## SHOMA DEVELOPMENT – FONTAINEBLEAU WEST – CIVIL ENGINEERING, DESIGN AND PERMITTING SERVICES

**Client Name:** Shoma Homes Development

**Type of Service:** Civil Engineering – Design and Permitting Services- Fontainebleau West

Milian, Swain and Associates, Inc. (MSA) was retained by Shoma Development Corporation to perform Civil Engineering, Design and Permitting Services for the Fontainebleau West

Development located in Miami-Dade County, Florida. MSA services included:

## **Data Collection:**

- Requested as-built plans from the existing utilities providing service in the area.
- Coordinated with a utility locator to ensure that existing underground utilities are identified for inclusion in the design plans.



- Conducted a site visit, documented the visit with photographs and made appropriate notations for consideration during the design phase.
- Coordinated with the Client's surveyor to identify the minimum survey data required for design and permitting of the Civil Engineering plans.
- Coordinated with the Client's Geotechnical Engineer to identify the minimum geotechnical data required for design and permitting of the water management and drainage system.

Onsite Paving, Grading and Drainage: MSA prepared onsite paving, grading and drainage (PG&D) plans in accordance with the South Florida Water Management District (SFWMD), the Miami-Dade County Department of Environmental Resources Management (DERM) and the Miami-Dade County Public Works Department (MDCPW) criteria. The following services were performed under this task:

- Prepared water management calculations considering a 10 year-24 hour, 25 year-72 hour and 100 year-72 hour design storm event. MSA advised Shoma Development Corporation and the project architect regarding the water management area required to service the previously mentioned storm events.
- Prepared secondary drainage system calculations considering a 5 year-24 hour storm event. The street drainage was designed to provide water quality prior to discharge to on-site wet detention areas.
- Prepared a demolition plan depicting the portions of the existing golf course that will be cleared for construction of the proposed development. Said plan will identify water and sewer utility relocations, easements to be vacated, buildings to be demolished and existing dry/wet detention areas to be modified.
- Prepared paving, grading and drainage plans.





**Onsite Water Distribution** System: MSA prepared onsite distribution water system plans in accordance with the Miami-Dade Water & Sewer Department, Miami-Dade County Fire Department, Miami-Dade County Department of Environmental Resources Management and Miami-Dade County the Health Department criteria. The following services were performed under this task:

Prepared onsite water distribution system plans

depicting 8" and 12" minimum diameter water mains and associated valving as required by the MDWASD. The proposed water mains will be placed within a MDWASD water easement.

- Depicted a plan and profile of the proposed water distribution system.
- Developed a WaterCAD model to ensure that the proposed system meets the Fire Department minimum fire flow requirements.

Onsite Sanitary Sewer Collection System: Prepared onsite gravity sanitary sewer collection system and private pump station plans in accordance with the Miami-Dade Water & Sewer Department and Miami-Dade County Department of Environmental Resources Management criteria.

<u>Permitting Services:</u> MSA assisted Shoma Development Corporation in the preparation and processing of permit applications through agencies having regulatory jurisdiction over this project

