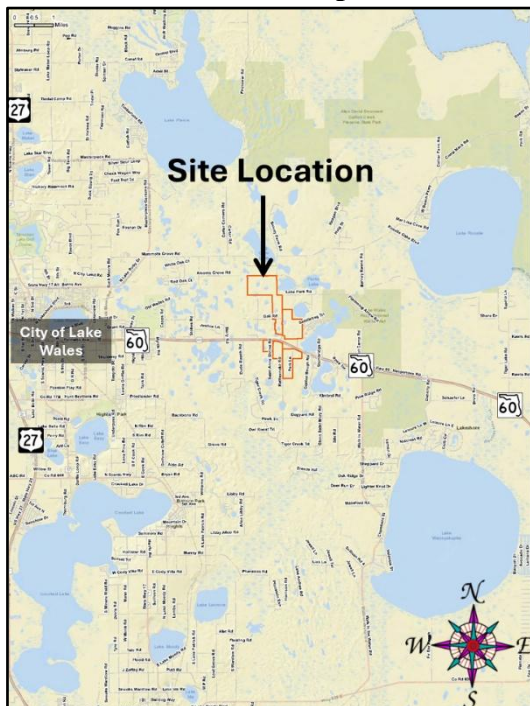


POLK COUNTY DEVELOPMENT REVIEW COMMITTEE STAFF REPORT

DRC Date:	September 25, 2025	Level of Review:	Level 3 Review
PC Date:	December 3, 2025	Type:	Conditional Use Approval
BoCC Date:	N/A	Case Numbers:	LDCU-2025-29
Applicant:	Dick Crockett	Case Name:	Mammoth Grove Mine
		Case Planner:	Andrew Grohowski, Planner II
Request:	The applicant is requesting Conditional Use (CU) approval for Non-Phosphate Mining (Borrow Pit) on approximately 855 acres within an Agricultural/Residential Rural (A/RR) and Industrial (IND) land use district.		
Location:	North and south of State Road 60, south of Camp Mack Road, east and west of Mammoth Grove Road, north of Griffith Road, east of Dude Ranch Road, west of Saddlebag Lake Road, east of the City of Lake Wales in Sections 1, 2, 11, 12 & 35, Townships 30 & 29, Range 28.		
Property Owner:	PH Citrus LLC		
Parcel Number (Size):	282935-000000-023010 (±239.03 acres), 283002-000000-010000 (±148.68 acres), 283001-000000-034000 (±198.34 acres), 283011-942200-010030 (±35.49 acres), 283011-942200-010110 (±10.00 acres), 283011-000000-011020 (±28.90), 283011-942200-010090 (±40.04 acres), 283012-946000-030000 (±40.51 acres), 283012-000000-043000 (±80.34 acres), 283012-000000-032020 (±33.75 acres) Project Area: (±855 acres)		
Future Land Use:	Agricultural/Residential Rural (A/RR), Industrial (IND)		
Development Area:	Rural Development Area (RDA)		
Nearest Municipality:	Lake Wales (± 3.6 miles west)		
DRC Recommendation:	Conditional Approval		
Planning Commission Vote:	Pending Hearing		

Location Map



2025 Satellite Photo (Context)



Summary of Analysis:

The applicant is requesting approval for a non-phosphate mine (sand mine/borrow pit) on approximately ±855 acres with approximately 649 acres designated for excavation. Borrow pits are typically excavated to provide fill material, such as gravel or soil. This can be valuable as the material can be utilized in a variety of construction projects. This is considered a “wet mine” consisting of mine lake areas where the excavated materials or “slurry” will be dredged pumped internally to an onsite processing plant to be washed, sized, and stockpiled. The sand will subsequently be removed for construction activities elsewhere. Hauling activities are planned for the hours of 5 a.m. to 7 p.m. Monday through Saturday, with mining operating on a continual basis. Employee and delivery traffic will only enter and exit the facility through access on Mammoth Grove Road. The mining area is split between an Agricultural/Residential Rural (A/RR) and Industrial (IND) land use districts. Per Policy 2.125-A2 of the Comprehensive Plan, the specialized use of non-phosphate mining is authorized in all land use locations. The project will be mined in five (5) phases total. The total life of the mine is anticipated to last approximately 65 years from County approval with the reclamation process occurring after.

The applicant has submitted the requisite documents for approval, including an operation mine plan, reclamation plan, and post-closure plan. The decision to permit the mining activity is based on an evaluation of the compatibility of the use with surrounding land uses and the ability to mitigate adverse impacts, including noise, visual, airborne, and waterborne pollutants, and traffic impacts. The applicant has demonstrated a plan to address these standards to satisfaction. The proposed use has little need for urban services other than fire rescue and transportation access, both of which are available to the subject site. The roadway system is adequate for the traffic, and the project site is close to State Road 60 (SR 60), a major principal arterial roadway. According to the submitted application, there will be three (3) access points directly from Mammoth Grove Road, two (2) along Saint Anne Shrine Road, and two (2) access points from Rattlesnake Road (Exhibit 5). No access is proposed from Church Road. Main access will be on Mammoth Grove Road, where the processing plant is centrally located. Trucks would then proceed south to SR 60. The traffic circulation plan estimates 60% of the truck traffic will head west on SR 60 and 40% east along SR 60. It is estimated that there will be an average output of 536 trucks per day leaving the site. Staff has recommended conditions on roadway maintenance. The applicant’s Impact Assessment Statement (IAS) indicates wetland and floodplain within the mine area will be avoided to the maximum extent possible, adhering to a 25-foot setback, with possible mitigation provided.

Further environmental studies, access management, final engineering, landscaping and buffering will be reviewed during the Level 2 Review process. After reviewing all the relevant facts, staff recommends approval. The request is compatible with surrounding uses and with the objectives and policies of the LDC and Comprehensive Plan.

Findings of Fact

- *LDCU-2024-24 is a Conditional Use (CU) approval for a Non-Phosphate Mining (Borrow Pit) on approximately ±385 acres within a Phosphate Mining (PM) and Agricultural Residential Rural (A/RR) land use district, and the County's Rural Development Area (RDA).*
- *Per Chapter 2, Table 2.1 of the Land Development Code (LDC), "Mining, Non-Phosphate" in IND and A/RR requires a Level 3, Conditional Use (CU) approval from the Planning Commission.*
- *Per Chapter 2, Section 204.A of the LDC, the purpose of the Agricultural/ Residential Rural (A/RR) district is to "provide lands for the continuation of productive agricultural uses and to provide for very low-density residential development within unincorporated rural areas. The A/RR district permits agricultural activities, agricultural support facilities, multi-family dwelling units, farm labor housing, group living facilities, and community facilities."*
- *Per Chapter 2, Section 204.C.6 of the LDC, the purpose of the Industrial (IND) district is to provide areas for general manufacturing, processing, and distribution of goods. General commercial uses necessary to support the industrial area are also permitted."*
- *LDC Chapter 10 defines Mining, Non-Phosphate as "extraction of limerock, sand, peat, clay, and soil from the earth for commercial purposes. The term also includes the reclamation of previously mined land; accessory transporting, washing, storage, drying, grinding, and shipping of mined materials; and all other accessory activities reasonably related to the mining process, but not chemical processing."*
- *According to POLICY 2.108-A1 of the Polk County Comprehensive Plan, the Rural Development Area (RDA) is an area "characterized by large open areas, agricultural use, with scattered development and rural centers. Services are limited and mostly found in the rural centers and clustered developments."*
- *The Planning Commission voted in 1991 to approve a conditional use for a non-phosphate sand mine operation north of SR 60 along Story Road and to the west of the subject site (CU 91-09). The following were the conditions of that approval:*

"i. This approval shall not constitute a variance or waiver from any requirement of any applicable development regulation.

ii. All driveways shall be approved by the Polk County Engineering Department or the Florida Department of Transportation as applicable.

iii. Post mining reclamation shall be conducted in compliance with the requirements of the Polk County Sand Mining Ordinance.

iv. The Conditional Use (excavated area) shall be confined to the area designated on the site plan submitted with the application and shall be a minimum of twenty (20) feet from any property boundary.

v. The project shall comply with the Polk County Flood Protection and Surface Water Management Code (Ord. 88-04, as amended). DRC Findings/Recommendation Page 3 of 14 Level 3/BGD 4/20/2018 9:15 AM CU 91-09M March 7, 2012

vi. *The following approved permits shall be submitted to the Development Review Committee for their review prior to any mining activity or mining related activity, including excavation, on-site:*

- *SWFWMD: 40D-45 permit and water use permit*
- *FDER: Industrial waste water permit*
- *FDER & USCOE: Dredge and Fill permit, if required*
- *DNR: Notice of intent to mine*

Additional federal and/or state permits may be required for this project. If required, copies of these permits shall be submitted to the Polk County Engineering Division.

vii. *Consistent with the recommendations of the Engineering Division, the applicant shall make the following improvements to Story Road prior to mining activity on the site:*

- *The existing paved portion of Story Road shall be improved to a 24-foot width.*

viii. *The applicant shall inspect the intersection of State Road 60 and Story Road for material spillage and agree to provide for its clean up and removal as necessary.*

ix. *The applicant shall comply with Policy 2.121-C3 (d) by submitting the necessary materials for review and approval by the Development Review Committee prior to any mining or mining related activities on-site."*

- *The Lake Wales Non-Phosphate Mine to the west encompasses over 2,200 acres and has undergone several modifications in 2000, 2004, 2006, and 2012. The most recent was a northern expansion up to Mammoth Grove Road (CU 91-09M).*
- *POLICY 2.124-C1 of the Comprehensive Plan states that, "the Mineral-Resource Protection District (MRPD) overlay is established for the purpose of protecting for future mining those known deposits of minerals and soils that are in appropriate locations so as not to have adverse impacts on existing development."*
- *The Lake Wales Sand Mine is directly adjacent to the subject site and is considered part of the MRPD.*
- *Per POLICY 2.108-A3.c of the Comprehensive Plan, Phosphate Mining shall be permitted within Rural-Development Areas. POLICY 2.125-A2 specifically outlines non-phosphate mining may be permitted in all land use locations.*
- *Per POLICY 2.114-B1: DEVELOPMENT CRITERIA FOR PHOSPHATE MINING - Development within these districts shall conform to the following criteria:*
 - a. *All activities within lands designated as PM shall be conducted in a manner that will minimize adverse effects upon water quality, fish and wildlife, and adjacent land uses.*
 - b. *All mining activities shall require approval through the County's development review procedures. **This review will require the approval of a "Conceptual Mine Plan," which shall include, at a minimum:***

1. a **"Mine-Area Map"** to include, at a minimum, the locations of the mine boundaries, public rights-of-way, existing structures, and environmental features (e.g. topography, watersheds, and any endangered wildlife habitats);
 2. a **"Mine-Area Layout"** to include, at a minimum, planned locations for beneficiation operations, waste-storage areas, and any proposed permanent structures and/or roads;
 3. a **"Reclamation Plan"** to include, at a minimum, all information required by applicable state regulations; and
 4. an **"Operations Plan"** to include, at a minimum:
 - (a) phasing plans,
 - (b) an Impact Mitigation Plan, and
 - (c) a **Traffic Circulation Plan** showing major access routes to the mine site.
- c. Once extraction activities are completed, the site shall be reclaimed (where reclamation is required by Chapter 16C-16, FAC) in accordance with the approved Reclamation Plan. Lands mined prior to reclamation requirements may be developed (reclaimed) without having to file a "reclamation plan."
- Per POLICY 2.125-G1 of the Comprehensive Plan, Non- Phosphate Mining permitted uses:
 "Mining of the following minerals shall be permitted throughout the County in all land use classifications, subject to County approval:
 - a. lime rock
 - b. sand
 - c. peat
 - d. clay
 - e. soil"
 - Comprehensive Plan POLICY 2.125-G2: NON-PHOSPHATE MINING ACTIVITY DEVELOPMENT CRITERIA states Non-Phosphate Mining shall be subject to the following criteria:
 - a. Mineral extraction activities shall be conducted in a manner which will minimize adverse effects to water quality, fish and wildlife, and adjacent land uses. Non-phosphate mining shall be permitted only where compatible with existing land uses and Future Land Use designation.
 - b. All mining activities shall require Board approval through the County's development review procedures. This review will require the approval of a "Mine Plan" which shall include, at a minimum:
 1. a "Mine-Area Map" to include, at a minimum, the locations of the mine boundaries, public rights-of-way, existing structures, and environmental features to include topography, watersheds, and any endangered wildlife habitats;
 2. a "Mine-Area Layout" to include, at a minimum, planned locations for beneficiation operations, waste-storage areas, and any proposed permanent structures and/or roads;
 3. a "Reclamation Plan" to include, at a minimum, all information required by applicable state regulations; and
 4. an "Operations Plan" to include, at a minimum, any phasing plans, an Impact Mitigation Plan, and a Traffic Circulation Plan showing major access routes to the mine site.

- c. *The decision to permit the mining activity shall be based on an evaluation of the **compatibility of the use with surrounding land uses**; and the ability to **mitigate adverse impacts, including noise, visual, airborne and waterborne pollutants, and traffic impacts**.*
- d. *Mineral extraction activities shall not be conducted so as to make the property impractical or impossible for other future uses. Once extraction activities are completed, the site shall be reclaimed in accordance with the approved Reclamation Plan.*
- *Chapter 3, Section 303 of the LDC details the standards that need to be achieved for conditional approval of “Mining, Non-Phosphate” uses. **These include the requirements for the Mine Plan, Reclamation Plan, and Post-Closure Plan.***
- *Chapter 3, Section 303 of the LDC states mining activity must be setback 100 feet from property lines and road right-of-way lines. All mining activity and facilities shall also be prohibited within 200 feet from any residential dwelling unit or residentially designated plat. **A reduction up to 75 feet of the setback from road rights-of-way may be granted by the Planning Commission**, upon the certification by a professional engineer that no structural degradation will occur to the right-of-way as a result of the mining activity and a 30-foot minimum setback from the edge of pavement or travel land, in the case of unpaved roads, is maintained. A reduction up to 75 feet of the setback from property lines may be granted by the Planning Commission where the affected parcel is located within the Rural Development Area (RDA), the affected parcel does not include a residence, and meets at least one of the following:*
 - (1) *The parcel is vacant,*
 - (2) *The parcel is 10 acres or larger in size, or*
 - (3) *The parcel is recognized by the Property Appraiser as agricultural with a "greenbelt" tax exemption.*
- *Chapter 3, Section 303 of the LDC states that an Annual Progress Report shall be required ... “by February 15 of each calendar year, describing the progress of mining and reclamation for each mine site during the past year (If a mine does not operate for a full year, the operator shall still be required to file an Annual Progress Report stating that fact). The report shall be signed by the authorized mine operator. The Annual Progress Report shall be submitted using a report form obtained from Polk County Land Development Division. This report shall include at least the following:*
 - a. *A map on an aerial photograph of scale 1" = 400' on most recent County aerial photograph, showing the areas previously mined during the life of the mine, the areas mined in the past year, and the areas reclaimed in the past year, showing acreage for all these areas;*
 - b. *A map showing the areas intended to be mined on the mine site during the upcoming year and showing the areas intended to be reclaimed during the upcoming year, giving acreage for those areas;*
 - c. *Total cumulative acreage mined and total reclaimed over the life of the mine, to date; and*
 - d. *Copies of environmental violations (by federal, state and regional regulatory authorities) and any subsequent inspection reports shall be attached.*

Failure to file the Annual Progress Report may be grounds for revocation of the Operating Permit. An extension of time for filing the Annual Progress Report may be granted by the

DRC for reasonable cause. However, when an extension is granted, the submittal of the Annual Progress Report shall occur no later than April 16.”

- *Per POLICY 2.113-A1 of the Comprehensive Plan, “Industrial lands are characterized by facilities for the processing, fabrication, manufacturing, recycling, and distribution of goods, and may contain any use also found within a Business-Park Center. However, land use activities that operate externally to enclosed structures may be permitted within an Industrial Future Land Use designation. Industrial districts are also the appropriate location for land use activities that produce significant amount of noise, odor, vibration, dust, and lighting on and off-site that do not produce a physical product.”*
- *The property is zoned for Spook Hill Elementary, McLaughlin Middle, Frostproof Senior High, and Bartow Senior High.*
- *Fire and ambulance response is from Polk County Fire Rescue Station 26, located at 2902 FL-60 East, Lake Wales. The estimated response time is seven (7) to nine (9) minutes.*
- *Sheriff’s response to the site is served by the Southeast District, located at 4011 Sgt Mary Campbell Way in Lake Wales. The response times for October 2025 were: Priority 1 – 14:17 minutes, Priority 2 – 34:37 minutes.*
- *The site is not located within the Polk County Utility Service Area.*
- *Based on the Mine Plan, there are three (3) access points identified along the frontage of Mammoth Grove Road (Road No. 983108), a County-maintained Rural Major Collector Roadway with a surface width of 24 feet. Two (2) access points are along Saint Anne Shrine Road (Road No. 081401), and two (2) driveways gain access from Rattlesnake Road (Road No. 082405), both of which are identified as Rural Minor Collector Roadways with a surface width of 20 feet. Mammoth Grove Road is tracked for concurrency Polk County’s Transportation Planning Organization (Link 4117 E/W).*
- *Per correspondence with Polk County Roads & Drainage Division, additional right-of-way dedication will be required on Mammoth Grove Road, Saint Anne Shrine Road, Rattlesnake Road, and Church Road.*
- *Wetlands and Flood Zones “A” and “AE” are present on the subject site. Per Chapter 6, Section 620.C of the LDC, wetland impacts, where unavoidable and where properly mitigated as determined by agencies having jurisdiction, shall be permitted for mining uses which meet State and Federal regulations.*
- *According to the Florida Natural Areas Inventory Biodiversity Matrix, the site is located within an area of documented endangered plant species sighting. The federal status of this plant species is listed as “threatened.”*
- *The subject property is not located within an Airport Impact Zone or a Wellhead-Protection Area.*
- *According to a preliminary report from the Secretary of State’s Department of Historical Resources Florida Master Site File, no archaeological sites are found within the parcel boundaries.*

- *The Comprehensive Plan defines Compatibility in Section 4.400 as “A condition in which land uses or conditions can coexist in relative proximity to each other in a stable fashion over time such that no use or condition is unduly negatively impacted directly or indirectly by another use or condition.”*
- *This request has been reviewed for consistency with Chapter 2, Tables 2.1 & 2.2, and Sections 303, and 906 of the LDC.*

Development Review Committee Recommendation: Based on the information provided by the applicant, recent site visits, and the analysis conducted within this staff report, the Development Review Committee (DRC) finds that with the proposed conditions the request **IS COMPATIBLE** with the surrounding land uses and general character of the area and **IS CONSISTENT** with the Polk County Comprehensive Plan and Land Development Code. Therefore, the DRC recommends **APPROVAL of LDCU-2025-29.**

CONDITIONS OF APPROVAL

Based upon the findings of fact, the DRC recommends APPROVAL of **LDCU-2025-29** with the following conditions:

1. Approval of LDCU-2025-29 shall be for “Mining, Non-Phosphate” on the subject parcels as demonstrated on the site plan, totaling ±855 acres. The site plan included herein together with the conditions of approval shall be considered the “Binding Site Plan.” Any modifications to LDCU-2025-29, except for those listed in Section 906.E of the LDC, shall constitute a Major Modification to this approval and require a Level 3 Review before the Planning Commission. [PLG]
2. The applicant shall be responsible to inspect adjacent roadway conditions for material spillage and provide for its clean-up and removal at least once a day for each day of operation. [PLG]
3. The stacking of vehicles shall not be permitted within any public right-of-way. [PLG]
4. This approval shall be valid until materials have been removed to the elevations specified in the General Mining Notes of the Operations Site Plan. [PLG]
5. Prior to the commencement of mining activities, the applicant shall hire a qualified professional to conduct a site survey/walkover to ensure that no threatened or endangered plant or animal species exist on the site. If any are discovered, the applicant shall properly protect the specie(s) or mitigate any impacts consistent with federal, state, and local law. [PLG]
6. Prior to Level 2 Review approval, the applicant shall provide a surety in an amount to guarantee the cost of repairing any damage to the driveway as a result of the mining operation. The surety shall include costs for milling, paving, and signing and marking at the mining driveway. This surety shall remain in place for the entire life of the mine. [ENG]
7. Traffic generated by this mine shall only access the property at the point(s) of direct ingress/egress on Mammoth Grove Road, Saint Anne Shrine Road, and Rattlesnake Road, as shown on the site plan. [PLG]

8. The material haul routes shall originate from the processing plant and proceed south on Mammoth Grove Road, which provides direct access onto SR 60 as designated on the Traffic Circulation Plan. No material traveling offsite shall be hauled northbound. [PLG]
9. Timelines and hours of operation set forth by this application are non-binding. [PLG]
10. Any institutional fencing (i.e. 6' chain-link security fencing) shall be removed once the mine reclamation is finished. However, this shall not preclude fencing typically associated with post closure uses (AG Exempt) to be installed. [PLG]
11. Stock piling of materials shall only be located in the areas shown on the Operations Plan, without approval through a major modification of the conditional use. [PLG]

GENERAL NOTES

NOTE: This staff report was prepared without the benefit of testimony and evidence submitted by the public and other parties at a public hearing.

NOTE: Approval of this request shall not constitute a waiver or variance from any applicable development requirement unless specifically noted in the conditions of approval and consistent with the LDC.

NOTE: All written comments made in the application and subsequent submissions of information made during the application review process, which are on file with the Land Development Division, shall be considered to be binding upon the applicant, provided such comments are not at variance with the Comprehensive Plan, LDC or other development regulations in effect at the time of development.

NOTE: Approval of this request is only for Level 3 Review and only for those development decisions within the Planning Commissioners' jurisdiction. A Level 2 Review (engineered plans) will be required reflecting the standard conditions listed in Section 303 of the Land Development Code and the development standards listed in Chapter 7 of the Land Development Code. Upon completion of the Level 2 Process, building permits will be required for all structures in accordance with Chapter 553 of the Florida Statutes.

NOTE: Issuance of a development permit by the county does not in any way create any rights on the part of the applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the county for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

Surrounding Land Use Designations and Current Land Use Activity

The following table provides a reference point for notable and pertinent Future Land Use Map districts and existing land uses upon them.

Table 1

Northwest Agricultural/Residential Rural (A/RR) CUP 91-09 ±2,200 acres	North Agricultural/Residential Rural (A/RR) Big Gum Lake, 3 single-family homes, citrus groves	Northeast Agricultural/Residential Rural (A/RR) Lakefront homes
West Industrial (IND) & Agricultural/Residential Rural (A/RR) Manufacturing & industrial plants ±7-357 acres	Subject Site Agricultural/Residential Rural (A/RR) Industrial (IND) Project Area ±855-acres Vacant cleared land	East Leisure/Recreation (LR) Saddlebag Lake Resort (PUD 71-12 & 73-08) ±140 acres
Southwest Agricultural/Residential Rural (A/RR) Massicotte Subdivision, single-family homes ±3-10 acres	South Agricultural/Residential Rural (A/RR) Orange groves & large vacant tracts	Southeast Agricultural/Residential Rural (A/RR) Lake Aurora, Recreational Camp, single-family homes ±85 acres

The immediate land use districts in the vicinity of the proposed request include A/RR, IND, and LR. The subject site is approximately 855 acres with several open surface waters scattered through the northern portion, totaling approximately 16 acres. The site is bifurcated into two distinct northern

and southern areas by SR 60. Mammoth Grove Road bisects the eastern and western portions of the project area, north of SR 60. According to historical aerials, the entire site has been used in the past for agricultural purposes for citrus production. To the west, an existing 2,200-acre sand mine operation has been in operation since 1991 (CUP 91-09). The existing mine directly abuts the northwesternmost portion of the subject site. Within the past year, the orange groves were clear cut and the subject site sits vacant. This area, unofficially known as Alcoma, has long been part of the citrus industry. It is predominately surrounded by citrus groves and a manufacturing corridor along SR 60. Saddlebag Lake Resort borders the site to the east and consists of 790 units. The recreational vehicle park was later modified to permit mobile homes in 1994. To the southeast, an 85-acre religious camp was established along Lake Aurora in 1947.

Compatibility with the Surrounding Land Uses and Infrastructure

The Comprehensive Plan defines Compatibility in Section 4.400 as “A condition in which land uses or conditions can coexist in relative proximity to each other in a stable fashion.”

Planning staff analyzes a site plan for compatibility by reviewing several factors: the type and intensity of adjacent uses versus the proposed use; how the proposed development interacts with the surrounding area in relation with existing uses; access to roads and where traffic generated from the site will travel; the proximity to retail, employment, emergency services, mass transit, parks, and other public services; and how the applicant addresses possible incompatibilities that might arise from the proposed use by utilizing mitigating strategies found in the Comprehensive Plan or through Conditions of Approval agreed upon by the applicant and staff.

Overall, the request is compatible with the surrounding area as the residential density in this area is very sparse and the intensity of the non-phosphate mine is not anticipated adversely affect the citizens of the immediate surrounding area. This area has long been a crossroads of industrial and mining activity. An existing sand mine abutting the northernmost portion of the site has been in operations since 1991 after it received approval from the Planning Commission (CU 91-09).

A. Land Uses:

The applicant is requesting conditional use approval for a non-phosphate mine (sand mine/borrow pit) to provide sand for fill material, construction aggregates, and other infrastructure projects. Of the approximately 855-acre site, about 649 acres are proposed for excavation. According to the applicant, the sand will be mined

The LDC defines compatibility as “A condition in which land uses or conditions can coexist in relative proximity to each other in a stable fashion over time such that no use or condition is unduly negatively impacted directly or indirectly by another use or condition.”

using a hydraulic dredge at a rate of 10 to 30 acres per year, with an anticipated closure around 2091. Water used in the mining process will be directed to the open water lakes. All processed water will be recirculated and recycled in a closed loop system to the dredge ponds. Mining, processing and maintenance will occur 24 hours a day, 365 days per year. Meanwhile truck operations will take place from 4:00 a.m. to 5:00 p.m., Monday through Saturday, resulting in 6,410 tons of material extracted a day at maximum capacity. The hauling trucks have a 24-ton capacity, generating 268 trucks entering and exiting the facility each day (536 daily truck trips), assuming a maximum of 10 employees at peak operation. Section 708 of the LDC requires 1 parking space per employee, plus 5 visitor spaces. The proposed sand mine will average 7 to 10 employees, therefore the total number of parking spaces required will be fifteen (15). These spaces are designated on the mine plan adjacent

to the office trailer (*Exhibit 5*). Traffic, discussed later in this report, will have minimal impacts on the surrounding roadways, much less so than if material had to be hauled to the property from offsite.

According to the site plan, a processing and wash plant will be located near the center of the site taking access off of Mammoth Grove Road. The height of the stockpiles at the processing plant will average between 25 to 35 feet, with an average of 80,000 cubic feet. Per Section 303, mining product stockpiles that exceed 25 feet in height the minimum setback for those stockpiles shall be increased by one foot for each additional foot of height over 25 feet. The stockpile locations are over 200 feet from the eastern property line that runs along the western side of Mammoth Grove Road and about 345 feet from the westernmost property line. Truck traffic will head south to SR 60 when transporting material. According to the Post-Closure Plan, the end result of this mining activity will include open space/habitat and retention ponds.

LDC Section 303 states mining activity must be setback 100 feet from property lines and road right-of-way lines. All mining activity and facilities shall also be prohibited within 200 feet from any residential dwelling unit and platted residential subdivision. A reduction up to 75 feet of the setback from road rights-of-way may be granted by the Planning Commission. However, no reductions are requested. Perimeter overburden storage berms will be approximately 7 feet tall, with the toe of the berm no closer than 25 feet from the property line. No excavation materials are anticipated to be temporarily stored within 100 feet of a property line or right-of-way line.

Mining is proposed in five (5) different “Mining Areas” total, each with their own ingress and egress (*Exhibit 5*). The proposal spans approximately 855 acres and has seven (7) points of access. Three (3) driveways are proposed off of Mammoth Grove Road. Once mining progresses, there will be two (2) temporary access points off of Saint Anne Shrine Road, and two (2) off of Rattlesnake Road. There is no proposed access off of Church Road. The wet material is mined with a dredge and pumped through a subsurface piping system to the centrally located processing facility. Similar to other mining activities in the area and under current conditions, the project will jack and bore pipes under SR 60 through a DOT permit. There are multiple options to transport the wet material to the processing facility, including transporting piping under Mammoth Grove Road ROW, which will be determined at Level 2 Review or through Administrative Review.

The initial phases will require hauling of materials for site preparation, which include land clearing and the removal of any overburden. However, once excavation commences, the wet material will be piped, rather than hauled, to the processing facility. Ongoing traffic is not anticipated during regular operations when transporting material to the facility. Once the final material is ready to be transported and utilized, trucks will head south to SR 60. No trucks will turn left and travel north on Mammoth Grove Road. It is estimated that 60% of the project trips will travel on west on SR 60 and 40% will head east towards Indian Lake Estates. The access points to the mine site meet the requirements of Chapter 7, and will meet closure requirements. Per correspondence with Polk County Roads and Drainage Division, additional right of way will be required off of Mammoth Grove Road, Saint Anne Shrine Road, Rattlesnake Road, and Church Road. Given the proposed driveway locations, no mining traffic is anticipated to pass any residential homes in order to reach SR 60. The nearest home is about 200 feet to the west within the Saddlebag Lake Resort community (*Exhibit 5*).f

Industrial and warehouse facilities are along the SR 60 corridor with the nearest being at the intersection of Mammoth Grove Road and SR 60. The request aligns with the historical use on the surrounding area, with an existing mine directly adjacent to the west (Cup 91-09). The submitted documents include an operation plan, traffic circulation, reclamation plan, and post-closure plan as required by LDC Section 303.

The planned site activities for the property after reclamation – the post-closure plan - include restoring pastureland and related agricultural uses with remnant ponds, re-vegetated with native species. Any disturbed areas of the site will be re-graded and only allow for future development based on the future land use designation by the LDC.

B. Infrastructure:

The proposed parcels are located in the Rural Development Area (RDA) where the construction of sidewalks is not required. The RDA does not support dense residential or non-residential development. There is adequate traffic capacity on surrounding roadways to support a Non-Phosphate Mining use at this location and emergency services are within a reasonable distance. The proposed mine will not have impacts on public infrastructure, including utilities, schools, and parks.

The most impact will be on the roadways. The surrounding roadway network has adequately serviced the existing, adjacent non-phosphate mining facilities. Staff has added conditions for roadway maintenance. Prior to Level 2 Review approval, the applicant shall provide a surety in an amount to guarantee the cost of repairing any damage to the driveway as a result of the mining operation. The surety shall include costs for milling, paving, and signing and marking at the mining driveway. This surety shall remain in place for the entire life of the mine. The applicant shall be responsible to inspect adjacent roadway conditions for material spillage and provide for its clean-up and removal at least once a day for each day of operation.

Nearest and Zoned Elementary, Middle, and High School

The property is currently zoned for Spook Hill Elementary, (± 7.4 miles); McLaughlin Middle (± 6.8 miles); Frostproof Senior High (± 4 miles); and Bartow Senior High (± 23.6 miles). The upcoming 2025-2026 school year will change the high school zoning to McLaughlin Academy of Excellence (± 6.8 miles). This is a non-residential use, and the request will not have an impact on school capacity.

Nearest Sheriff, Fire, and EMS Station

Fire/EMS response is primarily from Polk County Fire Rescue Station 26, located at 2902 FL-60 East, Lake Wales. The travel distance is 3.7 miles, and the travel time is estimated to be seven (7) to nine (9) minutes. Planning is underway for a new station to combine the Nalcrest Fire Station and the Nalcrest Ambulance Station. The new station will be adjacent to the Southeast Polk Wellfield Cretaceous Injection Well IW-1 on Boy Scout Camp Road and is not set to begin construction until after the completion of the well site facility. Once open, the travel distance from this new location will reduce to 3.1 miles and the response times should average between six (6) to eight (8) minutes.

This property is served by Polk County Sheriff's Office's Southeast (SE) District, located at 4011 Sgt Mary Campbell Way in Lake Wales. The response times for the SE District for October 2025 were: P1– 14:17 minutes; P2 – 34:37 minutes. Priority 1 Calls are considered true emergencies, in-progress burglary, robbery, injuries, etc. Priority 2 Calls refer to events that have already occurred, such as a burglary that occurred while the homeowner was on vacation and had just been discovered. Sheriff response times are not as much a function of the distance to the nearest sheriff's substation rather more a function of the overall number of patrol officers within the County.

Table 2, to follow, provides a breakdown of response times and travel distances for emergency services.

Table 2

	Name of Station	Distance	Response Time*
Sheriff	Southeast District (4011 Sgt. Mary Campbell Way, Lake Wales)	±12 miles	P1: 14:17 minutes P2: 34:37 minutes
Fire/ EMS	Polk County Fire Rescue Station 26 (2902 FL-60 E, Lake Wales)	±3.7 miles	7-9 minutes

*Source: Polk County Sheriff's Office and Public Safety *Response times are based on when the station receives the call and not from when the call is made to 911.*

Water and Wastewater Demand and Capacity:

A. Estimated Demand and Service Provider:

This request is within the County's RDA. There are no municipality water or wastewater lines directly available to the site. Non-Phosphate Mining can consume a lot of land but generate very little demand for water and wastewater services. The applicant's reclamation and post closure plans identify buildings that will remain. If necessary, a well and septic system will be required.

The site currently has nineteen (19) existing wells from the previous agricultural use, with a total permitted daily capacity of over 1,000,000 gallons per day (GPD) (water use permit # 20012392.005). As mining progresses, the existing wells will be permanently abandoned. While water is recycled through a closed-loop system, there is anticipated moisture loss due to the mined product being hauled off site. According to the applicant, each ton of product contains 80 pounds, or about 10 gallons of water (4% moisture content by weight). This loss will be replenished with the surficial Floridian aquifer to the mine lake. The withdrawal estimated to replenish the mine lake is about 30,000 GPD assuming that 1,000,000 tons of product is hauled off site per year, according to the applicant's Impact Assessment Statement (IAS). Additionally, the project is proposing one small diameter well for potable and maintenance and is expected to be 4,000 GPD. Sewage is estimated at about 200 GPD.

B. Available Capacity:

There are no public water or wastewater services offered in the immediate area, and there are no intentions of expanding services in this area. If necessary, a well and septic system will be required.

C. Planned Improvements:

There are no planned improvements by the County in the vicinity of the parcel.

Roadways/ Transportation Network

The Polk County Transportation Planning Organization (TPO) monitors traffic congestion on over 425 roadway segments (950 directional links). The data identifies both daily and peak hour traffic volumes. The peak hour traffic volumes are used to estimate the level-of-service for each roadway, in each direction. Level-of-service refers to the quality of traffic flow. It is the primary measure of traffic congestion. Level-of-service (LOS) is measured on a scale of 'A' to 'F' with LOS 'A' being the best (free-flow traffic) and LOS 'F' being the worst (severe traffic congestion).

A. Estimated Demand:

Due to the nature of the market in which non-phosphate mining takes place, there are no accurate means to estimate the trip counts that may occur as their specialized industry is driven completely by

a customer demand bias. Each of the five (5) “Mining Areas” will have one (1) access point onto a County-maintained roadway, except “Mining Area 4” which will have two (2) – one off of Rattlesnake Road and one off of Saint Anne Road. The central processing plan, office and ancillary activities area is located off of Mammoth Grove Road. The initial phases, about 6 months in advance of dredging operations, will involve some traffic in order to remove and clear overburden. However, once excavation begins all mined material will be transported through subsurface piping and not hauled to the processing facility.

According to the applicant, proposed trucking operation hours are 4:00 a.m. to 5:00 p.m., assuming full operation at six days per week (Monday through Saturday). The applicant submitted a Minor Traffic Study with this request that anticipates 536 Annual Average Daily Trips (AADT) and seventeen (17) Peak PM Hour Trips, assuming a maximum of 10 employees at peak operation. Access from the main plant will be taken directly off Mammoth Grove Road, a Rural Major Collector Roadway (RMC), is in close proximity, about ¼ mile driving distance south, to SR 60, a Principal Arterial Roadway. No trucks will turn left and head north on Mammoth Grove Road. It is estimated that 60% of the project trips will travel on west on SR 60 and 40% will head east towards Indian Lake Estates.

The surrounding roadway network has adequately served past mining facilities and will continue to do so without causing a failure in service. It is important to note that truck traffic that is generated from this project will utilize rural major or minor collector roadways and no local or private roadways. The adjoining roadway is a principal arterial roadway.

B. Available Capacity:

Although the request will have limited impact on the transportation system, it is still pertinent to be aware of available capacity when making land use decisions. Roadways have the capacity to assimilate the project’s traffic at this peak as described in the section above. Table 3, below, shows the available capacity of the most-affected links.

Table 3

Link #	Road Name	Current Level of Service (LOS)	Available PM Peak Hour Capacity	Minimum LOS Standard
4117E	Mammoth Grove Road From: SR 60 To: Camp Mack Road	C	860	C
4117W	Mammoth Grove Road From: SR 60 To: Camp Mack Road	C	859	C
5910E	SR 60 From: Stokes Road To: CR 630	B	15,838	C
5910W	SR 60 From: Stokes Road To: CR 630	B	15,868	C
5909E	SR 60 (Hesperides Road) From: SR 17 To: Stokes Road	C	25,284	D
5909W	SR 60 (Hesperides Road) From: SR 17 To: Stokes Road	C	25,331	D

Source: Polk County Transportation Planning Organization, Concurrency Roadway Network Database January 2025

Appendix C of the LDC requires all developments generating more than 50 average daily trips to conduct a minor traffic study. Mammoth Grove Road (Link #4117) has the capacity to support 900 peak hour trips and the capacity to assimilate 260 trips before the LOS is degraded. Meanwhile SR 60 has ample capacity to assimilate new trips.

C. Roadway Conditions:

Link # 4117 is a County-maintained RMC with a paved surface width of 24 feet. Saint Anne Shrine Road (Road No. 081401) is a Rural Minor Collector Roadway (RNC) with a width of 20 feet. Rattlesnake Road (Road No. 082405) is a Rural Minor Collector Roadway (RNC) with a surface width of 20 feet. According to the Roads and Drainage Division, all County-maintained roadways adjacent to the site will need to dedicate additional ROW, including Church Road (Road No. 081203). Due to the potential stacking of vehicles in the right-of-way and the proposed use can having adverse impacts on the conditions of the roadway, conditions are included within the staff report for preventative measures.

D. Planned Improvements:

There are no roadway improvements planned in the next five years for this area of the County.

E. Mass Transit:

There is no transit within a reasonable distance of the site; however, the nature of this request does not demand the need for mass transit.

F. Sidewalks:

There are no sidewalks along the parcel. Since this project is in the Rural Development Area (RDA), the construction of sidewalks is not required.

Park Facilities and Environmental Lands:

The closest environmental land is Tiger Creek Preserve which is ± 1.02 miles to the southwest. A portion of Lake Wales Ridge State Forest is ± 1.54 miles to the east, however no trails or services are offered. A portion of the State Forest, the Walk in Water Tract, offers recreational activities and is about seven (7) miles away. There are no City or County Park facilities nearby. The proposed use is not expected to interfere with these lands.

A. Location:

Tiger Creek Nature Preserve is located at 674 Pfundstein Road in Babson Park. Lake Wales Ridge State Forest is located at 851 County Road 630 East in Frostproof.

B. Services:

Tiger Creek Preserve offers hiking through guided trails. Lake Wales Ridge State Forest provides primitive camping, fishing, hunting, hiking and biking trails, picnic shelters and equestrian trails.

C. Multi-use Trails:

Over ten miles of multi-use hiking and horseback trails can be found at Tiger Creek Preserve.

D. Environmental Lands:

The subject site, at its southernmost point, is about one (1) mile north of Tiger Creek Preserve. Tiger Creek is home to two high-quality, seepage blackwater streams including Patrick Creek. A seepage

stream gets its water from the surrounding uplands; the blackwater comes from the leaching of tannins from falling vegetation. Only two or three such streams with an intact hardwood floodplain exist in Florida. The Lake Wales Ridge State Forest consists of multiple tracts throughout the area. Both the preserve and state forest protect a portion of the Lake Wales Ridge, a unique scrub ridge that provides valuable community habitat.

E. Planned Improvements:

Staff has not identified any planned improvements to the County parks near the subject site.

Environmental Conditions

Portions of the property are within wetlands and floodplains. The site is located in a general area that has seen significant phosphate mining operations. According to the applicant's Impact Assessment Statement (IAS) wetlands and flood zones may be impacted. The majority of the site is comprised of slightly well-drained soils. Compliance from the Florida Department of Environmental Protection (FDEP) and U.S. Army Corps of Engineers (USACE) are required should the features be considered Waters of the United States. Section 620 of the LDC permits mining activity within jurisdictional wetlands upon mitigation with the Agency Having Jurisdiction (AHJ). No off-site discharge of stormwater is proposed from the mine. All stormwater and process water will be directed to the mining areas and mine lakes. There will be no detention, retention ponds, or infiltration for groundwater, according to the applicant.

A. Surface Water:

A total of sixteen (16) acres of open surface waters scattered throughout the subject site. The proposed areas to be mined are located in three (3) separate drainage basins – the Catfish Creek Drainage Basin (± 625 acres), Tiger Creek Basin (± 149 acres), and Weyohyakapka-Ros Basin (± 33 acres). Per correspondence with Roads and Drainage, these basins are considered “Open” which shall meet LOS III design standards for stormwater facilities outlined in Section 703.H of the LDC. As previously mentioned, stormwater will be retained on the site in the mine lakes and all process water will be recirculated to the mine lakes. An important note is that the surrounding lakes levels are connected through an underground pipe system maintained by the County. A 30' wide pipe is on the eastern boundary of the project site, adjacent to Saddlebag Lake Resort. They provide outfall from Saddlebag Lake to Thomas Lake. The proposed 100' setback from these pipes is not anticipated to impact these stormwater systems.

B. Wetlands/Floodplains:

Approximately thirty-eight (38) acres of wetlands are scattered throughout the project area based on the submitted site plan. Additionally, Flood Hazard Zone “A” is present throughout the subject site with Flood Hazard Zone “AE” located to the northeast associated with Thomas Lake. The 649-acre excavation area is designed to not significantly impact these wetland systems, and a minimum of a 25-foot setback is provided, despite LDC Section 620 permitting mining activity within jurisdictional wetlands upon mitigation with the Agency Having Jurisdiction (AHJ). Wetlands generally do not have the desired soils when sand mining.

C. Soils:

Soils in the upland areas of the site are primarily Astatula sand (77%). It has a slight limitation to well-drained soil, with a water table depth of more than 80 inches. The site has varying degrees of

slopes, with depressions toward existing surface water features. Table 4, below, lists the soils associated with the subject site.

Table 4

Soil Name	Septic Tank Absorption Field Limitations	Limitations to Small Commercial Buildings	% of Site (approximate)
Tavares fine sand, 0 to 5 percent slopes	Moderate: wetness	Slight	12%
Smyrna and Myakka fine sands	Severe: wetness, poor filter	Severe: wetness	0.8%
Adamsville fine sand, 0 to 2 percent slopes	Severe: wetness, poor filter	Moderate: wetness	2.4%
Basinger mucky fine sand	Severe: ponding, poor filter	Severe: ponding	0.7%
Astatula sand, 0 to 5 percent slopes	Slight	Moderate: slope	77%
Tavares-Urban land complex	Moderate: wetness	Slight	0.1%
Narcoossee sand	Severe: wetness, poor filter	Moderate: wetness	1.1%
Astatula sand, 5 to 12 percent slopes	Slight	Moderate: slope	2.9%
Water	N/A	N/A	2.9%

Source: Soil Survey of Polk County, Florida, USDA, Soil Conservation Service

It has a slight limitation to well-drained soil, with a water table depth of more than 80 inches. Any future development of the site will be subject to Section 2.303: “Soils” of the County’s Comprehensive Plan (in conjunction with the Land Development Code) which requires all development to implement Best Management Practices based on the Department of Environmental Protection’s (DEP) Florida Development Manual.

D. Protected Species

According to the Florida Natural Areas Inventory Biodiversity Matrix, the site is not located within an area of documented endangered animal species sighting; however, a documented endangered plant species (Scrub Pigeon-Wing) was recorded at the southern end of the site within the last twenty years. The federal status of this plant species is listed as “threatened.” After mining operations stop, the mined areas will be reclaimed with vegetation and graded in accordance with local and state regulations. In lieu of residential or commercial land uses, the proposed project will create more undisturbed agricultural and buffer lands between Lake Hancock and other land uses.

E. Archeological Resources:

According to a preliminary report from the Secretary of State’s Department of Historical Resources Florida Master Site File, no archaeological sites are found within the parcel boundaries.

F. Wells (Public/Private)

This site is not within any of the County’s Wellhead Protection Districts. The applicant indicates nineteen (19) existing private wells from prior agricultural use. One small diameter well will be installed. As mining progresses, the existing wells will be permanently abandoned.

G. Airports:

This property is not within a Height Notification Zone or In-Flight Visual/Electronic Interference Zone.

Economic Factors

Sand mines are not nearly as intense as phosphate mining and are critical in growth areas like Central Florida. Raw material to help construct new developments must be excavated from elsewhere. Sand

mines operate in a few different manners. One is a facility that excavates the sand and processes it into concrete and other construction materials. These typically maintain processing facilities or batch plants onsite. These tend to be more land intensive and require ample water supply. The applicant is proposing another type of sand mine commonly known as a borrow pit. The sand is extracted, processed to be washed and sized, and then shipped elsewhere to be processed or utilized as fill for home or road construction, in addition to other uses.

Consistency with the Comprehensive Plan

Non-phosphate mining is listed as one of the limited uses allowed in A/RR and IND land use districts. The key to evaluating the proper location of a mine is the criteria listed in POLICY 2.125-G3 of the Comprehensive Plan. These require the Planning Commission to consider the following:

a. Does the mining activity minimize adverse impact on environmentally sensitive lands;

Yes, the mine is avoiding wetlands and maintaining a 25-foot buffer from existing wetlands, though LDC Section 620 would allow mining with the proper mitigation.

b. Does the mine plan maximize the ability to restore or mitigate environmentally sensitive lands;

According to the applicant, there are surface water features onsite. Additionally, the wetland and floodplain within the mine area may be impacted. However, wetland mitigation will be provided within the pit area or using wetland credits. According to the reclamation plan, the site will reshape mining features and revegetate disturbed areas to minimize aesthetic and biological impacts; and restore property to original pasture condition.

c. Does the operation plan minimize the adverse impacts of truck and heavy machinery traffic on residential streets; and

Yes, ingress/egress for the proposed project is along County-maintained Collector roadways. Truck traffic is anticipated at a rate of 536 trips per day (about 6,410 tons) depending on construction demand.

d. Does the operation plan minimize the extent of adverse external impacts, such as noise, dust, and visual impacts on non-industrial areas?

Yes, the site plan shows adherence to LDC rules for setbacks of mining activity from residential uses. The applicant has also provided plans to handle dust and run-off in their operations plan.

The Planning Commission, in the review of development plans, shall consider the following factors listed in Table 5 in accordance with Section 906.D.7 of the Land Development Code.

Table 5

The Planning Commission, in the review of development plans, shall consider the following factors in accordance with Section 906.D.7 of the LDC:	
Whether the proposed development is consistent with all relevant requirements of this Code;	<i>Yes, this request is consistent with the LDC, specifically Section 303 which permits this use upon completion of a Level 3 Review. Many of the conditions required in Section 303 will be enforced after a Level 3 Review. These can be found in the Findings of Fact on Pages 3 - 8 of the staff report.</i>
Whether the proposed development is consistent with all applicable policies of the Comprehensive Plan;	<i>Yes, this development is consistent with the Comprehensive Plan as reviewed above.</i>
Whether the proposed use is compatible with surrounding uses and the general character of the	<i>Yes, the request is compatible with surrounding uses and the general character of the area. See Pages 9 and 11 of</i>

Table 5

The Planning Commission, in the review of development plans, shall consider the following factors in accordance with Section 906.D.7 of the LDC:	
area, including such factors as density, height, bulk, scale, intensity, traffic, noise, and appearance; and	<i>this staff report for data and analysis on surrounding uses and compatibility.</i>
How the concurrency requirements will be met if the development were built.	<i>This request will not require concurrency determinations from the School Board or TPO. Impacts on public services can be found in the analysis found on Pages 12-15 of the staff report.</i>

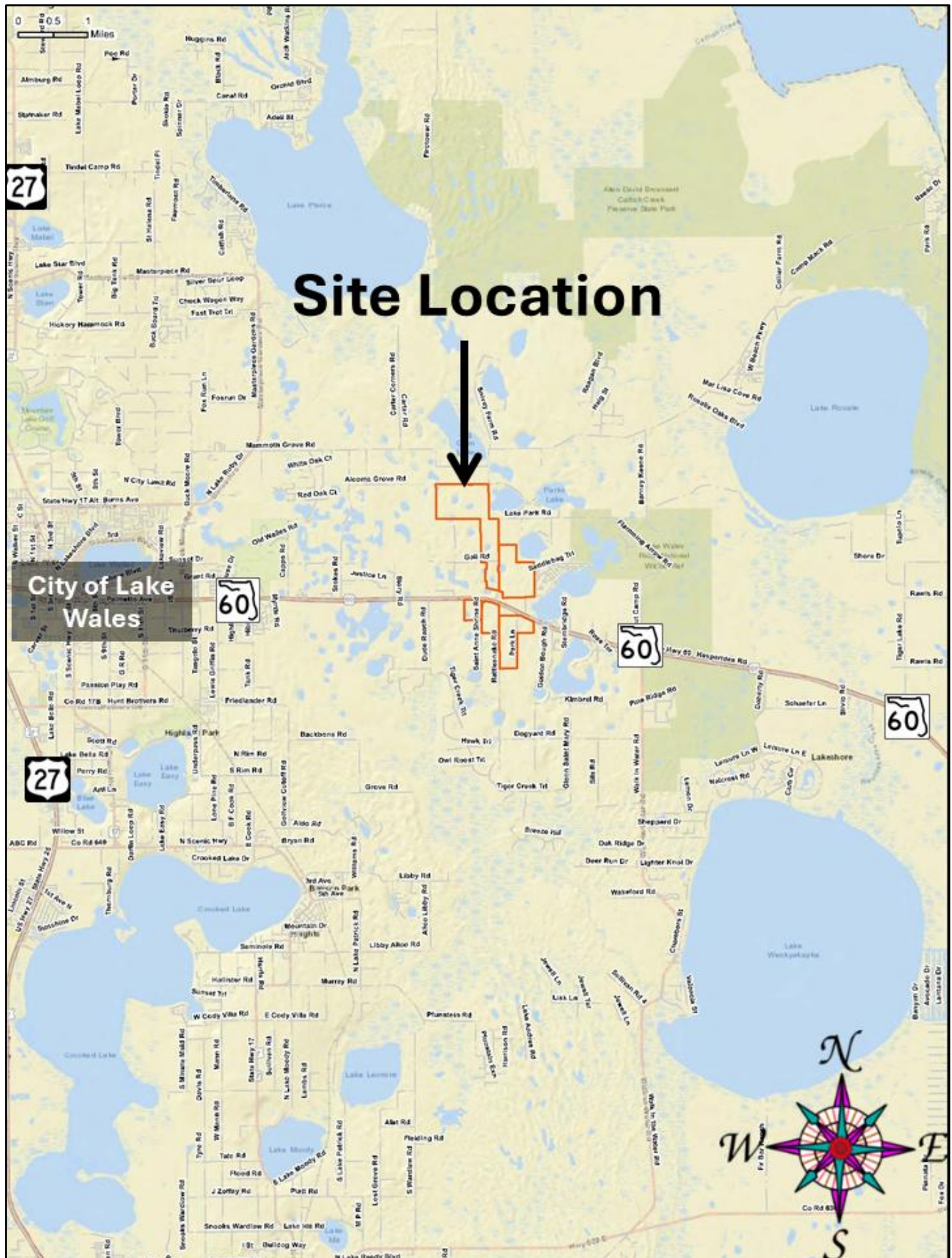
Comments from other Agencies:**Roads & Drainage Division:**

Additional right-of-way will need to be dedicated from the following County-maintained roadways (measured from the centerline of each roadway):

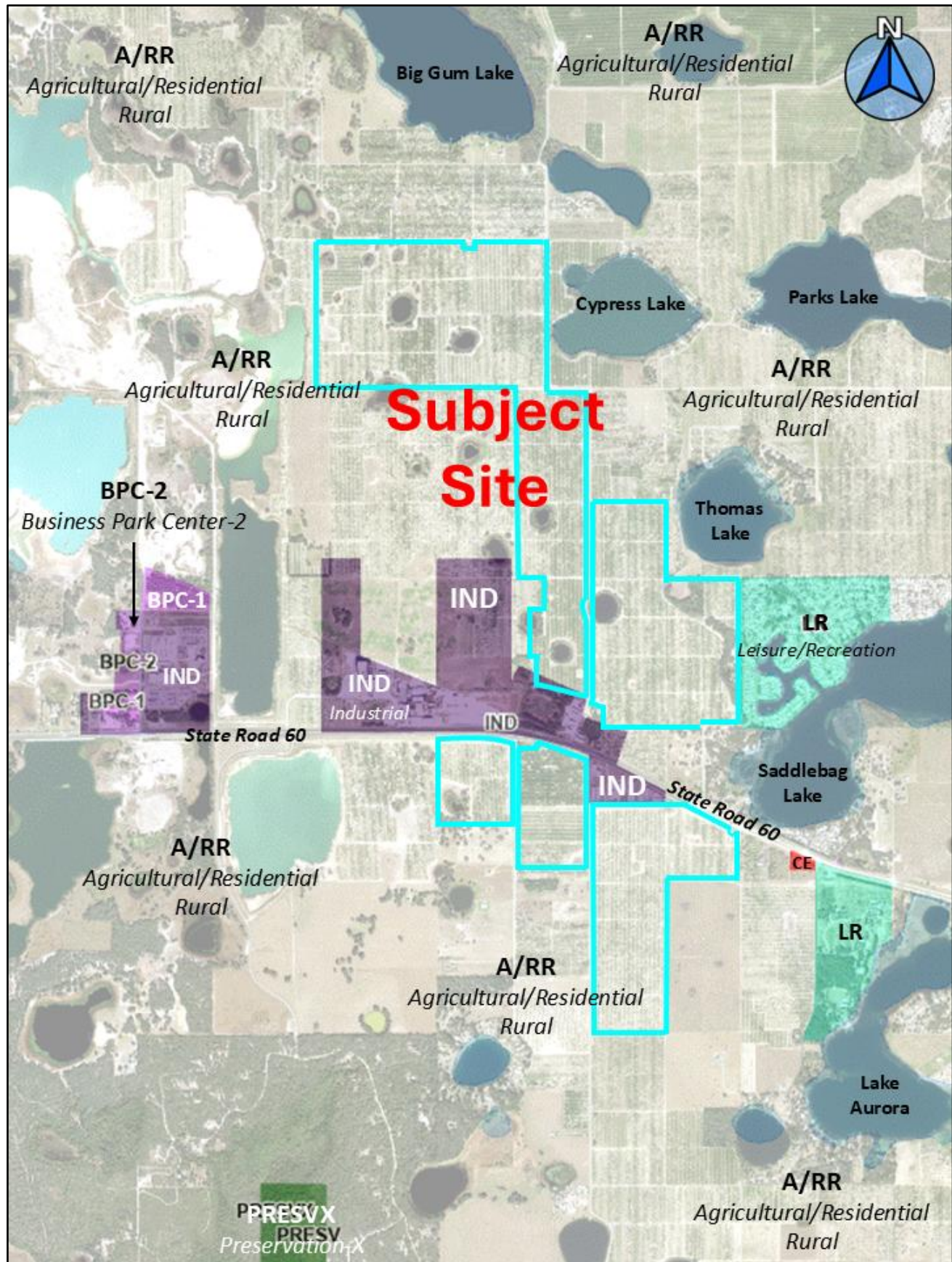
- Mammoth Grove Road (No. 983108): 40 feet
- Saint Anne Shrine Road (No 081401): 30 feet
- Rattlesnake Road (No. 082405): 30 feet
- Church Road (No. 081203): 30 feet

Exhibits:

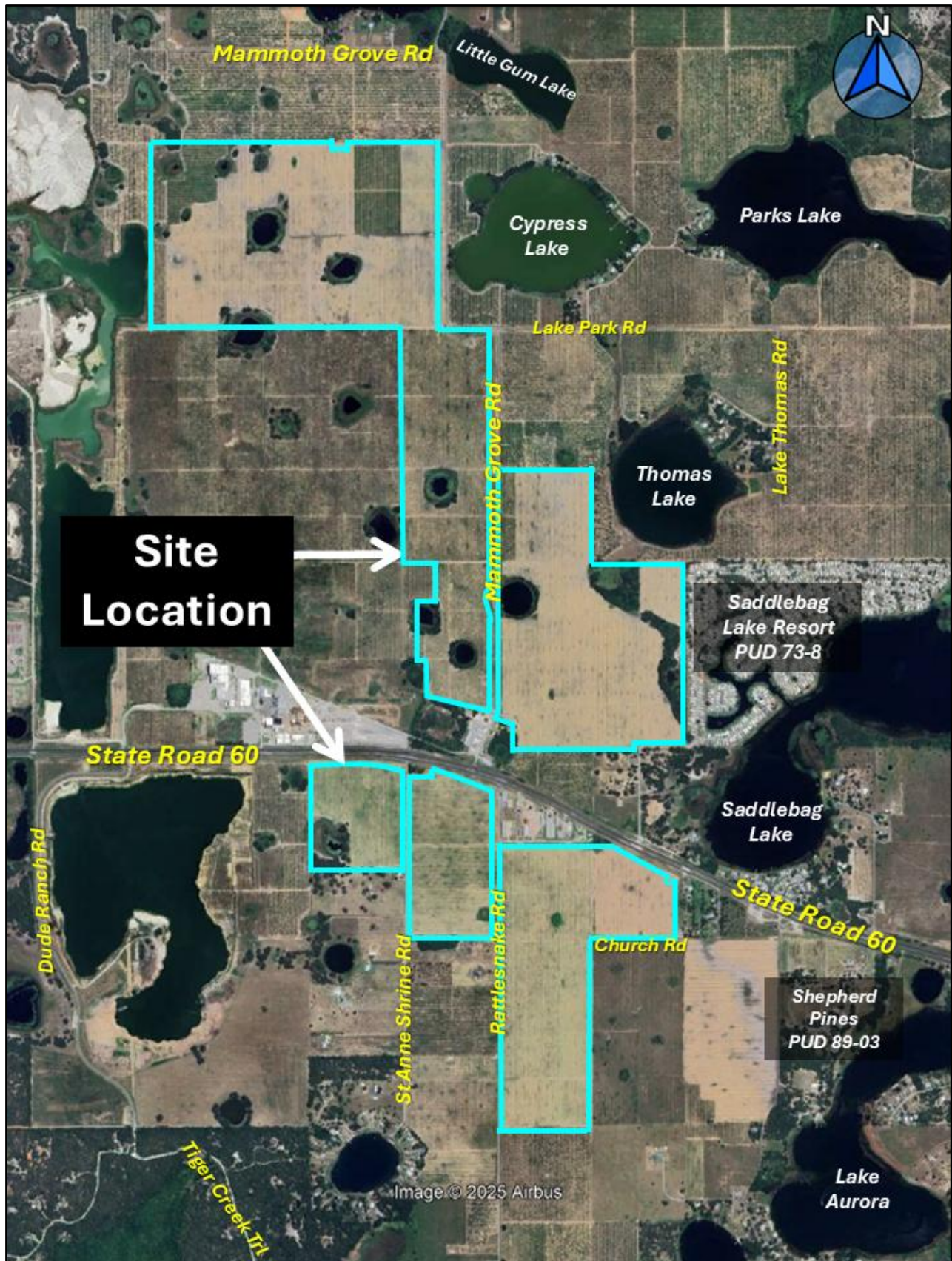
Exhibit – 1	Location Map	Exhibit – 6	Operations Plan
Exhibit – 2	Future Land Use Map	Exhibit – 7	Traffic Circulation Plan
Exhibit – 3	2025 Satellite Photo (Context)	Exhibit – 8	Reclamation Plan
Exhibit – 4	2023 Aerial Image, North	Exhibit – 9	Reclamation Plan (Notes)
Exhibit – 5	2023 Aerial Image, South	Exhibit – 10	Post-Closure Plan



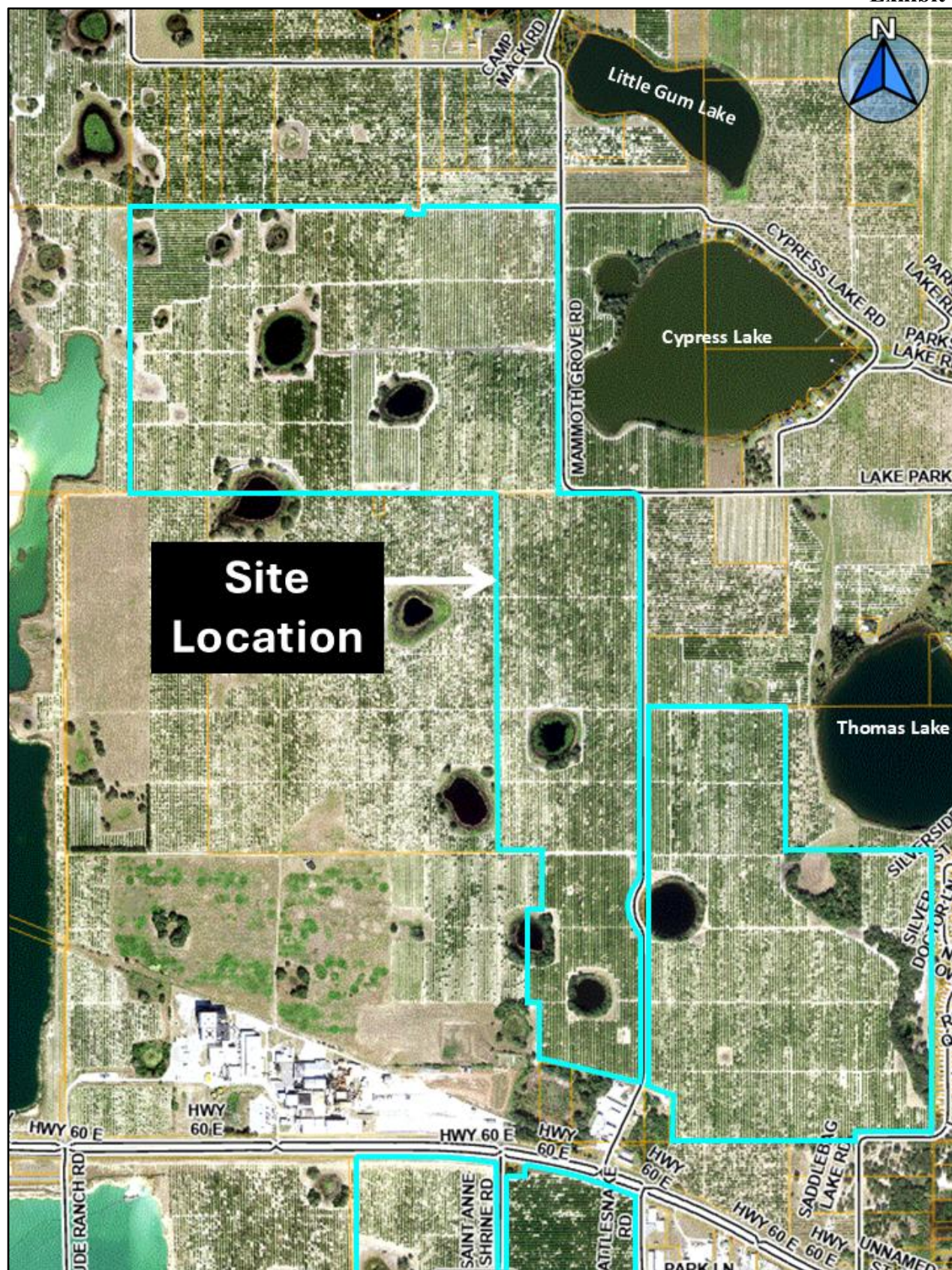
Location Map



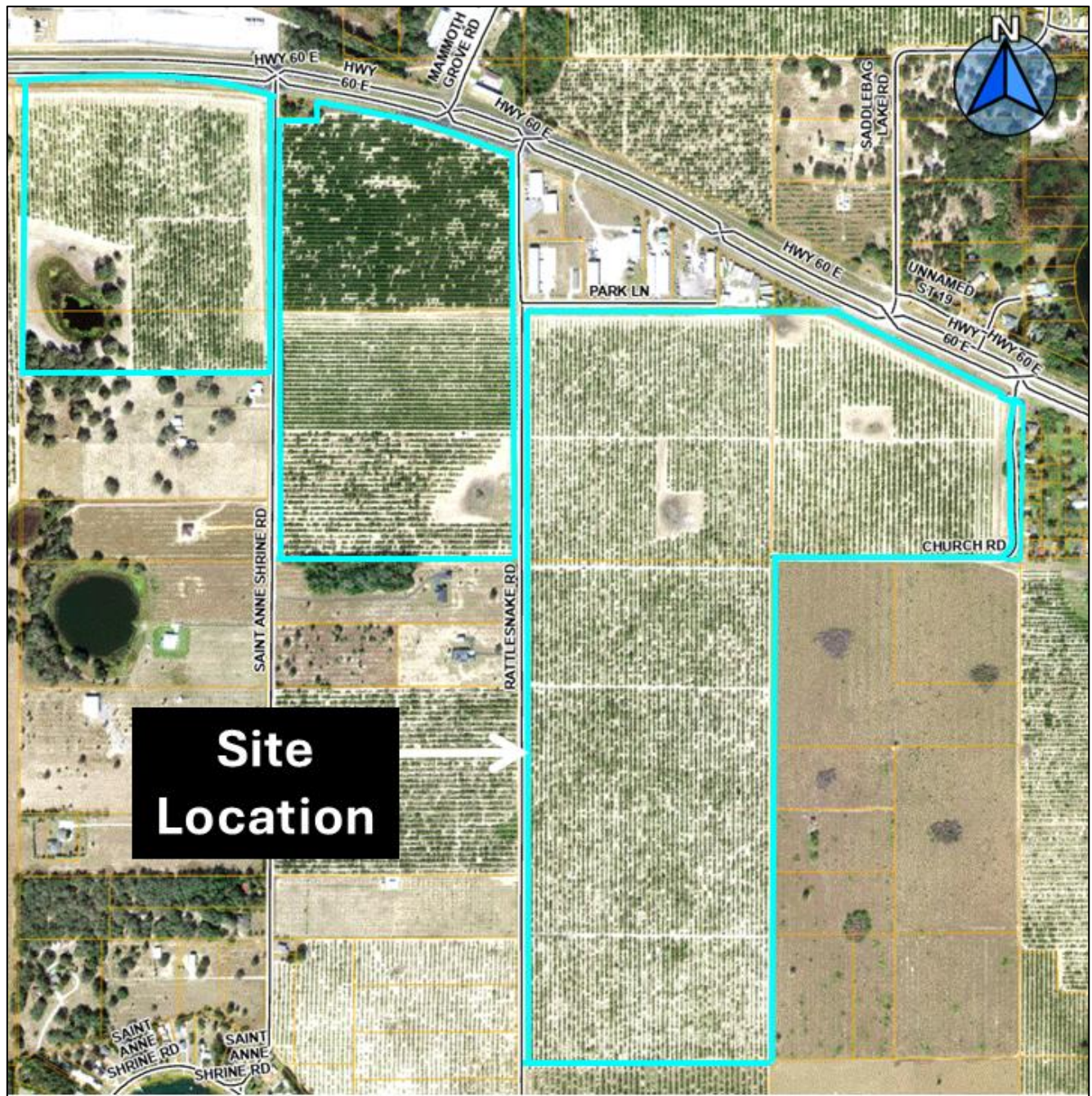
Future Land Use Map



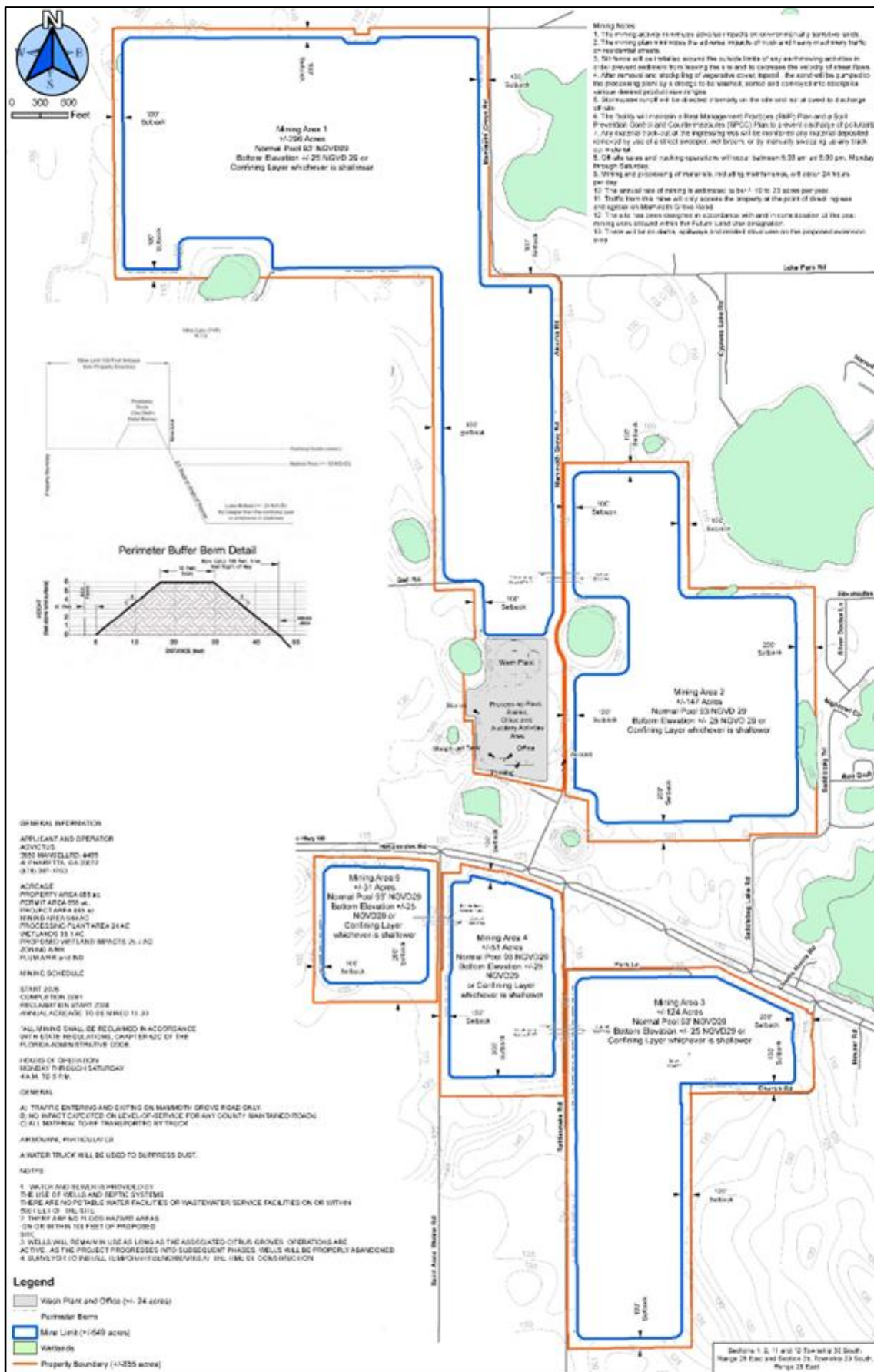
2025 Satellite Image (Context)



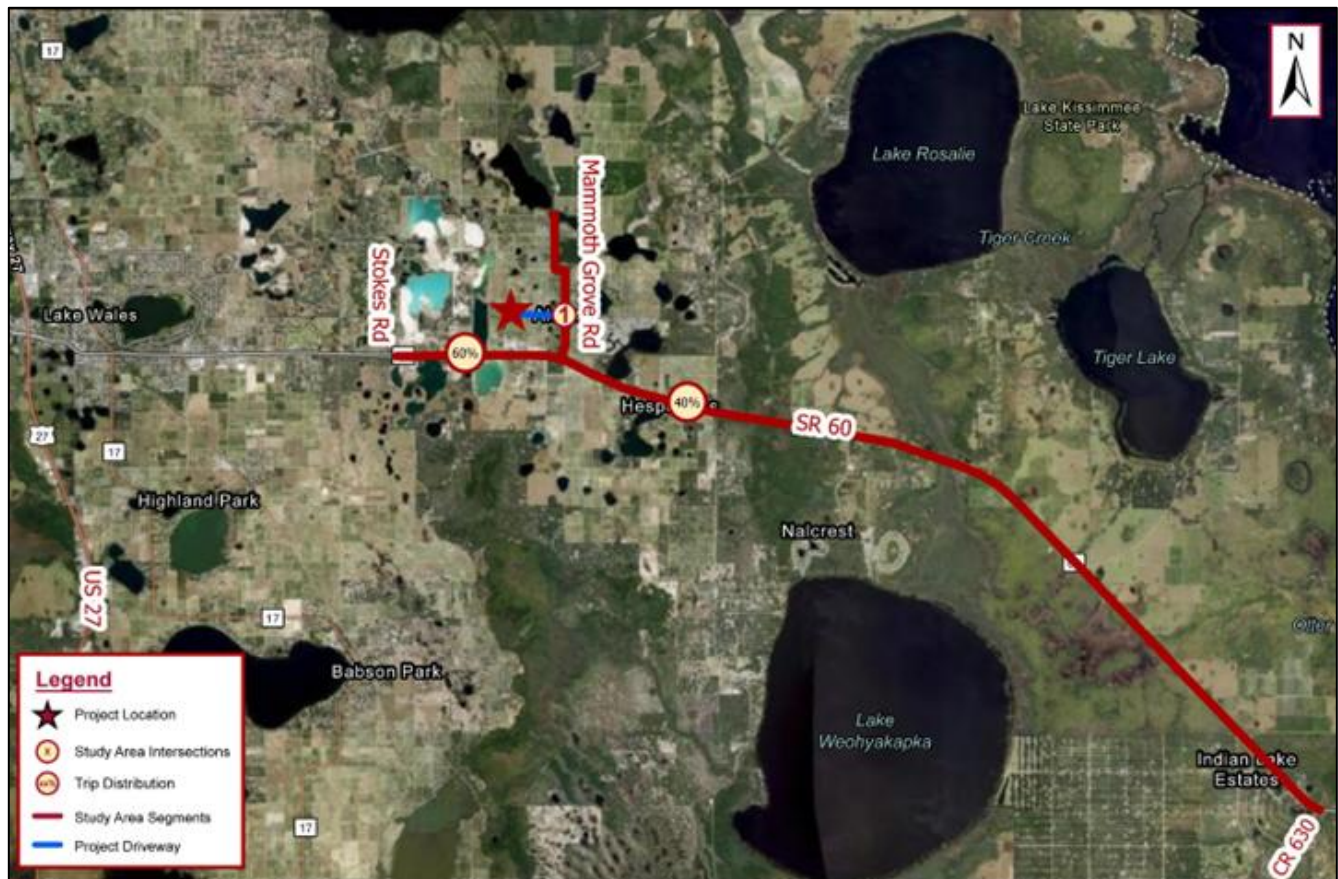
2023 Aerial Photo, North of SR 60 (Close Up)



2023 Aerial Photo, South of SR 60 (Close Up)



Operations Plan



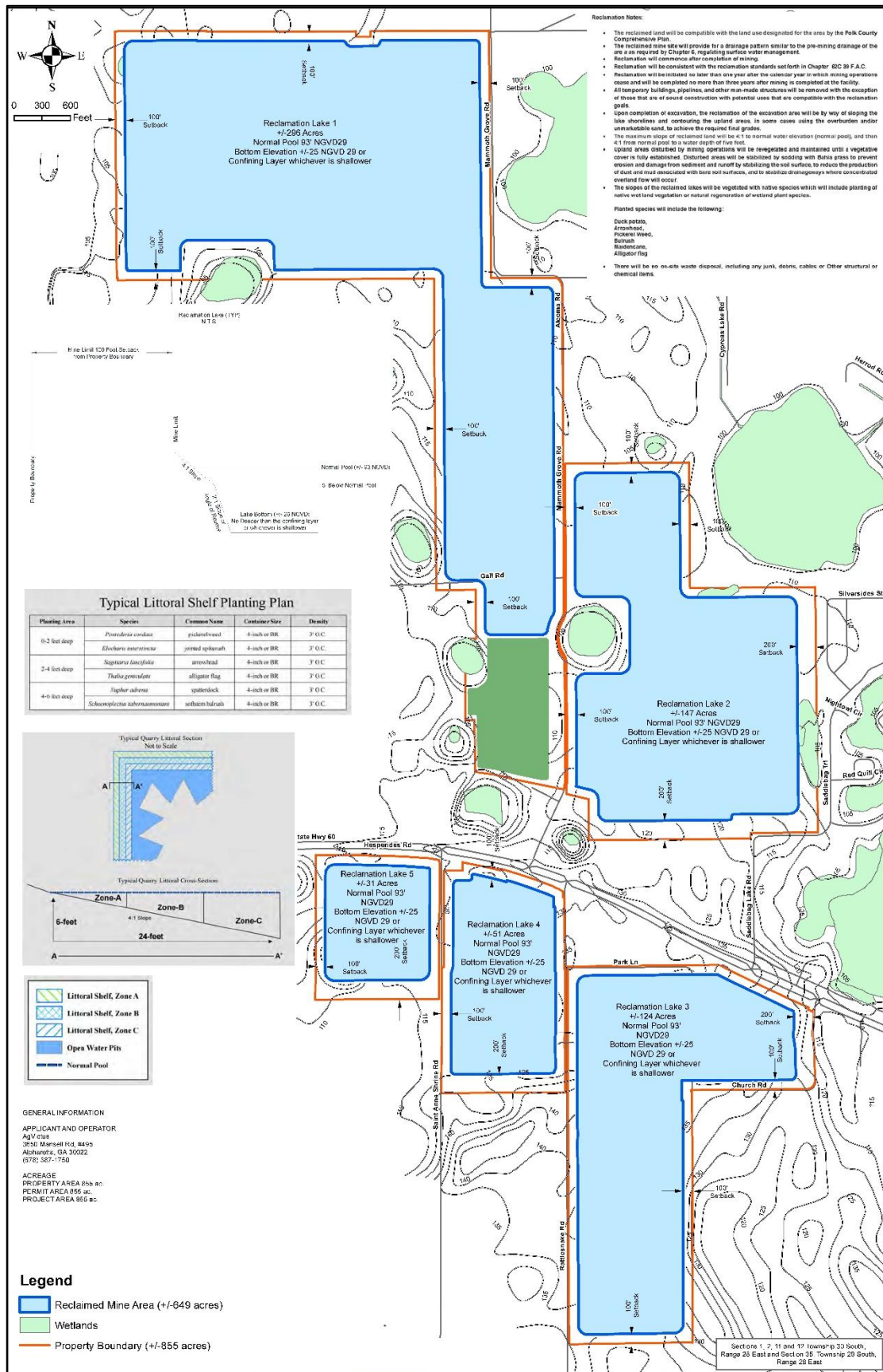
PH CITRUS LLC.

MAMMOTH GROVE MINE TRAFFIC CIRCULATION PLAN

Employees and commercial sand trucks will enter and leave the mine property through the AN access point along Mammoth Grove Road. Trucks will enter the existing access road and travel into the mining area, around the processing plant to be loaded and exit back out of the existing access point. All traffic exiting the site will be required to take a right turn on to Mammoth Grove Road and turn right or left on to State Road 60. No traffic will turn left and travel north on Mammoth Grove Road.

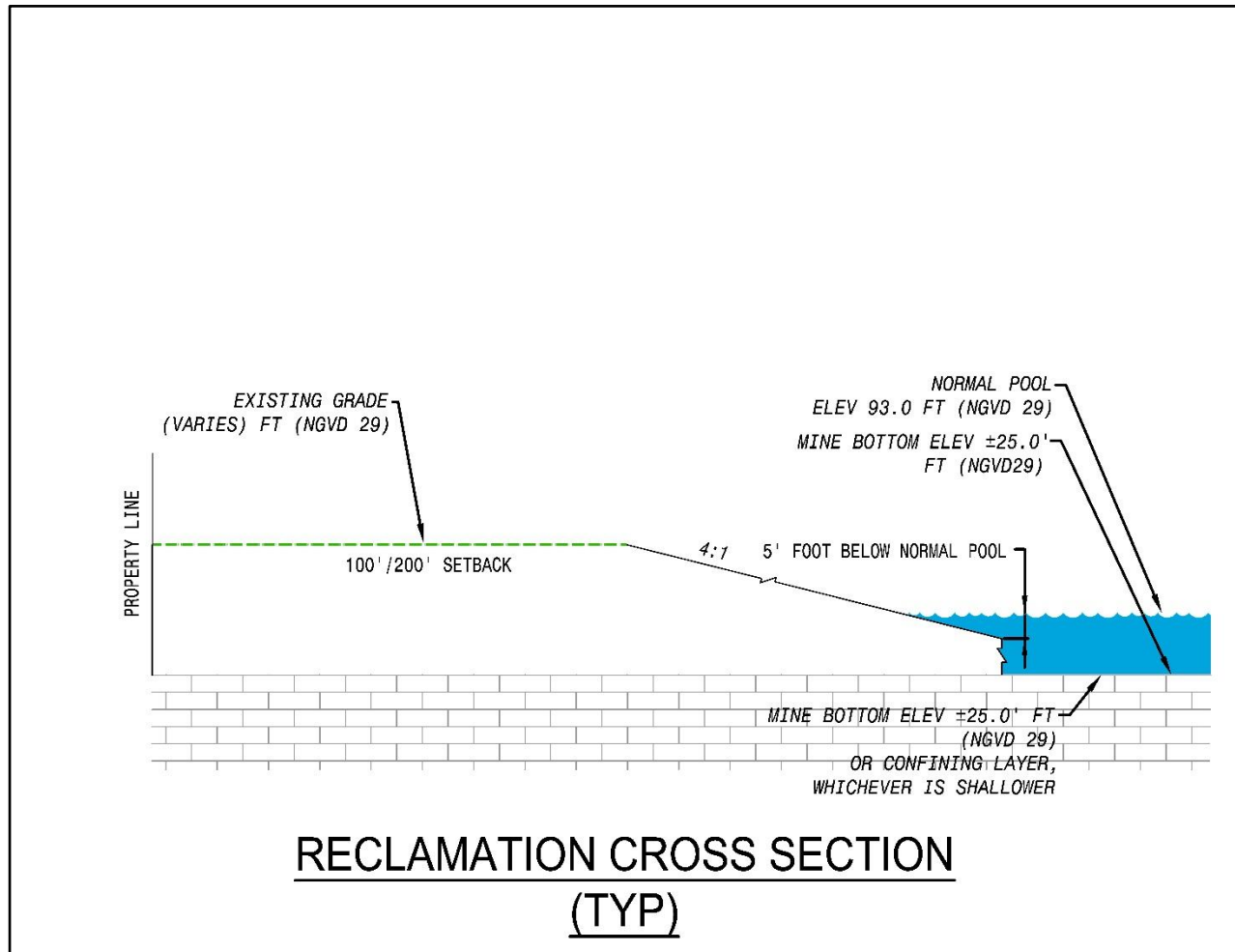
Based on the number of estimated trips and their distribution over the course of each workday, impacts to roadways, traffic volumes or patterns are not anticipated. Additionally, a traffic study was conducted and has been provided as part of the application for the Mammoth Grove Mine. The Traffic Impact Analysis, completed by Kimely Horn, was completed to evaluate potential roadway impacts associated with mine-related traffic. Results of this study concluded that the haul truck traffic reflected a de minimis addition to the local roadways, which were well within the published capacities for the associated roadways. As such, there is expected to be no measurable effects to local traffic or the roadways.

Traffic Circulation Plan

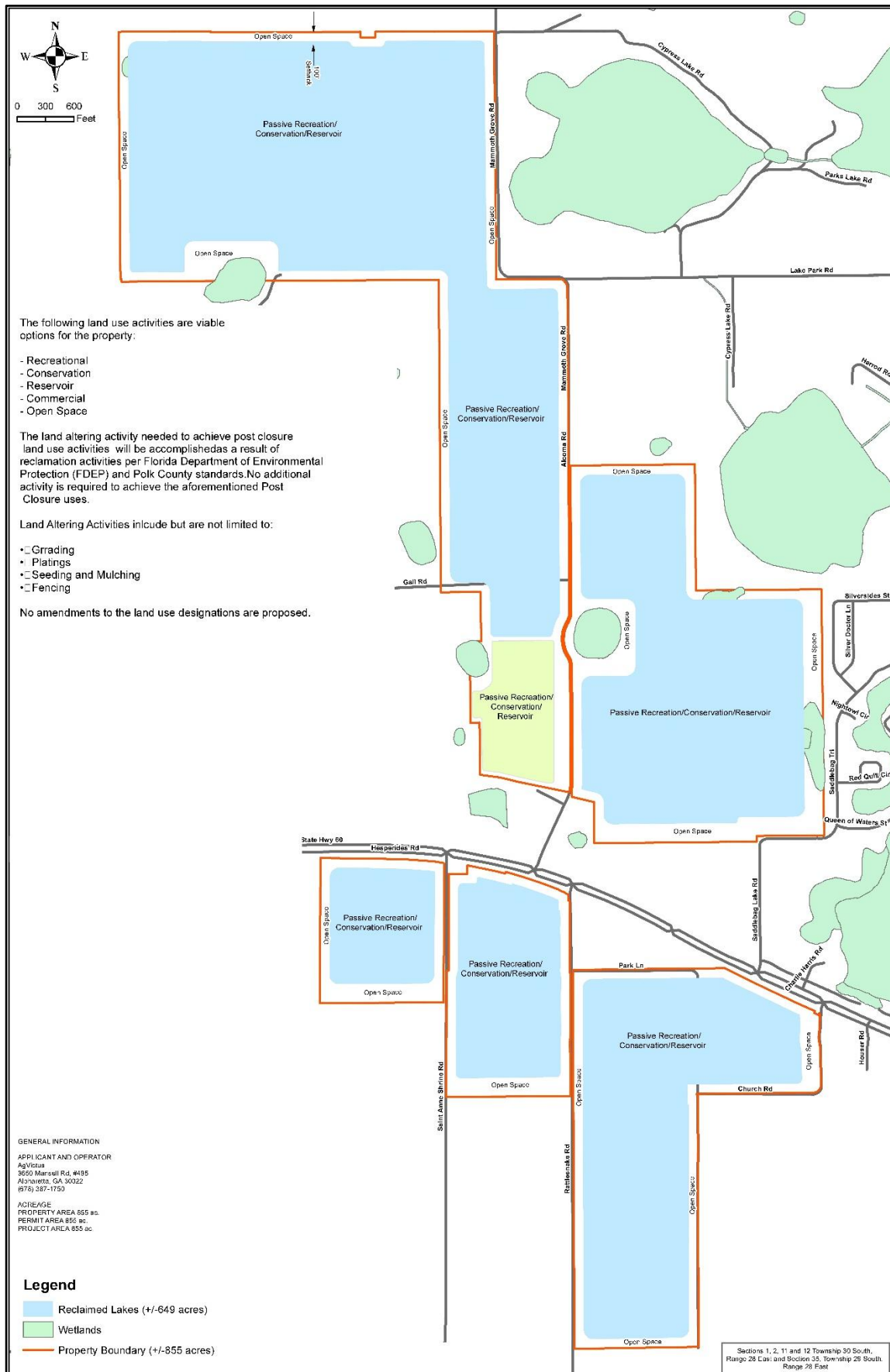


Reclamation Plan

Exhibit 9



Reclamation Notes



Post Closure Plan