN FOR DEVELOPMENT ON LAND WHICH IS LESS THAN 40,000 SQUARE FEET.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.

**SITE DEVELOPMENT PLAN
LENNOX PARK - LOT 640**



RAIN GARDEN PLANTING DETAIL



RAIN GARDEN PLANT LIST (SURFACE AREA=50SF)

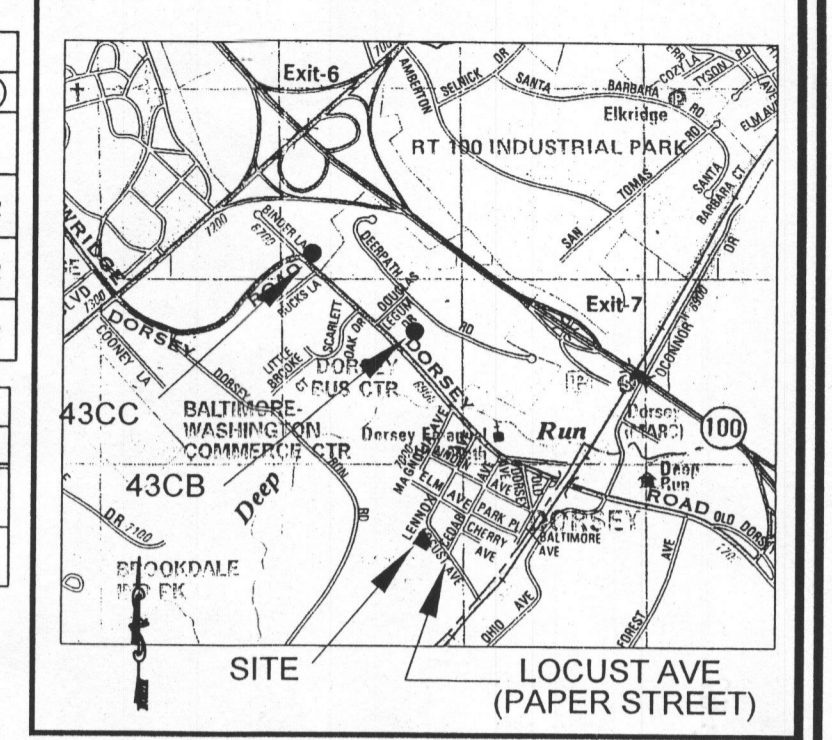
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE (9" x 5.5")
IG	1	ILEX GLABRA	INK BERRY	2'-3" HT.
LC	4	LOBELIA CARDINALIS	CARDINAL FLOWER LOBELIA	1 GAL. CONTAINER
DS	4	DRYOPTERIS SP.	WOOD FERN	1 GAL. CONTAINER
AN	3	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER

RAIN GARDEN ELEVATION CHART

LOT#	RAIN GARDEN #	ELEV. 1	ELEV. 2	ELEV. 3	ELEV. 4	OUTFALL ELEV.
640	RG-1	190.0	189.5	190.0	186.1	183.0

OPERATION AND MAINTENANCE SCHEDULE FOR RAIN GARDEN AREAS

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. TREATMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.



VICINITY MAP
SCALE: 1"=2000'

ADC MAP COORDINATE: 17-C13

BENCHMARKS

NO.	NORTHING	EASTING	ELEVATION
43CB	552084.24	1382282.44	144.44
43CC	553201.46	1381152.84	163.71

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREE LINE
- PROPOSED TREE LINE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- PROPOSED TREE
- SOILS BOUNDARY
- SILT FENCE

SITE ANALYSIS DATA CHART

LOCATION: TAX MAP 43, GRID 6, PARCEL 698
01 ELECTION DISTRICT
EXISTING ZONING: R-12
USE: RESIDENTIAL, 1 UNIT
GROSS AREA OF LOT 640: 10,215 S.F. OR 0.23 AC
AREA OF 100-YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT: 0 AC
AREA OF STEEP SLOPES OUTSIDE THE FLOODPLAIN: 0 AC
NET AREA OF PROJECT (LOT 640 AND QUIT CLAIM): 0.32 AC
AREA OF OPEN SPACE REQUIRED: N/A
AREA OF OPEN SPACE PROVIDED: N/A
AREA OF RECREATIONAL OPEN SPACE REQUIRED: N/A
AREA OF RECREATIONAL OPEN SPACE PROVIDED: N/A
AREA OF PROPOSED RIGHT-OF-WAY: N/A
TOTAL APPROXIMATE LIMIT OF DISTURBANCE: 17,890 SF OR 0.41 AC.

ADDRESS CHART

LOT #	STREET ADDRESS
640	7057 LENNOX AVENUE, ELK RIDGE MARYLAND 21075

Revised NOV 2 5 2009
UPZ - Land Dev

OWNER/DEVELOPER
MR. BROCK MORGAN
MS. JESSICA ROBIN PRIVIER
2833 PROFIT PATH
EDGEWOOD MARYLAND 21040
443-220-5503

NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN
LOT 640
LENNOX PARK**

DEED REFERENCE: 10491/356
ZONED R-12
PARCEL 698
01 ELECTION DISTRICT
CONTRACT #24 W&S
HOWARD COUNTY, MARYLAND

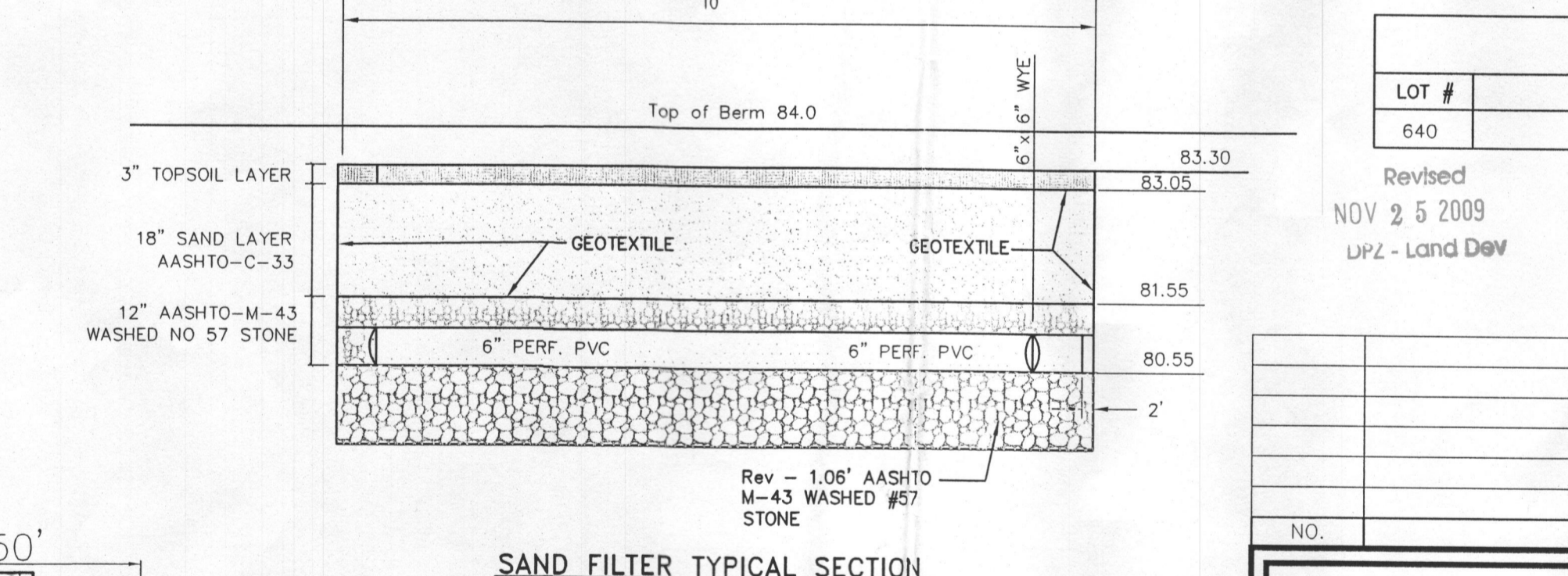
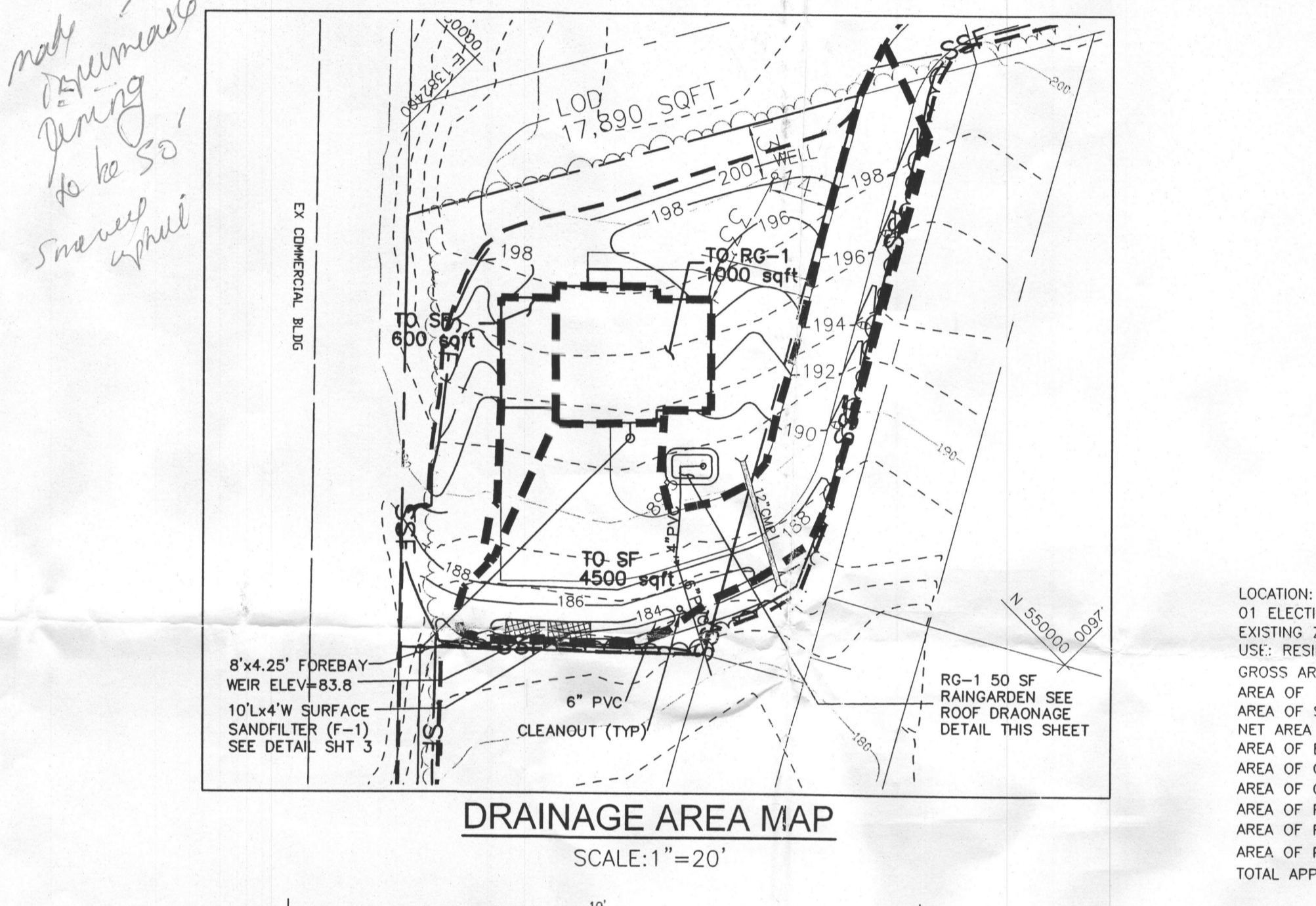
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: JAR
DRAWN BY: JAR/RHD
CHECKED BY: RHV
DATE: NOVEMBER 2009
SCALE: AS SHOWN
W.O. NO.: 08-24

I HEREBY CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR THAT I AM A REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. MY EXPIRATION DATE IS 10-30-2009.

JAMES A. RUFF, PE No. 21774

1 SHEET OF 2



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP
CrD	CROOM AND EVESBORO SOIL, 10 TO 15 PERCENT SLOPES	B
Ebc	EVESBORO LOAMY SAND, 1 TO 5 PERCENT SLOPES	A

PERMIT INFORMATION CHART

SUBDIVISION NAME		SECTION/AREA	LOT NUMBER
LENNOX PARK		NA	640
DEED REF. 10491/356	GRID NO. 6	ZONE R-12	TAX MAP 43
ELECT. DIST. 01		CENSUS TR. 6012.02	
WATER CODE:		SEWER CODE:	

SHEET INDEX

DESCRIPTION	SHEET NO.
SITE DEVELOPMENT	1 OF 3
SEDIMENT EROSION CONTROL LANDSCAPE NOTES AND DETAILS	2 OF 3
SEDIMENT EROSION CONTROL LANDSCAPE NOTES AND DETAILS	3 OF 3

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE

CHIEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR

BY THE ENGINEER

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF ENGINEER: Mr. James A. Ruff PE 21774

DATE: _____

BY THE DEVELOPER/OWNER

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTIONS BY HOWARD SOIL CONSERVATION DISTRICT."

Mr. Brock Morgan

Jessica Robin Privier

DATE: _____

DATE: _____

HOUSE FOOTPRINT
SCALE: 1"=30'

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD

DATE: _____

DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATE

I/WE CERTIFY THAT LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF THE PROJECT, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

BROCK MORGAN

**JESSICA ROBIN PRIVIER
LANDSCAPE NOTES**

1. AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED FOR THIS SITE BE OF THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF THE REQUIRED PLANTING MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS.

2. THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND LANDSCAPE FINISHES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

3. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

4. NO CLEARING OF EXISTING VEGETATION IS PERMITTED WITHIN THE LANDSCAPE EDGE FOR WHICH CREDIT IS BEING TAKEN; HOWEVER, LANDSCAPE MAINTENANCE IS AUTHORIZED.

**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO PERIMETER AND ROADWAYS	(1)	(2)	(3)
Perimeter/Frontage Designation				
Side Slope		101'	137'	73'
Linear Feet of Roadway		0'	0'	0'
Frontage/Distance		0'	0'	0'
Credit for Existing Vegetation		No	No	No
Other Trees (21' Substitution)		No	No	No
Shrubs (10:1 Substitution)		No	No	No
Number of Plants Required		101'	137'	73'
Shade Trees		1:60 2	1:60 3	1:60 2
Evergreen Trees		-	-	-
Number of Plants Provided		2	3	2
Shade Trees		-	-	-
Other Trees (21' Substitution)		-	-	-
Shrubs (10:1 Substitution)		-	-	-
Describe Plant Substitution Credits Below if needed		-	-	-

PLANT LIST

QTY	BOTANICAL NAME/ COMMON NAME	SIZE	ROOT
7	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2-1/2"-3" CAL	B & B

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

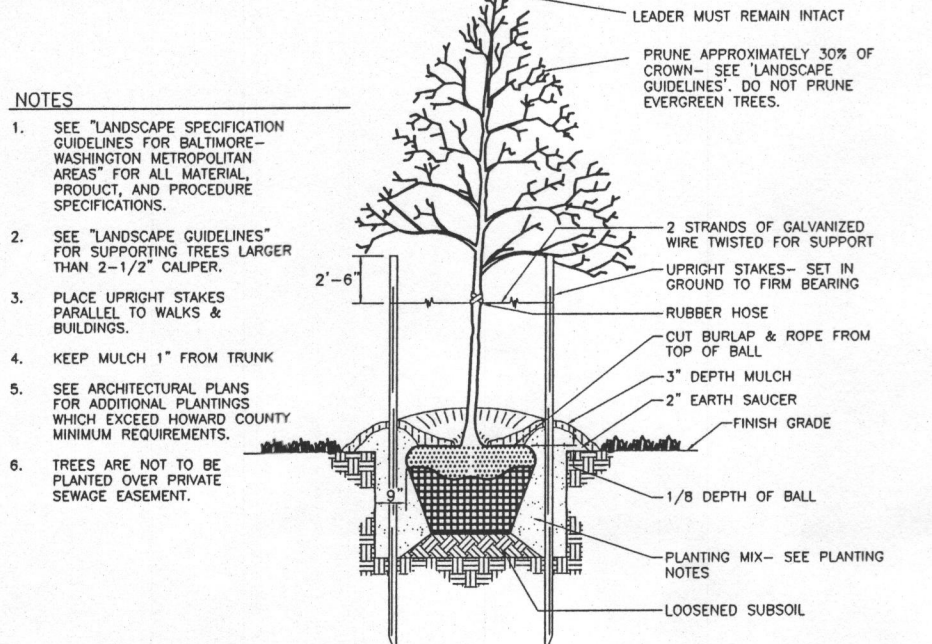
SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

- Preferred—Apply 2 tons per acre dolomitic limestone (92 lbs./100 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq.ft.).
- Acceptable—Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs./1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs./acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseeding.



TREE PLANTING AND STAKING

DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

TEMPORARY SEEDING NOTES

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.).

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.7 lbs./1000 sq.ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

DEFINITION
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

PURPOSE
To provide a suitable soil medium for vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

CONDITIONS WHERE PRACTICE APPLIES
1. This practice is limited to areas having 2:1 or flatter slopes where:

- The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
- The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
- The original soil to be vegetated contains material toxic to plant growth.
- The soil is so acidic that treatment with limestone is not feasible.

ii. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

i. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and silt contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 and 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 21.0 Vegetative Stabilization - Section i - Vegetative Stabilization Methods and Materials.
 - For sites having disturbed areas over 5 acres:
 - On soil meeting topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min) to permit dissipation of phytotoxic materials.
 - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Place topsoil (if required) and apply soil amendments specified in 21.0 Vegetative Stabilization-Section i-Vegetative Stabilization Methods and Materials.
- Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" - 8" depth.
 - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

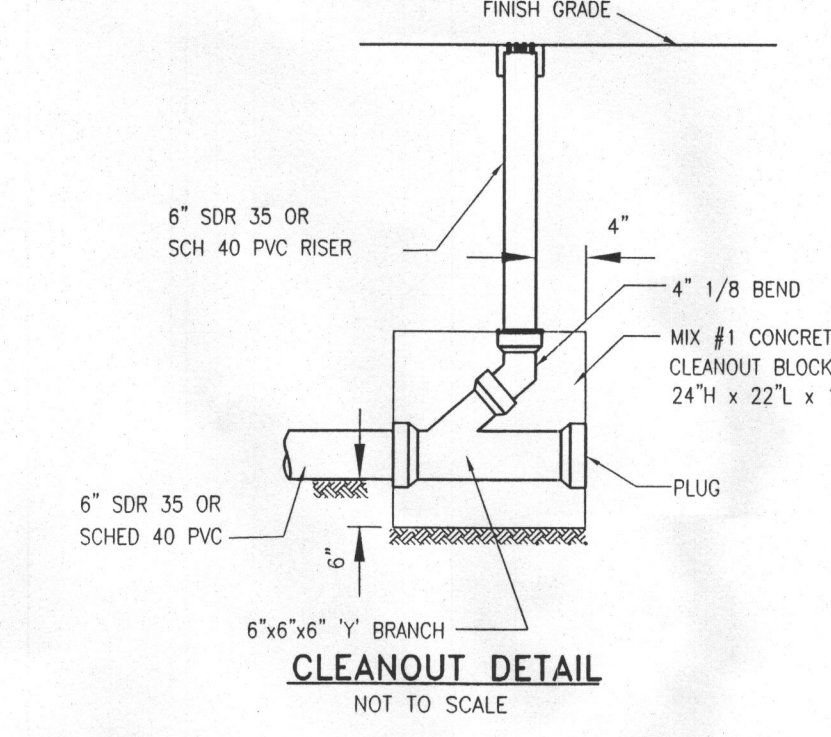
Spreading shall be performed in such a manner that seeding or sodding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

SEQUENCE OF CONSTRUCTION

- Obtain grading permit.
- Notify Howard County Bureau of Inspections and Permits (410.313.1880) at least 24 hours before starting any work.
- Construct Stabilized Construction Entrances. (1 day)
- Install super silt fence. (2 days)
- After obtaining permission from the sediment control inspector to proceed with clearing and rough grade site. (4 days)
- Construct house. The first floor elevation cannot be more than 1" higher or 0.2' lower than the elevations shown on this plan. The foundation footprint must be within the generic block. (3 months)
- Upon stabilization of all disturbed areas and with the approval of the sediment control inspector, remove all sediment control devices.

NOTES

- DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE THE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN HEREON.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLIED WITH.

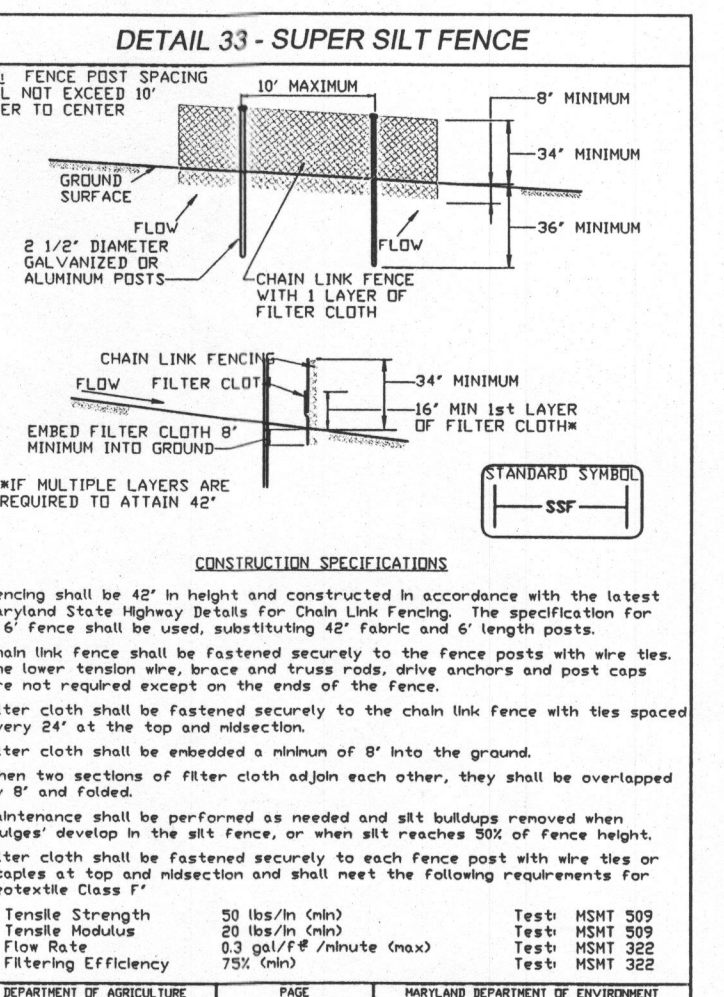
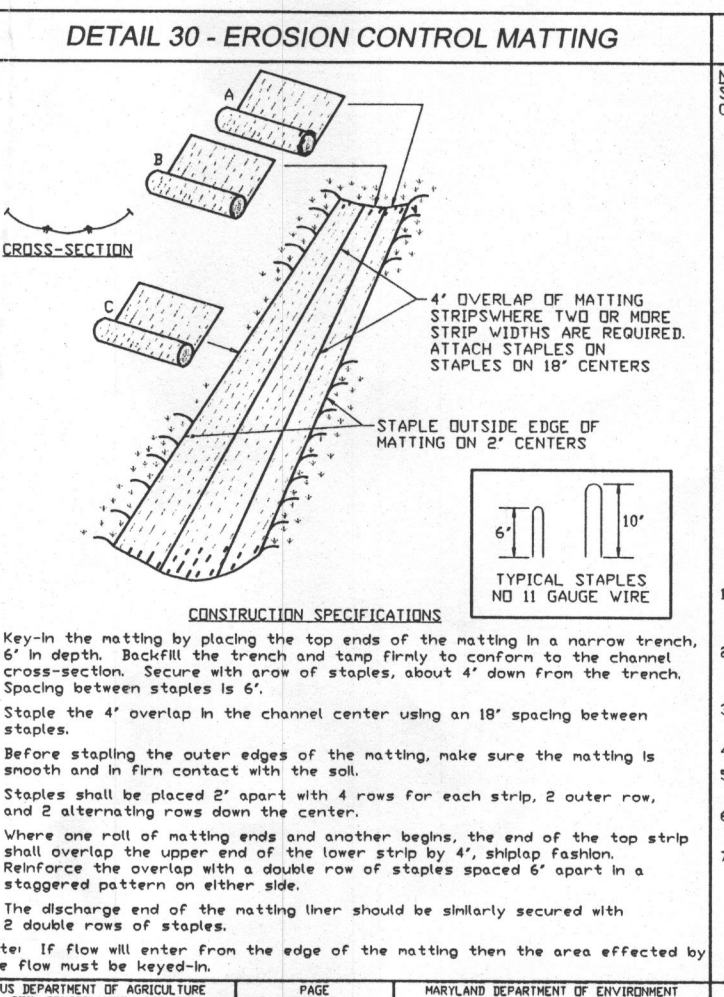
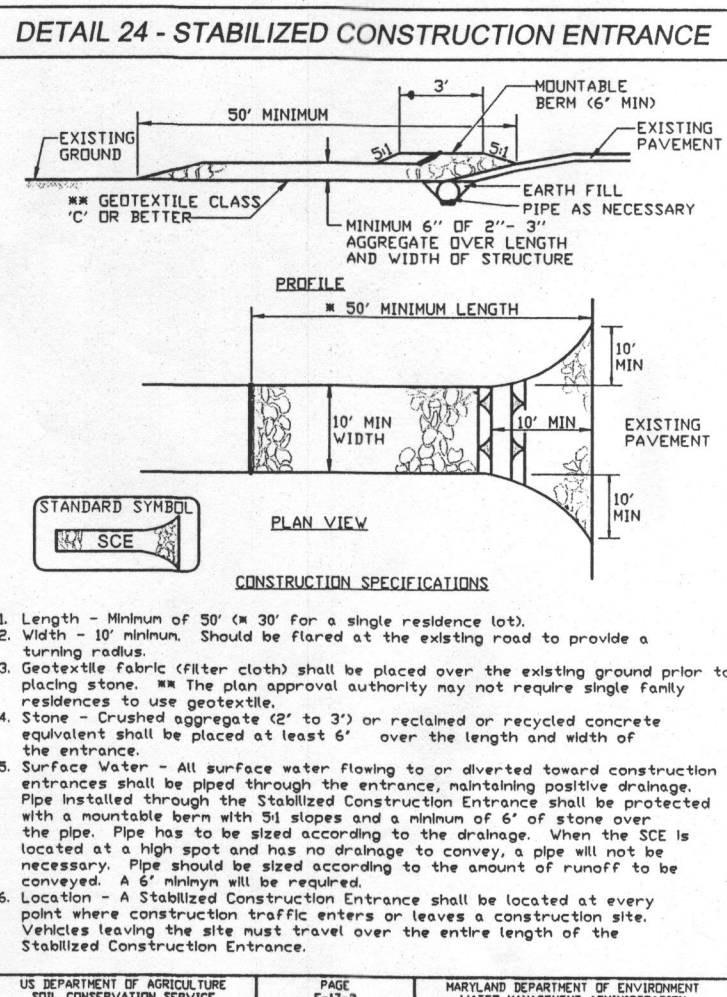
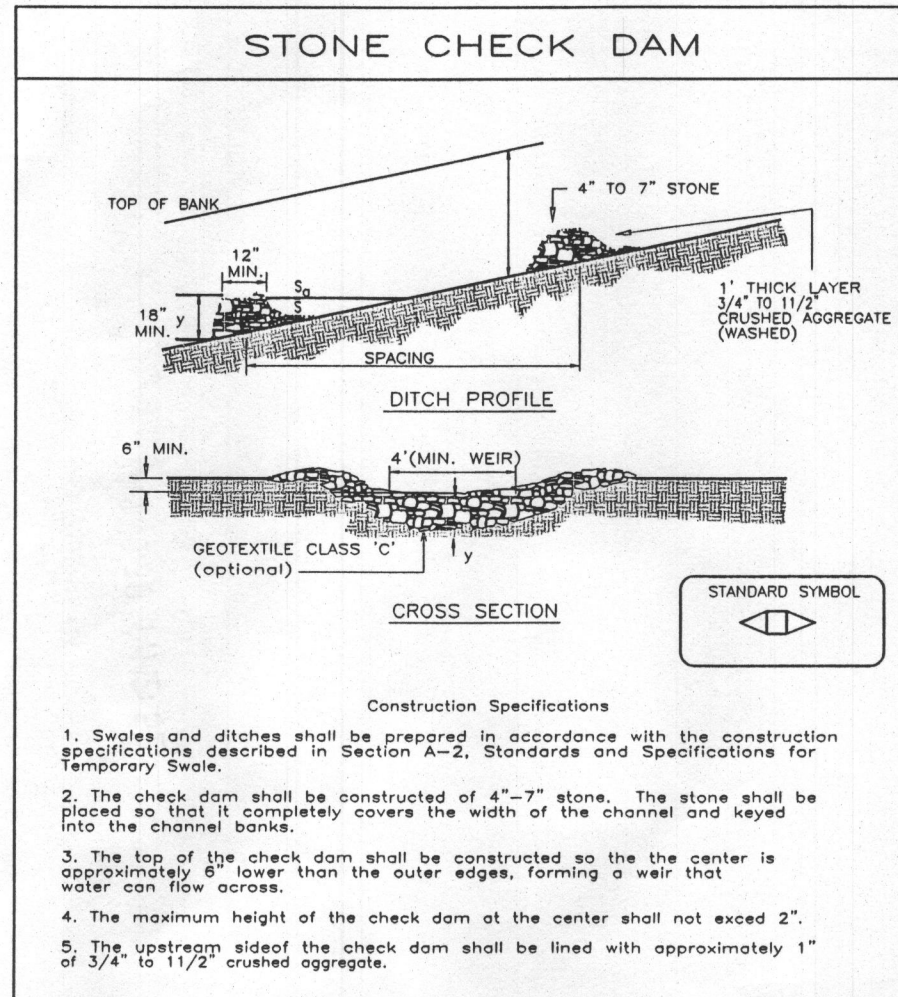


OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED SURFACE STORMWATER FILTRATION SYSTEMS (F-1, F-4, AND F-5)

- THE STORMWATER WETLAND FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
- THE TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF ONCE PER YEAR, WHEN VEGETATION REACHES 18" IN HEIGHT OR AS NEEDED.
- FILTERS THAT HAVE A GRASS COVER SHALL BE MOWED A MINIMUM OF THREE (3) TIMES PER GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 12 INCHES.
- DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
- VISIBLE SIGNS OF EROSION IN THE FACILITY SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
- REMOVE SILT WHEN IT EXCEEDS FOUR (4) INCHES DEEP IN THE FOREBAY.
- WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
- A LOGBOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- THE MAINTENANCE LOGBOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

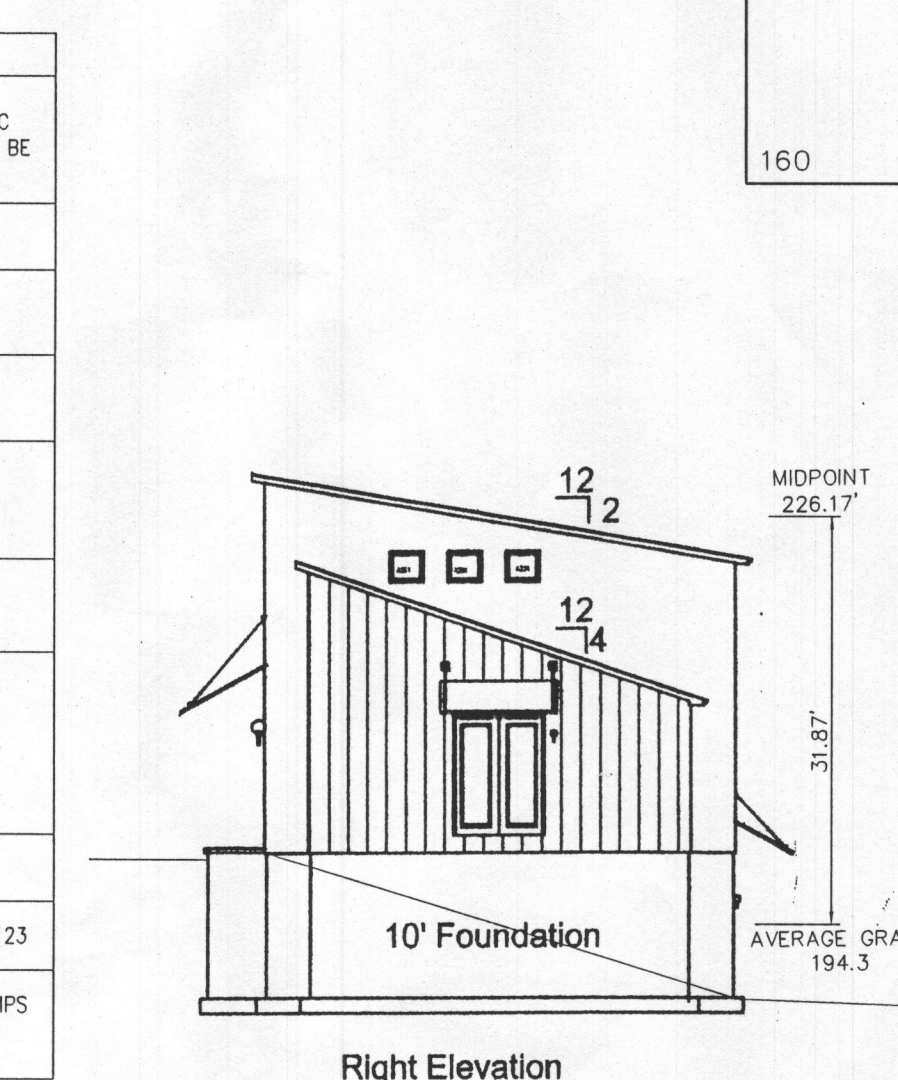
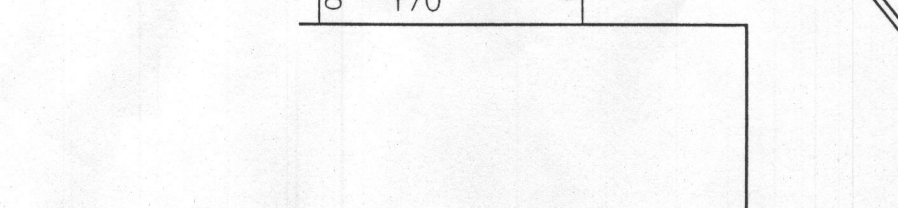
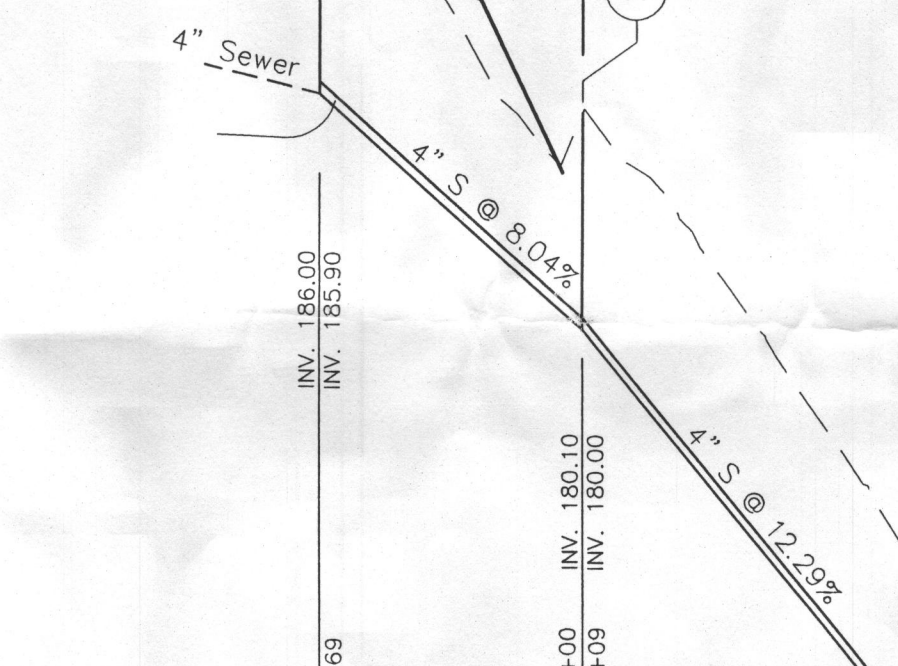
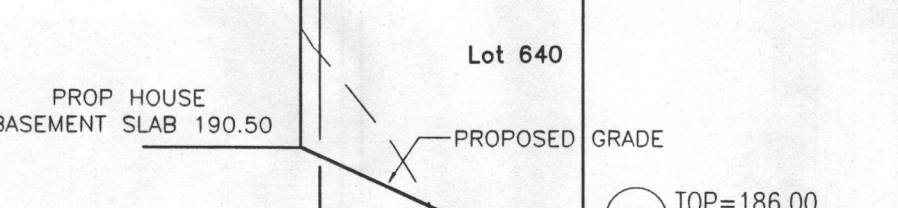
MATERIAL SPECIFICATIONS FOR SAND FILTERS

MATERIAL	SPECIFICATIONS / TEST METHOD	SIZE	NOTES
SAND	CLEAN AASHTO-M-6 OR ASTM-C-33 CONCRETE SAND	0.02" to 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRANITEONE #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR DOLOMITE SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.
UNDERDRAIN GRAVEL	AASHTO-M-43	0.375" to 0.75"	
COLLECTION PIPE	ASTM-D-1785 OR ASTM-D-3034 FITTINGS SHALL MEET ASTM-D-2729	RIGID SCHEDULE 40 OR SDR 35	PERFORATIONS TO BE 3/8 INCH DIAMETER ROWS 6' O/C MINIMUM 4-HOLES / ROW
OBSERVATION WELL / CLEANOUT	M 278 OR F 758, TYPE PS 28	6" RIGID SCHEDULE 40 OR SDR 35	PERFORATIONS TO BE 3/8 INCH DIAMETER ROWS 6' O/C MINIMUM 4-HOLES / ROW
GEOTEXTILE FABRIC (IF REQUIRED)	ASTM-D-4833 (PUNCTURE STRENGTH - 125 lb.) ASTM-D-4632 (TENSILE STRENGTH - 300 lb.)	0.08" THICK EQUIVALENT OPENING SIZE OF #80 SIEVE	MUST MAINTAIN 125 gpm PER SQ. FT. FLOW RATE. NOTE: A 4" PEA GRAVEL LAYER MAY BE SUBSTITUTED FOR GEOTEXTILES MEANT TO "SEPARATE" SAND FILTER LAYERS.
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO-M-278	4"-6" RIGID SCHEDULE 40 PVC OR SDR35	3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; MINIMUM OF 3" GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES.
CONCRETE (CAST-IN PLACE)	MSHA STANDARDS AND SPECS. SECTION 902, MIX NO. 3, F C = 3500 psi, NORMAL WEIGHT, AIR-ENTRAINED, RE-INFORCING TO MEET ASTM-615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED; 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND.
CONCRETE (PRE-CAST)	PER PRE-CAST MANUFACTURER	N/A	SEE ABOVE NOTE
NON-REBAR STEEL	ASTM A-36	N/A	STRUCTURAL STEEL TO BE HOT-DIPPED GALVANIZED ASTM-A-123
TOPSOIL	SAND 35-60% SILT 30-65% CLAY 0%	N/A	THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 1"



SAND FILTER SPECIFICATIONS

- MATERIAL SPECIFICATIONS FOR SAND FILTERS**
THE ALLOWABLE MATERIALS FOR SAND FILTER CONSTRUCTIONS ARE DETAILED IN TABLE B.3.1.
- SAND FILTER TESTING SPECIFICATIONS**
UNDERGROUND SAND FILTERS, FACILITIES WITH SENSITIVE GROUNDWATER AQUIFERS, AND FACILITIES DESIGNED TO SERVE URBAN HOT SPOTS ARE TO BE TESTED FOR WATER TIGHTNESS PRIOR TO PLACEMENT OF FILTER MEDIA. ENTRANCES AND EXITS SHOULD BE PLUGGED AND THE SYSTEM COMPLETELY FILLED WITH WATER TO DEMONSTRATE WATER TIGHTNESS. WATER TIGHTNESS MEANS NO LEAKAGE FOR A PERIOD OF 8 HOURS.
- SAND FILTER CONSTRUCTION SPECIFICATIONS**
ALL OVERFLOW WEIRS, MULTIPLE ORIFICES AND FLOW DISTRIBUTE SLOTS ARE TO BE FIELD-TESTED TO VERIFY ADEQUATE DISTRIBUTION OF FLOWS.
PROVIDE SUFFICIENT MAINTENANCE ACCESS (I.E., 12-FOOT-WIDE ROAD WITH LEGALLY RECORDED EASEMENT), VEGETATED ACCESS SLOPES ARE TO BE A MAXIMUM OF 10% GRADE SLOPES TO 15%; PAVED SLOPES TO 25%.
ABSOLUTELY NO RUNOFF IS TO ENTER THE FILTER UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
SURFACE OF FILTER BED IS TO BE LEVEL.
ALL UNDERGROUND SAND FILTERS SHOULD BE CLEARLY DELINEATED WITH SIGNS SO THAT THEY MAY BE LOCATED WHEN MAINTENANCE IS DUE.
SURFACE SAND FILTERS MAY BE PLANTED WITH APPROPRIATE GRASSES; SEE APPENDIX A.
"POCKET" SAND FILTERS (AND RESIDENTIAL BIOPRETENTION FACILITIES TREATING AREAS LARGER THAN AN ACRE) SHALL BE SIZED WITH A "WINDOW" THAT COVERS APPROXIMATELY 10% OF THE FILTER AREA. THIS "WINDOW" SHALL BE FILLED PEA GRAVEL (3/4 INCH SIZE).



SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1855).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 3:1, (b) 14 days as to all other disturbed or graded areas on the project site.
All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding does not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
Total Area (Project) 13,820 sqft or 0.32ac
Area Disturbed 16,489 sqft or 0.38ac
Area to be roofed or paved 5,391 sqft or 0.13ac
Area to be vegetatively stabilized 9,980 sqft or 0.23ac
Total Cut 356 cys
Offsite waste/borrow area location *
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
- Estimates of earthwork quantities are provided solely for the purpose of calculating fees.
- *To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.

OWNER/DEVELOPER

MR. BROCK MORGAN
MS. JESSICA ROBIN PRIVIER
2833 PROFITT PATH
EDGEWOOD MARYLAND 21040
443-220-5553

NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN - SINGLE FAMILY DWELLING
SEDIMENT EROSION CONTROL
LANDSCAPE NOTES & DETAILS
LOT 640
LENNOX PARK**

DEED REFERENCE: 10491356
ZONED R-12
CONTRACT #24 W&S
HOWARD COUNTY, MARYLAND

TAX MAP 43 GRID 6
01 ELECTION DISTRICT

PARCEL 698
HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
ENGINEERING, INC.**
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: JAR
DRAWN BY: JAR/HJ
CHECKED BY: RHV
DATE: NOVEMBER 2009
SCALE: AS SHOWN
W.O. NO.: 08-24

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 21774 EXPIRATION DATE 11-10-2009

JAMES A. RUFF, PE No. 21774

BUILDING ELEVATION

NOT TO SCALE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

PRIVATE WATER PROFILE

SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

HOWARD SCD DATE

Mr. Brock Morgan DATE

Jessica Robin Privier DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR DATE

BY THE ENGINEER

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER DATE
Mr. James A. Ruff PE 21774

BY THE DEVELOPER/OWNER

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTIONS BY HOWARD SOIL CONSERVATION DISTRICT.

Mr. Brock Morgan DATE

Jessica Robin Privier DATE

HOWARD SCD DATE