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September 10, 2008

(via Email & Certified Mail)

ZANGRILLI ENGINEERING

322 Oriskany Blvd
Whitesboro, NY 13492

Attn: Albert Zangrilli, Village Engineer

Dear Mr. Zangrilli:

Please accept this letter on behalf of my parents, Robert & Barbara Ross, who reside at 77 Cross Street, in the Village of Yorkville, Town of Whitestown.

On 6/16/08, the Whitestown Town Board adopted a Resolution regarding the "Holy Trinity Cemetery Stormwater Investigation". The Resolution states (my emphasis):

*...the Town Board has had an opportunity to review both the Ross Complaint, and the Response **with** officials from the Village of Yorkville including its Mayor, Superintendent of Public Works and **Village Engineer**, who similarly have reviewed and **take no exception to the findings and conclusions reached by the Town's Engineers...***

Please review the following:

1. The Resolution adopted by the Town states that they (as a public body) had an opportunity to "**review**" these materials "**with**" the "**Village Engineer**" (you).
 - a. We have filed FOIL requests with both the Village and Town requesting meeting minutes relative to this "**review**" session with the Town Board. In both instances, we were told no such records exist.
 - b. I followed up with another FOIL request, specifically requesting access to your records. I was told that since you are a consultant, and your records are not in the possession of the Village, I am not entitled to access them.
 - c. I would encourage you, the Village Clerk, and the Village Attorney to reconsider this denial on the basis of Advisory Opinion FOIL-AO-13646, dated 10/15/02, issued by Mr. Freeman of the NYS Committee on Open Gov't. This Opinion states:

...documents need not be in the physical possession of an agency to constitute agency records; so long as they are produced, kept or filed for an agency, the courts have held they constitute "agency records", even if they are maintained apart from an agency's premises.
 - d. Please make available all records related to the "review" meeting that you participated in with a quorum of the Whitestown Town Board. To formalize this request, I have copied the Village Clerk and Village Attorney.

2. The Resolution adopted by the Town Board specifically states (my emphasis) that you, “...**take no exception** to the findings and conclusions reached by the Town’s Engineers...”
 - a. The plans approved by Whitestown in 2001 required a ditch to be constructed between the Cemetery and several Cross Street properties. The Town Engineer acknowledges that this ditch has never been constructed. However, the Town Engineer on Page 3-6 of his report concludes (my emphasis), “...**no negative downstream impacts ... have been identified...**” due to the absence of this ditch. To the contrary:
 - i. In a 6/13/02 letter, **you wrote** (my emphasis), “...the present grading is not as shown on the approved grading and drainage plans. **During heavy rains, this storm water is running off of your property onto Village resident’s property along Cross Street. This grading must be completed and improved to keep storm water from flowing onto the adjacent property along Cross Street.**”
 - ii. In a 10/22/04 letter, **you wrote** (my emphasis), “The grading along the west property line, the property line that runs along the rear yards of the Cross Street houses, has not been completed in accordance with the plans. **The ditch that was supposed to be installed along this property line was never constructed. Storm water running down the hill is now running into the rear yards of the houses on Cross Street. These problems must be corrected immediately.**”
 - b. Given your 6/13/02 and 10/22/04 letters, please explain how it is that you “**take no exception**” to the Town Engineer’s assertion that “...**no negative downstream impacts ... have been identified...**” due to the absence of this ditch?
3. The Resolution adopted by the Town Board specifically states (my emphasis) that you, “...**take no exception** to the findings and conclusions reached by the Town’s Engineers...”
 - a. The plans approved by Whitestown in 2001 required that a reducing device, to limit discharge, be installed in the detention basin’s outlet control structure. In our complaint, we alleged that this reducer wasn’t installed until sometime in 2005. To refute our allegation, the Town Engineer, on Page 3-2 of his report, references a phone conversation he had with the Cemetery and argues that this **reducer was installed following project completion in 2001**. To the contrary:
 - i. In a **10/22/04** letter, **you wrote** (my emphasis), “...the 10” to 6” **reducer** on the outlet pipe from the detention basin **has never been installed.**”
 - ii. In a **10/29/04** letter, **you wrote** (my emphasis), “I met with Mr. Mark Lazaroski from the [Cemetery] on **October 27, 2004** to discuss the problems the Holy Trinity Cemetery expansion project is causing. **He agreed to install the reducer pipe at the end of the detention basin discharge pipe.**”
 - b. Given your 10/22/04 and 10/29/04 letters, please explain how it is that you “**take no exception**” to the Town Engineer’s argument that this reducer was installed in 2001?

4. The Resolution adopted by the Town Board specifically states (my emphasis) that you, "...**take no exception** to the findings and conclusions reached by the Town's Engineers..."
 - a. In 2001, you stipulated that Whitestown require the Cemetery to limit stormwater discharge from the Cemetery property to **0.5 CFS during the 25-year event**. This requirement was based on capacity concerns regarding the Village of Yorkville's stormwater collection system.
 - i. On 3/27/05, I wrote you to confirm this requirement. On 4/7/05 I received your response (my emphasis), **you wrote, "The Village of Yorkville restriction on the 25 year storm discharge rate of 0.5 CFS was never changed."**
 - b. On Page 3-3 of the Town Engineer's report, he presents the results of his modeling. He reveals that his modeling, for current site conditions, results in the Cemetery having a discharge rate of **5.42 CFS during the 25-year event**.
 - c. Given the **0.5 CFS** requirement you stipulated in 2001 and confirmed in your 3/27/05 letter, please explain how it is that you "**take no exception**" to the Town Engineer's argument that a discharge rate of **5.42 CFS** meets Village of Yorkville requirements?
 - i. Have you now revised the requirements?
 - ii. If so, what improvements have been made to increase the capacity of the Village's stormwater collection system?
 - iii. What are the new requirements?
 - d. Assuming that you must have prepared revised hydrologic/hydraulic calculations to justify this increased discharge rate, I FOILED access to your records regarding this project. I was denied access for the reasons outlined in Section (1)(b) of this letter.
 - e. Again, I encourage you, the Village Clerk, and the Village Attorney to reconsider this denial on the basis of the same Committee on Open Gov't Opinion outlined in Section (1)(c) of this letter.
 - f. Please make accessible all hydrologic/hydraulic calculations you have prepared regarding capacity for the subject collection system. When made available, we respectfully request that the seal and signature of the Professional Engineer-of-Record be affixed to these calculations. To formalize this request, I have copied the Village Clerk and Village Attorney.
5. The Resolution adopted by the Town Board specifically states (my emphasis) that you, "...**take no exception** to the findings and conclusions reached by the Town's Engineers..."
 - a. On Page 3-3 of the Town Engineer's report, he presents calculation results that claim the emergency spillway at the Cemetery's detention basin experiences **NO** flow during all design events, up to and including the 100-year storm event.
 - i. Furthermore, on Page 3-9 of the Town Engineer's report, he wrote, "The stormwater management basin ... has the capability to retain the 100-year storm event without activating the spillway per the requirement of the Village of Yorkville."

b. The Town Engineer's modeling contains a fundamental flaw that renders this conclusion incorrect.

- i. In the Town Engineer's modeling, the Town Engineer defines the emergency spillway to have an invert elevation of **511.00**. This is inaccurate, the emergency spillway weir, **per the approved construction drawings**, has an invert elevation of **509.00**.
- ii. To confirm my assertion that the modeling is incorrect, I contacted Mr. Peter Smart, **the software developer of the HydroCAD modeling software used by the Town Engineer**. I provided Mr. Smart a copy of the Town Engineer's weir definition, as well as copies of the construction details for the emergency weir and detention basin outlet structure. Mr. Smart responded in an 8/12/08 email stating:

Bob,

Device #5 does not seem to bear any relation to the "stepped" weir in your illustration [emergency spillway detail from construction drawings].

1) The modeled invert of 511.0' does not match the inverts of 509.0' or 510.0' shown on the sketch [emergency spillway detail from construction drawings]. There will never be any flow below the specified invert, regardless of the coefficients.

2) Based on the sketch [emergency spillway detail from construction drawings], the weir breadth is about 1 foot (the thickness of the concrete weir), but the model cites a breadth of 5'.

3) A BC [broad-crested] weir is intended for modeling a rectangular flow cross-section. The coefficients are intended to model the differing efficiency at each head, but they do not account for the variable flow area that occurs with a trapezoidal weir. I suggest a trapezoidal or custom weir instead.

Overall, I suspect there is a misunderstanding of the use of a BC [broad-crested] rectangular weir:

A) The crest must be horizontal.

B) The sides must be vertical (to create a rectangular flow cross-section)

C) The "breadth" is the thickness of the weir wall, measured along the direction of flow.

Peter Smart

HydroCAD Software Solutions LLC

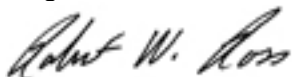
- iii. During the 100-year event, the Town Engineer calculated that the water level in the detention pond reached elevation **509.84'**. Yet, somehow, the Town Engineer concludes that **NO** water flows through the emergency spillway that has an invert elevation of **509.00**.
- iv. Given my assertion and the confirmation of Mr. Smart, I would request that you reconsider "**tak[ing] no exception**" to this specific finding and conclusion of the Town Engineer.

6. The Resolution adopted by the Town Board specifically states (my emphasis) that you, "...**take no exception** to the findings and conclusions reached by the Town's Engineers..."
 - a. The Town Engineer, in his modeling, defines the site cover characteristics for the **current condition to have 2.68 acres of impervious area.**
 - b. The Town Engineer then goes on to define, in his modeling, the site cover characteristics for the **build-out condition to have 1.7 acres of impervious area.**
 - c. Please explain how it is that you "**take no exception**" to the Town Engineer's finding and conclusion that **the construction of nearly one-mile of 20' wide asphalt paved (impervious) roadways results in a one-acre reduction in impervious area?**
7. The Town Engineer's report on file at the Town Clerk's Office does not have affixed the signature and seal of the Engineer-of-Record.
 - a. The **following excerpt is taken from Guideline 3 of the NYS Guidelines for Professional Engineering Practice in New York State** (my emphasis):

*Section 7209 (of Article 145 of the State Education Law) also identifies **when a professional engineer is required to sign and seal documents.** In general, all plans, specifications and **reports** prepared by the professional engineer or by a full-time or part-time subordinate under their supervision, **shall be signed and sealed when filed with public officials.***
 - b. Please make available the copy of the Town Engineer's report that you were provided in order to conduct your review. The basis of this request has already been outlined in Sections (1)(b) and (1)(c) of this letter. To formalize this request, I have copied the Village Clerk and Village Attorney.

Mr. Zangrilli, we look forward to the opportunity to review your records relating to your dealings with the Town of Whitestown, the Town Engineer and the Holy Trinity Cemetery. We would expect that these records are readily available, and per the Freedom of Information Law will be **made available within 5 business days.**

Regards,



Robert W. Ross, PE, NYS Lic #082606

Cc: Robert & Barbara Ross (email)
Town Supervisor Gibbs – Town of Whitestown (email)
Town Councilman Copperwheat – Town of Whitestown (email)
Town Councilman Ciancaglini – Town of Whitestown (email)
Town Councilman Barry – Town of Whitestown (email)
Town Councilman Sullivan – Town of Whitestown (usps)
Town Engineer Schrantz – Shumaker Engineering (email)
Mayor Petruccione – Village of Yorkville (usps)
Deputy Mayor Thomas – Village of Yorkville (usps)
Trustee Leone – Village of Yorkville (usps)
Trustee Deluca – Village of Yorkville (usps)
Trustee Spellman – Village of Yorkville (usps)
John Dillon - Village Attorney (usps)
Helen Petruccione, Clerk – Village of Yorkville (usps)