

VILLAGE OF BARRINGTON HILLS

Board of Health **NOTICE OF MEETING**



Tuesday, September 9, 2014 ~ 7:30 pm
Training Room - 112 Algonquin Road

AGENDA

1. Organizational
 - 1.1 Call to Order
 - 1.2 Roll Call
2. [Approve] Minutes
3. [Recommend] Septic Variance
 - 3.1 22 Spring Lane – James Atlas
4. [Recommend] SM4 Stormwater Program
Water Quality Testing – KOT Environmental Consultants, Inc.
5. Public Comment
6. Trustee's Report
7. Adjournment

Chairman: Gwynne Johnston

Next Regular Meeting Thursday, October 16, 2014

NOTICE AS POSTED

**VILLAGE OF BARRINGTON HILLS
BOARD OF HEALTH MEETING
July 23, 2014**

The special meeting of the Village of Barrington Hills Board of Health was called to order at 7:50 p.m. by Chairman Johnston. The regular meeting of July 15, 2014 was cancelled due to the lack of a quorum.

Board of Health Members Present: Gwynne Johnston, Chairman
Anne Majewski, M.D.
Shirley Conibear, M.D.

Board of Health Members Absent: Frank J. Konicek, M.D., Vice Chairman

Others Present: Robert Kosin, Village Administrator
Dan Strahan, Village Engineer
Peder Finnberg, Heritage Land Consultants

SEPTIC VARIANCE (66 BRINKER ROAD): Peder Finnberg, the design engineer for the property owner, presented a request for variance with regard to the proposed septic system. Mr. Finnberg noted that the changes to the Village Septic Ordinance required soil testing to demonstrate a minimum separation of 24” between the bottom of the septic system and the limiting layer. Based on soil tests performed by John A. Raber & Associates, Inc., the depth to the limiting layer was found to be 14” deep in the area of the proposed septic system for 66 Brinker Road, precluding the possibility of a traditional trench system. To meet the setback requirement, Mr. Finnberg proposed a mound system designed in accordance with the mound design standards of the Lake County Health Department.

Village Engineer Dan Strahan noted that GHA had reviewed the plans and recommended approval of the variance.

After discussion Dr. Conibear made a motion, seconded by Dr. Majewski, for approval of the request for a septic variance to construct a Type V mound system. The motion was approved by all members present.

SEPTIC VARIANCE (39 BRINKER ROAD): Mr. Strahan presented the details for a request for variance with regard to the proposed septic system on behalf of the property owner, who had attended the originally scheduled Board of Health meeting on July 15, 2014 which was cancelled due to the lack of a quorum, but could not attend the rescheduled meeting. Mr. Strahan noted that the changes to the Village Septic Ordinance required soil testing to demonstrate a minimum separation of 24” between the bottom of the septic system and the limiting layer. Based on soil

**VILLAGE OF BARRINGTON HILLS
BOARD OF HEALTH MEETING - July 23, 2014**

tests performed by John A. Raber & Associates, Inc., the depth to the limiting layer was found to be 17” deep in the area of the proposed septic system for 39 Brinker Road, precluding the possibility of a traditional trench system. To meet the setback requirement, RST Engineering, Inc. had proposed an at-grade mound system designed in accordance with the design standards of the Lake County Health Department. Mr. Strahan noted that GHA had reviewed the plans and recommended approval of the variance.

It was noted that the design included a curtain drain to be installed around the east and north sides of the proposed septic system which connected to a storm sewer system that discharged on the property to the north, owned by the same family. Chairman Johnston asked what provisions were in place to inform the neighbor of the obligation to maintain the downstream storm sewer system as the performance of the septic system depended upon the viability of the curtain drain. Mr. Strahan noted that Illinois Drainage Law would require the downstream property owner to maintain the storm sewer, though this would not provide a mechanism to inform future property owners of this obligation. Mr. Kosin suggested that a note could be recorded with the neighboring property to ensure that this requirement is understood by future property owners.

After discussion Dr. Majewski made a motion, seconded by Dr. Conibear, for approval of the request for a septic variance to construct a Type IV mound system, subject to the requirement that a notation be recorded with the downstream property owner of the requirement that the downstream storm sewer/drain tile be maintained. The motion was approved by all members present.

PUBLIC COMMENT: None

ADJOURNMENT

August 25, 2014

Mr. Peder Finnberg
Heritage Land Consultants
758 Ridgeview Drive
McHenry, IL 60050

850 Forest Edge Drive, Vernon Hills, IL 60061
TEL 847.478.9700 ■ FAX 847.478.9701

820 Lakeside Drive, Suite 5, Gurnee, IL 60031
TEL 847.855.1100 ■ FAX 847.855.1115

www.gha-engineers.com

Re: Septic Review- 22 Spring Lane
Review #1

Dear Mr. Finnberg:

Our office has reviewed the permit submittal for the septic modification for the existing four-bedroom residence at the above referenced address. Based on our review additional information and revision is needed prior to approval. Our review is based on HLC Project # 2014-169 SEP, dated July 22, 2014 and received by the Village on August 14, 2014.

1. A Type V (mound) system has been proposed in order to meet the required 24" separation from the limiting layer, found to be at a 8"-12" depth within the proposed septic area. **Based on the Village Code a variance from the Board of Health would be required to allow a mound system.** The next two regular Board of Health meetings are scheduled for Tuesday, September 9th and Thursday, October 16th. The applicant should contact the Village Clerk to request that this item be placed on an upcoming agenda.
2. Provide a completed watershed development permit application for the proposed development.
3. A water spigot is indicated in the vicinity of the proposed mound system. The service line to this spigot should be identified to confirm required setbacks are met from the proposed septic system.
4. Proposed grading should be shown around the proposed pool deck to demonstrate how this will be accommodated adjacent to the proposed mound.

The above review comments are provided based on the engineering information provided. Additional comments may be generated as the final plans and associated materials are submitted. Please include with the final engineering submittal a cover letter with a written response to each of the above comments.

Sincerely,
Gewalt Hamilton Associates, Inc.



Daniel J. Strahan, P.E., CFM
Village Engineer

cc: Wendi Frisen, VBH
James Atlas, Owner 22 Spring Lane Barrington Hills, IL 60010

To: Village of Barrington Hills Board of Health

From: Kurt Thomsen, Ph.D., PG
Flint Creek Watershed Partnership, Spring Creek Watershed Partnership

Date: September 3, 2014

Re: Water Quality Monitoring

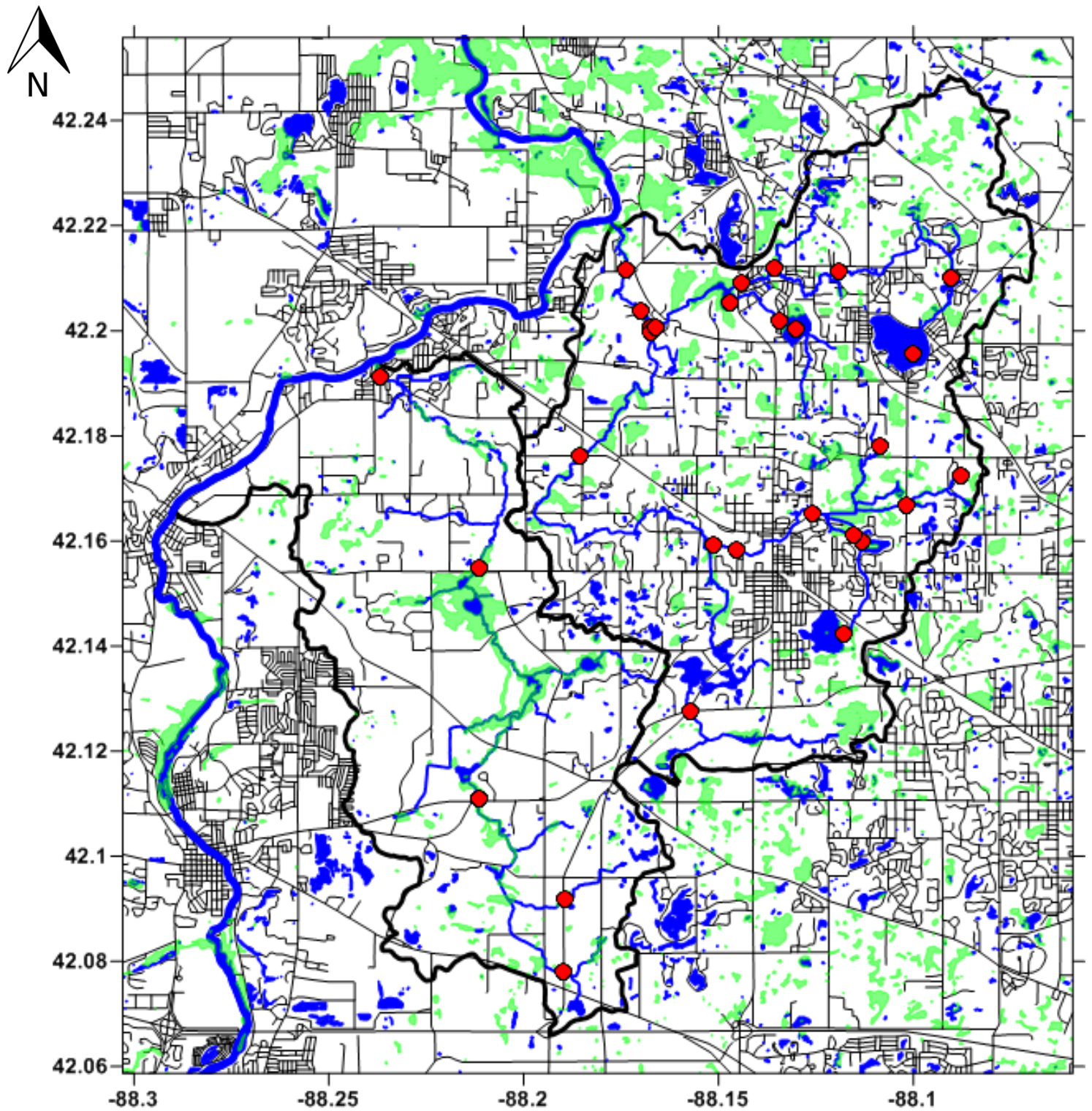
Flint Creek Watershed Partnership and Spring Creek Watershed Partnership through their not-for-profit fiscal agent, Citizens for Conservation, propose to implement the water quality monitoring plan that is currently being prepared for the Flint and Spring Creek watersheds (Figure 1) to establish baseline water quality characteristics. Implementation will take place in FY 15. The establishment of baseline water quality characteristics of the watersheds and continued monitoring will allow us to; 1) assess the current state of water quality resulting from non-point source pollution within streams and lakes; 2) assess changes in water quality to see how well implemented BMPs are working to remove pollutants for meeting water quality targets and ultimately milestones and project goals; and 3) assess the public social behavior related to water quality issues. Water quality monitoring will be performed by collecting physical, chemical, biological and social indicator data related to the watershed-based plans goals and objectives.

A significant amount of monitoring data has already been collected from the two watersheds. Most of these data have been collected by entities having ongoing established monitoring programs. These entities include: Lake County Health Department-Lakes Management Unit, IEPA Lake Monitoring Program, Citizens for Conservation, IEPA and IDNR Intensive Basin Survey Program, and River Watch Citizen Scientists. Additionally, the MS4 monitoring conducted by the jurisdictions within the watersheds has also provided a substantial amount of data and the sampling locations established as part of this effort will form the basis of the proposed monitoring network.

Data will be collected to establish baseline conditions for physical, chemical, and biological water quality indicators such as nutrients, suspended solids, water clarity, and dissolved oxygen. Also included, will be physical parameters such as habitat characteristics, temperature, oxygen concentration, specific conductance, and pH. These data will be collected annually. Additionally, geochemical characteristics will be established on a five-year basis to monitor the water source and changes in groundwater discharge areas. Habitat characteristics will be assessed by using the Index of Biotic Integrity and/or the Macroinvertebrate Biotic Index.

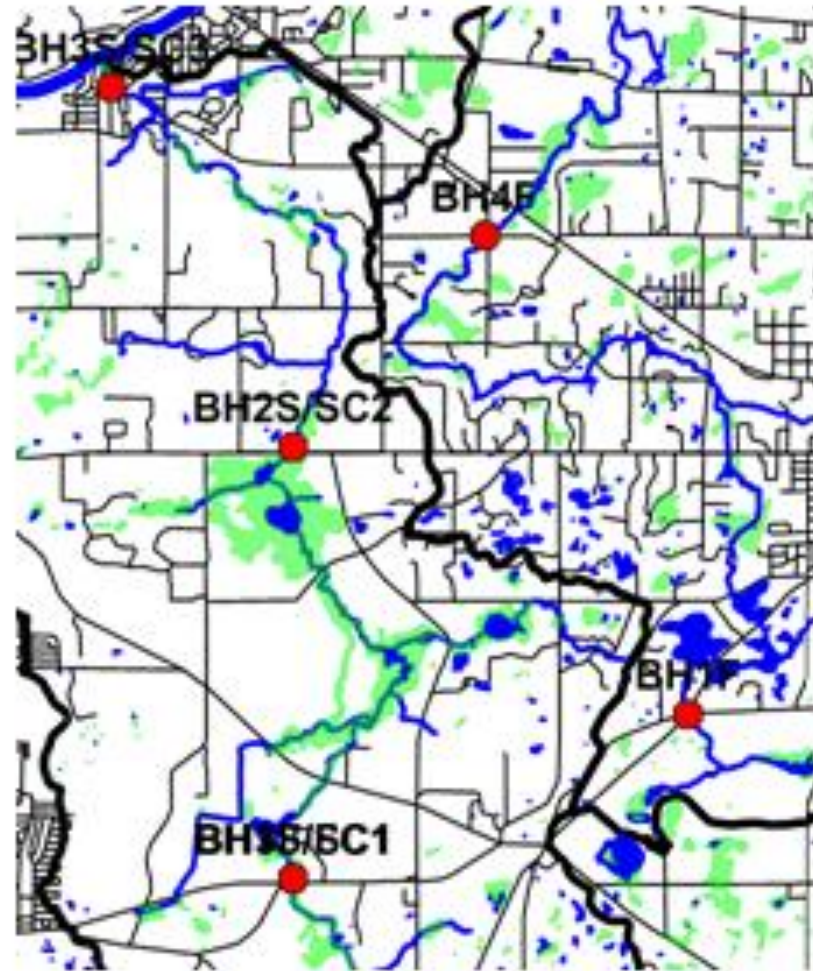
Hydraulic performance resulting from significant rain events and/or the implementation of a given BMP will be established. Water quality in streams is most often assessed at different locations following significant rain events to determine pollution loads resulting from human activities. Hydraulic conditions will be evaluated by assessing parameters such as peak discharge rate, reduction in total volume discharge, and time effects of discharge.

Figure 1 Proposed Water Quality Sampling Locations





Original MS4 Sampling Locations




Proposed MS4 Sampling Locations

Barrington Hills

Barrington Hills

ANALYTES/MEASUREMENTS

	Cost	Original
Field Analytes		
pH		X
Conductivity		
Dissolved Oxygen		
Stream Discharge		
Temperature		
Turbidity		
Oxidation Reduction Potential		
	 Labor	
Standard Water Quality Analytes		
Total Suspended Solids	\$10.00	\$ 10.00
Total dissolved Solids	\$10.00	
Coliform	\$12.00	
E-Coli	\$25.00	
Biochemical Oxygen Demand	\$20.00	\$ 20.00
Total Kjeldahl Nitrogen	\$35.00	\$ 35.00
Nitrate Nitrogen	\$13.00	
Total Phosphorus	\$25.00	\$ 25.00
Disolved Phosphorus	\$25.00	
Phenolics	\$20.00	\$ 20.00
Cadmium	\$9.00	
Copper	\$9.00	
Lead	\$9.00	
Zinc	\$9.00	
Digestion	\$10.00	
Subtotal:	\$241.00	
Geochemical Characterization Analytes		
Alkalinity	\$10.00	
Chloride	\$13.00	\$ 13.00
Fluoride	\$13.00	\$ 13.00
Orthophosphate	\$25.00	
Sulfate	\$13.00	
Aluminum	\$9.00	
Barium	\$9.00	
Calcium	\$9.00	
Iron	\$9.00	
Magnesium	\$9.00	
Manganese	\$9.00	
Potassium	\$9.00	\$ 9.00
Sodium	\$9.00	
Digestion	\$10.00	

ANALYTES/MEASUREMENTS

	Cost	Original
Subtotal:	\$156.00	
Total:	\$397.00	

Analytes Not Listed Above

Ammonia	\$35.00	\$ 35.00
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Current Cost Per Sample: \$ 180.00

Summary

	Original Annual Cost	Proposed Annual Cost	Proposed 5th Year Cost
Number of Samples:	6	5	5
Cost of Analyses:	\$ 1,080.00	\$ 1,205.00	\$1,985.00

Cost of Labor to Collect Samples, Document Field Measurements, and Reporting are not Included.