PERMIT NARRATIVE
MINING OPERATING PERMIT APPLICATION
SEVEN DIAMONDS MINE
SPRING HILL, PASCO COUNTY, FLORIDA

1.0 PURPOSE

Seven Diamonds, LLC is applying for a Pasco County Mining Operating Permit to construct and operate a sand and limestone mine. The purpose of this narrative summary is to provide technical information and corroborating documentation in support of this application. A complete mining operating permit application including the mining checklist and all applicable figures, drawings, and exhibits detailing the proposed mine are provided herein. A pre-application meeting was held with Pasco County Zoning and Intake Site Development staff on May 26, 2015.

2.0 PROJECT DESCRIPTION & SITE HISTORY

The proposed Seven Diamonds Mine is located at 16303 U. S. Highway 41 in Spring Hill, Pasco County, Florida. The site is situated approximately 5.5 miles north of the State Road (SR) 52, in Section 15 of Township 24 South, Range 18 East. The site is fenced and accessed via a gate on the west side of U.S. Highway 41. A site location map is provided as Figure 1.

The Seven Diamonds mine site is currently used for agriculture. Per the Florida Land Use Cover and Forms Classification System (FLUCFCS), the property is composed primarily of cropland and pasture (Code 2100), with subordinate areas of conifer-hardwood mixed forest (Code 4340), stream and bottomland swamp (Code 5200), longleaf pine/xeric oak forest (Code 4120), and tree plantation (Code 4400) habitats; wet prairie (Code 6430) habitats in the southern part of the project area are associated with Buzzard Lake and Crews Lake.

The Seven Diamonds mine site is situated immediately north and west of the Lago Verde sand and limestone mine. The Lago Verde mine operates under Florida Department of Environmental Protection (FDEP) Environmental Resource Permit (ERP) No. 300890-002, issued on January 7, 2012. The Seven Diamonds mine is also located north and west of the Equus Reserve Borrow

Pit. The Equus Reserve mine operates under Southwest Florida Water Management District (SWFWMD) ERP No. 43030508.000, issued on November 30, 2006.

3.0 SITE OWNERSHIP

According to available information from the Pasco County Property Appraiser's office, the proposed project site is contained within parcel ID # 15-24-18-0000-00300-0000. The project area encompasses a total of 284.72 acres. The property is owned by Seven Diamonds, LLC. Property ownership information is presented in Attachment C.

4.0 PROPOSED ACTIVITY

The subject property is underlain by a variable thickness of fine grained quartz sand, then a discontinuous thin layer of clayey sand and clay, and finally limestone of underdetermined thickness. The water table occurs near the top of the limestone.

Seven Diamonds, LLC proposes to mine sand and limestone resources at the site. The proposed mine pit encompasses a total of approximately 143 acres. Dry mining of the sand above the water table will be accomplished via front-end loader and/or track-mounted excavator. Mining of the limestone will be conducted using a track-mounted excavator or dragline. Drill and blast techniques will be used to break up the limestone for excavation. Excavated limestone will be crushed, screened, and washed on site to produce aggregate products. Limestone mining is proposed to a depth of approximately 90 feet below water table. No dewatering is proposed. No chemicals will be used at any time during the mining operation.

Production rates are market-driven and cannot be predicted. The permittee expects that the mine will operate 6 days per week (Monday through Saturday) during daylight hours. The mine is expected to operate for up to 25 years, depending upon the demand for product. The operation is anticipated to provide up to 10 new jobs.

5.0 SOILS

Native soils within the project boundary are composed of the following units:

- Tavares fine sand, 0-5% slopes
- Candler fine sand, 0-5% slopes
- Candler fine sand, 5-8% slopes
- Basinger fine sand
- Basinger fine sand, depressional
- Nobleton fine sand, 0-5% slopes

Basinger, Candler, and Tavares series units are classified as sandy soils with minor to trace amounts of clay and organic matter; Nobleton series is a clayey soil with minor amounts of organic matter and up to 40% clay. Candler series soils are classified as excessively drained; Tavares series soils are moderately well drained; Nobleton series is somewhat poorly drained; and the Basinger series soils are classified as poorly to very poorly drained. Basinger series are hydric soils. Tavares and Candler series soils are in hydrologic soil group A, the Basinger soils are in hydrologic group A/D, and Nobleton fine sand is in hydrologic group C/D. A soils map is included in Exhibit B of the ERP application package in Attachment D.

6.0 WILDLIFE AND WETLAND SURVEYS

A flora and fauna survey, including a survey for wetlands within the project boundaries, was conducted on the subject property in July, 2010. A follow-up inspection was completed in August, 2013. A copy of these reports as well as Florida Natural Area Inventory (FNAI) bio-diversity matrix reports are included in the ERP application package in Attachment D.

Surface water and wetland lines were field delineated and verified by SWFWMD in November, 2014, and surveyed by a Florida professional land surveyor in December, 2014. A copy of the wetland survey is included in the ERP application package in Attachment D.

The surface water line survey recognized two surface water features. Buzzard Lake is located in the southwestern part of the project site, and Crews Lake is situated on the extreme western edge of the project area. Results of the wetland delineations identified eight wetlands on the project site totaling 22.285 acres. Seven of these wetlands (Wetland Areas 1 through 6 and 1A) are

associated with Buzzard Lake and are classified as Category II wetlands per Pasco County Comprehensive Plan Conservation Objective 1.3; Wetland Area 7 is associated with Crews Lake, and is classified as a Category I wetland.

One listed species, gopher tortoise (*gopherus polyphemus*), was reported on the site in the 2010 survey. Follow-up surveys in 2013 showed gopher tortoises continue to inhabit the site. Prior to initiating excavation at the site, a gopher tortoise relocation permit will be obtained from the Florida Fish and Wildlife Conservation Commission (FWC). No other protected species were identified on the site.

No impacts to existing wetlands are proposed by this project. Existing on-site wetlands will be avoided and preserved. A minimum 25-foot buffer will be provided around all existing wetlands. The applicant has opted to not utilize dewatering, which will further minimize secondary impacts to wetlands and other surface waters. No groundwater withdrawals are proposed by this project. Best management practices for sediment and erosion control will be followed to prevent sedimentation to preserved wetlands.

7.0 HYDROGEOLOGY

The geology in the vicinity of the Seven Diamonds Mine is comprised of a thin veneer of undifferentiated sands and clays of Quaternary to Recent age overlying Tertiary-age limestones. In Pasco County, the veneer of sands and clays overlying the limestone can range from a few inches to more than 200 feet in thickness. A more detailed summary of the hydrogeology of the site is included in the ERP application package in Attachment D.

The Seven Diamonds Mine property is situated in an area where the surficial aquifer that existed in the sands above the clay and limestone has been depleted by long-term pumping at the Cross Bar Ranch Wellfield (CBRW), located approximately one mile east of the site. Crews Lake, a portion of which is on the Seven Diamonds property, has been mostly dry for many years.

8.0 DRAINAGE

All stormwater will be routed to the mine pits, which have more than adequate capacity to retain the design 25-year, 24-hour storm event. Due to a combination of natural topography and depth to water, all stormwater can easily be contained on site and no discharge from the site is anticipated. Pre- and post-development drainage maps and stormwater calculations are included in the ERP application package in Attachment D. No new impervious surface is proposed by this project. A stormwater pollution prevention plan is included in the ERP application package in Attachment D.

9.0 CULTURAL AND ARCHEOLOGICAL RESOURCE SURVEY

A cultural and archeological resource survey was conducted on the subject property in September, 2013. No cultural resources eligible for listing on the National Register of Historic Places were identified by the survey. A copy of the report is included in the ERP application package in Attachment D.

10.0 EXISTING FACILITIES

A site plan is included in Exhibit B of the ERP application package in Attachment D. Existing facilities within the proposed mine pit boundary are confined to the southern part of the site and include the following:

- Metal-roofed shed
- 4" livestock irrigation well (WCP #571966)

The metal-roofed shed will be decommissioned and removed prior to initiating excavation in this part of the site. Recyclable construction materials will be transported to an approved recycling center. Non-recyclable construction materials will be properly disposed of at a State-approved construction and demolition debris landfill. Prior to initiating any excavation nearby, the livestock irrigation well will be properly abandoned by a licensed well driller in accordance with Southwest Florida Water Management District (SWFWMD) regulations.

No new permanent structures are proposed by this project.

11.0 RECLAMATION

Reclamation of the Seven Diamonds Mine site shall comply with the requirements in Chapter 62C-36.008, F.A.C and Land Development Code section 404.3.M.10. A mining and reclamation plan is presented in Attachment F.