SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Permitting Process Summary

Questions have been raised (most notably by the South Florida Water Management District (SFWMD)) in the processing of this ADA relative to the regulatory requirements and the Applicant's commitments to landfill closure, wetland mitigation, and stormwater management. While the Applicant has expressed a vision for its handling of such issues, it acknowledges that the interaction between these factors creates extraordinarily complex problems. In light of these complexities, the Applicant can commit to general and conceptual programs but cannot commit to any specific treatment of these issues as part of the DRI approval. Rather, specifics will be defined as part of the more detailed environmental and resource permit reviews conducted by agencies with detailed substantive jurisdiction. The following outlines, in greater detail, the permits and processes wherein these specifics will be defined.

In addition to an approved development order, the following permits are required to commence site construction:

Beacon Countyline DRI Required Permits for Site Construction				
Permit	Issuing Agency	Status		
Conceptual ERP	SFWMD	Applied for and under review.		
Federal Dredge & Fill Permit	ACOE	Applied for and under review.		
Class IV Wetland Permit	DERM	Applied for and under review.		
Landfill Closure Permit	DERM	Will apply for by the fall of 2008.		
General Construction ERP for Mass Grading	SFWMD	Will apply for by the end of 2008.		
General Construction ERP for Phase 1	SFWMD	Will apply for by the end of 2008.		
Class VI Stromwater Permit	DERM	Will apply for by the end of 2008.		
Local Building / Public Works Permits	City of Hialeah and/or Miami-Dade County	Will apply for in first quarter of 2009.		
NPDES Construction Stromwater General Permit	FDEP	Will apply for after local permits are received.		
Source: ES Consultants, Inc.				

A Conceptual Environmental Resource Permit (ERP) application was submitted to the SFWMD on December 28, 2007, in order to permit the proposed wetland impacts On-Site and the conceptual stormwater management plan. The conceptual ERP does not actually authorize construction; general ERP permits will be required to perform actual construction. The conceptual ERP application is currently being processed and a Request for Additional Information (RAI) was issued on January 25, 2008. The Miami-Dade Department of Environmental Resources Management (DERM) is the agency charged with reviewing and permitting the stormwater management design. Therefore, the Applicant is currently seeking DERM's approval of the design concept prior to its submission of our RAI responses to the SFWMD. There are also outstanding wetland mitigation and minimization issues that must be resolved to complete the conceptual

ERP application. It is anticipated that the application will be complete by the end of 2008 and the permit issued 60 days from that time. The permit expires two years from the date of issuance or the date specified as a condition of the permit, unless within that time period an application for a general ERP Permit is applied for; if a general ERP Permit is issued the conceptual approval is valid for an additional two (2) years.

A Federal Dredge and Fill Permit application was submitted to the Army Corps of Engineers (ACOE) jointly with the conceptual ERP application. The Dredge and Fill Permit is required for the proposed impacts to the On-Site wetlands that are deemed "jurisdictional." The same information and application form is used for the Dredge and Fill permit and the ERP. The Dredge and Fill Permit is currently being processed and the ACOE has indicated that the application is considered complete. However, the Dredge and Fill Permit cannot be issued until the ERP is issued. The Dredge and Fill Permit is typically valid for five (5) years from the date of issuance.

A standard form Class IV Wetland Permit application was also submitted to DERM at the same time as the conceptual ERP application. The Class IV Wetland Permit is required for the proposed impacts to the On-Site wetlands. Although the information required to complete the Class IV Wetland Permit application is similar to that of the ERP and Dredge and Fill Permit, the Class IV Wetland Permit is applied for and reviewed by DERM separately. There are outstanding wetland mitigation and minimization issues that must be resolved in order to complete the Class IV Wetland Permit application. It is anticipated that this application will be complete by the end of 2008 and the permit issued 60 days from that time. The Class IV Wetland Permit is valid for three (3) years from the date of issuance and may be extended to a period not to exceed ten (10) years from the issue date.

It is anticipated that Applicant will be submitting the Landfill Closure Permit application to DERM at the end of September 2008. This permit is a Florida Department of Environmental Protection (FDEP) permit. However, FDEP has delegated authority over the Project to DERM because the Site is a former construction and demolition (C&D) debris landfill. The Landfill Closure Permit application is comprehensive, as it requires plans for the final closure cap and grades, stormwater management, gas management, waste relocation, water quality monitoring, financial assurance and an analysis of the effects of final development on the closure (e.g., proposed buildings, utilities and other infrastructure). Conceptual designs for the entire Project and detailed designs for the first phase of the Project, located in the southeast portion of the Site, will be submitted in connection with the Landfill Closure Permit application. The Landfill Closure Permit will likely require periodic modifications as construction is proposed for other phases of the Project and final Project designs are completed. It is anticipated that the review and issuance of the permit will take 120 to 150 days. Each modification is valid for up to five (5) years from the date it is issued.

It is anticipated that landfill closure issues and requirements will conflict to some extent with wetland mitigation and mitigation issues.

A general construction ERP will be required for both the first phase of development and the mass grading over the entire Site. The conceptual ERP will need to be approved prior to the issuance of any general construction permits. It is anticipated that the Applicant will apply for both general ERP permits prior to the end of 2008. The general ERP applications must provide detailed construction plans and stormwater calculations

for the proposed work and must be consistent with the approved Landfill Closure Permit plans. Future general ERPs will be required as subsequent phases of the Project are slated for development. Typical time-fames experienced for review and issuance of the general ERP is approximately 90 to 120 days. Each permit is typically valid for five (5) years from the date it is issued.

A Class VI Stormwater Permit application will need to be submitted to DERM Water Control for proposed permanent stormwater management systems. A Class VI Permit applies to stormwater management systems within a contaminated or solid waste disposal area. The application requirements for the Class VI Stormwater Permit are generally the same as the general ERP. Throughout the review process, DERM and SFWMD communicate to ensure concurrency on any proposed stormwater design prior to either agency issuing their respective permits. Typically, the review and issuance process for the Class VI Stormwater Permit takes 90 to 120 days. The Class VI Stromwater Permit is typically valid for one (1) year from the date of issuance but may be extended in additional one (1) year increments. Again, landfill closure issues are anticipated to conflict with stormwater and wetland minimization concepts.

Local Building/ Construction Permits from the City of Hialeah or Miami-Dade County will be required in order to perform actual construction. The issuing agency (i.e. the City of Miami Building Department, the Miami-Dade County Water and Sewer Department (WASD), the City of Miami Public Works Department or the Miami-Dade County Public Works Department) and application requirements depend on the type and location of the proposed work. Generally, these City and County permits are a prerequisite to obtaining any local permits. The duration of these City and County permits vary depending on the work proposed but are typically valid for one (1) year.

A National Pollutant Discharge Elimination System (NPDES) Generic Construction Permit will be required to commence work that disturbs more than 1 acre. There is no application review process associated with an NDPES Permit. Rather, a Notice of Intent (NOI) is submitted to the Florida Department of Environmental Protection (FDEP) by the Applicant notifying the FDEP of the intent to use the NDPES Permit. The conditions of the NDPES Permit must be adhered to and include the development of a Stormwater Pollution Prevention Plan (SWMPP) and certain documentation requirements. The NDPES Permit is valid for up to five (5) years from the submittal of the NOI.

Question 13: Wetlands

1. <u>COMMENT</u>: Please provide additional information and field documentation concerning the characteristics, acreages, and functional values of the on-site wetlands based on site inspections with District staff. Current wetland and topographical data for the 520 acre project site remains conceptual in nature and the referenced historic permitting documentation, topographic data, and prior environmental reviews were not included in the latest submittal.

RESPONSE: Please note the Project currently encompasses ±500 acres. The original ADA included 520 acres. During the sufficiency process the Golden Glades Right-of-Way was removed from the ADA and an out parcel was recently added to bring the Project to the current ±500 acre Site.

The wetlands shown on Map F.2 (R2) – Wetlands located in the revised Question 9 – Maps, are based on field observations and were delineated from aerial photography. The linear nature of the wetland boundaries are the result of the Construction & Debris landfill operation within the limits of the Project area. A list of previously issued permits by ACOE, FDEP and DERM are included as Exhibits 15.1 – ACOE Permit, Exhibit 15.2 – FDEP Permit, and Exhibit 15.3 – DERM Permit, in the revised Question 15 – Soils. A survey is also attached to demonstrate the topographical information that was utilized as part of the original evaluation of On-Site conditions. A set of wetland functional analysis score sheets that have been prepared for the wetland permitting review processes are also being submitted with this sufficiency response as part of the DRI review to address the functional values of the wetlands On-Site. These are included as Exhibits 13.1 – Uniform Mitigation Assessment Methodology (UMAM) score sheets and Exhibit 13.2 – Wetland Assessment Technique for Environmental Review (W.A.T.E.R.) score sheets located in the revised Question13 – Wetlands.

2. <u>COMMENT</u>: The Applicant has not demonstrated that practicable design modifications have been made to reduce or eliminate proposed wetland impacts to currently identified wetlands located on the 520 acre site. What is the status of this reduction and elimination documentation? Proposed wetland mitigation will be reviewed only after reduction and elimination criteria have been addressed.

RESPONSE: The Applicant has committed to working with DERM to close the landfill in accordance with all current closure requirements. The combination of the closure requirements, along with the stormwater management system design, and the street and building layout necessitate the filling of the 104 acres of wetlands On-Site. Please note that the revised number of wetland acres on the Project Site is now 104 acres with the removal of the Golden Glades Right-of-Way and the addition of the outparcel near the Golden Glades Right-of-Way.

The Applicant is currently coordinating with DERM regarding the closure/development plans. The Development plans will incorporate the landfill closure, and construction of the closure will be concurrent with the construction of the Development. The final cover will consist of an essentially impervious cap, consisting of buildings, parking lots and roadways, over the majority of the site and a two feet thick layer of approved materials and vegetative cover in pervious areas. The construction phases and schedule will be approved by DERM in compliance with the regulatory closure requirements.

Based on the initial meetings, the DERM requirements for stormwater management and final closure of C&D landfill dictate that stormwater be disposed of or directed to clean areas of the Site that have not received waste material. Essentially, the only areas of the Site that fall into this category are the areas currently delineated as wetland areas. It is required that the 100-year/3-day storm event be retained On-Site. Based on this analysis, the excavation of all of the 55 acres of wetlands in the southern portion of the Site is necessary for construction of the stormwater management system. This impact includes the 40-acre wetland, 10-acre wetland and 5-acre wetland in the southern portion of the Project, all of which are dominated by melaleuca.

The wetland impacts on the northern portion of the Project are necessary to meet the requirements of a multi-use development to incorporate the retail components of the overall Project. The northern portion of the Project is adjacent to NW 170 Street, which provides the necessary main road frontage essential for a successful retail operation as

part of the overall multi-use Development. Impacts to the northern 40-acre wetland are also necessary for the construction of the required road system, including the widening of NW 170 Street and NW 102 Avenue to accommodate the anticipated traffic needs for this portion of Miami-Dade County. These rights-of-way will also include the required utilities lines for the overall Project.

Minimization and avoidance of wetland impacts will be more thoroughly developed as part of the permitting processes with the ACOE, South Florida Water Management District, and the Miami-Dade County Department of Environmental Resources. Based on correspondence with the SFWMD, the Applicant is exploring the potential for acquiring privately owned land within the boundary of the Pennsuco wetlands to demonstrate environmental improvements that provide "regional ecological value that provides greater long term ecological value than the area of wetland or other surface water to be adversely affected and the proposed mitigation will provide greater ecological value than the area of wetlands or other surface water to be adversely affected" consistent with Section 4.2.1.2 of the Basis of Review. This option is being explored because of the low ecological value of the function provided by the area of wetlands to be adversely affected by the Project. If this demonstration of greater regional ecological value is successively achieved, it is our understanding that the District will not require the Applicant to implement practicable design modifications to reduce or eliminate impacts. We will provide information on this acquisition option as it becomes available.

3. <u>COMMENT</u>: Based on the submitted documentation, the site contains habitat utilized by listed avian species. However, the current project description indicates that no existing wetland habitat is proposed to remain on-site. Has the applicant coordinated with the appropriate wildlife agencies to ensure that no adverse impacts to listed wetland species will occur as a result of the proposed project?

RESPONSE: Please note that as stated in the DRI ADA, RS Environmental Consulting, Inc., has conducted numerous On-Site field inspections, including walking the transects shown on **Map G – Sample Station Locations** located in the revised **Question 9 – Maps**, and has not noted any use of the wetlands on the Project Site by any listed wildlife species. There is no evidence of utilization of the Project Site by any of the listed species for this portion of Florida. During a phone conversation with Mr. Winston Hobgood of the U.S. Fish & Wildlife Service (USFWS) on February 7, 2008, Mr. Hobgood indicated that based on USFWS records; there was no critical habitat on the Project Property and no records of use of the Project Site by any federally listed species.

Based on phone conversations between the Florida Fish & Wildlife Conservation Commission (FWC) and RS Environmental Consulting, Inc. on March 4, 2008, the Commission has decided that no comments are required from the FWC on the Beacon Countyline DRI.

The combination of the lack of observations of any On-Site habitat utilization by any endangered species through continued Site inspections by RS Environmental Consulting, Inc., along with the comments provided by the U.S. Fish & Wildlife Service and the Florida Fish & Wildlife Conservation Commission is an indication of the lack of habitat on the Project Site for any threatened or endangered animal species.

4. <u>COMMENT</u>: Based on the submitted documentation, secondary impacts to off-site wetlands have not been addressed. Please update project documentation to identify adjacent wetlands/other surface water resources and include measures proposed to off-set potential adverse secondary impacts associated with project development. In addition, will the proposed project negatively affect the hydrology of off-site wetlands? Please discuss how these potential adverse secondary impacts to off site wetlands will be resolved.

RESPONSE: A secondary impact analysis has been conducted for the wetlands within Section 17 adjacent to the proposed work associated with the closure of the landfill and construction of the commercial facility. The analysis includes the assumption that secondary impacts extend 25 feet from either the edge of construction or from the toe of slope of any road construction on property not owned by the Applicant consistent with traditional secondary impact analysis associated with the impact review for the SFWMD. Please note that impacts to wetlands owned by the Applicant are dealt with through direct impact analysis.

Because of the configuration of the Project, the Golden Glades right-of-way in the north central portion of the Project is enclosed by the proposed commercial and retail development portions of the Project. As a result of this configuration, secondary wetland impacts have been calculated for both the north and south boundaries of the entire right-of-way within the Project boundaries. The results of this analysis indicate that there will be 6.06 acres of secondary wetland impacts to the Golden Glades right-of-way.

As part of the overall secondary impact analysis, the secondary wetland impacts of the construction of roads are being considered in this response. The roads considered in this analysis include NW 97 Avenue from NW 154 Street to NW 170 Street, NW 107 Avenue from theoretical NW 107 Street to theoretical NW 162 Street, and NW 162 Street from NW 97 Avenue to NW 102 Avenue. The locations of these streets being considered in the secondary impact analysis are shown in **Exhibit 13.3 – Conceptual Silt Fence Barrier Locations** located in the revised **Question 13 – Wetlands**. The results of the analysis anticipate that there will be 6.06 acres of secondary impacts associated with the construction of roads around the Project that ultimately will have to be built. The individual secondary impacts for each road are shown in **Exhibit 13.4 – Secondary Wetland Impacts** located in the revised **Question 13 – Wetlands**. Please note that secondary impacts to wetlands north of the Project Site are not anticipated due to the Golden Glades Canal that lies immediately north of NW 170 Street because of the lack of any vegetated-shelf along the banks and the steep banks of the canal.

Finally, it is not anticipated that there will be any secondary wetland impacts to the rock mining lakes to the south and west of the Project Site due to the heavily impacted nature of the existing mining operations.

5. <u>COMMENT</u>: The current project submittal proposes to off-set all wetland impacts within a mitigation bank. However, the submitted documentation has not demonstrated that practicable design modifications have been made to reduce or eliminate proposed wetland impacts. It also does not indicate if the referenced mitigation bank is located within or outside the project drainage basin as depicted in Figure 4.4.1 of the District's Basis of Review for ERP applications. If the mitigation site is located outside the project drainage basin, a cumulative impact assessment demonstrating that no adverse impacts to the wetland resources

within the drainage basin will occur must be provided. Upon resolution of these issues, District staff will determine the amount of mitigation bank, a letter referencing the mitigation credits reserved for this project will be required to be submitted by this entity.

RESPONSE: The Applicant has committed to working with DERM to close the landfill in accordance with all current closure requirements. The combination of the closure requirements, along with the stormwater management system design, and the street and building layout necessitates the filling of the 104 acres of wetlands On-Site. Please note that the revised number of wetland acres on the Project Site is now 104 acres with the removal of the Golden Glades Right-of-Way. A thorough elimination and reduction of wetland impacts analysis will be conducted as part of the Environmental Resource Permitting process with the South Florida Water Management District. Please refer to the response to Comment 2, above, for further discussion on the primary need to fill the wetlands.

The Applicant is exploring all options for offsetting the unavoidable impacts to wetlands. It is anticipated that the majority of the mitigation plan will consist of the purchase of credits at local mitigation banks including the Hole-in-the-Donut and the Everglades Mitigation Bank. Details of the mitigation plan will be developed in coordination with the environmental permitting processes of the U.S. Army Corps of Engineers, South Florida Water Management District and the Miami-Dade County Department of Environmental Resources Management. Based on correspondence with the SFWMD, the Applicant is exploring the potential for acquiring privately owned land within the boundary of the Pennsuco wetlands to demonstrate environmental improvements that provide "regional ecological value that provides greater long term ecological value than the area of wetland or other surface water to be adversely affected and the proposed mitigation will provide greater long term ecological value than the area of wetlands or other surface water to be adversely affected" consistent with Section 4.2.1.2 of the Basis of Review. This option is being explored because of the low ecological value of the function provided by the area of wetlands to be adversely affected by the Project. If this demonstration of greater regional ecological value is successively achieved, it is our understanding that the District will not require the Applicant to implement practicable design modifications to reduce or eliminate impacts. The Applicant will provide information on this acquisition option as it becomes available.

6. <u>COMMENT</u>: Please indicate on the project plans the location of silt barriers/floating turbidity barriers to maintain state water quality standards in adjacent off-site wetlands and other surface waters during project construction. How will landfill materials be excavated and stored during project construction to prevent erosion/runoff into adjacent wetlands and other surface waters?

<u>RESPONSE</u>: Exhibit 13.3 – Conceptual Silt Fence Barrier Locations located in the revised Question 13 – Wetlands shows the proposed placement of turbidity screens around the entire perimeter of the Project to control erosion to meet water quality standards.

To meet the required grades and elevations for construction of the Development and to comply with zoning requirements, significant spreading and shaping of the debris must be conducted. Spreading of debris will be in only those areas that currently have in-

place debris and are or were permitted to receive the debris. It is not anticipated that material will be hauled and disposed off site.

BMPs will be employed to handle the relocation and storage of landfill materials properly during Project construction. A waste relocation plan will be developed to minimize the disturbance of landfill materials On-Site and to prevent erosion/runoff into adjacent wetlands and other surface waters prior to waste relocation. **Exhibit 13.3 – Conceptual Silt Fence Barrier Locations** shows the potential locations of silt barriers/floating turbidity barriers. The following actions will be employed to prevent erosion/runoff into adjacent wetlands and other surface waters as necessary:

- To control soil erosion due to wind, during site preparation the disturbed areas of the Site will be sprayed with water using water trucks. Keeping the soil surface moist will control dust and soil erosion. Contractors will be required to have water trucks On-Site to control dust.
- To control soil erosion due to water, erosion control devices (silt fences, temporary swales and hay bales, as appropriate) will be installed in the immediate vicinity of the waste relocation areas. Erosion control devices will stop soil particles carried by water from entering waterways, storm water drains, drainage swales, and surface water detention areas. Contractors shall be responsible for maintaining appropriate erosion control devices.
- Silt barriers/floating turbidity barriers will be used during waste relocation that may impact the adjacent surface water. Turbidity barriers will prevent turbidity in water in the vicinity of the earthwork location from propagating to other areas of the surface water pond.
- Gravel will be placed at the entrance to the Site to clean mud from truck tires. Gravel will minimize the amount of mud and soil carried off-site by trucks.
- 7. <u>COMMENT</u>: What is the current compliance status of the on-site Peerless Landfill? What methodologies will be used to remediate extensive on-site landfill materials and address associated subsidence issues and elevated groundwater ammonia levels? How will this remediation work be incorporated into project permitting activities?

RESPONSE: The former Peerless C&D Landfill has not accepted C&D debris since 2000. The prior owner of the Property went bankrupt, and the FDEP solid waste permits and the FDEP or SFWMD ERPs associated with this Property expired in 2005. The Applicant purchased the Property in 2005 to develop it into a commercial/industrial center that will enhance the area and contribute to the economic growth of the City of Hialeah and South Florida. The Applicant intends to comply with the requirements for C&D landfill closure and has been working with regulatory agencies and the City of Hialeah to establish a program for the re-development of the Site.

The landfill closure will be constructed concurrently with the Development. An ERP associated with the Property was submitted to the SFWMD in December 2007 and is being processed for permitting. The Applicant will submit a landfill closure permit application to DERM in August 2008, including civil (infrastructure) plans for a portion of the Site (Phase 1), and conceptual closure and stormwater management plans and for the balance of the Site.

The landfill materials On-Site will be graded and relocated as necessary to allow construction of the Development and in compliance with the approved zoning resolutions. To address subsidence issues, geotechnical investigations regarding the stability of the fill materials and a gas survey regarding the methane generation at the Site are currently underway. Appropriate structural design will be employed to account for possible settlement. If necessary, appropriate methane gas management systems will be incorporated at the Site, similar to other systems used at similar projects in South Florida. Both methane gas management and potential settlement concerns will be addressed as necessary during the Project design, permitting and construction phase. Providing an essentially impervious cap, consisting of buildings, parking lots and roadways over the majority of the Property will minimize the infiltration of stormwater through the landfill material. Pervious areas will be capped with a 2 foot thick layer of approved materials and vegetative cover. Because infiltration through the waste materials will be minimized by the cap, groundwater ammonia levels are anticipated to gradually decrease to values below the Groundwater Cleanup Target Level (GCTL). The groundwater on the Site has been monitored semi-annually for several years through a groundwater monitoring plan approved by DERM. The Applicant is working with DERM and will continue to evaluate and track the groundwater quality On-Site. The most recent groundwater monitoring results were submitted to DERM for review in April 2008.

Solid waste and environmental concerns will be addressed in the following permits: ERP through SFWMD, Class VI through DERM, and Solid Waste Closure Permit delegated by the FDEP to DERM. These permits will be modified as development progresses to ensure that each phase of the Project meets the permit requirements and the modifications will be approved by the appropriate agencies.

8. <u>COMMENT</u>: Is dewatering proposed during any construction activities? If so, how will potential contamination issues be addressed? The District requires a water use permit for short-term dewatering activities unless the work qualifies for a "No Notice Dewatering Permit" pursuant to Section 40E-20.302(3), F.A.C.

RESPONSE: Currently, it is not anticipated that dewatering will be required for Site development; however, it is acknowledged that permits/approvals will be required from SFWMD and DERM if dewatering is necessary. If there is a potential for induced movement of existing contamination plumes resulting from un-anticipated dewatering activities for development, the Applicant will coordinate with DERM and SFWMD staff to address the associated issue.

Question 17: Water Supply

9. <u>COMMENT</u>: The acreage for the proposed park is not included in the non-potable demand table. The estimated irrigated acreage for all other parcels is 39.5 acres. The park parcel is another 40 acres. Non-potable water demand could almost double by adding the park. The applicant is not including the park acreage because of the uncertainty of the irrigated acreage. A conservative acreage figure for the park should be included. The applicant is advised the on-site surface or groundwater withdrawals will require a water use permit from the District. An application to use groundwater must include and analysis of the potential for induced movement of pollutants. Any permit application for use of water on-site

must demonstrate that the withdrawals do not impact Lower East Coast Everglades water bodies.

The acreage for the proposed park is not included in the non-potable demand table. The estimated irrigated acreage for all other parcels is 39.5 acres. The park parcel is another 40 acres. Non-potable water demand could almost double by adding the park. The applicant is not including the park acreage because of the uncertainty of the irrigated acreage. A conservative acreage figure for the park should be included. The applicant is advised the on-site surface or groundwater withdrawals will require a water use permit from the District. An application to use groundwater must include and analysis of the potential for induced movement of pollutants. Any permit application for use of water on-site must demonstrate that the withdrawals do not impact Lower East Coast Everglades water bodies.

<u>RESPONSE</u>: Below is the revised **Table 17.2 (R2)** found in **Question 17 – Water Supply** that includes the City's park acreage.

Table 17.2 (R2) Average Non-Potable Water Demand for Irrigation (High Period)				
Proposed Development		Irrigation Water Demand*		
Use	Acres	Acres Requiring Irrigation	Gallons Per Day	
Warehouse	275	10% of Total	106,700	
Office	55	10% of Total	21,340	
Retail and Restaurants	51	10% of Total	19,788	
Hotel	8	20% of Total	6,208	
City Park	60	60% of Total	139,680	
Total Gallons Per Day Demand			293,716	
Source: PBS&J				

^{*} Estimates are for application of one inch weekly to areas requiring irrigation, representing usage in a warm period with low rainfall. The estimates assume that 10% of warehouse, office and retail tracts, and 20% of the hotel site, will require irrigation. The acreage shown for the City Park is the size of the land being dedicated to the City of Hialeah. It is anticipated that the areas being irrigated would be limited to the playing fields and landscaping in the parking lots and next to the buildings. Thus, 60% of the site or 36 acres would be irrigated.

The Applicant acknowledges the need for a water withdrawal permit for any On-Site with-drawals and will prepare a water use application that addresses the requirements of the Lower East Coast Everglades water bodies. As stated in **Table 17.2** (R2), above, the demands are based on one inch of water per week during the warm period with low rainfall. These figures therefore represent a worst case scenario. Water conservation measures will be implemented including but not limited to the use of xeriscape plant materials, low flow irrigation heads, irrigating at night and minimizing the area being irrigated. A water use permit would be obtained from the SFWMD at the time of design. If required, groundwater modeling would be performed to confirm that SFWMD requirements are met.

10. <u>COMMENT</u>: The response to FDEP Question 3 states that City of Hialeah staff has indicated that a purple pipe distribution system is not necessary. If a Water Use Permit is issued for this project, it will require that the permittee use reclaimed water or potable water would be the only supply options. Either way, the irrigation system should be designed to use reclaimed water.

RESPONSE: The Applicant proposes to construct a central irrigation water distribution system to serve the Site. This system would include a pump station that would withdraw ground water either from the On-Site lake or a well. The proposed distribution system would be designed for the eventual connection to a reclaimed water source whenever it becomes available to the Site. Operation of the ground withdrawal pumping system would cease upon connection to the reclaimed water source. The proposed irrigation system would be designed to conform to the requirements of a reclaimed water system which would include the use of purple pipes.

11. **COMMENT**: Who will operate and maintain the irrigation system?

RESPONSE: The central irrigation system would be operated and maintained by the Property Owners' Association.

12. <u>COMMENT</u>: Please provide the required letter from the portable water supplier that addresses the requirements of Question 17.F.1.a through c.

RESPONSE: The service provider letters have been received from the City of Hialeah and from Miami-Dade County Water and Sewer Department. These letters are attached as part of revised **Question 17 – Water Supply** and revised **Question 18 – Wastewater Management** included in this response.

Question 18: Wastewater

13. <u>COMMENT</u>: Please provide the required letter from the wastewater provider that addresses the requirements of Question 18.C.

<u>RESPONSE</u>: The service provider letters have been received from the City of Hialeah and from Miami-Dade County Water and Sewer Department. These letters are attached as part of revised **Question 17 – Water Supply** and revised **Question 18 – Wastewater Management** included in this response.

Question 19: Stormwater Management

14. <u>COMMENT</u>: The responses to this question are inadequate. Information not provided includes the location of proposed wet retention lakes, details of how the different parcels will be interconnected with the wet retention lakes, typical exfiltration trench and overflow structure details, proposed control elevations, lake cross-section details, and typical lot and road grading schemes. In addition, preliminary calculations that include land use acreages, stage-storage assumptions, anticipated percolation rates for exfiltration trench design, and preliminary design storm information should be provided to demonstrate that water quality and flood protection criteria will be met.

RESPONSE: The Applicant proposes to construct two On-Site lakes that will provide fill material for the Site as well as provide stormwater storage capacity. In addition to the lake, the proposed stormwater management system will be designed to retain the runoff from a 100-year 72-hour storm event On-Site. The proposed system would include exfiltration trenches (French drains) and dry retention swales On-Site. The proposed stormwater management system would consist of a stormwater collection component that would route the runoff into a system of approximately 22,600 linear feet of perimeter

swales and approximately 17,500 linear feet of French drains. The French drains would be 15-feet deep. The system of French drains and swales would be designed to store and percolate runoff into the ground thereby recharging groundwater. Excess runoff would discharge through overflow structures into the On-Site lakes. Water quality requirements would be met by the dry storage provided by the French drains and the swales. The conceptual stormwater management plan and typical details of the lake shore and swale are included in Figure 19.1 – Conceptual Stormwater Management and Figure 19.2 – Conceptual Stormwater Details located in the revised Question 19 – Stormwater Management included in this response.

15. <u>COMMENT</u>: As portions of the property were previously used as a construction and demolition landfill, issues related to the closure requirements for the landfill must be addressed. The ADA indicates that the location of lakes and other stormwater drainage facilities will depend on closure requirements. The ADA also indicates that the applicant is exploring various stormwater management concepts that may include conveyance of some or all stormwater to offsite water bodies. Without more detailed information, District staff is unable to complete its review of the proposed stormwater management plan.

RESPONSE: The Applicant is currently coordinating with DERM regarding the closure/development plans. The Development plans are anticipated to incorporate the landfill closure, and construction of the closure will be concurrent with the construction of the Development. The final cover will consist of an essentially impervious cap consisting of buildings, parking lots and roadways, over the majority of the Site and a 2-ft thick layer of approved materials and vegetative cover in pervious areas. The construction phases and schedule will be approved by DERM in compliance with the regulatory closure requirements.

The proposed conceptual stormwater management plan consists of two On-Site lakes that would provide wet retention, approximately 22,600 linear feet of perimeter dry retention swales and approximately 17,500 linear feet of exfiltration trenches (French drains). The conceptual stormwater management plan and typical details of the lake shore and swale are illustrated in Figure 19.1 – Conceptual Stormwater Management and Figure 19.2 – Conceptual Stormwater Details located in the revised Question 19 – Stormwater Management included in this response.

16. <u>COMMENT</u>: The ADA contemplates conveyance of some or all storm water to water bodies located adjacent to the project site. Please identify all areas proposed to be incorporated into the project site and revise the ADA accordingly.

RESPONSE: The proposed conceptual stormwater management system for the Site does not include off-site lake storage and does not anticipate the need for such storage. However, the Applicant wishes to have this option available should the need arise. Off-site lake storage would be subject to the need for such storage and the ability to negotiate storage rights with the owners of the lakes in adjacent properties.

17. <u>COMMENT</u>: Will silt barriers/floating turbidity barriers be utilized to maintain state water quality standards in adjacent offsite wetlands and other surface waters during project construction? How will landfill materials be excavated and stored during project construction to prevent erosion/runoff into adjacent wetlands and other surface waters?

RESPONSE: The Project plans have been revised to show the placement of turbidity screens around the entire perimeter of the project to control erosion to meet water quality standards as shown in **Exhibit 13.3 – Conceptual Silt Fence Barrier Locations** located in the revised **Question 13 – Wetlands** included in this response. The actual location of these turbidity screens will be relocated and adjusted, as appropriate, during construction.

To meet the required grades and elevations for construction of the Development and to comply with zoning requirements, significant spreading and shaping of the debris must be conducted. Spreading of debris will be in only those areas that currently have inplace debris and are or were permitted to receive the debris. It is not anticipated that material will be hauled and disposed off site.

BMPs will be employed to handle the relocation and storage of landfill materials properly during project construction. A waste relocation plan will be developed to minimize the disturbance of landfill materials On-Site and to prevent erosion/runoff into adjacent wetlands and other surface waters prior to waste relocation. **Exhibit 13.3 – Conceptual Silt Fence Barrier Locations** shows the potential locations of silt barriers/floating turbidity barriers. The following actions will be employed to prevent erosion/runoff into adjacent wetlands and other surface waters as necessary:

- To control soil erosion due to wind, during Site preparation the disturbed areas of the Site will be sprayed with water using water trucks. Keeping the soil surface moist will control dust and soil erosion. Contractors will be required to have water trucks On-Site to control dust.
- To control soil erosion due to water, erosion control devices (silt fences, temporary swales and hay bales, as appropriate) will be installed in the immediate vicinity of the waste relocation areas. Erosion control devices will stop soil particles carried by water from entering waterways, storm water drains, drainage swales, and surface water detention areas. Contractors shall be responsible for maintaining appropriate erosion control devices.
- Silt barriers/floating turbidity barriers will be used during waste relocation that may impact the adjacent surface water. Turbidity barriers will prevent turbidity in water in the vicinity of the earthwork location from propagating to other areas of the surface water pond.
- Gravel will be placed at the entrance to the Site to clean mud from truck tires. Gravel will minimize the amount of mud and soil carried off-site by trucks.

The proposed conceptual stormwater management system for the site does not include off-site lake storage and does not anticipate the need for such storage. However, the Applicant wishes to have this option available subject to the need for such storage and negations with the owners of the lakes in adjacent properties.