

**Heritage Harbour 150 acres  
Engineer's Summary  
10/7/09**

**ENVIRONMENTAL CONSIDERATIONS:**

There have been three (3) wetlands identified by the Southwest Florida Water Management District (SWFWMD) and the Army Corps of Engineers (ACOE) on the subject property. These wetlands have been identified as Wetlands I, H and M. Currently no impacts to these wetlands have been approved by the Water Management District. However, wetland impacts have been proposed at the County level by means of the DRI Zoning Ordinance and impacts have been approved pursuant to the ACOE Permit for the Heritage Harbour Development. A re-evaluation of wildlife habitat may be required at the time of permit review by both the Water Management District and Manatee County; however, there are no known protected species present on the subject parcel. No additional Federal or ACOE Permitting is necessary for the subject parcel.

**STORMWATER CONSIDERATIONS:**

Runoff rates and locations of discharge were established for the subject site by means of the Heritage Harbour North Master Drainage ERP. These rates and locations were established by means of an adICPR model that incorporated assumed design characteristics (Curve Number, Storage Volume, etc.) based on a conceptual site plan of the subject parcel. These allowable rates are not absolute; however, a stormwater design that proposes runoff rates higher than or in a different location than those approved with the Heritage Harbour North Master Drainage System would fall under more scrutiny by the Water Management District. The subject parcel receives runoff from the Lighthouse Cove development in Heritage Harbour. This runoff must be accounted for in the drainage design of the subject parcel. Please refer to the attached Stormwater Discharge Exhibit for the location of approved inflows and outflows relating to the subject parcel.

**SITE FILL:**

Based on limited existing topographic data for the subject parcel and proposed grades for the River Strand Golf Course and adjacent development for Heritage Harbour North, it is estimated that approximately 3% of fill would be necessary on lot pads and within proposed right-of-ways to establish minimum elevations.

**FLOODPLAIN MITIGATION:**

The subject site falls within Zones AE and Zone B of the FEMA floodplain. In this case, only a small portion of the site falls within the AE zone. For each lot located within this area, a LOMR-F will be necessary prior to closing of the home sale for insurance purposes. At this time, there are no additional floodplain mitigation or considerations anticipated.

**IRRIGATION:**

A sixteen inch (16") irrigation main has been stubbed out adjacent to the subject parcel. This main is connected to the main irrigation pumps located on the west bank of Lake 71 adjacent to Lighthouse Cove Unit 3. This lake is augmented by both a recharge well and reuse water provided by Manatee County.

**SANITARY SEWER:**

The current master sanitary sewer plan assumes a build-out density for Parcels 1&5 of 480 residential single-family units. It is anticipated there is sufficient capacity within the existing system to accept flow for the build-out of the subject parcel pursuant to the proposed General

Development Plan, which proposes 695 units; however, this will depend on the product mix of single- and multi-family units within the development. This should be investigated in more detail during the site planning for the subject parcel.

**POTABLE WATER:**

Because of pressure present within the existing water distribution system, it is anticipated that the density within the proposed General Development Plan can be supported, regardless of the product mix.