

QUESTION 15 – SOILS

See State Comprehensive Plan (Chapter 187, F.S.)

GOAL (9); POLICIES (6),(9)

GOAL (16); POLICIES (6)

A.

1. Provide a description of each of the soils indicated on Map E utilizing the following format:

Table 15-1, Soil Descriptions and Interpretations, provides a description of the soils identified in Map E, General Soils Classification, as occurring in the Main Street at Coconut Creek project area. These descriptions were prepared based on information in the Soil Survey of Broward County, Florida, Eastern Part (U.S. Department of Agriculture, Soil Conservation Service, 1984) and field verified.

TABLE 15-1 SOIL DESCRIPTIONS AND INTERPRETATIONS					
SOIL NAME AND MAP SYMBOL	BRIEF SOIL DESCRIPTION	SEASONAL HIGH WATER TABLE DEPTH DURATION	PERMEABILITY RATE (IN/HOUR)	DEGREE & KIND OF LIMITATION FOR PROPOSED USES	DEGREE & KIND OF LIMITATION FOR POND EMBANKMENTS
Hallandale Fine Sand (Ha)	Nearly level, poorly drained organic soil underlain by limestone at a depth of 7 to 20 inches.	0 feet above the soil surface and 1 foot below the soil surface from Jun.-Nov.	6.0 - 20	Severe	Severe
Immokalee Fine Sand (Ia)	Nearly level, deep, poorly drained, sandy soil that has a layer well coated with organic matter at a depth of 30 inches or more.	0 feet above the soil surface and 1 foot below the soil surface from Jun.-Nov.	6.0 - 20	Severe	Severe
Margate Fine Sand (Ma)	Nearly level, poorly drained, sandy soil	1 foot above the soil surface and 1 foot below the soil surface	6.0 - 20	Severe	Severe

**TABLE 15-1
SOIL DESCRIPTIONS AND INTERPRETATIONS**

SOIL NAME AND MAP SYMBOL	BRIEF SOIL DESCRIPTION	SEASONAL HIGH WATER TABLE DEPTH DURATION	PERMEABILITY RATE (IN/HOUR)	DEGREE & KIND OF LIMITATION FOR PROPOSED USES	DEGREE & KIND OF LIMITATION FOR POND EMBANKMENTS
	underlain by limestone at a depth of 20 to 40 inches but has solution holes as deep as 60 inches.	from Jun.-Feb.			
Pompano Fine Sand (Pp)	Nearly level, deep, poorly drained, sandy soil in sloughs and broad flats.	0 feet above the soil surface and 1 foot below the soil surface from Jun.-Nov.	> 20	Severe	Severe

2. Describe the potential for subsidence and any unique geologic features (such as sand dunes, bluffs, sinkholes, springs, steepheads, etc.) on the site. Discuss what aspects of the site plan will be used to compensate for or take advantage of these features.

The Main Street at Coconut Creek project area is largely composed of fine sands. Soil limitations for development are severe due to wetness and ponding. Appropriate construction measures will be used to avoid subsidence and other soil related problems. The project area will require fill which can be obtained from on-site lake construction.

- B. Where a soil presents a limitation to the type of use proposed in the development, state how the limitation will be overcome. Specify construction methods that would be used for building, road and parking lot foundations, and for lake or canal bank stabilization as relevant.

The Main Street at Coconut Creek project area is largely composed of fine sand underlain by limestone at a depth of 7-40 inches or organic matter at a depth of 30 inches or more. Soil limitation for development is severe. The limitation will be overcome by applying accepted engineering methods in South Florida, including proper site planning and adding appropriate amounts of fill material. Methods and approaches for specific areas are dependent upon location and land use and will be defined in the detailed engineering design.

- C. What steps will be taken during site preparation and construction to prevent or control

wind and water soil erosion? Include a description of proposed plans for clearing and grading as related to erosion control.

All local, state and federal regulations that are designed to prevent soil erosion and sedimentation will be followed. Construction will proceed in an orderly fashion, with erosion control measures implemented before and immediately after earthwork on the site, as most appropriate.

During construction, temporary dikes will control erosion by hay bales, siltation curtains, and other standard means too assure that discharge from the property during construction will not increase the turbidity levels in the receiving water by more than 29 NTUs. Both wind and water erosion will be controlled by mulching, seeding or sodding, and planting vegetation in cleared areas around buildings as soon as practical. Permanent drainage facilities will be built to keep up with site development and will be closely monitored during the development phase.

At full development, erosion will be controlled by maintenance of ground cover (natural and landscaped) and by a stormwater management system with adequately sized and properly located ponds.

- D. To what degree and in what location(s) will the development site be altered by fill material? If known, specify the source location and composition of the fill. Also identify the disposal location for any overburden or spoil.

The level of site planning done for the DRI Application for Development Approval (ADA) does not address the fill areas in detail. In general, for economic reasons, attempts are made to cut and fill within the project boundaries. During the project permitting under local, regional and state agencies, detailed engineering plans will be prepared addressing final site topography and the plans will identify cross sections and quantities of any fill material to be relocated. It is anticipated that all fill requirements can be met with on-site lake construction. Disposal locations for overburden and spoil will be determined at time of construction.