

- I. Provide the digital GIS data layers for the wetlands, Land Reclamation Units, and mandatory mined areas and relevant metadata, including the source data and map projection systems for the existing and post-reclamation conditions for the proposed project. N/A

Part 3: Stormwater Drainage and Treatment Information and Analyses

Provide drainage calculations signed, dated, and sealed by an appropriate Florida-licensed professional, and supporting documentation demonstrating that the proposed project meets the conditions for issuance under Rules 62-330.301(1)(a), (b), (c), and (e), F.A.C. **Larger mines or more complex mine plans require one or more intermediate stage maps or GIS data layers and drainage calculations to explain how the proposed water management system and offsite flows will change as mining and reclamation progress.** The plans and calculations shall include the following:

- a. Provide separate drainage maps for the existing, construction, and post-reclamation conditions that include the drainage patterns and basin/sub-basin boundaries. Provide the acreage for each basin/sub-basin and include flow direction arrows showing any off-site runoff being routed through or around the system, topographic information, and connections between wetlands and other surface waters below the 25-year 24-hour design storm event applied to the average annual water table. Merge the construction and post-reclamation elevation contours with the existing elevation contours in areas that will remain undisturbed.
- b. Identify the existing and proposed onsite hydrologic soil names and classifications (e.g. Type A, C, B/D, D). Reference the source, such as the U.S. Department of Agriculture/Natural Resource Conservation Service Soil Survey (NRCS), used in estimating the existing onsite hydrologic soil name and classifications. Provide maps, as appropriate, on which the permit area has been delineated.
- c. Indicate the existing and post-reclamation land use and land cover. Provide the acreages and percentages of the total project, for the following:
1. Impervious surfaces (and directly-connected impervious surfaces) excluding buildings, wetlands and other surface waters;
 2. Buildings;
 3. Pervious surfaces (green areas not including wetlands);
 4. Lakes, canals, retention areas, other open water areas; and
 5. Wetlands (Please refer to Section C to ensure consistency in wetland acreages). N/A
- d. Identify the wetland and/or waterbody that will receive discharge from the stormwater management system. Provide the receiving wetland/waterbody seasonal high water or mean high tide elevation, including the dates, datum, and methods used to determine these elevations. N/A
- e. Provide mine-wide drainage analyses for the existing and post-reclamation peak rates of discharge, volumes of runoff, and peak stages for the appropriate design storm events demonstrating that the proposed project meets the stormwater design criteria in the applicable Applicant's Handbook, Volume II. Account for all onsite depressional storage and offsite contributing areas. Refer to the applicable Volume II for the design storm event(s) that applies to the project area. Typically, the information includes the following: N/A
1. Runoff characteristics, including area; runoff curve number or runoff coefficient; hydrologic soil classifications; and time of concentration for each drainage basin/subbasin in the existing and post-reclamation conditions;
 2. Design storms used including rainfall depth, duration, frequency, and distribution;