## Stormwater Amendment Article

## Hi John.

See my responses below in red. In regards to BETA's availability for the meeting on Wednesday it is not good. I have a prior commitment and Phil Paradis is on vacation next week – I'd have to go deeper on the bench. If additional questions come up I am happy to talk by phone or email in advance of the meeting.

-Melissa

## Melissa Recos, PE

Senior Project Manager

**BETA Group, Inc.** | 781.255.1982

Hi Melissa,

At the September 29<sup>th</sup> Finance Committee meeting which reviewed the proposed Stormwater amendment Article (2ft HGW-Attached Article 8 Pg.9 of SB packet).

The Finance Committee Chair had questions that needed further clarification on economic impact:

- What percentage of undeveloped land would be affected by this proposed regulation amendment? As
  discussed below.
- 2. What would be the result of potential slab foundations with respect to location of mechanicals (utilities) in new developments? In homes that do not have basements, utilities are often placed in a garage "alcove" designed for that purpose or a utility room within the house.
- 3. "Setting **bottom floor** elevation a minimum 2 ft Above SHGW" is this proposed language specific to standup basements, crawl space and or livable space below grade? No, the language is not specific to any type of basement or space. The idea is to avoid pumping groundwater by not digging into it.

As we discussed earlier question (#1) is difficult to answer as the variables that would need to be known for each potential development are not available.

If BETA could offer an estimate concerning the above or use some recent development analysis that would be most helpful.

Note that this is proposed to be tied to the stormwater bylaw so it would only be considered if development requires an acre or more of land disturbance (average single family home on a stand alone lot or building addition would most likely not trip this requirement).

Sample of Recent development where sump pump and/or foundation drains were included in the design for groundwater:

- Glen Ellen (324 townhouses) most homes throughout the development have foundation drains as a
  precautionary measure, groundwater is shallow in areas of this site and the developer made a conscious
  effort to engineer so sump pumps would not be needed (they were worried about liability if sump pumps did
  not work due to power outage or maintenance issues)
- Acorn Place (22 condo units) crawl spaces in each unit require sump pumps
- Emerson Place (43 single family homes)— Estimated 4 homes will have sump pumps, others are high enough that they are not anticipated to need sump pumps but may have foundation drains

Sample of Recent Development without sump pump or foundation drains:

- 114 Union Street Apartment Buildings Slab Foundation
- Gateway Apartment Buildings with basements, groundwater is generally 10' below proposed grade
- Commercial buildings typically on Slab Foundations

Could you also please get back to Deirdre Gilmore (Cc'd) for BETAS availability for **next Wednesday's 10/6 Finance Committee meeting 7PM** regarding the same?

Thanks, John