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SITE INVESTIGATION MEMO

DATE: March 6, 2018
TO: BREC
FROM: Michael Thomassie, Duplant Design Group, PC
SUBJECT: BREC Zoo – Airline Hwy. Site Feasibility
DDG Project #17-454

INTRODUCTION

- The purpose of this memorandum is to provide information on the various issues associated with the project such that the client can make an informed decision regarding the feasibility of the project.
- Summary of Property – The property is approximately 119 acres and is located on Airline Highway (US 61). The subject property is bound to the northeast by Airline Hwy right-of-way, to the south by Bayou Manchac, to the southwest by Ward’s Creek, and to the northwest by a drainage feature and existing rural land use. The project is located in the Bayou Manchac watershed.
 - The project falls within the jurisdiction of East Baton Rouge Parish (city-parish consolidated government).
 - The existing property is owned by BREC and operates as the existing Airline Highway Park and Fairgrounds. The site includes recreational areas including baseball/softball fields, playgrounds, infrastructure buildings, fenced in parish fairground areas, an air rifle range, gravel roads and parking areas, and a small oxidation pond.

PERMITTING

- East Baton Rouge City/Parish
 - EBR Commercial Permits – Permits will be required for all proposed structures and proposed site improvements within the scope of the project. The EBR Department of Development – Permit and Inspection office will be the office that will issue all commercial permits for the project.
 - EBR Sewer Infrastructure – The proposed sewer infrastructure (lift station and forcemain) will require permitting approval from the EBR Sewer Engineering and Subdivision Engineering offices.
- LA Department of Health and Hospitals (LADHH)
 - The proposed sewer infrastructure will require permitting approval from LADHH.
- LADOTD
 - Access Connection Permit – Permit will be required for the proposed access connections for the development along Airline Hwy.
 - Project Permit – Permit will be required by LADOTD for improvements within the Airline Hwy right-of-way

- U.S. Army Corps of Engineers (USACE)
 - Jurisdictional Determination – a Jurisdictional Determination is a determination from the USACE for potential areas identified as wetlands and waters of the United States on the property.
 - 404 Permit - Section 404 of the Clean Water Act requires a permit from the USACE and authorized State agencies for the discharge or dredge or fill material into wetlands and waters of the United States.
- LADEQ
 - LADEQ Stormwater General Permit LAR100000 – Notice of Intent (NOI CSW-G) will be required to be submitted to LADEQ for any land disturbance 5 acres or greater.

WETLANDS/OTHER WATERS

- A Wetlands Delineation was completed by Hydrik Wetlands Consultants dated February 12, 2018 for the site identifying a total of 2.76 acres of wetlands
 - The 120.11 acre delineated area consists of approximately 74.21 acres of recreational area and 45.9 acres are a combination of forested hardwood uplands, forested hardwood wetlands, a 1.4 acre lake, and a series of non wetland waters.
- The submittal was made to the Corps for a Jurisdictional Determination (JD)
 - Approval is expected in 4-6 months from submittal (expected around June or July of 2018)
- Once the JD is approved and impacts are understood and identified, the USACE permitting process can begin. Permits typically take 12-16 months for approval.

GEOTECHNICAL

- Based on experience in the immediate area, we expect onsite soils will be suitable for fill and shallow foundations could be used for buildings.
- A Geotechnical Consultant should be engaged to prepare a Geotechnical Report when the project moves into design stages. This report will include Site Specific recommendations for building foundations, use of onsite fill, and pavement recommendations among other information used in design.

SURVEY/PLATTING

- The Boundary Survey provide by BREC is dated.
- A Topographic/ALTA Survey will be required for the design of the project
- Based on the survey provided, the property is 3 separate tracts.
 - A Resubdivision Plat to combine the 3 lots into one lot would likely be required for the proposed project.

UTILITIES

- Water
 - There is an existing 8” line with capacity to service the site on the west side of Airline Hwy. terminating at Paladin Dr.
 - There is also an existing 24” line on the east side of Airline Hwy.
- Sewer
 - City/Parish staff confirmed that there is capacity for the project in the Public System based on the preliminary sewer estimates. At this time, there are two potential tie-in locations. Additional coordination is required with the City/Parish to confirm the preferable tie-in location.
 - Additional coordination between BREC and the City/Parish is required to determine if the required onsite lift station will be public or private.
 - A public Sewer Lift Station and Force main is estimated cost \$450,000 - \$600,000.

- A private Sewer Lift Station and Force main is estimated cost \$150,000 - \$200,000.
- Gas – existing facilities are located in the vicinity of the site to service the project.
- Electrical – existing facilities are located in the vicinity of the site to service the project.
- Telecomm – existing facilities are located in the vicinity of the site to service the project.

TRAFFIC

- The site is located along Airline Hwy (US 61). The Airline Hwy right-of-way is 300' wide, which includes the 4-lane median divided highway with a posted speed limit of 65 mph. There are 5 existing median cuts along the frontage of the property, some of which include left turn lanes for the existing access to the Airline Hwy Park and associated existing development across Airline Hwy from the park. There are 2 existing deceleration right turn lanes for the existing access to Airline Hwy Park.
- A traffic study will be required for DOTD review and approval. Vectura Consulting Services, LLC is preparing a traffic study which analyze existing and future traffic conditions and will include recommendations for improvements to Airline Hwy.

DRAINAGE/DETENTION

- The drainage design will meet or exceed the recently updated requirements of East Baton Rouge Parish. Onsite detention ponds will be designed to ensure that the post-development flowrates do not exceed the pre-development flow rates for the design storms.
- During the process, engineers plan to coordinate with the City/Parish to investigate the possibility for the project to have a positive drainage impact.
- The design process would include coordination with East Baton Rouge City/Parish, adjacent parishes, DOTD, the Pontchartrain Levee District, and the Amite River Basin Commission.
- The design process would include extensive drainage modeling of the existing and developed conditions of the site to ensure that there would be no negative change to the way floodwater is conveyed within the watershed. This would include analyzing a broad range of storm events to insure no adverse impacts to upstream or downstream properties.

FLOOD PLAIN

- FEMA's base flood elevation at the site for the 100 Year Storm is elevation 17.
- The site is approximately 120 acres which is much more than needed for the project. More than 39 acres of the property is currently above FEMA's base flood elevation. Additional higher ground would be created by moving dirt from the lower areas of the site. The Site would be developed so there would be no floodplain storage volume lost. This would be accomplished by creating large areas for Floodplain Storage.
- The Concept Plan for the Zoo has a +/-75 acre footprint and can easily fit on the property.
- The design process would include extensive floodplain mitigation modeling of the existing and developed conditions of the site. **BREC plans to provide a 10% increase in floodplain storage for the 100 yr. storm which is above and beyond all requirements. The Current Floodplain Mitigation Plan meets this goal.**
- The project would be developed to meet or exceed Parish's Unified Development Code and FEMA requirements.