From: Rob Gordon

To: <u>"gpape@gsp-consulting.com"</u>
Cc: <u>Derek Pielech; Jim Diepenbrock</u>

Subject: Eng TRC comments - Belle Meade Apartments

Date: Wednesday, January 07, 2015 5:29:00 PM

Attachments: <u>image003.png</u>

Engineering has reviewed the plans for the Belle Meade Apartments and have the following TRC comments:

- 1. The project is proposing in excess of 10,000 sf of impervious area and will require a stormwater management permit. Please submit a complete stormwater permit application to Engineering, including all required calculations and a \$1,000 review fee.
- 2. The water quality requirements should be satisfied by the offsite pond (Belle Meade Village). A separate offsite State stormwater permit must be obtained from DENR-DEMLR.
- 3. The stormwater management system shall attenuate the peak run-off produced by the two (2)-year, ten (10)-year, and twenty-five (25)-year frequency design storms to predeveloped conditions (woods in good condition). The offsite pond does not have a future (water quantity) allocation, so calcs will have to be submitted that demonstrate compliance with this requirement.
- 4. On-site conveyance systems shall be designed at a minimum to convey the ten (10)-year storm event and be evaluated for the 25 & 50-yr storm events. The existing pipe system extending along Sikes to the pond has not been evaluated/reviewed, thank you for including analysis all the way to the pond. Please be sure to include appropriate tailwater condition.
- 5. Please include inlet and BMP drainage area maps with the analysis or within the plan set.
- 6. A public drainage easement should be specified over the existing pipe system adjacent to Sikes Ave. The required width is specified in the technical standards. Please make sure the car wash is entirely outside the easement.
- 7. Similar to the Belle Meade Village Streets, Matteo Drive has no inspection record on file. In order to accept it as a public street, the following must occur:
 - a. The City of Wilmington will conduct a site inspection and determine if any additional testing or survey is needed to assess the condition of the roadway. If you have any design data, testing analysis or inspection reports from when the roadway was constructed, please provide them as they may be helpful in assessing the condition of the roadway.
 - b. The City would develop a punchlist of needed improvements (if any). We would prefer to do this concurrent with the TRC review, so any needed improvements would be known prior to construction release. We also require video analysis of the (public) stormdrain system prior to official acceptance. This does not have to occur until after construction, but we would suggest video inspection prior to construction as well. This would allow any replacement/repair to be incorporated into construction and would also establish a baseline condition of the system but preliminary video inspection is not a requirement.
 - c. Finally, the roadway would have to be dedicated as public r/w. This can occur at any point during review/construction.
- 8. Why are the Wet detention pond details included on this set? This is an offsite pond. If the pond has to be modified, then the Belle Meade village Plans will have to be modified unless

both projects are being developed by the same entity. If the details are duplicated and one set is modified, it creates the potential for misinformation. I would suggest eliminating the sheet. However, the weir slot on the Belle Meade Village Plans is 4" high by 2' wide, your detail appears to be 4" wide, by 2' high – is this an error or is a modification being proposed?

9. Please do not tie the roof drains across the Matteo r/w directly into a box.

These comments will be uploaded to protrak. Please call or email if there are any questions. Thank you.

Robert Gordon, PE Project Engineer

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