



**US Army Corps
of Engineers®**

**Department of the Army
Permit Number SAJ-2009-03221(SP-MEP)**

ATTACHMENT B
WATER QUALITY CERTIFICATION
47 Pages

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transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.
15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.
17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.
18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

SPECIFIC CONDITIONS:

1. **SUPERCEDED PERMITS:** This permit supersedes and replaces in its entirety Environmental Resource Permit (ERP) No. 0095520-023, issued by the Department on February 14, 2014, for the Existing Entrance Road; ERP No. 095520-017, issued by the

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Department on December 30, 2011, for the Wingate Mine Extension; and ERP No. 0095520-008, issued by the Department on July 15, 2008, for the Wingate – Ft. Green Utility Corridor.

2. **SOVEREIGN SUBMERGED LANDS:** The permittee is hereby advised that Florida law states: "No person shall commence any excavation, construction, or other activity involving the use of sovereign or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund or the Department of Environmental Protection under Chapter 253, F.S., until such person has received from the Board of Trustees of the Internal Improvement Trust Fund the required lease, license, easement, or other form of consent authorizing the proposed use." Pursuant to Chapter 18-4, F.A.C., if such work is done without consent, or if a person otherwise damages state land or products of state land, the Board of Trustees may levy administrative fines of up to \$10,000 per offense. No sovereign submerged lands have been identified on the property.
3. **HISTORICAL AND ARCHAEOLOGICAL ARTIFACTS:** Pursuant to General Condition 14, if historical or archaeological artifacts are discovered within the project site the permittee shall immediately notify the Bureau of Historic Preservation, Division of Historical Resources, R. A. Gray Building, 500 S. Bronough St., Tallahassee, Florida 32399-0250; the permittee shall also notify the Department, at MiningAndMitigation@dep.state.fl.us, 2600 Blair Stone Road, MS 3577, Tallahassee, Florida 32399, or contact our office at 850.245.8336.
4. **FINANCIAL RESPONSIBILITY:** Financial responsibility shall be provided by the applicant as follows:
 - a. Within 6 months of the Wingate East Mine permit issuance or a later time approved in writing by the Department, the final version of the financial responsibility mechanism for the mitigation costs shall be provided to and approved by the Department as required by Section 10.3.7.4(a), Applicant's Handbook (A.H.). **No work shall be initiated on any area authorized until the Department has approved, in writing, the executed final version of the financial responsibility mechanism.** Pursuant to subsection 373.414(19), F.S., the initial financial responsibility mechanism shall be equal to 110 percent (%) of the estimated mitigation costs for wetlands and other surface waters affected by the first three years of operations covered under this permit; and, for each year thereafter, the financial responsibility demonstration shall be updated, including to provide an amount equal to the 110 percent of the estimated mitigation costs for the next year of operations under the permit for which financial responsibility has not already been demonstrated. The amount shall be adjusted to reduce the financial responsibility, for areas complete through revegetation, to the amount covering the remaining monitoring and maintenance costs for that area. Financial responsibility amounts shall no longer be required for individual wetlands and other surface waters that have been released by the Department, as described in Specific Condition 29. Adjustments shall be submitted with the annual status report required in Specific Condition 10.

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- b. The mitigation cost per acre for the wetland types shall be adjusted annually either by recalculating the cost of constructing, managing and monitoring the mitigation in current dollars or using an inflation factor based on the annual Construction Cost Index, as presented in the first issue of the Engineering News Record published in December of each year. Adjustments shall be submitted with the annual status report required in Specific Condition 10.
- c. In accordance with the Applicant's Handbook, Volume 1 (October 1, 2013):
 1. A permittee must notify the Agency by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the permittee as debtor within 10 business days after the commencement of the proceeding.
 2. A permittee who fulfills the requirements of sections 10.3.7 through 10.3.7.9, by obtaining a letter of credit or performance bond will be deemed to be without the required financial assurance in the event of bankruptcy, insolvency or suspension or revocation of the license or charter of the issuing institution. The permittee must reestablish in accordance with sections 10.3.7 through 10.3.7.9, a financial responsibility mechanism within 60 days after such event.
 3. When transferring a permit, the new owner or person with legal control shall submit documentation to satisfy the financial responsibility requirements of sections 10.3.7 through 10.3.7.9. The prior owner or person with legal control of the project shall continue the financial responsibility mechanism until the Agency has approved the permit transfer and substitute financial responsibility mechanism.
5. CONSERVATION EASEMENT AND LONG TERM MANAGEMENT: The permittee shall provide a phased perpetual conservation easement (CE) to the Department on approximately 1,540.8 acres, including 1,333.8 acres within the Wingate East Mine and 206.8 acres in the off-site Myakka River Headwaters Restoration Project. A Long Term Management Plan (LTMP) (Appendix 4-4-C), covering all of these areas is incorporated as part of this permit. Onsite, the CE area shall include approximately 498.2 acres of unmined lands within and adjacent to the 100-year floodplains of the West Fork of Horse Creek and several wetlands, unnamed tributaries and supporting native upland habitats associated with the Myakka River, [Phase A-1 and A-2 Lands, (Maps 4-8-B-iv and 4-8-C)]. The CE shall also include approximately 835.6 acres of reclaimed land within the Wingate East Mine [Phase A-3 Lands, (Map 4-8-C)]. The reclaimed lands include 766.8 acres of wetlands and other surface waters, 20,464 linear feet of streams and 68.8 acres of uplands including an approximate 25-foot upland buffer around each mitigation wetland, stream or other surface water shown on Map 4-8-B-i. Additionally, a CE shall be placed on the 206.8 acres that covers the Myakka River Headwater Restoration Project [Phase B Lands], which consists of the creation, enhancement and preservation of approximately 149.0 acres of wetlands and other surface waters of which 4,774 linear feet are stream reaches associated with the Myakka River or tributary and approximately 57.8 acres of upland enhancement and

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preservation adjacent to the Myakka River (Figure 6 of the Myakka River Headwaters Restoration Plan, Appendix 4-3-B).

A Baseline Documentation Report (Ecological Baseline Report) shall be completed in accordance with Section 3 of the LTMP, for each of the above categories of lands within the CE prior to execution and recording of each phase of the easement. Baseline reports shall be submitted to the Department for review prior to execution of the easements and shall be recorded with the easement. The Baseline Documentation Report shall be modified for the Phase A-2 lands enhanced as required by Specific Condition 8 following release of all the enhancement areas from all mitigation requirements.

Within 6 months of the Wingate East Mine permit issuance or at a later time approved in writing by the Department, the permittee shall execute in a format acceptable to the Department, the CE and an accurate legal description of Phase A-1 and A-2 lands as granted by the landowner. Within 90 days of execution by the Department, the permittee shall have the document recorded in the public records of Manatee County. Post-Reclamation Phase A-3 lands shall be addressed by modifying the easement following release of each of the individual reclamation units shown on MOS-WC-CPF Map #10 that contain mitigation wetlands or other surface waters. Release of a reclamation unit (LRU) shall include release of all uplands, wetlands and other surface waters in that LRU from the reclamation requirements of Chapter 62C-16, F.A.C., and release of all mitigation wetlands and other surface waters from the requirements of Specific Condition 28. An accurate legal description and amendment to the CE shall be executed by the permittee in a format approved by the Department within one year from the date that the Department has released all lands within that LRU from all reclamation and mitigation requirements. Within 90 days of execution by the Department, the permittee shall have the document recorded in the public records of Manatee County. For the off-site Phase B lands, the CE and an accurate legal description shall be executed by the permittee in a format approved by the Department within one year from the date that the Department has released all lands within the off-site area from all mitigation requirements. Within 90 days of execution by the Department, the permittee shall have the document recorded in the public records of Manatee County. The CE, Exhibits, Amendments, LTMP and the Easement Documentation Reports shall be incorporated and made part of this permit document.

6. **LONG TERM MANAGEMENT PLAN:** The long term management plan (LTMP) associated with the CE required by Specific Condition 5, shall go into effect at different times for each phase of the CE. For Phase A-1 lands, the LTMP shall be effective following recording of the CE. For Phase A-2 lands, the LTMP shall go into effect following release of all mitigation areas from the requirements of Specific Condition 28 and approval of the revised Baseline Documentation Report required by Specific Condition 5. For Phase A-3 lands, the LTMP shall go into effect on the protected areas in each released LRU, as defined in Specific Condition 5, following modification of the CE to add these protected areas. For Phase B lands, the LTMP shall go into effect once the project has been released from all mitigation requirements and the CE has been recorded.

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7. **CONSERVATION EASEMENT SIGNAGE:** All areas within the Phase A-1 and A-2 CE shall be clearly identified in the field with appropriate signage within 90 days of Department's execution of the CE document and shall remain so for the duration of mining operations in the permitted area. All areas within each of the Phase A-3 and B lands shall be clearly identified in the field within 90 days of the Department's execution of the CE document.
8. **ON-SITE ENHANCEMENT:** Within 6 months of the Wingate East Mine permit issuance or a later time as approved in writing by the Department, the following enhancement and restoration activities on approximately 55.2 acres of unmined uplands, wetlands and other surface waters shall be initiated. The Enhancements shall be conducted as shown on Map 4-8-B-iv and described in Appendix 4-3-A, Preservation Enhancement Plan for the Wingate East Mine. The On-Site Enhancement Project is summarized below:
 - a. Restoration of 19.4 acres of pine flatwoods (FLUCFCS 411).
 - b. Restoration of 3.4 acres of mixed upland forest (FLUCFCS 434).
 - c. Restoration of 17.18 acres of wet prairie (FLUCFCS 643).
 - d. Restoration of 2.52 acres of herbaceous marsh (FLUCFCS 641).
 - e. Restoration of 12.8 acres of forested wetlands (FLUCFCS 617 and 630).
 - f. Upland and wetland enhancement activities shall also include control of nuisance and/or exotic species where necessary.
 - g. Upon completion of the mitigation activities identified above, monitoring shall be conducted as described in Specific Condition 35. Reports shall be submitted in accordance with Specific Condition 11.
 - h. The enhancement/restoration activities described in Appendix 4-3-A, shall be deemed complete once the Department has determined the project has met the success criteria for the community type/FLUCFCS code as described in Specific Condition 28. Following completion of the enhancement activities, each enhancement area will be eligible for release in accordance with Specific Condition 29.
 - i. Once the Department has determined that the project has meet the success criteria described in Specific Condition 28, the Permittee shall modify the Baseline Documentation Report and have it rerecorded as described in Specific Condition 5.
9. **MYAKKA RIVER HEADWATER RESTORATION OFF-SITE MITIGATION:** Within 6 months of the Wingate East Mine permit issuance or a later date as approved in writing by the Department, the creation, restoration, enhancement and preservation activities will be initiated on 57.6 acres of uplands and 135.5 acres of wetlands and other surface waters. The remaining 13.7 acres are currently under an existing easement and are only included in the

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project boundary for continuity. These acres are not credited to the Myakka River Headwater Restoration Off-Site Mitigation Project. The project shall be initiated as detailed in Appendix 4-3-B (Myakka River Headwaters Restoration Plan, A Regional Benefit Project) and includes:

- a. Creation of 692 linear feet of Myakka River stream channel; restoration/enhancement of 1,732 linear feet of stream and preservation of 2,350 linear feet of natural stream.
- b. Creation of 0.9 of an acre of Mixed Wetland Hardwoods (FLUCFCS 617, WC-1).
- c. Creation of 2.7 acres of Wet Prairie (FLUCFCS 643) including the construction of ditch blocks.
- d. Enhancement of 5.4 acres of Mixed Wetland Hardwoods (FLUCFCS 617, WE-1, WE-2, WE-3).
- e. Restoration of 35.7 acres of Hydric Pine Flatwoods/Savanah (FLUCFCS 625/626, WR-2).
- f. Restoration of 2.7 acres Herbaceous Marsh (FLUCFCS 641, WR-1) including the construction of ditch blocks.
- g. Creation of 24.8 acres of Pine Flatwoods (FLUCFCS 411, UC-1).
- h. Restoration of 21.5 acres of Pine Flatwoods (FLUCFCS 411, UR-1).
- i. Preservation without enhancement of 84.6 acres of Mixed Hardwood Swamp (FLUCFCS 617, WP-1, WP-2, WP-3), 3.4 acres of Bay Swamp (FLUCFCS 611, WP-4), 0.3 acres of wet prairie (FLUCFCS, WP-5), and 11.3 acres of Upland Hardwood Forest (FLUCFCS 430, UP-1).
- j. The permittee shall follow the diligent and aggressive standard operating procedures (SOPs) for nuisance vegetation maintenance through a multi-year establishment period as outlined in Appendix 4-3-B.
- k. Upon completion of the mitigation activities identified in Appendix 4-3-B, monitoring shall be conducted as described in the Specific Condition 35. Reports shall be submitted in accordance with Specific Condition 11.
- l. Once the Department has determined that the project has met the success criteria described in Specific Condition 28, the Permittee shall complete and execute a Baseline Documentation Report concurrent with the execution and recording of the Myakka River Headwaters Restoration Off-Site Mitigation Area Conservation Easement as described in Specific Condition 5.

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10. ANNUAL STATUS REPORTS: Annual narrative reports shall be submitted to the Department in Tallahassee indicating the status of the project. These reports shall include the following information:

- a. Date permitted activity was begun or projected commencement date if work has not begun on-site;
- b. Brief description and extent of work (site preparation, mining operations, restoration) completed since the previous report or since the permit was issued. Indicate on copies of the permit drawings those areas where work has been completed. This description shall include details on construction of isolation berms adjacent to unmined wetlands, clearing, wetland severance, muck removal, storage and placement, and completed earthwork, and planting;
- c. Brief description and extent of work (site preparation, mining operations, restoration) anticipated in the next year. Indicate on copies of the permit drawings those areas where it is anticipated that work will be done;
- d. The results of any pre-mining wildlife and endangered/threatened species surveys conducted during the year. Copies of any permits obtained and a description of activities taken to avoid or relocate these species shall also be provided; and
- e. The information required in Specific Conditions 4, 12c, 18, 19b, 28 and 32, as needed.

The status reports shall be incorporated into the annual reclamation report required by Chapter 62C-16, F.A.C. The reports should include: a description of problems encountered and solutions undertaken and anticipated work for the following year. The annual report for the previous calendar year is due on or before March 1 of each year following permit issuance.

11. ANNUAL HYDROLOGY/WATER QUALITY/VEGETATIVE MONITORING REPORTS:

Annual hydrology and water quality reports that include the information required in Specific Conditions 13, 17, 24 and 35 shall be submitted to the Department. Vegetation statistical reports of the data required in Specific Condition 35 shall also be submitted to the Department beginning one year after initial planting and in years two, three, five, and biennially thereafter until release. Reports are due upon completion or no later than March 1 of the year following monitoring. Specific monitoring and reporting requirements are described in Specific Condition 35.

12. SURFACE WATER QUALITY PROTECTION: Water quality in wetlands or other surface waters adjacent and/or downstream from site preparation, mining operations, and reclamation activities shall be protected as follows:

- a. Prior to any clearing or mining operations, the areas to be disturbed shall be severed from adjacent wetlands and other surface waters. This severance includes the construction of

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an isolation berm or an isolation berm and ditch adjacent to, but not within, the undisturbed wetlands and other surface waters. The areas to remain undisturbed, shown as "Avoided" on Map 3-2, shall not be disturbed by mining operations.

- b. Ditch, berm, and retention systems shall be designed and constructed prior to initiation of mining operations to manage or prevent discharge from a 25-year, 24-hour storm event. The Applicant's Handbook, Vol II (effective date October 1, 2013) shall be used to determine the design storm characteristics. Operation, maintenance and inspection of the berm, ditch and retention systems shall be in accordance with the permittee's "Stormwater Management Plan" (Appendix 3-6-C), including the applicable requirements for impoundments specified therein.
- c. Prior to the use of any ditch and berm systems, the permittee shall have in its possession, engineering design as-built drawings, signed and sealed by a Professional Engineer registered in the state of Florida, confirming that they have been constructed in accordance with the stormwater management plans attached to this permit and in accordance with the design drawings. As-built drawings shall be submitted to the Department, as they become available, or with the annual status reports required in Specific Condition 10.
- d. The top of the outside berm (including temporary roads) on all recharge ditches or severance berms adjacent to areas not designated for mining operations (including preservation areas) shall be sloped such that they drain towards the recharge ditch or mine pit. Where recharge ditch and berms are constructed, the top of the outside berm shall be at an elevation that is sufficiently higher than the designed height of the interior berm between the recharge ditch and the mine-cut, as determined by a registered professional engineer, to ensure that overflow of the recharge ditch, if any, will be directed to the mine cut and not undisturbed areas.
- e. The isolation berms and recharge ditch and berms shall remain in place until mining operations and reclamation have been completed, all applicable monitoring indicates that applicable State Water Quality Standards are met, and the Department has determined that the reclaimed wetlands are adequately stabilized and sufficiently acclimated to ambient hydrological conditions. The determination of when the severance berms and recharge ditch and berms may be removed shall be made by the Department, in writing, upon the written request of the permittee. This determination shall be based on a site inspection and water quality monitoring data collected in accordance with Specific Condition 14g. At that time, the ditch and berms shall be removed and revegetated to meet the topography and land use(s) identified on Map 4-5 and Map 4-2-B-ii, respectively.
- f. Best management practices or any other Department approved practices for turbidity and erosion control shall be implemented and maintained to prevent siltation and turbid discharges outside of the disturbance area. Methods shall include, but are not limited to, the use of staked filter cloth, silt-control polymers, sodding, seeding, mulching, and the

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deployment of turbidity screens around the immediate project site, as appropriate for each area. Except as otherwise provided in this permit, in no case shall offsite discharges result in exceedance of State water quality standards pursuant to Chapter 62-302, F.A.C.

- g. During all phases of recharge ditch and isolation berm construction and removal authorized by this permit, the permittee shall be responsible for ensuring that erosion control procedures are followed and that erosion and turbidity control devices are inspected and maintained daily and after each rainfall event >1/2 inch. Erosion and turbidity control devices shall also be inspected and maintained on a regular basis during all phases of mining operations and reclamation. Inspectors shall have completed stormwater erosion control training and be familiar with all BMP plans. Records of inspections shall be maintained on site for a period of three (3) years and shall be available to Department staff upon request. Erosion control devices shall remain in place until all areas are sufficiently stabilized to prevent erosion, siltation, and turbid discharges. If the berm impounds water above the downstream toe of the outside berm, then the berm shall also be visually inspected daily to ensure its integrity and stability during the period(s) that water is impounded by the berm. Berms shall be maintained to prevent any breaches of the berms or prevent erosion sufficient to cause violations of state water quality standards for turbidity.
 - h. There shall be no discharges unless specifically authorized by this permit or the permittee's Industrial Wastewater Facility Permit, File No. FL0032522.
13. SURFACE- AND GROUND-WATER QUALITY MONITORING: A surface and groundwater quality monitoring program shall be implemented as part of this permit and shall continue through the end of mine life. Data shall be submitted to the Department with the annual water quality reports required under Specific Condition 11. Data shall be collected as specified in Table MR-A, and as follows:
- a. The following parameters shall be monitored quarterly during the construction phase at surface water stations Tex SWQ-4, and WGC MR-1 (shown on Map 2-3-B): temperature, pH, dissolved oxygen (DO), conductivity, turbidity, fixed solids, total alkalinity, total suspended solids (TSS), total phosphorus (TP), nitrogen - ammonia, orthophosphate, total nitrogen (TN), total kjeldahl nitrogen (TKN), nitrate/nitrite, fluoride, sulfate, chloride, chlorophyll-a, color, calcium, potassium, magnesium, iron, oils & greases, silica, and sodium.
 - b. The following parameters shall be monitored semi-annually prior to and through the construction phase in surficial aquifer groundwater monitoring wells TEXGW-1, TEXGW-2, TEXGW-3: pH, temperature, conductivity, turbidity, total alkalinity, TP, total nitrogen, nitrate, nitrite, nitrogen – ammonia, total organic carbon, fluoride, sulfate, chloride, calcium, magnesium, iron, sodium, potassium, and oil & grease. The groundwater monitoring well locations are shown in Map 2-3-A.

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- c. The following parameters shall be sampled quarterly during the construction phase at surface water stations Tex SWQ-4, WGC MR-1 and annually during the construction phase in groundwater monitoring wells TEXGW-1, TEXGW-2, TEXGW-3: gross alpha. If gross alpha is greater than 15, then Radium 226 & 228 shall also be monitored.
- d. The permittee shall obtain approval by the Department prior to relocating a surface water monitoring station or groundwater quality monitoring well specified in this permit. The location and elevations of each replacement station and well shall be resurveyed.
- e. The permittee may submit a request for the cessation of water quality sampling at specific surface water or groundwater monitoring locations and/or specific water quality parameters after at least five (5) years of data has been collected. Each submittal shall contain sufficient information, including analytical results and the progression of mining and reclamation activities, to support the request. Sampling shall continue in these monitoring locations until Department approval.
- f. The following parameter shall be monitored daily during severance from or reconnection to any preserved or offsite connected wetland or other surface water at locations 50m upstream and 50m downstream of the construction area: Turbidity.
- g. In all created streams and wetlands designed to reconnect to preserved or off-site wetlands or other surface waters, the following parameters shall be monitored monthly from June to October prior to reconnection: turbidity, temperature, DO, pH, conductivity, and each parameter for which a Total Maximum Daily Load has been established for the immediate receiving waterbody.
- h. The industrial wastewater (IW) facility permit No. FL0032522, issued in accordance with Chapter 62-620 constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System (NPDES) Program in accordance with Section 403.0885, F.S.

By law, the IW Permit shall establish the following:

- i. The water within the NPDES system shall be discharged through designated outfalls and discharge points. Rules 62-620.620(2), F.A.C., require specific conditions regarding effluent limitations; standards and prohibitions at outfalls and discharge points; require discharge sampling; reporting requirements; and corrective measures and confirmation sampling procedures and frequency, and request the revision of any condition.
- ii. Best management practices and pollution prevention procedures and standard operating procedures for wastewater management.

The permittee shall contemporaneously send copies of all IW Permit related notices, reports, and applications submitted to the Department's Industrial Wastewater Program,

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to the Department's Mining & Mitigation Program (2600 Blair Stone Road, MS 3577, Tallahassee, FL 32399 or MiningAndMitigation@dep.state.fl.us). The permittee shall also send a copy of all IW Permit revisions within 30 days of receipt to the Department's Mining & Mitigation Program when requested.

14. **EXCEEDANCES OF WATER QUALITY STANDARDS:** The following measures shall be taken immediately by the permittee if mining related activities cause turbidity levels within waters of the State on or adjacent to the project site exceed State Water Quality Standards established pursuant to Chapter 62-302, F.A.C.:
 - a. Immediately cease all work contributing to the water quality violation, until the requirements in paragraph b and c below are completed;
 - b. Stabilize all exposed soils contributing to the violation. Modify the work procedures that were responsible for the violation, and install more turbidity containment devices and repair any non-functioning turbidity containment devices;
 - c. Notify the Department in Tallahassee (phone 850.245.7554) within 24 hours of the time the violation is first detected.

15. **SPILL REPORTING:** The permittee shall report all unauthorized releases or spills of untreated or treated wastewater or stormwater in excess of 1,000 gallons per incident, or where public health or the environment may be endangered, to the **Florida State Watch Office, Toll Free Number (800) 320-0519, and the Department's Mining and Mitigation Program** at the phone number listed below, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information:
 - a. Name, address, and telephone number of person reporting.
 - b. Name, address, and telephone number of permittee or responsible person for the discharge.
 - c. Date and time of the discharge and status of discharge (ongoing or ceased).
 - d. Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater or stormwater).
 - e. Estimated amount of the discharge.
 - f. Location or address of the discharge.
 - g. Source and cause of the discharge.
 - h. Whether the discharge was contained on site and cleanup actions taken to date.
 - i. Description of area affected by the discharge, including name of water body affected, if any.
 - j. Other persons or agencies contacted.

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For unauthorized releases or spills of 1,000 gallons or less, per incident, oral reports, or facsimiles when used in lieu thereof, shall be provided to the Department at the address listed below, within 24 hours from the time the permittee becomes aware of the discharge.

Phosphate Management

13051 N. Telecom Parkway
Temple Terrace, FL 33637-
0926

Phone: (813)470-5911

DWRMIW.PM@dep.state.fl.us

**Mining and Mitigation
Program**

2600 Blair Stone Road, MS 3577
Tallahassee, FL 32399

Phone: (850)245-8336

[MiningAndMitigation@dep.state.
fl.us](mailto:MiningAndMitigation@dep.state.fl.us)

Homeland Field Office

2001 Homeland Garfield
Road

Bartow, FL 33830

Phone: (863) 534-7077

Fax: (863)534-7143

A written submission shall also be provided to the Department at the address listed above, within five (5) days of the time the permittee becomes aware of the unauthorized release or spill, greater than 1,000 gallons. The written submission shall contain: all of the information listed above, a description of the unauthorized discharge and its cause; the period of the unauthorized discharge including exact dates and time, and if the unauthorized discharge has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the unauthorized discharge.

16. **CATTLE DIP VAT:** According to Chapter 376, F.S., any private owner of property in this state upon which cattle-dipping vats are located shall not be liable to the state under any state law, or to any other person seeking to enforce state law, for any costs, damages, or penalties associated with the discharge, evaluation, contamination, assessment, or remediation of any substances or derivatives thereof that were used in the vat for the eradication of the cattle fever tick. Voluntary cleanup of the historic cattle dip vat located in Section 26 should follow the procedures described in the Contaminated Site Cleanup Rule 62-780, F.A.C.
17. **WATER QUANTITY PROTECTION:** Water levels and flows in wetlands and other surface waters adjacent and downstream from site preparation, mining operations, and reclamation activities shall be protected as follows:
 - a. **Water Quantity Protection Measures:** To provide protection from potential water quantity impacts to wetlands, other surface waters, streams, existing surface water storage, and adjacent lands pursuant to Chapter 62-330.301, F.A.C., the permittee shall implement and comply with Special Conditions 10 through 12, 16 and 17 in the Southwest Florida Water Management District's integrated Water Use Permit (WUP) No. 20011400.025, and the Environmental Management Plan (EMP), dated January 25, 2012, that is incorporated therein as Exhibit "E".
 - b. **Water Quantity Protection and EMP Performance:** Appropriate water levels, considering normal seasonal fluctuations and other climatic conditions that may affect the natural system, shall be maintained to ensure that there are no adverse impacts to wetlands from mining activities. Where mining operations have commenced within the

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applicable Mandatory Mitigation Distance (MMD), as defined in the EMP, conditions in the protected area shall also be verified by both monthly visual inspections by the permittee and in conjunction with periodic mine inspections performed with Department staff. When monitoring under the EMP indicates that water quantity protections are not maintaining the protected wetland functions and values as documented by Section 5.0 of the EMP, the permittee shall separately notify the Department in writing. In addition, the permittee shall contemporaneously submit to the Department a copy of any correspondence with SWFWMD regarding the EMP, including reports specified under Section 10.0 of the EMP and any correspondence related to corrective actions or Adverse Impacts as defined in the EMP. The permittee shall ensure that such reports highlight and specifically identify whenever an External Backstop trigger has occurred as described under Section 6.0 of the EMP, and whenever it is determined that mining activities are or were the cause of deviations from historical water level ranges within the surficial aquifer system (SAS) as described under Section 7.0 of the EMP. The Department may require independent corrective action where water quantity protection and EMP performance are not preventing an adverse impact related to mining activities.

- c. **Documentation of Surficial Aquifer Restoration:** Surface and groundwater modeling shall be conducted to verify that the final post-reclamation topography and lithology will maintain the existing range of hydroperiods and provide adequate groundwater seepage to the preserved wetlands and other surface waters. A model similar to that used in Appendix 2-2-A-iv (Post Reclamation Hydroperiod Modeling) may be used as part of the modeling effort. Data from the existing monitoring wells shown on Map 2-3-A and others installed as a requirement of the IWUP and EMP in Specific Condition 19a and 19b (4 year baseline data), shall be used to help determine the appropriate hydroperiods that shall be maintained. Modeling results shall be submitted to the Department for approval. In addition to the modeling reports, the permittee shall provide the Department waste disposal and reclamation plans that ensure reclaimed subsurface flows will maintain the existing range of hydroperiods of the preserved wetland and other surface waters. The plans should include an analysis of post-reclamation topography, mine cut directions, sand tailings and overburden depths and locations, the locations of any overburden saddles and overburden composition. Approval of the modeling and disposal/reclamation plan constitutes Department approval to proceed with contouring of the area adjacent to the preserved wetland.
- d. **Protection of Stream Flow:** At all times during the life of the Wingate East Mine, the permittee shall maintain a minimum 500-foot-wide buffer of either natural ground or backfilled mined lands that have been contoured to the post-reclamation elevations shown on Map 4-5 along at least one bank of each linear foot of preserved stream systems, including the preserved portions of West Fork of Horse Creek, Myakka Headwater wetland (Wetland No. 25-7 through 25-12), shown within the avoided area boundary on Map 2-2-B-i.
- e. Rainfall amounts shall be monitored daily from a minimum of two representative stations. Surface water levels, groundwater levels, and rainfall monitoring at the stations

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represented on Map 2-3 shall continue until all reclamation activities are completed and have been released by the Department. Monitoring results shall be submitted with the Annual Hydrology Reports required under Specific Condition 11.

18. WILDLIFE MANAGEMENT: The permittee shall follow the Wingate East Wildlife and Habitat Management Plan (Appendix 2-6-B) for all preclearing wildlife surveys, timing of habitat disturbance and relocation activities or as required by Florida Fish and Wildlife Conservation Commission/ US Fish and Wildlife Service (FFWCC/USFWS) permits or management plans. The appropriate FFWCC/USFWS coordination shall be initiated prior to the disturbance of habitat if it is being utilized/occupied by listed species, or relocation of any listed wildlife species. Copies of all correspondence, permits, authorizations and reports to or from these agencies shall be provided to the Department with the Annual Status Reports required in Specific Condition 10.

19. TIMETABLES AND MINING OPERATIONS: The mining operations and reclamation activities authorized by this permit shall be completed according to the following generalized timetable except as otherwise noted:

a. Generalized Timetable for Work in Wetlands and Other Surface Waters:

<u>Activity</u>	<u>Relative Time Frame</u>
Commencement of Severance/Site preparation	No more than six (6) months prior to mining operations (unless approved by the Department for the purposes of directly transferring topsoil/muck to a contoured mitigation site), except as otherwise authorized herein.
Final grading, including muck placement	No later than 18 months after completion of mining operations, including backfilling with sand tailings.
Phase A planting (species that tolerate a wider range of water levels)	No later than six (6) months after final grading or 1 year after muck placement
Hydrological Assessment	For two (2) years after contouring in accordance with Specific Condition 29 and 43.
Phase B planting (species that tolerate a more narrow range of water levels)	Up to 12 months after the completion of the hydrological assessment.
Phase C planting (shade-adapted ground cover and shrub species, additional trees)	At least two (2) years prior to release in forested wetlands

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and shrubs to meet density and diversity requirements in Specific Condition 28)	
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- b. Disturbance, mining, and reclamation of wetlands, streams and other surface waters (Maps 2-2-B-i and 2-2-B-ii), shall proceed as shown on Maps 3-1 and 4-1, and Tables 4-1 and 4-2. The permittee shall submit updates to the approved schedule with the Annual Status Reports required in Specific Condition 10. Anticipated deviations from these schedules shall be submitted prior to initiating impacts to wetlands, streams and other surface waters out of sequence and significant changes may require a modification to this permit. Changes in sequence of wetland, stream and other surface water disturbance shall be acceptable provided a) there are no additional adverse impacts or b) an acceptable mitigation plan to offset these impacts is provided.
20. TOPSOIL UTILIZATION: Prior to conducting mining operations in permitted wetlands, wetland muck, topsoil, or sod shall be removed from the site for use in wetland restoration. The upper 18 inches of wetland muck or topsoil shall be harvested from impacted wetland areas, as practicable, prior to mining and shall be used to establish the final design contours in reclaimed wetland areas. Neither muck, nor topsoil nor sod shall be collected from wetlands that are highly degraded (have minimal cover of desirable species). If the permittee believes a donor wetland is highly degraded and contains unsuitable soil material, the permittee shall notify the Department, which shall determine if the wetland is degraded to an extent that it meets this condition. Timing between the clearing of donor sites and the completion of wetland restoration shall be optimized to provide greater opportunities for direct transfer of wetland muck or topsoil. In some instances, wetland muck or topsoil may be removed from donor sites more than six (6) months in advance of mining operations. If no contoured mitigation site is available to receive the wetland topsoil, it shall be stored in a manner that minimizes oxidation and colonization by nuisance species.
- Whenever practicable, the permittee is encouraged to harvest topsoil from upland areas prior to mining and use the topsoil to establish the final design contours in reclaimed upland areas.
21. LISTED PLANTS: The permittee is encouraged to relocate any threatened or endangered plant species encountered to appropriate unmined or reclaimed community types.
22. SOIL ESTABLISHMENT: Surface soils shall be established for each post-reclamation land use/vegetation community as follows: In all areas proposed to be reclaimed as wetlands, other surface waters or natural upland systems, several feet of sand tailings shall be placed over the contoured overburden spoil, unless otherwise specified in hydroperiod or other modeling/engineering and design, for the specific habitat type to establish the parent materials for the surface soils and promote water infiltration. Additional overburden may be added to the surface soils, as needed, to enhance water holding capacity, cation exchange capacity, and nutrient retention, provided that the infiltration zone remains composed of predominantly sandy material and could be classified as sand, loamy sand, or sandy loam pursuant to the USDA-NRCS soil texture classification. A mixture of overburden and sand tailings may be used in areas reclaimed as pasture.

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Whenever practicable, topsoil harvested from upland areas prior to mining, shall be used to establish the final design contours in reclaimed habitat areas. Incorporation of additional organic materials into the upland soils through green manuring or amendment with composts or other organic materials is encouraged when topsoil is not available.

Wetland muck that is reasonably free of nuisance and exotic species and harvested from wetland sites prior to mining shall be used to establish the final design contours in reclaimed wetland areas as described in Specific Condition 24.

23. **POST-MINING LANDSCAPE ELEVATIONS:** Within 90 days of the completion of contouring and soil establishment in each reclamation parcel, the permittee shall submit as-built topographic surveys to demonstrate that the land surface elevations have been established as shown on Map 4-5. Substantial deviations from the approved reclaimed land surface elevations that have the potential to adversely affect the functions of preserved, off-site, and/or reclaimed wetlands or other surface waters shall be corrected within 90 days of detection.
24. **MITIGATION CONSTRUCTION STANDARDS:** The permittee shall create as mitigation 766.8 acres of wetlands (This number does not include any enhanced wetland acres required under in Specific Condition 8 and 9), and 20,464 linear feet of stream channels, as shown on Maps 4-2-B-ii, 4-3-B, 4-8-B-i and listed on Table 2-4-F. The mitigation wetlands to be constructed include 314.8 acres of freshwater marsh (FLUCFCS 641), 95.0 acres of wet prairie (FLUCFCS 643), 26.9 acres of shrub swamp (FLUCFCS 647), 2.3 acres of hydric palmetto prairie (FLUCFCS 649), 25.9 acres of bay swamp (FLUCFCS 611), 8.3 acres of gum swamp (FLUCFCS 613), 10.1 acres of stream and lake swamp (FLUCFCS 615), 146.3 acres of mixed wetland hardwood forest (FLUCFCS 617), and 136.4 acres of hardwood-conifer mixed wetland forest (FLUCFCS 630). The wetland and other surface water mitigation and restoration shall be accomplished in accordance with the timetables in Specific Condition 19, Map 4-5, Appendix 2-2-A-iii (Post Reclamation Wetland Cross Sections), and in the following manner:

For All Mitigation Areas:

- a. **Final Hydroperiod Modeling:** The designs of representative wetlands were modeled as part of the application process based on predicted subsurface conditions following mining and backfilling of mine cuts with sand tailings and overburden (Appendix 2-2-A-iv, Wetland Hydroperiods in the Post-Reclamation Landscape at the Wingate East Mine). Representative wetlands are those wetlands selected based on their FLUCFCS code and position in the post reclamation landscape to demonstrate that the hydro periods of the post reclamation wetlands are adequate. Prior to construction, hydroperiod modeling, using similar modeling concepts and techniques, shall be used to finalize the design of the sub-surface lithology, land surface elevations and topographic gradients in each wetland and other surface water mitigation area and contributing upland watershed. The hydroperiod modeling results shall confirm that the wetland bottom and outlet elevations, the side slopes, and the subsurface lithology will result

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in hydroperiod depths and durations appropriate for the community types planned for each mitigation area. A similarly calibrated model shall be used to design the remaining mitigation wetlands and other surface waters to be constructed to achieve the design criteria set forth in Appendix 2-2-A-iv. Modeling results shall be submitted to the Department for review and approval at least 90 days prior to commencement of contouring.

For Forested Wetlands:

- b. **Soil Establishment:** After mining operations and backfilling with sand tailings, forested wetland mitigation areas (FLUCFCS 611, 613, 615, 617, and 630) shall be graded and capped with several inches of wetland muck or topsoil to achieve the final elevations indicated in the attached permit drawings. In the event that sufficient wetland muck or topsoil is not available, the permittee shall coordinate the use of other appropriate materials with the Department. However, all bay swamps shall receive a minimum of one foot of muck or a combination of muck and mulch or other appropriate organic material such as mucky-sand or sandy-muck. Direct transfer of topsoil and live material (stumps, shrubs, small trees) shall be used where feasible. Wetland topsoil should be reasonably free of nuisance and exotic plant species before application to wetland mitigation areas.
- c. **Hydropattern and Habitat Heterogeneity:** The permittee shall construct hummocks, leave some areas roughly graded and install stumps, logs, and/or woody debris piles several inches above the seasonal high water line to provide habitat heterogeneity. Snags shall also be placed within the forested wetlands as appropriate to encourage wildlife usage. Direct transfer of small shrubs and trees from future mining areas shall also be utilized if feasible.
- d. **Restoration of the Vegetation Community:** Forested wetlands shall be planted with sufficient tree, shrub, and herbaceous species to establish the densities and species richness and dominance characteristics appropriate for each community type in accordance with Tables 4-3-A-i through 4-3-D in order to meet the requirements of Specific Condition 28. Appropriate species shall be planted based on the design elevations, the results of the hydrology monitoring, and the goals of the mitigation. Up to 49% of the trees and shrubs planted in the upper transitional zone (defined as the uppermost one foot change in elevation within the wetland boundary) may consist of appropriate upland and facultative species as found in the reference wetlands.
- e. **Successional Plantings:** Additional plantings of shade tolerant shrubs and herbaceous vegetation shall occur after establishment of suitable canopy/subcanopy cover within the forested wetlands. This shall include a selection of at least 5 of the following species: swamp azalea (*Rhododendron viscosum*), highbush blueberry (*Vaccinium corymbosum*), swamp fern (*Blechnum serrulatum*), cinnamon fern (*Osmunda cinnamomea*), woodoats (*Chasmanthium latifolium*), swamp dogwood (*Cornus foemina*), royal fern (*Osmunda regalis*), netted chain fern (*Woodwardia areolata*), chain fern (*Woodwardia virginica*) and lizard's tail (*Saururus cernuus*).

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For Herbaceous Wetlands (FLUCFCS 641, 643, 647 and 649):

- f. **Soil Establishment:** After mining operations and backfilling with sand tailings, herbaceous wetland mitigation areas (FLUCFCS 641, 643 and 647) shall be graded and capped with several inches of wetland muck or topsoil, when available, to achieve the final elevations indicated in the attached permit drawings. Hydric rangeland/palmetto prairie areas (FLUCFCS 649) shall receive several inches of hydric rangeland/palmetto prairie, wet prairie, wet flatwoods or pine flatwoods topsoil, if available. Direct transfer shall be used where feasible. The muck or topsoil should be reasonably free of nuisance and exotic plant species before application to wetland mitigation areas. Green manuring or amendment with composts or other organic materials is encouraged when topsoil is not available.
- g. **Hydropattern and Habitat Heterogeneity:** Marshes and wet prairies shall be designed to maintain the diversity of community types that existed prior to mining operations in order to support a wide range of wildlife species including birds, reptiles, and amphibians. Both depression marshes and basin marshes shall be constructed. Hydroperiods shall range from seasonal saturation to almost continual inundation. Marshes and wet prairies shall be constructed with variations in topography and slope in order to provide a diversity of hydroperiods, depths of inundation and available habitat. The outer slopes in most marshes shall be gradual enough to support wide transition zones with a diversity of vegetation, and constructed according to the post reclamation wetland cross sections in Appendix 2-2-A-iii. Depression marshes shall exhibit the distinct zonation patterns typical of the least disturbed depression marshes occurring at the Wingate East Mine.
- h. **Vegetation Establishment:** If muck or topsoil are unavailable, herbaceous wetland species shall be planted on 3-foot centers according to the species listed on Table 4-3-E, 4-3-F, 4-3-G and 4-3-J, as appropriate for the community type, to establish vegetation density, species richness, dominance characteristics, and ecotone zonation patterns that are typical of reference wetlands of the designed community type and to meet the requirements of Specific Condition 28. Supplemental planting shall be done in mucked or topsoiled wetlands as necessary to meet the requirements of Specific Condition 28.
- i. **Ecotone Development within Herbaceous Marshes:** Most herbaceous marshes shall be rim-mulched with several inches of wet prairie, pine flatwoods, or palmetto prairie topsoil or sod unless suitable material is not available within a reasonable hauling distance. Direct transfer shall be used where feasible. Where top-soiling is not feasible, other methods that are likely to achieve similar diversity of wet prairie/shallow marsh forbs and grasses such as direct seeding or planting in accordance with Tables 4-3-F shall be used as approved by the Department.
- j. **Additional Requirements for Wet Prairies and Hydric Rangeland:** The uplands immediately surrounding wet prairie and hydric rangeland areas shall be direct seeded or planted with native grasses such as creeping bluestem (*Schizachyrium scoparium*), sand cordgrass (*Spartina bakeri*), blue maidencane (*Amphicarpum muhlenbergianum*), broom

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grass (*Andropogon* spp), lovegrass (*Eragrostis* spp.), and eastern gama grass (*Tripsacum dactyloides*) to help prevent invasion by range grasses and other non-native grasses.

For Streams:

- k. Stream systems (FLUCFCS 511) shall be constructed in accordance with the design criteria set forth on the Wingate East Restored Stream Design Table, Table 8 of the Stream Mapping, Assessment, and Reclamation Design Guidance, Wingate East Mine, Manatee County, Florida in Appendix 2-2-B-i to achieve the approximate stream lengths listed until a minimum of 20,464 linear feet is reached. Individual stream lengths on Table 4-5 may vary based on Department approval of final design plans. Prior to construction, final design plans based on the actual post mining conditions shall be developed based on hydrologic modeling that includes estimating bankfull flow. Hydrologic modeling results shall be compared to the classifications of the hydrological regimes, as well as the low flow data collected on the existing first and second order streams within the project to confirm that designed stream flow and the relative amount of time that water is present above the bed is at least within the range of existing streams. Modeling results, final design documents and construction drawings shall be submitted to the Department for approval.
- l. Reclaimed stream valleys (FLUCFCS 511) shall be constructed with a minimum of 3 feet of sand tailings overlain with up to 6 inches of overburden that is disked into the tailings or as otherwise approved by the Department following review of final design plans. Topsoil shall be used instead of overburden in areas where it is used to establish specific upland or wetland plant communities adjacent to the stream. Overburden may be used to construct the banks if added cohesive strength is necessary. However, stream beds should be constructed from sand tailings.
- m. Stream systems MK-1 through MK-5 shall include restoration of at least 12,143 linear feet of stream channel (FLUCFCS 511), including Rosgen C and E segments. The final design plans shall demonstrate the degree of similarity to the existing stream system (segments 103C, 106A and 107A).
- n. Reclaimed valleys designed to support sloughs and strands (FLUCFCS 516) shall be constructed to create a simple hydrologic connection on the valley flat. Valleys shall be constructed at the widths and elevations shown on Map 4-5 to ultimately achieve the lengths listed on Table 4-5. Flow conveyance channels will not be constructed, but may develop over time.
- o. An experienced stream restoration scientist shall be utilized by the permittee as staff or consultant for the period of stream mitigation construction through release to provide project guidance and conduct regular inspections during construction and planting activities.
- p. No more than 90 days after final grading, the permittee shall prepare an as-built construction report that documents that the restored reach has been constructed in accordance with the specifications outlined in Appendix 2-2-B-i and the final design plans. The as-built survey

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shall include a longitudinal profile of the entire stream reach that includes mapping of each pool and riffle with thalweg, water surface (if present) and top of bank elevations noted, and representative cross sections measured at a frequency of one per 20 bankfull-widths with locations selected to represent approximately 50% pools and 50% riffles. Cross section surveys shall include the flood prone width. Repeat surveys shall be required as outlined in Specific Condition 35. The as-built report shall also document the successful establishment of all habitat amendments, including number of bends/pools, number of large woody debris (LWD) snags, number of root wads, number of fine woody fascines, and percent palmetto lining the banks, as applicable for each restored stream reach. As-built reports shall include photo documentation at each cross section and representative structures.

Post Construction Requirements:

- q. Documentation of As-Built Conditions: Within 90 days of final grading, the final contours of each created wetland and other surface water shall be surveyed in accordance with general survey procedures utilizing a 50-foot grid and spot elevations to 0.1 of a foot. An as-built contour map will be generated to show one (1) foot contours for uplands, 0.5 of a foot contours in wetlands/surface waters and the 0.1 of a foot spot elevations, extending 200 feet into the adjacent uplands where accessible. The contour map(s) will reference NGVD and be certified by a land surveyor or professional engineer registered in the state of Florida. All topographic maps shall meet the minimum technical standards as set forth in Chapter 472, F.S.
- r. Post-Construction Hydrology Monitoring and Second-Year Hydrology Assessment: Post construction monitoring, as described in Specific Condition 35 (outlined in Table MR-B), shall be performed for all created mitigation areas. All piezometers, staff gauges, and flow meters shall be installed at mutually agreed-upon locations within 90 days of the completion of grading/contouring activities in the mitigation areas to be monitored. Hydrologic data collected for each mitigation monitoring site is to be compiled, analyzed and submitted in both tabular and graphical formats with the Annual Hydrology Reports required in Specific Condition 11.

Initial assessment of the site hydrology shall be conducted for at least two (2) years after final contouring of each mitigation area. The results shall be submitted to the Department for review and approval within 30 days of completion of the analysis. Within 30 days of receipt of the data, the Department will review the results and approve the design hydrology, or require additional information or changes to the design. If the hydrology of the site does not meet the design objectives, the permittee shall have 60 days to submit a remedial action plan to ensure that design objectives will be met. Following the initial hydrological assessment, monitoring of each mitigation area shall continue until the requirements of Specific Condition 28 have been met.

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- s. Upon completion of the mitigation activities, monitoring of each created wetland, stream and other surface water shall be conducted as described in Specific Condition 35. Reports shall be submitted in accordance with Specific Condition 11.
25. RECLAMATION CONSTRUCTION STANDARDS: The permittee shall reclaim the remaining acres of wetlands and other surface waters, and uplands in accordance with Maps 4-2-B-i and 4-5, Tables 2-1-A-ii, 3-1-B, the attached planting tables (Tables 4-3-A-i through 4-4-E), Rule 62C-16 and Conceptual Reclamation Plan MOS-WC-CPF.
26. TIME SCHEDULE FOR COMPLETION OF MITIGATION: Forested wetlands, forested other surface waters and created streams shall achieve, or shall be on a clear trajectory toward achieving, all applicable mitigation success criteria listed in Specific Condition 28 (excluding tree height requirements) within 12 years of final contouring of drainage areas reporting to these mitigation areas. Herbaceous wetlands and other surface waters shall achieve, or shall be on a clear trajectory toward achieving, all applicable mitigation success criteria listed in Specific Condition 28 within 7 years of contouring. The time period for attainment of the mitigation success criteria may be extended by the Department for specific wetlands when circumstances beyond the control of the operator, such as drought or flooding, occur.

In the event that a mitigation site has not met the design objectives within the applicable time frame, and monitoring data do not demonstrate that the site is on a clear trajectory towards achieving all applicable mitigation success criteria listed in Specific Condition 28, the permittee shall prepare and submit a corrective action plan to the Department detailing additional construction, maintenance, and/or enhancement measures that will be implemented to achieve the design objectives within a two-year extended time period. Upon approval, the permittee shall be granted an additional two year period in which to perform the corrective actions and/or enhancement activities specified in the approved corrective action plan and to provide documentation that the site has achieved or is on a clear trajectory toward achieving the applicable mitigation success criteria listed in Specific Condition 28.

27. VEGETATION MAINTENANCE: A monitoring and maintenance program shall be implemented to promote the survivorship and growth of desirable species in all mitigation areas:
- a. This program shall include at least semi-annual inspections of mitigation uplands, wetlands and other surface waters for nuisance and exotic species. Nuisance and exotic vegetation shall be controlled by herbicide, fire, hydrological or mechanical means in order to limit cover of nuisance species to less than ten (10) percent and to remove exotic species when present in each mitigation area. Manual or chemical treatment of nuisance and exotic species shall be implemented at least annually when cover of nuisance species in any area of one acre or more increases to more than ten (10) percent cover or if exotic species are present. Manual or chemical treatment shall also be implemented if cogon grass (*Imperata cylindrica*) coverage exceeds ten (10) percent on reclaimed sites or five (5) percent within 300 feet of any wetland, stream or other surface water.

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- b. Water levels may be controlled through outflow control structures and/or pumping as necessary to enhance the survivorship and growth of hydrologically sensitive taxa. The location, designs, and need for such structures shall be mutually agreed upon by the permittee and the Department. All water management structures shall be removed at least two years prior to release request.
 - c. Supplemental tree and shrub plantings in accordance with Specific Condition 24 shall occur when tree/shrub densities fall below those required to meet Specific Condition 28.
 - d. Supplemental herbaceous plantings in accordance with Specific Condition 24 shall occur if cover by a diversity of non-nuisance, non-exotic wetland species as listed in rule 62-340.450, F.A.C., falls below the level required to meet Specific Condition 28.
28. MITIGATION RELEASE CRITERIA: The on-site and off-site mitigation uplands, wetlands, streams and other surface waters shall be released when they have been constructed in accordance with the requirements of Specific Conditions 24 and the attached permit drawings, the following conditions have been met, and no intervention in the form of irrigation, dewatering, or replanting of desirable vegetation has occurred for a period of two consecutive years unless approved in writing by the Department. If the associated watershed has been reclaimed, individual wetlands or other surface waters may be released by the Department provided they have met the minimum establishment period for the wetland type and meet all applicable permit conditions. The permittee shall indicate in the Annual Status Report required by Specific Condition 10 the start date for the non-intervention period for each wetland/other surface water:

A. Water Quality

Water quality in created wetlands and other surface waters shall meet Class III standards (Chapter 62-302, F.A.C.)

B. Hydrology

1. Each created wetland shall have hydroperiods and depths of inundation sufficient to support wetland vegetation, that meet the hydroperiods, depth of inundations and seepage contributions predicted by the modeling required in Specific Condition 24a and that are within the range of conditions occurring in the reference wetlands of the applicable community type as determined based on the monitoring data. Reference wetlands are discussed further in Paragraph B of Specific Condition 35.
2. Surface waters, other than wetlands and streams, shall flood at a frequency sufficient to produce an apparent ordinary high water line (OHWL) based on hydrologic indicators listed in Section 62-340.500, F.A.C., or hydrologic monitoring demonstrates flooding at frequency that meets the modeled mean annual flood elevation.

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C. Vegetation

For All Wetlands and Other Surface Waters:

1. Total cover by non-nuisance, non-exotic FACW, and/or OBL species listed in rule 62-340.450, F.A.C., (desirable species) in the ground cover shall be at least 80%, unless another value is listed for a specific community type below. Desirable ground cover plant species shall be reproducing naturally, either by normal vegetative spread or through seedling establishment, growth and survival.
2. Cumulative total cover by range grasses, such as Bahia grass (*Paspalum notatum*) and Bermuda grass (*Cynodon dactylon*), shall be less than 10%.
3. Non-vegetated open water and/or bare ground shall cumulatively be limited to less than 10% of the wetland area.
4. Cover by nuisance vegetation species, including cattail (*Typha* spp.), primrose willow (*Ludwigia peruviana*) and climbing hemp vine (*Mikania* spp.) shall be limited to less than 10% of the total wetland area.
5. Invasive exotic vegetation including, but not limited to Cogon grass (*Imperata cylindrical*), melaleuca (*Melaleuca quinquenervia*), Chinese tallow (*Sapium sebiferum*), Japanese climbing fern (*Lygodium japonicum*), Old world climbing fern (*Lygodium microphyllum*) and Brazilian pepper (*Schinus terebinthifolius*) shall not be considered an acceptable component of the vegetative community. Invasive exotic species shall mean those species listed on the Florida Exotic Pest Plant Council's most recent list of invasive exotic plant species (<http://www.fleppc.org/>).

For Herbaceous Marshes (FLUCFCS 641):

6. Cover within herbaceous marshes shall be dominated by native species typical of reference marshes and shall be distributed in similar zonation patterns. Species richness and dominance regimes shall be within the range of values documented within the reference marshes. At least 50% of the marshes shall be dominated by a combination of grass, sedge, and rush species, including but not limited to those identified on Table 4-3-E.

For Wet Prairies (FLUCFCS 643):

7. Total cover by non-nuisance, non-exotic FAC, FACW, and/or OBL species listed in Rule 62-340.450, F.A.C., (desirable species) in the ground cover shall be at least 80%. Non-nuisance, non-exotic facultative species will be considered desirable only provided that their contributions to the vegetative community structure are within the

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range of values documented within the reference wetlands and the mitigation site is jurisdictional in accordance with Rule 62-340, F.A.C.

8. In no case shall temporary dominance by transient facultative species such as dogfennel (*Eupatorium capillifolium*), sesbania (*Sesbania* spp.), wax myrtle (*Myrica cerifera*), shyleaf (*Aeschynomene americana*), or similar species be used to demonstrate achievement of vegetation community performance standards.

Relative ground cover by native grasses and sedges from Table 4-3-F shall be at least 60% and at least 40 of the species on Table 4-3-F shall be present or shall be within the range of values documented within the reference wet prairies.

For Shrub Marshes (FLUCFCS 647):

9. Ground cover within shrub marshes shall be dominated by native species typical of reference herbaceous marshes. Shrub cover shall be dominated by button bush (*Cephalanthus occidentalis*). Cumulative cover by Carolina willow (*Salix caroliniana*) and wax myrtle (*Myrica cerifera*) shall be less than 25%.

For Hydric Palmetto Prairie/Rangeland (FLUCFCS 649):

10. The shrub layer shall contain at least 3 of the species listed on Table 4-3-J, including saw palmetto (*Serenoa repens*), and shall have an average of at least 200 shrubs and subshrubs per acre.
11. Ground cover shall be dominated by native species typical of reference hydric pine flatwoods, hydric palmetto prairies or wet prairies. At least 20% of the relative cover shall be derived from wiregrass (*Aristida stricta* var. *beyrichiana*) and other perennial pyrogenic bunchgrasses. Species richness and dominance regimes shall be within the range of values documented within the reference hydric palmetto prairie, wet flatwoods or wet prairie.

For Bay Swamps (FLUCFCS 611):

12. The canopy layer shall contain at least seven (7) of the tree species listed on Table 4-3-A-i and the combined contribution to canopy cover by sweet-bay (*Magnolia virginiana*) swamp bay (*Persea palustris*), loblolly-bay (*Gordonia lasianthus*) and swamp tupelo (*Nyssa sylvatica* var. *biflora*) shall exceed 60%.
13. The shrub layer shall contain at least five (5) of the species listed on Table 4-3-A-i and shall have an average of at least 100 shrubs per acre and no one species shall comprise more than 40% relative cover.
14. The groundcover shall contain 10 or more native wetland (FACW or OBL) species typical of a bayswamp community or shall have at least five (5) of the groundcover

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species listed on Table 4-3-A-I, and no one species shall comprise more than 50% relative cover. Shade tolerant species such as those listed on Table 4-3-A-i shall comprise at least 50% relative cover.

For Gum Swamps (FLUCFCS 613):

15. The canopy layer shall contain at least five (5) of the tree species listed on Table 4-3-A-ii and at least 50% of the trees shall be swamp tupelo (*Nyssa sylvatica var. biflora*).
16. The shrub layer shall contain at least three (3) of the species listed on 4-3-A-ii and shall have an average of at least 75 shrubs per acre, with no one species contributing to more than 50% of the total shrub density.
17. Total cover by desirable species in the ground cover shall be at least 50%. The groundcover shall contain at least five (5) of the groundcover species listed on Table 4-3-A-ii, and no one species shall comprise more than 50% relative cover.

For Mixed Wetland Hardwoods (FLUCFCS 617 or 615):

18. The canopy layer shall contain at least eight (8) of the tree species listed on Table 4-3-B. No one tree species shall constitute more than 30% of the total density or shall be within the range of values of the reference wetlands.
19. The shrub layer shall contain at least five (5) of the species listed on Table 4-3-B with no one species contributing to more than 50% of the total shrub density or is within the range of values of the reference wetlands.
20. The groundcover shall contain at least ten (10) species typical of forested wetlands and no one species shall comprise more than 30% relative cover. Shade tolerant species such as those listed on Table 4-3-B shall comprise at least 50% relative cover.

For Wetland Mixed Hardwood-Coniferous Forest (FLUCFCS 630):

21. The canopy layer shall contain at least eight (8) of the tree species listed on Table 4-3-D. Neither pines nor hardwoods shall account for more than 66% of the crown canopy composition and no one tree species shall constitute more than 30% of the total trees.
22. The shrub layer shall contain at least five (5) of the species listed on Table 4-3-D and shall have an average of at least 100 shrubs per acre with no one species contributing to more than 30% of the total shrub density.
23. The groundcover shall contain at least ten (10) species typical of forested wetlands and no one species shall comprise more than 30% relative cover. Shade tolerant species such as those listed on Table 4-3-B shall comprise at least 50% relative cover.

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For Pine Flatwoods (FLUCFCS 411) and Palmetto Prairie (FLUCFCS 321):

24. For pine flatwoods areas, the canopy layer shall contain at least 100 pine trees per acre, including at least 50% long leaf pine (*Pinus palustris*) per acre, unless the hydrological conditions do not support long leaf pine. Slash pine shall be an average of at least 12 feet tall and long leaf pine shall be beyond the grass stage. No area greater than an acre in size shall have less than 50 trees per acre.
25. The shrub layer shall contain at least seven (7) of the species listed on Table 4-4-A and saw palmetto (*Serenoa repens*) and gall berry (*Ilex glabra*) shall be the dominant species. There shall be an average of at least 300 shrubs and sub-shrubs per acre and no area greater than one acre in size shall have less than 100 shrubs per acre. Early successional species such as saltbush (*Baccharis* spp.) and wax myrtle (*Myrica cerifera*) do not count toward meeting this requirement.
26. Total groundcover by non-nuisance, non-exotic, native species typical of pine flatwoods or palmetto prairie communities shall be at least 80%. At least 20% of the relative cover shall be derived from wiregrass (*Aristida stricta* var. *beyrichiana*) and other perennial pyrogenic bunchgrasses. Fire-adapted, native herbaceous species shall be of an adequate density to carry a prescribed fire in the growing season over an average of at least 75% of the flatwoods community on an average of a 1 - 3 year cycle. Transects shall have an average of at least 45 of the species listed in Table 4-4-A or other native, non-canopy species appropriate to mesic flatwoods as identified in literature such as the Florida Plant Atlas (USF), Guide to the Vascular Plants of Florida (Wunderlin 2003), and/or Guide to the Natural Communities of Florida (Florida Natural Areas Inventory). Bare ground and leaf litter shall cumulatively constitute 20% or less cover. Cumulative total cover by non-native grasses, such as Bahia grass (*Paspalum notatum*), Bermuda grass (*Cynodon dactylon*), and smutgrass (*Sporobolus indica*) shall be less than 10%.
27. Invasive exotic vegetation including, but not limited to Cogon grass (*Imperata cylindrical*), Chinese tallow (*Sapium sebiferum*), Brazilian pepper (*Schinus terebinthifolius*), Japanese climbing fern (*Lygodium japonicum*), Old world climbing fern (*Lygodium microphyllum*) shall not be considered an acceptable component of the vegetative community. Invasive exotic species shall mean those species listed on the Florida Exotic Pest Plant Council's most recent list of invasive exotic plant species (<http://www.fleppc.org/>).

For Xeric Oak Forests (FLUCFCS 421)

28. The subcanopy/shrub layer shall contain at least eight (8) of the species listed on Table 4-4-C and scrub/sandhill oaks (*Quercus* spp) and saw palmetto (*Serenoa repens*) shall be the dominant species. At least three (3) scrub/sandhill oak species shall be present. There shall be an average of at least 200 shrubs per acre and no area

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greater than one acre in size shall have less than 150 shrubs per acre. Early successional species such as saltbush (*Baccharis* spp.) and wax myrtle (*Myrica cerifera*) do not count toward meeting this requirement.

29. Total groundcover by non-nuisance, non-exotic, native species typical of xeric oak/sandhill forests shall be at least 60%. At least 10% of the relative cover shall be derived from wiregrass (*Aristida stricta* var. *beyrichiana*) and other perennial pyrogenic bunchgrasses. Transects shall have an average of at least 20 of the species listed on Table 4-4-C or other native, non-canopy species appropriate to xeric oak or sandhill as identified in literature such as the Florida Plant Atlas (USF), Guide to the Vascular Plants of Florida (Wunderlin 2003), and Guide to the Natural Communities of Florida (Florida Natural Areas Inventory). Bare ground and leaf litter shall cumulatively constitute 40% or less cover. Cumulative total cover by non-native grasses, such as Bahia grass (*Paspalum notatum*), Bermuda grass (*Cynodon dactylon*), and smutgrass (*Sporobolus indica*) shall be less than 10%.
30. Invasive exotic vegetation including, but not limited to Cogon grass (*Imperata cylindrical*), Chinese tallow (*Sapium sebiferum*), Brazilian pepper (*Schinus terebinthifolius*), Japanese climbing fern (*Lygodium japonicum*), Old world climbing fern (*Lygodium microphyllum*) shall not be considered an acceptable component of the vegetative community. Invasive exotic species shall mean those species listed on the Florida Exotic Pest Plant Council's most recent list of invasive exotic plant species (<http://www.fleppc.org/>).

For Temperate Hardwood, Live Oak and Hardwood-Conifer Mixed Forests (FLUCFCS 425, 427, and 434):

31. The canopy layer in temperate hardwood forests (FLUCFCS 425) shall contain at least eight (8) of the tree species listed on Table 4-4-D and no one tree species shall constitute more than 30% of the total trees. At least 66% of the trees shall be hardwoods.
32. The canopy layer in live oak forests (FLUCFCS 427) shall contain at least four (4) of the tree species listed on Tables 4-4-D and at least 66% of the trees shall be live oak (*Quercus virginiana*).
33. The canopy layer in hard-wood coniferous forests (FLUCFCS 434) shall contain at least eight (8) of the tree species listed on Table 4-4-E and no one tree species shall constitute more than 30% of the total trees. Neither pines nor hardwoods shall account for more than 66% of the total trees.
34. An average of at least 300 live trees per acre that are an average of at least 12 feet tall shall be present (the height requirement does not apply to Cabbage Palm (*Sabal palmetto*), which shall have at least one leaf that is three (3) feet long including the stalk), and no area greater than one acre in size shall have less than 100 trees per acre.

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35. The shrub layer shall contain at least five (5) of the species listed on Tables 4-4-D and 4-4-E, with no one shrub species contributing more than 30% of the total shrubs, and shall have an average of at least 100 live shrubs per acre. Early successional species such as saltbush (*Baccharis* spp) and wax myrtle (*Myrica cerifera*) do not count toward meeting this requirement).
36. Total groundcover by non-nuisance, non-exotic, native species typical of native upland forest communities shall be at least 70%. Bare ground and leaf litter shall cumulatively constitute 20% or less cover. Cumulative total cover by non-native grasses, such as Bahia grass (*Paspalum notatum*), Bermuda grass (*Cynodon dactylon*), and smutgrass (*Sporobolus indica*) shall be less than 10%.
37. Invasive exotic vegetation including, but not limited to Cogon grass (*Imperata cylindrical*), Chinese tallow (*Sapium sebiferum*), Brazilian pepper (*Schinus terebinthifolius*), Japanese climbing fern (*Lygodium japonicum*), Old world climbing fern (*Lygodium microphyllum*) shall not be considered an acceptable component of the vegetative community. Invasive exotic species shall mean those species listed on the Florida Exotic Pest Plant Council's most recent list of invasive exotic plant species (<http://www.fleppc.org/>).

D. Streams (FLUCFCS 511)

1. **Hydrology:** Each reclaimed stream shall have a bankfull discharge comparable to the values provided on Appendix 2-2-B-i and the final design plans required by Specific Condition 24. The frequency of bankfull events shall occur at a frequency comparable to the existing streams that were monitored for low flow and bankfull flow frequency. The velocity of water shall be adequate to preclude the establishment of excessive amounts of vegetation in the channel following canopy closure in the stream buffers. Water depths and flows shall be comparable to those in Appendix 2-2-B-i and the final design plans approved by the Department and at least within the range of the existing streams that were monitored for low flow and bankfull flow frequency
2. **Design Consistency:** For each restored stream segment, the as-built construction report required by Specific Condition 24q shall be utilized to document that the conditions of the restored stream segment are consistent with the stream design outlined in Appendix 2-2-B-i and the final design plans approved by the Department per Specific Condition 24. Specifically, the as-built construction report shall demonstrate that morphological design parameters in Table 8 of Appendix 2-2-B-i and parameter values derived during the final design as approved by the Department were achieved during construction within acceptable tolerances (10 percent). The report shall also demonstrate the successful establishment of all habitat amendments, including number of bends/pools, number of large woody debris (LWD) snags, number of root wads, and percent palmetto lining the banks, as applicable for each restored stream reach.

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3. **Stream Stability:** Morphological parameters shown in Table 8 of Appendix 2-2-B-i shall be consistent with final design values approved by the Department. Variation in morphological parameter values over time from those documented by the as-built survey shall not exceed the range of values (i.e., natural variability) represented by the survey data of reference streams shown in Table 7 of Appendix 2-2-B-i, as based on drainage area and the reference design curve.
4. **In-Stream Vegetation:** Vegetation cover within the bankfull extent of the restored stream channels shall not exceed 50% of the channel bottom by year 10 of monitoring or following tree canopy closure.
5. **Buffer Vegetation:** The riparian buffer shall be established as described in Specific Condition 25 to meet the land uses as shown in Appendix 4-4-D. Vegetation in the adjacent buffer area shall be trending toward meeting the success criteria listed for that community type in Specific Condition 28. Relative cover by nuisance and exotic species within the riparian buffers shall be less than 10%.
6. **Biota:** Representation and relative abundance of lotic versus lentic taxa, representation and relative abundance of functional feeding groups, species diversity, and species richness values shall be similar to those documented in existing streams to be mined/impacted, other reference streams, and/or literature data. Mosaic shall prepare and submit reference stream data and reference values that will be used for macroinvertebrate performance criteria for Department approval within 90 days of permit issuance. Determination of lotic versus lentic species and functional feeding guilds shall be assigned based on Merritt and Cummins, An Introduction to the Aquatic Insects of North America, or similar published literature. In instances when a genus or species is assigned as both lotic and lentic, each individual sampled of that genus/species shall be considered as one half of an individual for each designation.
7. **Sloughs and Strands:** Slough and strands (FLUCFCS 516) shall be jurisdictional in accordance with Rule 62-340, F.A.C based on visual inspection or hydrologic data. Documentation of restoration of the final mitigation slough/strand lengths listed on Table 4-5 shall be provided to the Department.

E. Wetlands and Other Surface Waters Jurisdiction

1. Mine wide, not less than 766.8 acres of created wetlands and other surface waters and 20,464 linear feet of created stream channels (FLUCFCS 511 and 516) shall be determined to be jurisdictional pursuant to Chapter 62-340, F.A.C. This includes 326.9 acres of created forested wetlands, 439.0 acres of created herbaceous wetlands and 0.9 of an acre of other surface waters. The minimum acreage for each wetland identified on Maps 4-2-B-ii, 4-8-B-i shall be achieved as indicated on Table 2-4-F. At least the minimum length of each stream segment identified on Map 4-3-B shall be achieved as indicated on Table 4-5. However, minor changes in the size, shape, or

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location of individual wetlands and streams may be acceptable subject to review and written approval from the Department. The acreage of wetlands shall be determined pursuant to Chapter 62-340, F.A.C., and the boundaries shall be mapped with GPS. Stream lengths shall be determined based on survey data or GPS mapping of the channel thalweg.

2. For the off-site Myakka River Restoration Project, not less than 3.6 acres of wetlands shall be created, not less than 691.7 linear feet of stream shall be created, and stream reaches shall be increased 333.2 linear feet as a result of enhancement activities conducted on 1,398.6 linear feet of existing stream.

29. MITIGATION RELEASE PROCEDURES: The required mitigation shall be released when Specific Condition 28 has been met. Mitigation wetlands and streams shall be released as follows:

- a. The permittee shall notify the Department whenever the permittee believes the mitigation is ready for release, but in no event earlier than two years after the mitigation is completed. This notice shall be sent to the Administrator, Mining and Mitigation Program, MiningAndMitigation@dep.state.fl.us or to the Department of Environmental Protection, 2600 Blair Stone Road, MS 3577, Tallahassee, FL 32399;
- b. Within one hundred twenty (120) days of receipt of this notice, the Department shall notify the Permittee that either the Department has determined:
 1. That the mitigation can be released; or
 2. That the mitigation cannot be released, identifying those elements of the mitigation that do not meet the release criteria.

30. LONG TERM MANAGEMENT RELEASE CRITERIA: The on-site and off-site mitigation uplands, wetlands, streams and other surface waters shall be released from the Long Term Management Plan (LTMP) required in Specific Conditions 5 and 6, when the Department has verified that the site specific mitigation is self-sustaining when compared to the Baseline Documentation Reports. The criteria used to demonstrate self-sustainability will be a minimum of two consecutive reports as described in Section 8 of the LTMP, verifying that no significant deviations from baseline conditions have resulted based on the management activities utilized.

31. WASTE CLAY AND SAND TAILINGS DISPOSAL PLANS:

- a. An Annual Narrative on Waste Clay Disposal for the mine shall be completed and submitted annually. The Narrative shall describe the clay disposal and waste clay sampling activities and provide the available sampling data from the previous and current years.

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- b. An updated Waste Clay Disposal Plan (Appendix 3-4-A) and Phosphatic Waste Clay Consolidation Model for the mine shall be completed and submitted every five (5) years or when there is a major change in the Waste Clay Disposal Plan; which may include, but are not limited to, major changes in the production rate, addition of reserves and changes in the approved waste clay disposal areas. The updated Phosphatic Waste Clay Consolidation Model shall incorporate the clay disposal information and the Waste Clay sampling data acquired since the previous update. The permittee may request modification to the requirements of this specific condition.
 - c. An Annual Narrative on Sand Tailings Disposal for the mine shall be completed and submitted annually. The Narrative shall identify the overall facility sand tailings production and utilization based on known production and mining areas, and identify the Reclamation Parcels where tailings were disposed the previous year. The Narrative shall also include the proposed Reclamation Parcels for tailings disposal during the current year.
 - d. An updated Sand Tailings Disposal Plan for the mine shall be completed and submitted every five (5) years. A year by year production and void creation for the overall facility shall be provided, in order to evaluate potential stockpiles or deficits that will occur through the life cycle. The plan shall also provide yearly sand tailings disposal projections specific for each Reclamation Parcel. In the event that a sand tailings balance assessment identifies a potential sand tailings deficit that could affect an area exceeding 5% of the remaining sand tailings disposal acreage, then the assessment shall also identify the specific sand tailings areas where the approved land surface elevations shown on Map 4-5 may not be able to be established, and describe all wetlands and streams identified on Maps 4-3-B and 4-8-B-i and Tables 4-5 and 2-4-F that may be affected by a deficit in material. In the event that such areas are identified, the permittee shall, within 90 days, submit a plan to the Department detailing actions that will be taken to ensure that all required mitigation will be completed in a timely manner.
32. CLAY SETTLING AREA: The clay settling area WE-1, shown on Map 3-4, Table 3-4-A and described in Appendix 3-4-A (Life of Mine Waste Disposal Plan, Wingate East Mine) is conceptually approved in accordance with the following:
- a. An update to the Hydrology Analysis shall be required prior to approval of changes to the footprint of the approved waste clay disposal area. Such changes shall include but not limited to the addition of a new clay settling area, the deletion of a clay settling area, and the expansion or reduction of the WE-1 clay settling area. The permittee may request modification to the requirements of this specific condition.
 - b. The permittee shall provide detailed construction plans for any dam break diversion and containment systems to the Department's Mining and Mitigation Section for review and approval at least three months prior to initiating construction. Any proposed delays in the completion of reclamation or mitigation due to construction and operation of the

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containment systems shall be noted in the Annual Status Reports required by Specific Condition 10.

- c. The outfalls for the reclaimed clay settling area shall be designed to manage the mean annual, 25 year, and 100 year peak storm events while minimizing the potential for erosion and maintaining downstream pre-mining flow volumes. Interim and final outfall installations must be approved prior to commencement of construction. Interim and final outfall configurations shall take into account the effects of additional incremental clay consolidation and the ultimate consolidated clay elevation, respectively, based on consolidation modeling and yearly data collected for the clay monitoring program. The reclaimed clay settling area and associated final outfall structures shall be designed and maintained within the Wingate East Mine to preclude non-modeled storage of rainfall runoff below the lowest outfall control elevation.

33. OPERATION AND MAINTENANCE: The surface water management system approved in this permit shall meet the following requirements:

- a. All construction, operation and maintenance shall be as set forth in the plans, specifications, and performance criteria approved by this permit.
- b. If revisions or modifications to the permitted project are required by other regulatory agencies, the Department shall be notified of the revisions so that a determination can be made whether a permit modification is required.
- c. Within ninety days after removal of the berm and separation of the surface water management system of a reclamation parcel from lands that report to any surface water discharges permitted under Chapter 62-620, F.A.C., the permittee shall submit one set of certified record drawings of the surface water management system as actually constructed and notify the Department that the facilities are ready for inspection and approval.
- d. Within thirty days after sale or conveyance of the permitted surface water management system, the land on which the system is located, or portions thereof, the owner in whose name the permit was granted shall notify the Department of such change of ownership. Transfer of this permit or portions thereof, shall be in accordance with the provisions of Chapter 373, F.S., and Section 6.2 and 6.3, A.H. All terms and conditions of this permit shall be binding upon transfer.
- e. The operational phase applies to those lands disturbed by mining operations, where reclamation has been complete, that no longer report to any surface water discharges permitted under Chapter 62-620, F.A.C., but have not been released in accordance with mitigation success criteria in Specific Condition 28, the reclamation requirements of Chapter 62C-16, F.A.C., and the Long Term Management Plan requirements of Specific Condition 30, as applicable.

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- f. Pursuant to rule 330.310(7)(a), F.A.C., The operation phase of mining activities subject to the land reclamation requirements of Chapter 378, F.5., shall terminate, without the need to apply for abandonment of the permit, after the mine, or its subunits as applicable:
 - i. Has been successfully reclaimed in accordance with Chapter 378, F.5., other than lands disturbed by mining operations that are not subject to the requirements of Chapter 378, F.5.;
 - ii. Has met all success requirements of the individual permit issued under Part IV of Chapter 373, F.S.; when the construction phase of the permit includes all phases of construction, abandonment, reclamation, and final success determination over reclaimed lands; and
 - iii. Does not contain components that require long-term operation or maintenance, such as: stormwater management systems; achievement of mitigation success criteria; work in conservation easements requiring a permit under this chapter; state-owned submerged lands authorizations; dams; above-grade impoundments; works; water control structures; erosion and sedimentation controls; and dewatering pits.
 - g. For mitigation areas covered by the Conservation Easement(s) and Long Term Management Plan required by Specific Conditions 5 and 6, the operational phase shall remain in effect until the Department has determined that the site specific mitigation is self-sustaining when compared to the Baseline Documentation Reports as outlined in the Long Term Management Plan and Specific Condition 30.
34. ELECTRONIC REPORTING: Except as otherwise specifically provided in this permit, the required submittals, such as certifications, monitoring reports, notifications, etc., shall be submitted to the Department in a digital format (via electronic mail, CD or DVD, or through file transfer site), when practicable. The mailing address for the appropriate Department office is 2600 Blair Stone Road, MS 3577, Tallahassee, Florida 32399 and the electronic mail address is MiningAndMitigation@dep.state.fl.us. All submittals shall include the project name and indicated permit number when referring to this project.

35. MONITORING REQUIRED:

A. General Monitoring Requirements:

1. Annual status reports shall be submitted to the Department detailing the progress of the mitigation as specified in Specific Condition 10. Annual hydrology and water quality monitoring reports shall be submitted to the Department as specified in Specific Condition 11. Vegetation monitoring reports shall be submitted to the Department beginning one year after planting as specified in Specific Condition 11. Subsequent vegetation monitoring reports shall be submitted in years two, three, five,

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- and biennially thereafter until release. Vegetation monitoring reports shall include on the cover page, just below the title, the certification of the following statement by the individual who supervised preparation of the report: "This report represents a true, accurate, and representative description of the site conditions present at the time of monitoring."
2. All monitoring data (other than data collected for compliance purposes) shall be submitted as available, but by no later than March 1st of the following year as specified in Specific Condition 11. Please clearly include in the reports: **"This information is being provided in partial fulfillment of the monitoring requirements in Permit No. 0095520-025."**
 3. Vegetation and hydrology monitoring plans detailing specific sampling techniques and proposed sampling locations shall be submitted for approval at least 60 days prior to sampling. Methods used shall be consistent in reference and created wetlands throughout permit duration. The methods should provide an accurate representation of site conditions.
 4. No additional permits are required under Part IV of Chapter 373, F.S., for the installation of piezometers, monitoring wells, staff gauges or any other devices associated with conducting the monitoring required by this permit.
 5. Annual hydrology reports shall include the daily rainfall amounts for the Wingate Mine, with monthly totals.
 6. Proposed minor changes to monitoring locations, parameters and frequencies shall be submitted to the Department in writing. If approved, such changes shall not be considered a formal modification of this permit and shall not require a fee.

B. Selection of Reference Wetlands

Several high-quality wetlands of each community type to be created shall be selected by the permittee and submitted to the Department for review and approval for those community types where reference wetlands are chosen to be used to determine compliance with Specific Condition 28. For the purposes of this section, "high quality" shall mean wetlands that achieve a score of at least 0.77 or receive an 8 for the Community Structure component through application of Chapter 62-345, F.A.C. Reference wetlands may include systems within the onsite preservation areas, or within other protected areas within the region. Additional stage and hydroperiod data shall also be collected from representative wetlands. The permittee shall submit a proposed sampling plan including vegetation and hydrology sampling methods, locations and sampling frequencies to the Department for approval within one year of permit issuance.

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C. Compliance Monitoring: Water Quality and Water Quantity

1. All monitoring reports shall include the following information: (1) permit number; (2) dates of sampling and analysis; (3) a statement describing the methods used in collection, handling, storage and analysis of the samples; (4) a map indicating the sampling locations; and (5) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data. Monitoring reports shall also include the following information for each sample that is taken: (1) time of day samples taken; (2) water temperature (°C); (3) depth of water body; (4) depth of sample; (5) antecedent weather conditions; and (6) direction of flow. Water quality shall be monitored in accordance with Table MR-A.
2. Water quality data collected in accordance with Specific Condition 13 shall be submitted with the Annual Monitoring Reports as specified in Specific Condition 11. All monitoring reports shall include field notes documenting the sampling procedures; cumulative analytical summary tables, including the applicable surface water and groundwater standards; groundwater elevation contour maps; sample location maps; surface water sampling logs; Groundwater Sampling Logs per DEP-SOP-001/01 FS2200 or a similar form; analytical laboratory reports; and conclusions and recommendations.
3. Hydrology data shall be submitted with the Annual Monitoring Reports as specified in Specific Condition 11. Hydrology data shall be compared and presented in both a tabular and graphical format, with the on-site daily rainfall data. Any hydrological and/or biological indicators of wetland impacts noted during the monitoring program should be fully discussed in the annual report in regard to: (1) the overall hydrologic setting, (2) whether the noted impacts are negative or positive, and (3) whether the said impacts are of any significance.
4. Water levels in wetlands and other surface waters shall be monitored in accordance with Table MR-B.

D. Stream Monitoring

1. For stream projects, visual monitoring shall be conducted along the entire length of each reach to document observable stream conditions associated with sediment transport and stream stability, such as bank instability, instability/failure of instream structures, structure piping, headcuts, lateral bank migration and excessive sediment deposition or degradation of the channel. Digital photographs of observed and noted problems will be taken. GPS coordinates in Florida State Plane will be collected at noted problem areas. Visual monitoring of streams shall be conducted only by individuals that have the appropriate training and/or expertise to assess the stability of streams and the condition of in-stream structures.

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2. A brief narrative of the results of the visual assessments shall be included in the Annual Monitoring Report. The narrative in the Annual Monitoring Report should include the results from the visual assessments conducted in that monitoring year. Any areas of concern shall be annotated on a plan view of the site with GPS coordinates provided in decimal degrees (Florida State Plane), with photographs, and with the written narrative describing the features and issues of concern. Once a feature of concern has been identified, that same feature shall be reassessed on all subsequent visual assessments. Photographs should be taken from the same location year-to-year to document the current condition of the concern. The Monitoring Report shall identify all recommended courses of action, which may include continued monitoring, repair or other remedial action to alleviate the concerns.
3. Reclaimed streams shall be surveyed annually to assess morphological stability. Three 100-meter reaches shall be surveyed for every 1,000 meters of reclaimed stream length. The selection of survey reaches shall be representative of overall reach conditions and include areas that may be predisposed to potential problems, such as particularly tight meanders, channel confluences, or changes in bed slopes. The upstream and downstream extents of the survey reaches shall be permanently monumented and referenced to the thalweg stations from the original design. Surveying shall be conducted for 10 years, with monitoring events occurring on years 1, 2, 3, 5, 7, and 10.

Surveying shall include longitudinal thalweg, bank, water surface (if present), and bankfull indicator profiles and representative cross-sections. A total of six cross-sections shall be surveyed in each surveying reach: 3 in riffles and 3 in pools located in meander bends. Meander bend pool cross-section locations shall be selected to include a range of meander radius of curvatures. Cross-sections shall include thalweg, water surface (if present), bankfull, top of bank elevations and measurements of Bank Height Ratio (BHR) and Entrenchment Ratio (ER). Cross-sections shall be permanently monumented and referenced to the thalweg stations from the original design.

4. The as-built survey of the longitudinal thalweg profile, water surface, bankfull indicators, and top of banks, collected during the as-built survey of the constructed channel according to Specific Condition 24p shall be used as the baseline condition for comparing and assessing morphological monitoring data. Survey monitoring data shall be used to calculate all morphological parameters contained in Table 8 of Appendix 2-2-B-i. Morphological parameter values derived from morphological monitoring shall be compared to the parameter values calculated from the as-built survey data to determine if Release Criteria are met.
5. Hydrology Monitoring: Hydrology shall be monitored as specified in Table MR-B.
6. Macroinvertebrate Monitoring: To establish a standard method, the Department's Standard Operating Procedures for Stream Condition Index sampling and calculation

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shall be used to monitor establishment of a macroinvertebrate community in reclaimed streams. Macroinvertebrate sampling shall be conducted annually, providing flow conditions are sufficient, for at least three years prior to release. The three samples do not have to be in consecutive years to allow for sampling under suitable flow conditions. Sampling shall be conducted in one (1) 100-meter reach for every 1,000 feet of reclaimed stream length up to a total of three (3) sampling reaches per stream segment. The 100-meter reaches sampled shall be chosen from the same 100-meter reaches used for surveying under monitoring requirement D4. The individual SCI metrics shall be compared to reference data approved by the Department under Specific Condition 28D6. If the stream does not meet Release Criteria after three sampling events have been completed, additional annual sampling shall be conducted until the Release Criteria is met.

E. MITIGATION MONITORING

1. **VEGETATION:** All herbaceous vegetation monitoring shall occur during or immediately after the summer growing season. The reports should include statistical summaries of all monitoring required under this section, a description of the methods used to collect the data (include citations and strata definitions (trees, shrubs, groundcover), photographs taken from the same permanent stations, and maps of sampling locations. Means and one standard error of the mean for each variable measured shall be reported in each report. Percent cover shall be reported as both total and relative. Information shall be reported graphically against time in the final report submitted prior to the request for release. Reports shall be submitted in the following format:

- a. Data shall be reported separately for individual wetlands. For wetlands that include both herbaceous and forested areas, provide separate groundcover data tables for each wetland type.
- b. DEP mitigation data shall be reported separately from data collected from non-DEP mitigation areas.
- c. Shrub data shall be reported separately.
- d. Summary data tables including the following information shall be provided for each wetland and wetland type:

Trees:

- Density of each species (numbers per acre, not just numbers sampled)
- Mean height of each species
- Numbers recruited if they meet the specified tree definition

Shrubs:

- Density of each species (numbers per acre, not just numbers sampled)
- Numbers recruited if they meet the specified shrub definition

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Ground cover (report both total and relative cover):

- percent cover of each species
- percent cover of desirable species (as defined in Specific Condition 28C1).
- percent cover of nuisance species (as defined in Specific Condition 28C4).
- percent cover of all wetland species
- percent cover of upland species
- percent cover of open water (total cover only)
- percent cover of bare ground (total cover only)
- qualitative description of vegetation zonation along the wetland ecotone

- e. If any supplemental planting was done, provide a table that lists species and numbers planted.
 - f. Provide species data by both scientific and common name.
2. **SOILS:** For each created wetland, the initial monitoring report shall also include information on the final soil types within the wetland, including the range of muck or wetland topsoil depths and a description of the upper foot of soil, below any muck or wetland topsoil. Descriptions for soils below the muck or topsoil can include sand tailings or overburden. The texture of the overburden should be described (sandy-loam, sand, etc.). Actual measurements of muck depths shall be obtained from at least 5 locations in the 611 FLUCFCS wetlands. If no muck or topsoil was applied, then this should be noted.
 3. **WATER QUALITY:** Water Quality shall be monitored as specified in Table MR-A.
 4. **WATER QUANTITY:** Water quantity shall be monitored in accordance with Table MR-B. Water quantity data shall be compared and presented in both a tabular and graphical format, with the on-site daily rainfall data being collected as shown on Table MR-B.

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MR-A: Water Quality Monitoring (Page 1 of 2)

Locations	Parameters	Methods	Frequency/ Duration	Compliance Criteria
1. Existing Surface Water Stations: Tex SWQ-4 and WGC MR-1.	pH, Temperature, DO, Conductivity, Turbidity, Total Alkalinity, Hardness, TSS, TP, Ammonia, Ortho Phosphate, Total Nitrogen, TKN, Nitrate/Nitrite, Fluoride, Sulfate, Total Organic Carbon (TOC), Chloride, Chlorophyll-a, Aluminum, Selenium, Calcium, Magnesium, Arsenic, Cadmium, Chromium, Iron, Lead, Nickel, and Zinc	DEP Standard Operating Procedures (SOPs) or according to an approved QAPP.	Quarterly prior to and through construction phase.	62-302.530, F.A.C., Class III Standards and 62-330, F.A.C.
3. Existing Monitoring Wells: TEXGW-1, TEXGW-2, and TEXGW-3.	pH, temperature, Conductivity, Turbidity, TDS, Total Alkalinity, Hardness, TP, Ortho Phosphate, Total Nitrogen, TKN, Nitrate/Nitrite, Fluoride, Sulfate, Chloride, Aluminum, Selenium, Calcium, Magnesium, Arsenic, Cadmium, Chromium, Iron, Lead, Nickel, and Zinc.	DEP SOPs or according to an approved QAPP.	Semi-Annually prior to and through construction phase.	62-520.420, F.A.C., Class G-II Standards
2. Existing Surface Water Stations and Monitoring Wells: Tex SWQ-4, WGC MR-1, TEXGW-1, TEXGW-2, and TEXGW-3.	Gross Alpha and Radium 226/228. If gross alpha is greater than 15, then Uranium shall also be monitored.	DEP SOPs or according to an approved QAPP.	Annually prior to and through construction phase.	62-302.530, F.A.C., Class III Standards, 62-330, F.A.C and 62-520.420, F.A.C., Class G-II Standards

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MR-A: Water Quality Monitoring (Page 2 of 2)

Locations	Parameters	Methods	Frequency/ Duration	Compliance Criteria
<p>5. Preserved Streams and Wetlands:</p> <p>Field located 50 m upstream and 50 m downstream of the point of severance and reconnection of each stream or wetland.</p>	Turbidity	DEP SOPs or according to an approved QAPP.	Daily during severance or reconnection to preserved wetlands or streams.	62-302.530, F.A.C., Class III Standards
<p>6. Reclaimed Streams and Wetlands:</p> <p>Field located in stream and mitigation wetlands at or near the connection to preserved wetlands/streams.</p>	Turbidity, Temperature, DO, pH, and Conductivity.	DEP SOPs or according to an approved QAPP.	Monthly from May through October prior to reconnection to preserved wetlands.	62-302.530, F.A.C., Class III Standards
<p>7. Reclaimed Streams and Wetlands:</p> <p>Field located in streams and mitigation wetlands at or near vegetation transects.</p>	Turbidity, Temperature, DO, pH, and Conductivity.	DEP SOPs or according to an approved QAPP.	Three weekly samples prior to release request.	62-302.530, F.A.C., Class III Standards

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Table MR-B: Water Quantity Monitoring (Page 1 of 1)

Locations	Parameters	Methods	Frequency/ Duration	Compliance/ Release Criteria
1. Rain Gauges: Wingate Creek No. 1 (Rain Gauge 38) Wingate Creek No. 2 (Rain Gauge 37) Manson Jenkins (Rain Gauge 35) Ona Rain Gauge 13 (Rain Gauge 34) Wingate East (Rain Gauge TBD)	Rainfall	Rain gauge	Daily	N/A
2. Existing Surface Water Gauging Stations: TEXSWQ-4 and MR-1.	Water level and flow hydrographs.	Continuous stage level recorders and DEP SOP FT 1800.	Continuously through construction phase. Flow measurements taken monthly or as needed to refine the existing flow rating curves.	Downstream flows shall not be reduced to the point where lack of flow exiting the mine property causes water quality violations in major tributary systems.
3. Wetland Hydrographs: In each created wetland.	Water levels, average water depth, and hydroperiod hydrographs	Staff gauges, piezometers, and visual inspection	Piezometers weekly for at least 2 years after contouring is complete for initial hydrological assessment, then monthly continuing until release.	Within the range of values documented in reference wetlands of the appropriate community type.
4. Stream Gauging: In downstream most portion of each created stream reach.	Water level and flow hydrographs, occurrence of bankfull events.	Continuous stage level recorders and DEP SOP FT 1800	Stage - continuously until release. Flow measurements - as needed to develop flow rating curves.	Bankfull stage and discharge volumes shall be similar to the values described in Appendix 2-2-B-i.

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Table MR-C: Vegetation, Soil, and Stream Macroinvertebrate Monitoring (Page 1 of 2)

Monitoring Type	Locations	Parameters	Methods	Frequency/ Duration	Compliance/ Release Criteria
1. Vegetation	Field located randomly selected replicate sites field located along several transects across each created mitigation wetland.	Species list and % cover, FLUCCS level III map, % bare ground and open water, nuisance spp. cover, upland spp. cover, wetland spp.cover, tree density, shrub density, tree height, tree dbh (starting year 5), and fruit and seedlings (starting year 7).	Modified line-intercept, belt-transects; point-frames, and/or elongated quadrats.	Years 1, 2, 3, and 5 following final planting, then every other year through the year prior to release request.	Specific to community type being restored. See Specific Condition 28.
2. Soils	In mitigation wetlands at or near vegetation transects described above.	Substrate description (hydric indicators/ depth to hydric indicators), litter accumulation, compaction, and soil moisture.	soil auger, shovel, penetrometer, soil moisture meter	During vegetation sampling.	See Soils Section of Mitigation Monitoring Section.

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Table MR-C: Vegetation, Soil, Stream Macroinvertebrate Monitoring (Page 2 of 2)

Monitoring Type	Locations	Parameters	Methods	Frequency/ Duration	Compliance Criteria
3. Stream Channel Integrity and Morphology	Entire channel profile and representative cross sections of each created stream reach for as-built condition; then 3 representative 100-m reaches for each 1,000 m of stream thereafter.	Bank and channel stability, map of channel, sinuosity, stream length, stream slope, bankfull indicators present, bankfull area, depth and width, max depth, width/depth ratio, entrenchment ratio, radius of curvature, large woody debris abundance, and vegetation cover in stream channel.	Visual inspection. Survey equipment, and GPS	Visual inspection of the channel after significant rain events for at least the first two years after contouring. Initial – Survey entire channel, survey profile and representative cross sections. Then representative reaches during years 2, 3, 5, 7 and 10 after completion of construction.	See Specific Conditions 28D2, D3 and 36D1-4
4. Macro-invertebrates	One 100m reach for each 1,000 feet of stream up to a total of 3 reaches per stream.	Number and identity of each taxa, diversity, richness, and functional feeding guilds (Merritt & Cummins).	Dipnet sampling, (DEP SCI SOP)	Annually for at least three years prior to release request. Sampling shall be conducted in late August or early September.	See Specific Conditions 28D6 and 36D6.

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<u>Attached Tables:</u>	<u>Title</u>	<u>Document Receipt Date</u>
Table 2-1-A-ii	Site Land Use Summary	September 28, 2015
Table 2-2-C-i	FDEP JD Wetland and OSW Impact Summary	September 28, 2015
Table 2-2-D-i	Stream Impact Summary	July 20, 2015
Table 2-4-B	UMAM Functional Gain vs. Functional Loss Summary	September 28, 2015
Table 2-4-C	Wetland and OSW Current Condition UMAM Summary by Assessment Area ID	September 28, 2015
Table 2-4-D	Preservation (UMAM)	September 28, 2015
Table 2-4-E	Enhancement (UMAM)	September 28, 2015
Table 2-4-F	Creation (UMAM)	September 28, 2015
Table 2-6-A	State and Federal Listed Wildlife Observed on Site	December 23, 2014
Table 2-6-D	State and Federal Listed Plant Species Observed on Site	December 23, 2014
Table 3-1-B	Mine Impact Summary	October 15, 2015
Table 3-2	Mine Plan Summary	December 23, 2014
Table 3-4-A	Clay Settling Area Summary	July 20, 2015
Table 3-4-B	Wingate Estimated Tailings Schedule	December 23, 2014
Table 4-1	Mine -Reclamation Schedule	December 23, 2014
Table 4-3-A-i	Proposed Plantings in Bay Swamps (FLUCFCS 611)	December 23, 2014
Table 4-3-A-ii	Proposed Plantings in Gum Swamps and Inland Ponds & Sloughs (FLUCFCS 613 and 616)	December 23, 2014
Table 4-3-A-iii	Proposed Planting in Streams and Lake Swamps (FLUCFCS 615)	December 23, 2014
Table 4-3-B	Proposed Plantings in Mixed Wetland Hardwoods (FLUCFCS 617)	December 23, 2014
Table 4-3-D	Proposed Plantings in Mixed Forest Swamps (FLUCFCS 630)	December 23, 2014
Table 4-3-E	Proposed Herbs to be Planted in Freshwater Marsh (FLUCFCS 641)	December 23, 2014
Table 4-3-F	Proposed Herbs to be Planted in Wet Prairie Marshes (FLUCFCS 643)	December 23, 2014
Table 4-3-G	Proposed Herbs to be Planted in Shrub Marsh (FLUCFCS 647)	December 23, 2014

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Table 4-3-J	Proposed Herbs to be Planted in Wet Palmetto Prairie (FLUCFCS 649)	December 23, 2014
Table 4-4-A	Proposed Plantings in Palmetto Prairie (FLUCFCS 321)	December 23, 2014
Table 4-4-B-ii	Proposed Plantings in Other Pine Flatwoods (FLUCFCS 411)	December 23, 2014
Table 4-4-B-iii	Proposed Plantings in Other Pine Forests (FLUCFCS 419)	December 23, 2014
Table 4-4-C	Proposed Plantings in Xeric Oak Scrub and Sand Live Oak (FLUCFCS 421 and 432)	December 23, 2014
Table 4-4-D	Proposed Plantings in Live Oak and Temperate Hardwood (FLUCFCS 427 and 425)	December 23, 2014
Table 4-4-E	Proposed Plantings in Hardwood - Conifer Mixed (FLUCFCS 434)	December 23, 2014
Table 4-5	Reclaimed Streams and Slough/Strand Lengths by LRU	September 28, 2015
Table 4-7	Reclaimed Uplands in 25' Buffer	October 20, 2015
<u>Attached Maps:</u>		
<u>Title:</u>		
<u>Signed & Sealed Date:</u>		
Map 1-1-A	General Location	December 16, 2014
Map 1-2	General Vicinity	July 16, 2014
Map 1-4	Aerial Photo	December 16, 2014
Map 2-1-B-i	Existing Vegetation (Level I)	July 16, 2015
Map 2-1-B-ii	Existing Vegetation (Level III)	July 16, 2015
Map 2-1-B-ii-a	Existing Vegetation (Level III) - Tile Sheets 1-8	July 16, 2015
Map 2-2-B-i	FDEP Jurisdictional Wetlands and OSW	December 16, 2015
Map 2-2-B-i-a	FDEP Jurisdictional Wetlands and OSW - Tiles Sheets 1-8	September 25, 2015
Map 2-2-B-ii	Streams	July 16, 2015
Map 2-2-B-ii-a	Streams - Tiles Sheets 1-8	July 16, 2015
Map 2-3	Proposed Monitoring Stations	October 20, 2015
Map 2-4-B	Wetland UMAM Values	September 25, 2015
Map 2-4-B-a	Wetland UMAM Values - Tiles Sheets 1-8	September 25, 2015
Map 2-5	Existing Soils	December 16, 2014
Map 2-5-a	Existing Soils - Tile Sheets 1-8	December 16, 2014

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Map 2-6-B	Listed Wildlife Locations	July 16, 2015
Map 2-7	Existing Topography	December 16, 2014
Map 2-7-a	Existing Topography - Tile Sheets 1-8	December 16, 2014
Map 2-8-A	100-Yr. Floodplain	December 16, 2014
Map 2-8-B	25-Yr. Floodplain	December 16, 2014
Map 2-9-A	Existing Drainage Basins	December 16, 2014
Map 3-1	Mine Plan and Access Corridors	December 16, 2014
Map 3-2	Mined, Disturbed Areas	July 16, 2015
Map 3-4	Waste Disposal	December 16, 2014
Map 3-6	Best Management Practice (BMP) Buffers	December 16, 2014
Map 4-1	Reclamation Schedule	December 16, 2014
Map 4-2-B-i	Post Reclamation Vegetation (Level I)	September 25, 2015
Map 4-2-B-ii	Post Reclamation Vegetation (Level III)	September 25, 2015
Map 4-2-B-ii-a	Post Reclamation Vegetation (Level III) - Tile Sheets 1-8	September 25, 2015
Map 4-3-B	Post Reclamation Streams	September 25, 2015
Map 4-4	Post Reclamation Soils	December 16, 2014
Map 4-5	Post Reclamation Topography	September 25, 2015
Map 4-5-a	Post Reclamation Topography - Tile Sheets 1-8	September 25, 2015
Map 4-6	Post Reclamation Basins	September 25, 2015
Map 4-8-B-i	FDEP Mitigation Wetlands and Streams	September 25, 2015
Map 4-8-B-i-a	FDEP Mitigation Wetlands and Streams - Tile Sheets 1-8	September 25, 2015
Map 4-8-B-ii	UMAM Scores Without Project	September 25, 2015
Map 4-8-B-ii-a	UMAM Scores Without Project - Tile Sheets 1-8	September 25, 2015
Map 4-8-B-iii	UMAM Scores With Project	September 25, 2015
Map 4-8-B-iii-a	UMAM Scores With Project - Tile Sheets 1-8	September 25, 2015
Map 4-8-B-iv	Mitigation Categories	October 15, 2015
Map 4-8-B-iv-a	Mitigation Categories - Tile Sheets 1-8	October 15, 2015
Map 4-8-C	Proposed Conservation Easements	September 25, 2015
Map 4-8-D	Post Reclamation Wetland Cross Section Locations	September 25, 2015

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<u>Attached Figures:</u>	<u>Title</u>	<u>Document Receipt Date:</u>
Figure 2	Typical Access Corridor Cross Section	December 23, 2014
Figure 3-B	Typical Ditch and Berm System Cross Section	July 20, 2015
Appendix 4-4-D	Post Reclamation Land Use Within Proposed Conservation Easements	September 28, 2015
Appendix 4-4-D-a	Post Reclamation Land Use Within Proposed Conservation Easements – Tile Sheets 1-8	September 28, 2015
<u>Attached Documents:</u>	<u>Title</u>	<u>Document Receipt Date:</u>
Appendix 1-4	Financial Assurance	July 20, 2015
Appendix 2-2-A-iii	Post Reclamation Wetland Cross Sections	July 20, 2015
Appendix 2-2-A-iv	Wetland Hydroperiods in the Post Reclamation Landscape at the Wingate East Mine	July 20, 2015
Appendix 2-2-B-i	Stream Mapping, Assessment, and Reclamation Design Guidance	July 20, 2015
Appendix 2-6-B	Wingate East Wildlife Habitat Management Plan	July 20, 2015
Appendix 3-4-A	Life of Mine Waste Disposal Plan Wingate East Mine	January 16, 2015
Appendix 3-6-C	Stormwater Management Plan	December 23, 2014
Appendix 4-3-A	Preservation Enhancement Plan for the Wingate East Mine	December 23, 2014
Appendix 4-3-B	Myakka River Headwaters Restoration Plan	September 28, 2015
Appendix 4-4-A	Wingate East Conservation Easement Template	October 15, 2015
Appendix 4-4-C	Wingate East Long Term Management Plan	October 15, 2015