

Engineering has reviewed the plans for the City Block Apartments II project submitted October 7, 2019 and have the following comments:

1. SW Application: Is there 2,813 sf of offsite impervious being treated in the SCM? The calculations and Drainage Area Map do not appear to include any offsite impervious. Offsite impervious is not required to be treated, it's appreciated, but not required. Please clarify.
2. Infiltration System Design #1: The % Impervious (60.5%) does not appear to be consistent with % impervious found in the other calculations (64.1%).
3. What tailwater elevation was assigned to the HGL calculations for the 10 and 25 HGL calculations?
4. Technical Standards require analysis of the 10 and 50-year design storms, not the 10 and 25-year.
5. Soils Report: I don't know where the Marmalade Building location is/was. The test was conducted in 2007. With such a high infiltration rate and the date that the test was conducted, at a minimum, I need a location map showing the location of the test. I hope the test was conducted within close proximity to the SCM location, if not within the footprint for acceptance of the test results.
6. City Supplement forms were made obsolete by the recent MDC updates. Please use the Supplement EZ form provided by NCDEQ for the SCM. Also, since this is a redevelopment project and the project is receiving credit for the existing impervious, the impervious area listed used should just be the amount of impervious receiving treatment.
7. C-2.1: Existing impervious on the Bladen Street parcels needs to be hatched for removal.
8. C-2.1/C-2.2: There appears to be an existing driveway that needs to be closed on 4th Street.
9. C-2.2:
 - a. Minor revision: The SW application has 9,430sf of existing impervious, the Site Information lists 9,439sf.
 - b. Where feasible, remove cleanouts, meter boxes, etc. from inside newly constructed sidewalk.
10. C-3.0:
 - a. The technical standards require an emergency overflow for this type of SCM. The two proposed drop inlets along 4th Street (DI-2 and DI-3) appear to be meet that requirement. The tech standards also reference the need for an emergency overflow device be designed for a system failure during the 10-year storm. Please submit the SCM routing for the 10-year storm with an infiltration rate of 0 in/hr.
 - b. Based on the rim elevations of DI-2 and DI-3, the rim for DI-15 is lower. Since water would exit from DI-15 first, where would it drain? It cannot drain onto the adjacent property, negatively impacting them. Also, some CO rims are lower than DI-2, DI-3 and DI-15. I have seen caps get popped due to pressure buildup. Just my two cents.
 - c. It appears the infiltration system is drawn with only 10 rows instead of 11.
11. C-4.0: The 2" water meter can remain in the public r/w, but the backflow preventer cannot. Please relocate it to a location outside of the public r/w.
12. C-5.0: Please increase the size of the commercial driveway details. Difficult to read at current scale when plans are reproduced.
13. C-5.3: Remove the CFPUA detail sheet from the plan set.

Please submit one complete set of plans, stormwater narrative, application, calculations and all other supporting documentation to Engineering for additional review. Please call or email if there are any questions. Thank you.