

## **Environmental Protection Comments**

### **ZOX-03-20 GRU Groundwater Recharge Wetland Park Special Exception**

A request by CHW, Inc., agent, for Mitchem-Rivers, LLC, owner, for a special exception for a major utility on approximately 76.49 acres on tax parcels 04433-000-000 and 04433-003-000 located at 3602 SW 122nd St. The parcels have a future land use designation of Rural/Agriculture (1 dwelling unit/ 5 acres) and are in the Agriculture zoning district.

Lead Planner: Mehdi Benkhatar at [mbenkhatar@alachuacounty.us](mailto:mbenkhatar@alachuacounty.us)

### **Comments Due (date): 9/25/20**

EPD staff requests a virtual meeting to discuss this request for additional information. Please contact Eliana Bardi ([ebardi@alachuacounty.us](mailto:ebardi@alachuacounty.us)) to schedule.

### **Request for additional information:**

1. A pre-application meeting was conducted on 4/27/20 with the applicant and consultants. At the meeting, staff from the Environmental Protection Department requested that water quality monitoring reports at the inflow and discharge locations (groundwater) for similar facilities be provided for review. The consultants indicated these data exist for the nearby Kanapaha Middle School Facility site. Please provide any water quality data or reports for similar facilities.
2. Similarly, at the pre-application meeting staff had requested information on the regional groundwater flow, along with an inventory of all nearby wells. The information requested was not provided with this submittal and will need to be submitted as part of the Special Exception review.
3. Provide an analysis of potential impacts to adjacent properties based on groundwater mounding.
4. Please provide additional information regarding wetland design and function, including number of cells, approximate size, depth, control structures, whether cells will be lined or unlined, and generalized maintenance and operation plan. This information is needed during the Special Exception review process to determine risk and develop conditions, as applicable.
5. Provide information on the reclaimed water infiltration test sites at Oakmont subdivision. Were any reports written on those test sites? What were site conditions in Oakmont to make that project unfeasible? How did those site conditions compare to the property proposed in this Special Exception?
6. Regarding the geotechnical investigation and conclusions, please provide responses and/or additional information, as applicable, to the following:
  - a. While indicators of active sinkhole development were not identified at the subject site, evidence of processes that can lead to the development of sinkholes, including limestone dissolution, raveling, in-filled voids, and cavities, is present in many of the SPT soil borings. Furthermore, evidence of past sinkhole activity was identified in soil boring B-4. Please explain the conclusion in Section 6.1 of Summary Report of Sinkhole Susceptibility Study that this site is suitable for a constructed recharge wetland that will receive and discharge an estimated 3 to 5 million gallons of treated wastewater per day in light of these conditions.
  - b. Please explain why twice as many electrical resistivity imaging (ERI) transections (total of 6) were completed on the western half of the project area as were conducted on the eastern half (total of 3).
  - c. The ground penetrating radar survey was conducted on a more-or-less evenly spaced grid pattern of continuous transects. It seems that the ERI technology was amenable to

the site conditions and was effective at identifying areas for further investigation via SPT borings. Please explain why the ERI survey was not conducted using a more evenly spaced pattern, and why a denser transect spacing was not utilized.

- d. Section 5, Further Site Characterization, references additional geotechnical explorations to be conducted in the future. Are any of those results or reports available? Also, no results were provided for the 15 acre parcel to the north; was a geotechnical exploration conducted on this parcel? If so, please provide those results.