## 18. WASTEWATER MANAGEMENT

## A. Provide, in the table given below, the projected wastewater generation at the end of each phase of development and proposed wastewater treatment. Identify the assumptions used to project this demand.

**Table 18-1, Projected Wastewater Flow**, provides a breakdown of the estimated average daily wastewater flow (ADF) for the single phase of development. At Project completion, the projected ADF is estimated to be 981,000 gpd.

TABLE 18-1 PROJECTED WASTEWATER FLOW				
Land Use	Wastewater Generation <sup>1</sup> (Mgd)	On-Site Wastewater Treatment (Mgd)	Off-Site Wastewater Treatment <sup>1</sup> (Mgd)	
Office	0.676	0.000	0.676	
Retail	0.115	0.000	0.115	
Hotel	0.083	0.000	0.083	
Residential	0.107	0.000	0.107	
TOTAL	0.981	0.000	0.981	
Source: David Plummer and Associates 1. Refer to Potable Water Demand estimates shown in Table 17-1, Potable / Non-Potable Water Demand.				

Projections of the average daily wastewater flow have been estimated based on the following demand rates:

•	Office:	20 gpd/100 sf
٠	Retail:	10 gpd/100 sf
•	Hotel:	150 gpd/room
•	Residential Condominium:	250 gpd/du

## B. If applicable, generally describe the volumes, characteristics and pre-treatment techniques of any industrial or other effluents prior to discharge from proposed industrial-related use(s).

Not applicable. All wastewater flows from the Project are anticipated to be domestic wastewater with no industrial or special generators.

C. 1. If off-site treatment is planned, identify the treatment facility and attach a letter from the agency or firm providing the treatment outlining present and projected excess capacity of the treatment and transmission facilities through buildout, any other commitments that have been made for this excess and a statement of ability to provide service at all times during or after development.

Treatment of wastewater flows generated from the Project will be provided by the City of Fort Lauderdale. The attached letter (Appendix 18-1, Letter from the City of Fort Lauderdale) addresses its ability and capacity to provide wastewater transmission and treatment services at all times during and after development of this Project.

2. If service cannot be provided, identify the required capital improvements, cost, timing, and proposed responsible entity necessary to provide service at all times during and after development.

Not applicable.

D. If septic tanks will be used on site, indicate the number of units to be served, general locations and any plans for eventual phase-out.

No septic tank systems are proposed for the Project.

E. Indicate whether proposed wastewater service will be provided within an established service area boundary.

The Project Site is entirely within the service area of the City of Fort Lauderdale.

**Appendix 18-1** Wastewater Management Service Availability Letter



July 22, 2008

Fax (305) 444-4986

Victor Lee, PE, PLS David Plummer & Associates 1750 Ponce de Leon Boulevard Coral Gables, Florida 33134 (305) 447-0900

## Subject: WATER AND WASTEWATER CAPACITY AVAILABILITY LETTER Riverbend Site DRI (77 Acres), West of I-95 and east of SW 27 Ave. and bifurcated by Broward Boulevard, located within the City of Fort Lauderdale.

Dear Mr. Lee:

Your have submitted information indicating that the 77-acre Riverbend site property would be redeveloped into mix-use retail, residential condominiums, hotel and office uses. Additionally, you have provided information indicating that the projected water consumption and sewer contribution for this project will be approximately, 1.008 mgd and 0.981 mgd, respectively.

The City of Fort Lauderdale's water and sewer conveyance and treatment systems have enough capacity to handle the projected water and sewer additional flows. Furthermore, during April 2009, the City of Fort Lauderdale will complete construction of a new gravity sewer collection system and pump station for the Riverland area (SA 2 – Basin B), which were designed to accommodate future flows generated by the Riverbend development. The gravity collection system to be constructed as part of the Riverbend project will have to be connected to our recently constructed gravity sewer along SW 24 Avenue. The location of such connection points should be coordinated through our Waterworks office (Doug VanNote (954) 522-2604 Ext. 23).

The Riverbend 77-acre site is surrounded by 6, 8, 10, and 30-inch water mains that have enough capacity to supply water for the intended uses. The water distribution system, which will be constructed as part of the redevelopment to provide service within the 77-acre site, must be connected to the existing 30-inch distribution water main located along W. Broward Boulevard.

The City of Fort Lauderdale's George T. Lohmeyer Regional Wastewater Treatment Plant (GTLWWTP) provides wastewater treatment for the City of Fort Lauderdale. The level of service standard for the GTLWWTP is average day flow. The GTLWWTP currently averages 35.5 million gallons per day (MGD), and the Plant's permitted treatment capacity is 48 MGD. Additionally, the City owns and operates two Water Treatment Plants, namely

Page 2 July 22, 2008

Fiveash and Peele Dixie, and they are permitted for 70 mgd and 20 mgd treatment capacities, respectively. Average daily consumption is approximately 50 mgd.

Inquiries concerning charges for connection and consumption should be directed to the City of Fort Lauderdale as utility owner. Appropriate Permit Applications should be routed through the City's One-Stop-Shop Permitting Division, 700 NW 19th Avenue, Fort Lauderdale, Florida 33311-7834 (Mr. Denis Girisgen, P.E.).

Should you have any questions or require any additional information, please contact me at (954) 522-2604 Ext. 38 (jorgeh@fortlauderdale.gov).

Sincerely, Jorge Holguin

Project Engineer

C: File sewer connection letters