

## August 30, 2004 Minutes

# MINUTES OF THE SPECIAL WORKSHOP MEETING OF THE EMERALD ISLE BOARD OF COMMISSIONERS CHAPTER 16 – STORM WATER MANAGEMENT ORDINANCE MONDAY, AUGUST 30, 2004 – 6:00 PM - TOWN HALL

The special workshop meeting of the Emerald Isle Board of Commissioners was called to order by Mayor Art Schools at 6:00 pm.

Present for the meeting: Mayor Art Schools, Commissioners Nita Hedreen, Robert Isenhour, Pat McElraft, Floyd Messer, and John Wootten.

Others present: Frank Rush Town Manager, Rhonda Ferebee Town Clerk, Planning Director Kevin Reed, Town Engineer Greg Meshaw.

### REVIEW OF PROPOSED REVISIONS AT AUGUST 10 BOARD OF COMMISSIONERS MEETING

Town Engineer Greg Meshaw briefly reviewed the August 10 proposed revisions to the Storm Water Management Ordinance. He noted the August 10<sup>th</sup> revisions applied to all development, redevelopment, including residential dwellings. He said it established three (3) categories of permitted projects:

- 1) Projects already permitted by NCDENR under the storm water management regulations  
OR (for projects not permitted by NCDENR)
- 2) Low impact option
- 3) Engineer controlled option

Mr. Meshaw gave the Board details of each of these options. He stated that the proposal presented on August 10 also provided basic guidelines for the design of storm water control devices, such as infiltration systems, and wet detention ponds. He said it required operation and maintenance plans for storm water systems, stating that storm water systems must be designed by an individual who meets the NC Occupational Licensing requirements. He highlighted the differences in the current ordinance versus the August 10 version.

(The August 10, 2004 ordinance amendment is attached to and incorporated into these minutes)

As excerpted from Town Manager Rush's memo to the Board:

Essentially, the attached ordinance amendment would only require new single family homes and duplexes that have a moderate amount of impervious surface to complete an engineered storm water plan. New single family homes and duplexes that minimize impervious surface (less than 15% of the total lot area) would not be required to complete an

engineered storm water plan, but would be required to implement “common sense” storm water controls such as swales, driveway angles, etc. New single family homes and duplexes that utilize a significant amount of impervious surface (more than 15% of the total lot area) would be required to have an engineer prepare a detailed storm water plan, and also bear the additional expense associated with an engineer’s services. In this way, the August 10 proposed revisions create some incentive for the developer / owner to minimize impervious surface.

As you know, the August 10 proposed revisions appear, at first glance, to be somewhat complicated. As we discussed, the reason the August 10 proposed revisions appear to be complicated is due to the fact that we incorporated as much of the State storm water regulations as possible. The August 10 proposed revisions mimic the approach of State regulations to a large degree by establishing the percentage impervious surface threshold and incorporating State standards, but the August 10 revisions also have a few significant deviations from the State regulations. The State’s impervious threshold is 25%, compared to 15% in the August 10 proposed revisions. The State regulations require the retention of the first 1.5” of rainfall, compared to 2” in the August 10 proposed revisions. The August 10 proposed revisions also retain current Town requirements to replace wetlands on-site if more than 1,000 sq. ft. of wetlands are filled, and retain the automatic requirement for an engineered storm water plan if more than 2 ft. of fill is added to the disturbed area of the development site.

#### ALTERNATIVE CONCEPTS FOR REVISIONS TO STORM WATER MANAGEMENT ORDINANCE

- a. **Alternate Version #1 – Reduce Threshold for Engineered Plans**
- b. **Alternate Version #2 – Specify Storage Requirements**

**Town Manager Frank Rush detailed two alternate versions: Alternate Version #1 and Alternate Version #2 for the Board to consider.**

(A copy of both Alternate Version #1 and Alternate Version #2 are attached to, and incorporated into these minutes)

**Mr. Rush said it seemed most of the concerns on August 10<sup>th</sup> were coming from the fact that they imported a lot of the State language into the ordinance, and that language is considerably different than what is in the existing ordinance. He sensed from the Board and community that perhaps that was going to be too complicated and that the focus should be on our existing ordinance, using that as a template for making future changes. In light of that, Mr. Rush stated that with the assistance of Planning Director Kevin Reed and Town Engineer Greg Meshaw, he had put together these two alternate versions to serve as possible templates. He said after discussing these two alternate versions, it would be helpful for the Board to determine which one of those they would want to use as the starting template for making any future changes, or the Board may want to stay with the August 10<sup>th</sup> version.**

**The following is an excerpt from Town Manager Frank Rush’s memo to the Board summarizing Alternate Version #1 and Alternate Version #2:**

*“Alternate Version #1 – Reduce Threshold for Engineered Plans”* essentially makes only minor changes to the existing storm water management ordinance. Alternate Version #1 reduces the threshold for engineered storm water plans from 5,000 sq. ft. of impervious surface to 2,500 sq. ft. As a result, all new single family and duplex development with more than 2,500 sq. ft. of impervious surface would be required to submit an engineered storm water plan. Alternate Version #1 also stipulates that new single-family and duplex development with less than 2,500 sq. ft. of impervious surface would still be required to submit a storm water management plan, however, the plan need not be prepared by an engineer nor must it include formal calculations based on

2” of rainfall (or any other volume of rainfall).

Alternate Version #1 simply requires the new development with less than 2,500 sq. ft. of impervious surface to “take all reasonable steps to insure that storm water runoff is retained on site and does not adversely impact adjacent properties and public infrastructure during normal rainfall events.” In practice, the new development would not be required (or allowed) to dedicate a certain calculated area for infiltration or use a drywell system, but would instead be required to direct roof downspouts and / or provide appropriate driveway angles to direct runoff to areas where infiltration would likely occur on site. The elimination of the calculation of storage capacity should adequately address the NC Board of Examiners’ concerns about non-engineers performing engineering work.

With the exception of “housekeeping”-type revisions, the remaining provisions in Alternate Version #1 are identical to the Town’s existing storm water management ordinance.

*“Alternate Version #2 – Specify Storage Requirements”* is very similar to the Town’s existing ordinance (and maintains the 5,000 sq. ft. threshold for engineered plans). However, it removes the stipulation that storm water plans for new development with less than 5,000 sq. ft. of impervious surface provide adequate control for the “first 2” of rainfall”, and replaces it with a directive that “sufficient area be reserved to provide 16.67 cubic feet of storage capacity for every 100 sq. ft. of impervious surface proposed”.

Essentially, Alternate #2 completes the 2” rainfall calculation as a part of the ordinance as opposed to requiring the applicant to make that calculation. The Board should note that “16.67 cubic feet of storage capacity for every 100 sq. ft. of impervious surface” is exactly equal to the “first 2” of rainfall”, and thus Alternate Version #2 would essentially continue the implementation of the Town’s existing ordinance in the same manner as it is currently implemented. Because the Town has actually included the calculation in the ordinance text, we believe that this may satisfy the NC Board of Examiners’ concerns. We have received encouraging indications about this issue, however, we are still awaiting a final decision on this issue from the NC Board of Examiners.

With the exception of “housekeeping”-type revisions, the remaining provisions in Alternate Version #2 are identical to the Town’s existing storm water management ordinance.

The Board should note that both Alternate Version #1 and Alternate Version #2 as attached are VERY PRELIMINARY DRAFTS at this point, and are included only to illustrate the concept. If the Board chooses to pursue the adoption of Alternate Version #1 or #2 there is still a need for a thorough review of the language and additional “housekeeping” revisions to the ordinance. These additional “housekeeping” revisions would be made prior to the Board’s official consideration of an ordinance.

#### DECISION – USE AUGUST 10 REVISIONS, ALTERNATE VERSION #1, OR ALTERNATE VERSION #2 AS TEMPLATE FOR EVENTUAL ORDINANCE REVISIONS?

Following discussion by the Board the decision was made to pursue Alternate Version #2 as the template for eventual ordinance revisions. The general consensus of the Board being that they would lean toward the Alternate Version #2, pending the opinion from the Board of Engineers.

#### DETAILED REVIEW OF SELECTED TEMPLATE FOR REVISIONS / IDENTIFICATION AND DISCUSSION OF ADDITIONAL REVISIONS

Mr. Rush directed the Board’s attention to the attached Alternate Version #2 as presented, noting the “house-keeping” changes as indicated by strike-through and underlining. Mr. Rush noted that the goal of the “house-keeping” items was to make it reflective of what happens in actual practice in the field, and to eliminate things that were not important.

**The Board questioned Mr. Rush and Mr. Meshaw concerning the details and reasons for changes regarding the various “house-keeping” items as highlighted in Alternate Version #2, most specifically in reference to wetlands, salt water intrusion, and interdunal troughs.**

**Mr. Rush stated that he would make recommended changes for the Board to review prior to the September meeting.**

*Motion was made by Commissioner Isenhour to adjourn the meeting. The Board voted unanimously 5-0 in favor. Motion carried.*

*The meeting was adjourned at 7:03 pm.*

**Respectfully submitted:**

**Rhonda C. Ferebee  
Town Clerk**