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Working Together to Protect the Ogeechee, Canoochee and Coastal Rivers

May 11, 2025

Via E-Mail

Coastal Regional Commission
planning@crc.ga.gov

Re: Comments on DRI #4701 - QuickTrip Gas Station & Convenience Store¹ - Pooler

Coastal Regional Commission:

Ogeechee Riverkeeper 501(c)(3) (ORK) works to protect, preserve, and improve the water quality of the Ogeechee River basin, which includes the Canoochee River, tributary streams, and all of the streams flowing out to Ossabaw Sound and St. Catherine's Sound. The Ogeechee River system drains more than 5,500 square miles across 20 counties in Georgia. ORK works with local communities to retain the ecological and cultural integrity of rivers, streams, wetlands, and related habitats throughout the Basin. One of ORK's primary roles is as watchdog on new land development projects in the watershed that could pose a threat to its water quality and aquatic environments.

ORK's comments on the QuickTrip Gas Station & Convenience Store development fall into two overarching categories. First, both the special flood hazard area that covers the entirety of the property and the significant wetlands coverage indicates that this site will be constantly vulnerable to flooding. Second, the property's designation as an Area of Significant Natural Resources calls for a thorough review of its natural resources and how they will be impacted. Ultimately, Ogeechee Riverkeeper urges the City of Pooler to deny any construction permits for new buildings within a special flood hazard area. If the City plans to proceed, ORK strongly suggests that the applicants and developer be required to conduct and share additional studies prior to any building permits or occupancy certificates being issued to ensure that flood risks and environmental impacts to the property and the surrounding area are addressed and mitigated to the fullest extent possible.

1. Flooding risks and hazards present on this property should prevent the proposed development

The proposed location for this development faces serious and sustained flooding risks. Its presence entirely within the floodplain highlights the site's poor location. Combined with the stormwater drainage canal that crosses the property and wetlands present on the site, flooding and inundation are very likely to be regular issues on this site. Even

¹ For QuikTrip No. 7137, per the Development Site Plan.

with mitigation and planning, flood damage will still be an issue and should prevent this project from being permitted. However, if the City of Pooler does plan to proceed, it should do so fully informed by the applicants and with confidence that the plans sufficiently reduce flood damage risks.

Flooding is very likely at this location, justifying the City's denial of building permits and site occupancy certificates. Alarming, the entirety of this proposed development is in the Federal Emergency Management Agency's (FEMA) designated 1% Annual Chance Flood Hazard area, also known as the 100-year floodplain or Zone AE.² While the "100-year floodplain" name implies that floods will only occur once every 100 years, this obscures the actual risk. Over 30 years, the actual flood risk is 26%³ - a more than 1 in 4 chance for properties in the 100-year floodplain over that time period.

Additionally, the "100-year floodplain" looks narrowly at only the "base flood." The base flood describes the strength of flood that is 1% likely to happen in any year.⁴ Non-base floods, i.e. floods less strong or severe than the base flood (aka the "100-year flood"), are more likely to happen each year. Likewise, the 100-year flood is not the absolute strongest possible flood that the property could face. The narrow focus on the 100-year flood not only undercounts the potential frequency of flooding on the property but also underconsiders the severity of flooding the property could experience. Further, reliance on the backwards-looking 100-year flood model further obscures risk. The estimated floods and the extent of the floodplains relies on historic data, leaving out the most recent and most representative data. With the anticipated increase to storm frequency and intensity in the coming years and decades, the extent, size, and frequency of flooding on this property is likely greater than the Flood Hazard area anticipates.

The drainage canal and wetlands on the site further indicate that water will be a sustained issue. The drainage canal necessarily implies that significant amounts of stormwater will pass through this property, increasing the risk of flooding. Additionally, per the U.S. Fish and Wildlife Service's National Wetland Inventory,⁵ a significant portion of the 20.04 contiguous acres of wetland are present on the site. This suggests that waters tend to flow across and pool on this property at and around these features. This movement of water, along with any past flooding events on the site, needs to be considered proactively, before any site clearing or construction begins.

Flooding issues are particularly concerning at truck stops. Of principal concern are underground fuel storage tanks, which are extremely vulnerable sources of pollution during flooding inundation. Even minor faults in the storage tanks would quickly turn them into serious sources of pollution, allowing these fuels to be quickly swept onto neighboring and nearby properties as well as into waterways and other vulnerable ecological areas. Even under best-case scenarios where underground storage tanks are perfectly and flawlessly maintained, the site will undoubtedly still have remnant pollutants as a result of frequent vehicle traffic. Some percentage of the vehicles making up this traffic will have various leaks, leaving behind a variety of automotive fluids on the impervious surfaces

² Coastal Regional Commission. "Flood Zone." Available at: crc4.sharepoint.com/Planning/_layouts/15/guestaccess.aspx?share=ESPQuOejh_IFoM4vGwDsTKEBc8v-5AMPOVNMj4FFDtL1bQ&e=YaDzvP.

³ See <https://savannahga.gov/FAQ.aspx?QID=332> and <https://www.floodsmart.gov/flood-zones-and-maps>

⁴ Federal Emergency Management Agency. "Appendix B: How to Read a Flood Insurance Rate Map (FIRM) Course Glossary". Available at: https://emilms.fema.gov/is_0273/groups/157.html

⁵ U.S. Fish & Wildlife Service. "National Wetland Inventory." Available at: <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>

proposed for this development. A flooding event will wash these pollutants onto neighboring and nearby properties and into habitats and aquatic features. It is not a question of *if*, but a matter of *when* and *to what extent* will pollution-carrying flood waters from this site become an issue.

Considering the likelihood of flooding on the site due to its presence in the 100-year floodplain and its aquatic features, as well as the polluting impacts from this flooding, **ORK urges the City of Pooler to deny any building permits or occupancy certifications** for this proposed development.

In addition, the City of Pooler should also take into account the potential financial burdens related to flooding. Those financial burdens include, but are not necessarily limited to property and structure damage, water and land pollution, and buyout costs. At the most basic level, flooding threatens to inundate, damage, and destroy any structure in its path. Structures within the floodplain see their risks increase. Costs of clean up, collateral damage, and to neighboring properties should be considered. Flooding also presents water pollution threats. As discussed above, gasoline and diesel fuels as well as other remnant vehicle-related pollution from frequent car and truck traffic risks being swept up in flood waters. The nearby Little Ogeechee River is the principal water body threatened by these pollution risks. Finally, if flooding occurs frequently enough, FEMA may offer a property buyout⁶ to return the property to its now-current, undeveloped conditions. These buyouts, though funded mainly by FEMA, still expect a 25% contribution from the local and/or state government.⁷ This burden, as well as additional clean-up, emergency, rescue, and other foreseeable flood-related costs would likely fall on the City. ORK urges the City of Pooler to specifically consider and factor in these foreseeable financial costs of building in the floodplain when making its decisions.

In summary:

- ORK strongly discourages in construction within the 100-year floodplain due to the likelihood of flood damage,
- The drainage canal and significant wetlands on the site strongly indicate that stormwaters will cross this site,
- The underground storage tanks and other automotive-related pollutants on site make flooding a pollution issue for nearby properties and in downstream environments, and
- The City of Pooler should be aware of the potential financial risk that comes from flood-related buyouts.

⁶ University of Delaware Disaster Research Center and The Nature Conservancy. "Floodplain Buyouts: Challenges, Practices, and Lessons Learned." At page 9. August 2021. Available at: https://www.nature.org/content/dam/tnc/nature/en/documents/Buyouts_Lessons_Learned_Siders_Gerber_Chavez_TNC_Full_Report_2021.pdf

⁷ Federal Emergency Management Agency. "FACT SHEET: Acquisition of Property After a Flood Event." Available at: <https://www.fema.gov/press-release/20250121/fact-sheet-acquisition-property-after-flood-event>

2. If development is to proceed, studies should be conducted and detailed plans should show how the property's wetlands, stormwater, and Significant Natural Resources will be addressed

ORK reiterates its position that construction within the FEMA-designated Special Flood Hazard Area should not occur due to the likelihood of flood-related damages, pollution, clean-up, and buyouts. However, if the City of Pooler chooses to proceed with approving this proposed project, ORK urges that the applicants and developers first conduct and provide studies and plans that explain wetlands preservation and filling, fully address stormwater management, and assess the impact on designated Areas of Significant Natural Resources. These should be submitted and reviewed by the City of Pooler BEFORE any land clearing or construction is allowed to begin.

Wetlands - natural and no-cost stormwater management - should be preserved throughout the property. These quickly-dwindling resources not only reduce stormwater flows, they retain important volumes of stormwater, filter pollutants, and provide natural habitats for the region's fish and wildlife. All of these ecosystem services are invaluable and are freely available - so long as the City of Pooler and other governmental bodies and regulators do not allow developers to fill the wetlands and build atop them. When wetlands are filled, these services are lost and either have to be replaced with expensive and less effective artificial options or are not replaced and harm our shared places and natural resources. **Wetlands provide these ecosystem services regardless of the Army Corps' jurisdictional determination.**

As such, wetlands preservation and the development of a wetland plan should be an early step in the planning process. Failing to delineate and enumerate the wetlands present on the site obscures the actual impact that this development will have on the property's existing aquatic features. The Development Site Plan included in the DRI materials is of such low quality and resolution that it is unclear whether wetlands are noted at all. This lack of clarity suggests the applicant and developers did not fully consider preservation wetlands in their planning.

To recenter and fully consider these important resources, ORK asks the City of Pooler to require the applicant to create a wetlands plan that, at minimum, (1) clearly delineates all of the wetlands present on the property, overlays their location on the Master Plan and any subsequent plans, and enumerates the acreage proposed to be filled and preserved, (2) prioritizes and details how the development preserves the wetlands present on the site, (3) adjusts the Master Plan and site layout to avoid wetland fill wherever possible, (4) provides a justification for why wetlands must be filled, and (5) mitigates any lost wetlands and their ecosystem functions with on-site mitigation or restoration efforts as close to the site as possible to reduce localized impacts.

Beyond wetlands, a **flooding and stormwater management plan** should be required of the applicants. As currently detailed in the DRI information, the applicant states that "Detention pond is proposed to mitigate impact on Stormwater Management".⁸ This statement, and the presumption of meeting only minimum required standards, is not sufficient for a gas station fully within the 100-year floodplain. As such, ORK urges the City of Pooler to require the applicant/developer to conduct and share a study to inform its stormwater management plans.

⁸ DCA. "DRI #4701 DEVELOPMENT OF REGIONAL IMPACT DRI Information Form Part 2" Available at: <https://apps.dca.ga.gov/DRI/AdditionalForm.aspx?driid=4701>

The presence of underground storage tanks and the stormwater drainage canal bring unique concerns to this development. With the significant likelihood of flooding, as discussed above, the City of Pooler should be convinced that precautions and safeguards around the fuel tanks and fugitive pollution are sufficient to protect neighboring properties and downstream areas. This could include additional layers of protections ahead of predicted heavy storms and flooding events, fuel-related pollution neutralization features, and regular maintenance, monitoring, and clean-up in stormwater ponds related to fugitive fuel pollution. Likewise, with floodwaters all but certain to pass through the drainage canals, the applicant/developer should provide information that reassures the City of Pooler that its stormwater features are capable of handling that degree of flood control.

Additionally, the 26.5% impervious surface coverage should be reduced wherever possible. The development on this 23.18-acre site would result in more than 6 acres of new impervious surface. These hard surfaces, like concrete and asphalt, prevent stormwater from infiltrating into the ground, where they can be absorbed and reduce stormwater volumes. Impervious surfaces also speed up stormwaters, adding to management pressure. Finally, impervious surfaces hold pollutants and allow them to be washed into nearby waterways if not properly captured or treated. To reduce these issues, a significant reduction in impervious surfaces should be prioritized.

Beyond these specific concerns on this site, ORK suggests that the flooding and stormwater management plan include and discuss the following topics: (a) hydrologic modeling and mapping - both pre- and post-development, (b) the history of flooding on the property and in the area, (c) alternative site layouts that reduce flooding issues, (d) impervious surface reductions and other green infrastructure to reduce stormwater runoff pressure, (e) alternative stormwater management approaches that utilize the site's natural features, and (f) stormwater retention and management features that go beyond minimum standards in order to build in resiliency. For example, stormwater retention features should be built to retain 125% of the 100-year storm or 100% of the 500-year storm. Beyond these topics, the City of Pooler should require any other topic it finds important in making its rezoning and permitting decisions.

Finally, a **natural resources plan** assessing the Significant Natural Resources present on the site should be conducted, shared, and integrated into the City of Pooler's decision. According to the Coastal Regional Commission's ARSA map, the entire property is designated as an "Area of Significant Natural Resources." Without deeper consideration, important natural resources could be negatively impacted and permanently lost. Topics that should specifically be reviewed are (a) the species present on the site, including any threatened, endangered, or other species of concern, (b) the impacts of habitat loss on surrounding area, (c) the ecological services provided by the site such as flood control, pollution filtration, habitat, and groundwater recharge, and (d) the impact on nearby properties, other natural resources, and downstream areas. Likewise, the City of Pooler should add any other topic it feels is central to its rezoning and permitting decision.

These three studies and plans - wetlands, flooding and stormwater, and natural resources - should be submitted before any permitting decision is made by the City of Pooler. By requiring the applicant to address the specific topics, the City will have all of this crucial information and be able to make a more informed decision about this proposed development, rather than having to back-track or otherwise seek enforcement after it has already approved the project.

In summary:

- New construction within the 100-year floodplain bring unavoidable risk and should be avoided,
- The applicant/developer be required to submit and publicly share a wetlands plan, a flooding and stormwater management plan, and a natural resources plan *before* any permitting decision is made,
- These three plans should be used to inform, revise, and improve any development plans,
- Wetlands should be preserved wherever possible to reduce flooding risk and avoid the need for expensive and less effective artificial management structures and habitats,
- Flooding and stormwater plans should consider the risk of underground storage tanks, the drainage canal, fugitive pollutants, and impervious surface reduction, among many other topics,
- Stormwater ponds should be constructed above minimum requirement to build-in resiliency for increasingly strong and frequent storm events, and
- A natural resources plan should address impacts to species, habitats, ecological services, and any other topic deemed important by the City.

Thank you in advance for your time and consideration; please let me know if you have any questions:

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