

## Genna Porter

---

**From:** Rob Gordon  
**Sent:** Tuesday, January 19, 2016 10:09 PM  
**To:** 'Larry Diehl'  
**Cc:** Jim Diepenbrock; Genna Porter  
**Subject:** Eng Review - Circle K  
**Attachments:** Supplement Offsite Rev.1.doc

Engineering has reviewed the plans for the Circle K project and have the following comments:

1. I have not received a signed application for the project yet. Please forward once the document has been signed.
2. I did not receive an offsite supplement. Please complete the attached form and include with the next submittal
3. There is a small amount of pervious pavement proposed on the application that does not appear to be on the plans. Please clarify.
4. There are grading issues with the site:
  - a. The permanent pool of the pond is permitted at elevation 32.0. The invert (in) of the OS-1 drainage area will actually drain the basin, not drain to the basin. Please re-grade this area.
  - b. Please note the following water surface elevations from the offsite pond (per approved calcs): 10 yr = 34.45', 25 yr= 34.82', 100 yr= 35.78. The site would be expected to hold some water in a 100-yr event, but the main connecting drive aisle would be completely inundated by the 10 and 25-yr events. Please re-grade these areas to provide safe passage for emergency vehicles.
  - c. There may be a survey bust somewhere. All the surveyed elevations for structures on the adjacent site appear lower than the as-built received for that site. The vertical datum appear to be the same. I believe we provided these as-built drawings to you previously. Please investigate this discrepancy.
5. Considering the apparent tailwater issues from the offsite pond, HGL calcs will be required for all proposed piping for the project.
6. We do not typically comment on the Tc of a pipe design, but a 46 min Tc for DA B is very high (too high...) – even the other Tc's in the mid 20's are much higher than we typically see for this type of inlet DA (rarely more than 5 min...). Please use a more conservative Tc or provide justification for the Tc proposed.
7. Note Only – we do not require City of Wilmington drainage structures be used on private sites – or City streets. We actually prefer NCDOT standard structures. Considering the site fronts on an NCDOT road, it might be simpler to propose only NCDOT structures. Please do provide details for whatever type structure proposed.
8. There appears to be some issues with the dimensions on the City sidewalk detail. Please clarify.

Please submit one copy of plans along with any required forms and calcs to Engineering for additional review. Please make sure to provide digital copies of the submittal to Genna (cc'd). Please call or email if there are any questions. Thank you.

Robert Gordon, PE  
Plan Review Engineer

City of Wilmington, Engineering Division  
212 Operations Center Drive  
Wilmington, NC 28412  
Office: (910) 341-5856 | Fax: (910) 341-5881  
Email: [rob.gordon@wilmingtonnc.gov](mailto:rob.gordon@wilmingtonnc.gov)  
[www.wilmingtonnc.gov](http://www.wilmingtonnc.gov)



Follow us on Facebook or Twitter

[facebook/cityofwilmington](https://www.facebook.com/cityofwilmington)  
[@cityofwilm](https://www.instagram.com/cityofwilm)