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December 1, 2025

Katherine Burgess, AICP, Principal Planner
Planning Section
Lee County Department of Community Development
1500 Monroe St
Fort Myers, FL 33901

Re: Armeda Property Insufficiency Letter #1
Record Number: CPA2025-00008

Dear Ms. Burgess,

Listed below are specific responses to each comment received dated November 4, 2025, for the above referenced project. The following items are resubmitted based on Staff review.

1. Revised Application Form;
2. Revised Traffic Impact Statement;
3. Soils Map;
4. Flood Insurance Rate Map;
5. Revised Lee Plan Analysis;
6. Characterization of Ground and Surface Water Resources Report;
7. Revised Justification of Proposed Amendment;
8. List of all the consultants working on this application;
9. Existing and Proposed Future Land Use Map & Proposed Amendment Exhibit M11;
10. Archaeological Sensitivity Zones Map Exhibit;
11. Master Site File;
12. Environmental Impacts Analysis;
    a. Vegetation Map;
    b. Indigenous Habitat Management Plan; and
    c. Protected Species Assessment
13. Updated Letters of Availability; and
14. Public Facilities Analysis.

DOT Review – Katherine Burgess

1. Part II - Existing Conditions, Paragraph 1: The description for the project location is incorrect; please update.

Response: The paragraph in the revised TIS correctly describes the approximate location of the subject site

2. Table 1 (page 4); Table 2, Table 4 (page 5): The "existing" uses detailed in the comp plan portion of the TIS (52 DU's) mismatch the CPA application (53 DU's). It is not necessary to reflect the trip generation for these units, as they may not be credited as "existing" trip generation accredited to the CPA. These trips cannot be credited against/discounted from the total trip generation for the proposed 737 units. Please remove the discounted trips from Table 4 and adjust the following tables/statements throughout the TIS to correctly reflect only the trips that would be generated by the proposed land use.

Response: **As with all previous Comprehensive Plan Amendment application traffic impact studies submitted to Lee County, the application analyzes the impacts of the "change" to the Future Land Use Category. The change in the net increase from the number trips that could be generated from the site based on the existing Future Land Use Category versus the requested Future Land Use Category. Therefore, the analysis examines the "change" in trip generation of the site as a result of the requested Land Use Category change. So considering the trip generation of the existing uses is entirely appropriate and is the standard practice in these applications.**

3. Page 6 - Long Range Impacts - Please correct the statement "there were no roadway improvements within a 3-mile radius of the site shown on the 2045 Cost Feasible Plan." (Note: The preparer has correctly reflected the planned improvement in subsequent tables and appendices). Examples: - SR 31 will be widened first to 4LD (5 year), then 6LD (2045) - SR 78 will be widened to 4LD (5 year + 2045)

Response: **This statement has been corrected in the revised TIS.**

4. Page 7 - Short Range Impacts: The preparer may now include SR 31 widening to 4LD between SR 78 to Cook Brown Rd. Funding is reflected in Lee MPO's 2026-2030 TIP for this road segment.

Response: **This improvement was included in the revised TIS.**

5. Page 8 - Please revise paragraph one of the Short Range Impact summary to reflect total trips for the 737 dwelling units, rather than only the increase in trips.

Response: **Table 5A & 6A is based on the entire build-out of the project (737 dwelling units). The tables in the report are for illustrative purposes only to highlight the fact that the property could be developed with a certain number of residential dwelling units without seeking any rezoning approval and the trip generation associated with that development intensity. The Level of Service analysis contained in the report was indeed based on the 737 dwelling units.**

6. Table 1A - The calculation for LOS adjustments has been incorrectly applied. The formula should account for maximum 5% increase for exclusive Left Turn Lanes, and maximum 5% increase for exclusive Right Turn Lanes; however the formula used has compounded the adjustments. Please revise to ensure that no greater than total 10% adjustment (of the base LOS) is applied.

   Example: - SR 31 (north and south of N. River Road) reflect a LOS C capacity of 2,888, which is likely formulated as ((2,620*1.05)*1.05) = 2.888. This incorrectly compounds the base LOS C capacity of 2,620 for C3R for both exclusive Left Turn lanes and for exclusive Right Turns. This should instead be formulated as (2,620*1.05)+(2,620*1.05) = 2,882. Please make the same correction throughout the table.

   It is unclear where the LOS D Volume for SR 78 was found; the reviewer cannot reproduce this even using the adjustment factors. Please double check and advise which FDOT MMLOS table this was found in, or correct to the current reference for C3R context class, LOS D. (Note: The LOS D base volume should be 1,850 and apply the correct adjustments from there). - SR 80 4LD LOS D Volume should be 1,810 for C3C, and apply the correct adjustments from there.

Response: **This was corrected in the revised TIS.**

7. Table 2A –
   - Reflect the correct total PM Peak Hour Project Traffic (604 trips).
   - K Factor and D Factor for North River Road should be 0.089 and 0.60, respectively.
   - D Factors for most State Road Segments are incorrectly stated. All instances showing 0.528 should be revised to 0.55 per the FDOT count station data.
   - When Trip Generation, KFAC, and DFAC revisions are implemented, please update Project Traffic Distribution, PM Peak Hour Project Traffic, and Traffic Volumes accordingly.

Response: **This was corrected in the revised TIS.**

8. Table 3A -
   - Please double-check the calculated LOS Volumes consistent with the comments on Table 1A.

Response: **This was corrected in the revised TIS.**

9. Table 4A -
   - Please revise Project Traffic consistent with comments on Table 2A. (Note: Table 3A correctly reflects FDOT DFAC for the stations listed).
   - Please update AM and PM Project traffic in accordance with the trip generation revision.

Response: **This was corrected in the revised TIS. Again, see previous response regarding the trip generation for the Comp Plan analysis.**

Environmental Review – Elizabeth Workman

10. CPA2025-00008 documents must be consistent with the zoning case DCI2025-00019.

Response: **So noted.**

11. Provide a map and description of the soils found on the property.

Response: **A soils map exhibit of property has been included with this resubmittal.**

12. Provide a topographic map depicting the property boundaries and any 100-year flood prone areas as identified by FEMA.

Response: **Please see attached FEMA Flood Insurance Rate Map and FEMA Letter of Map Revision Determination depicting the property boundaries. This map depicts the 100-year flood prone areas.**

13. Provide a map delineating property boundaries on the most recent FLOOD Insurance Rate Map.

Response: **Please see attached FEMA Flood Insurance Rate Map and FEMA Letter of Map Revision Determination depicting the property boundaries.**

14. Provide an analysis of Lee Plan policies 60.1.2, 60.4.3, 61.1.6, 123.2.10, 123.2.15, 123.3.2, and 123.4.1.

Response: **Please see revised Lee Plan Analysis (Exhibit M12 and M19). The policies noted above have been addressed within the analysis.**

15. Pursuant to Lee Plan Policy 2.3.1 and 61.1.6, provide an integrated surface and ground water model that utilizes site-specific data to assess the potential adverse impacts on water resources and natural systems.

Response: **Please see attached Characterization of Ground and Surface Water Resources Report. The applicant is in the process of preparing the Environmental Resource Permit (ERP) application submittal which will establish the information needed to prepare the integrated surface and ground water model that will be provided in the next resubmittal package.**

16. The application indicates that the subject property is utilized by endangered and threatened species. Please provide an analysis of Objectives 123.3 and 123.4 discussing how the requested Map amendments are consistent with these objectives as it relates to endangered and threatened species.

Response: **Please see revised Lee Plan Analysis (Exhibit M12 and M19). The policies noted above have been addressed within the analysis.**

17. The well field protection zone map indicates future well fields in this location, provide an analysis of goal 63, discussing how the proposed map amendment will continue to protect the counties groundwater supplies.

Response: **A map of Wellfield Protection Zones was included within the Narrative of Request. Also, as noted in the Characterization of Ground and Surface Water Resources Report, Lee Plan Map 4-C (depicting iso-travel times of 6-months, 1 year, 5-years and 10-years), shows proposed public supply wells located immediately south of the Armeda Property along North River Road which are part of the North Lee County Public Supply Wellfield. A review of the Water Use Permit, No. 36-00152-W, for this facility indicates that in February 2024, these proposed production wells were relocated to the east on land owned by Lee County near the Telegraph Creek Preserve. The proposed production wells are to be constructed into the Lower Hawthorn Aquifer which is separated from the Sandstone Aquifer by hundreds of feet of confining unit sediments. A copy of the Water Use Permit Modification is provided as Attachment 3 to this referenced Report. Therefore, based on the recent permit modification, there are no wellfield protection zones south of the proposed development.**

<u>Legal Review – Richard Burris</u>

18. If the subject property contains wetlands or the proposed amendment includes more than one land use category a metes and bounds legal description must be submitted in addition to the perimeter boundary of the property for each wetland or future land use category.

    The application states the request is to Rural and Wetlands. A metes and bounds legal description is required for the Wetlands land use category. Wetlands future land use boundaries will be determined by using the methodology in Fla. Admin. Code R. 17-340 as ratified and amended in §373.4211, Fla. Stat. A Jurisdictional Determination approved by SFWMD or Florida DEP must be submitted prior to the issuance of such an interpretation.

Response: **It is noted that a metes and bounds legal description must be submitted for each land use category and each wetland. At this time, the applicant is in the process of preparing and ERP submittal and will provide the legal descriptions prior to sufficiency.**

Planning Review - Katherine Burgess

19. The justification provided in Exhibit M20 does not sufficiently address the proposed Future Land Use Map Amendment. Revise the justification to address why it is in the County's best interest to redesignate the subject property as Rural instead of DR/GR. The response should provide data and analysis that verifies the DR/GR designation is not appropriate on the subject property and/or that the rural designation is more suitable. The response should not address the potential benefits of the proposed companion rezone.

Response: **Please see the revised Justification of Proposed Amendment (Exhibit M20). This document has been updated with data and analysis that the Rural designation is more suitable. Specifically, with an emphasis on the surrounding development characteristics and compatibility with neighboring properties along North River Road.**

20. The surrounding properties map and list of property surrounding property owners appear to be correct. Physical mailing labels of the list included in Exhibit M3 will need to be provided with a later submittal.

Response: **So noted.**

21. Provide a list of all the consultants working on this application.

Response: **The latest submittal material includes a list of all consultants that are working on this application.**

22. Add an exhibit that describes the application request(s).

Response: **Please see attached Exhibit M11 – Proposed Amendments document. Additionally, two map exhibits displaying the existing and proposed future land use request from Density Reduction / Groundwater Resource to Rural and Wetlands.**

23. Under Objective 4.1, properties that are within the Lee County Water and Sewer Service Area maps cannot receive water or sewer service from an entity other than Lee County Utilities unless LCU agrees. Confirm that LCU is the service provider this development will be using for these services, or update the request accordingly.

Response: **Lee County Utilities will be the service provider. An availability letter from LCU has been included with this application resubmittal.**

24. Many of the analyses in the Lee Plan Analysis focus on the rezone's consistency with the Lee Plan, not on the proposed CPA's consistency with it. The Goal, Objective, Standard, and Policy analysis in the Lee Plan Analysis needs to address how the proposed comprehensive plan amendment is consistent with the Lee Plan, particularly with respect to use, density, and intensity, given what is possible in the Rural FLU versus the DR/GR. Revise as necessary.

Response: **Please see revised Lee Plan Analysis. The Goals, Objectives, Standards, and Policies in this analysis have been revised to focus on the proposed Rural FLU and focusing surrounding development characteristics.**

25. Some comments and edits only appear in DigEPlan. Verify that all comments, highlights, or other markups are addressed in the resubmittal, as each will be reviewed until the status for the comment is updated to "closed".

Response: **So noted.**

26. The resubmittal in response to comments must be submitted as one submittal package. Staff cannot add files or responses ad hoc to the application materials.

Response: So noted.

27. HISTORIC: applicant has not provided a map of the subject property showing the archaeological Sensitivity Zones.

    The applicant has not provided a map of any historic districts and/or sites listed on the Florida Master Site File which are located on the subject property or adjacent properties.

Response: An Archaeological Sensitivity Zone map exhibit has been included with this resubmittal. Additionally, a Master Site File has also been included. This Master Site File includes additional information outlining a historical structure has also been identified within the property boundary from 1986. There is no existing structure on site in the area noted by the Master Site File.

Items marked Yes must be resolved before the plan review can be approved. Items marks "No" may be deferred to subsequent submittals and are not required to be addressed prior to approval of plans and documents.

Document: Submittal 1 - Exhibit - M12 & M19 - Lee Plan Analysis + State Policy and Regional Policy Plan.pdf

Planning Review – Katherine Burgess

28. Provide the analysis of the environmental report as it applies to this policy in this section.

Response: Please see attached revised Lee Plan Analysis. Please also see attached Characterization of Ground and Surface Water Resources Report. The applicant is in the process of preparing the Environmental Resource Permit (ERP) application submittal which will establish the information needed to prepare the integrated surface and ground water model that will be provided in the next resubmittal package.

29. Under Lee Plan Objective 1.5, all areas designated as Wetlands by the state are considered part of the Wetlands FLUC. Revise this response as necessary.

Response: Please see revised Lee Plan Analysis. Per Objective 1.5 descriptions of designated wetlands has been updated to include Wetland FLUC.

30. Provide an analysis on how the property is consistent with the proposed Rural FLUC and the potential differences in allowed uses between Rural FLUC and DR/GR FLUC.

Response: Please see revised Lee Plan Analysis. Policy 1.4.1 has been updated to address the differences in the allowed uses between Rural and DR/GR.

31. Updates to Table 1(b) require a comprehensive plan amendment. Contact Rick Burris at RBurris@leegov.com to determine if Table 1(b) amendments are necessary and add the Table 1(b) amendment to this application request.

Response: Please see attached revised Application and Table 1(b) analysis within the Lee Lan Analysis.

32. Provide a map of these areas to verify that each area is only being used for one incentive.

Response: **Please see the Indigenous Restoration, Preservation, and Creation Plan. This document includes each area that is being uses for the incentives.**

33. Objective 2.2 states that growth should be directed to future urban areas. Future urban area is a defined term in the Lee Plan. DR/GR, Wetlands, and Rural FLUC are defined as Future Non-Urban Areas. Revise the response to consider the request from this perspective.

Response: **Please see revised Lee Plan Analysis and the Justification of Proposed Amendment. Both documents outline the request and address Objective 2.2 and how strategic growth has been occurring in this area of the County.**

34. The application materials did not include a Letter of Availability from LCU. There is reference to this letter coming under separate cover. LCU's availability letter should be included in the resubmittal and may require changes to the analyses of the sections that reference the information coming under separate cover. Additionally, if LCU is not able to provide water or sewer service, these responses will need to be changed. Revise accordingly.

Response: **Please find the latest Letter of Availability provided by Lee County Utilities dated September 23, 2025 and revised Lee Plan Analysis.**

35. Provide an analysis of how the map amendment from DR/GR (Density Reduction/Groundwater Resource) to Rural supports the water quality in this area, particularly with the change in potential uses and density.

Response: **This submittal includes a hydrological report titled *Characterization of Ground and Surface Water Resources.* This document outlines the changes and the notes that the proposed development would not have an adverse effect to the water quality in this area.**

36. The phrase, "The requested future land use map amendment will facilitate the concurrent residential planned development" appears to be used as justification for the proposed map amendment throughout the application. A pending zoning action is not justification for a Future Land Use Map amendment. Consider rewording these to better support the CPA request.

Response: **Please see revised Lee Plan Analysis. The analysis for Policy 2.3.1 and throughout the Lee Plan Analysis has been rewritten to support the CPA request on its own merit and to only reference the companion rezone for context.**

37. The community meetings must be completed and all of the information included in Policy 17.3.4 is provided to staff for review before the application is found sufficient.

Response: **So noted.**

Submittal 1 – Letters of Availablity.pdf

38. The application materials correctly include the utilities request letter to LCU; however, the letter of availability from LCU is missing. Provide the Letter of Availability for water and sewer services from LCU.

Response: **Please find the latest Letter of Availability provided by Lee County Utilities attached.**

39. The application materials correctly include the Fire request letter to Bayshore Fire District; however, the letter of availability from is missing. Provide the Letter of Availability from the Bayshore Fire District.

Response: **Please find the latest Letter of Availability provided by Bayshore Fire District attached.**

40. The application materials correctly include the law enforcement request letter to LCSO; however, the letter of availability from LCSO is missing. Provide the Letter of Availability from LCSO.

Response: **Please find the latest Letter of Availability provided by Lee County Sheriff Office attached.**

41. The application materials correctly include the LeeTran request letter; however, the letter of availability from LeeTran is missing. Provide the Letter of Availability for LeeTran.

Response: **Please find the latest Letter of Availability provided by TeeTran attached.**

42. The application materials correctly include the Lee County Schools request letter; however, the capacity letter from LCS is missing. Provide the capacity letter from LCS.

Response: **Please find the latest Letter of Availability provided by Lee County Schools attached.**

43. The application materials correctly include the EMS request letter to Public Safety; however, the letter of availability is missing. Provide the Letter of Availability for EMS.

Response: **Please find the latest Letter of Availability provided by Emergency Medical Services (EMS) attached.**

We trust the responses and resubmitted documents satisfy the comments issued. Please contact us should you have any questions or need additional information.

Thank you in advance for your consideration of the above information. Please contact me directly at pmurray@rviplanning.com if you have any questions or require additional information.

Sincerely,

Patrick Murray, AICP
Project Manager

Lee County Community Development

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT - MAP

Project Name: Armeda Property

Project Description: A request to amend the Future Land Use Map (Map 1-A) to change the FLU category on 561.63± acres from DR/GR to Rural and Wetlands, amend Lee County Future Water Service Areas (Map 4-A) and Lee County Future Sewer Service Areas (Map 4-B) to add the subject property. This request includes an amendment to Table 1(b). The request is associated with a concurrent RPD Rezone to allow for 737 single-family DUs.

Map(s) to Be Amended: Map 1-A, Map 4-A, Map 4-B

State Review Process: ☐ Small-Scale Review ☐ State Coordinated Review ■ Expedited State Review

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1. **Name of Applicant:** Forestar (USA) Real Estate Group Inc
   Address: 551 N. Cattleman Rd Suite 304
   City, State, Zip: Sarasota, FL 34232
   Phone Number: (239) 898-2279 E-mail: JamesRatz@forestar.com

2. **Name of Contact:** Patrick Murray, AICP
   Address: 1514 Broadway, Suite 200
   City, State, Zip: Fort Myers, FL 33901
   Phone Number: (904) 728-0872 E-mail: pmurray@rvlplanning.com

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COMMUNITY DEVELOPMENT

3. **Owner(s) of Record:** See Attached Exhibit A - Property Owners List & Map
   Address:
   City, State, Zip:
   Phone Number: E-mail:

4. **Property Location:**
   1. Site Address: See Attached Exhibit A - Property Owners List & Map
   2. STRAP(s): See Attached Exhibit A - Property Owners List & Map

5. **Property Information:**
   Total Acreage of Property: 561+/- Total Acreage Included in Request: 561+/-
   Total Uplands: 507+/- AC Total Wetlands: 54+/- AC Current Zoning: Agricultural (AG-2)
   Current Future Land Use Category(ies): Density Reduction Groundwater Resource (DR/GR)
   Area in Each Future Land Use Category: DR/GR: 561+/- Acres
   Existing Land Use: Single-Family Residential / Agriculture

6. **Calculation of maximum allowable development under current Lee Plan:**
   Residential Units/Density: 53 Commercial Intensity: 0 Industrial Intensity: 0

7. **Calculation of maximum allowable development with proposed amendments:**
   Residential Units/Density: 737 Commercial Intensity: 0 Industrial Intensity: 0

Public Facilities Impacts

NOTE: The applicant must calculate public facilities impacts based on the maximum development.

1. **Traffic Circulation Analysis**: The analysis is intended to determine the effect of the land use change on the Financially Feasible Highway Plan Map 3A (20-year plus horizon) and on the Capital Improvements Element (5-year horizon). Toward that end, an applicant must submit a Traffic Impact Statement (TIS) consistent with Lee County Administrative Code (AC)13-17.

    a. Proposals affecting less than 10 acres, where development parameters are contained within the Traffic Analysis Zone (TAZ) or zones planned population and employment, or where there is no change in allowable density/ intensity, may be eligible for a TIS requirement waiver as outlined in the Lee County TIS Guidelines and AC-13-17. Identification of allowable density/intensity in order to determine socio-economic data for affected TAZ(s) must be coordinated with Lee County Planning staff. Otherwise a calculation of trip generation is required consistent with AC-13-17 and the Lee County TIS Guidelines to determine required components of analysis for:

        i. Total peak hour trip generation less than 50 total trip ends – trip generation.

        ii. Total peak hour trip generation from 50 to 300 total trip ends – trip generation, trip distribution and trip assignment (manual or Florida Standard Urban Transportation Modeling Structure (FSUTMS) analysis consistent with AC-13-17 and TIS Guidelines), short-term (5 year) and long-range (to current Lee Plan horizon year) segment LOS analysis of the nearest or abutting arterial and major collector segment(s) identified in the Transportation Inventory based on the trip generation and roadway segment LOS analysis criteria in AC-13-17. A methodology meeting is recommended prior to submittal of the application to discuss use of FSUTMS, any changes to analysis requirements, or a combined CPA and Zoning TIS short term analysis.

        iii. Total peak hour trip generation is over 300 total trip ends - trip generation, mode split, trip distribution and trip assignment (manual or FSUTMS analysis consistent with AC-13-17 and TIS Guidelines), short-term (five-year) and long-range (to current Lee Plan horizon year) segment LOS analysis of arterial and collector segments listed in the Transportation Inventory. LOS analysis will include any portion of roadway segments within an area three miles offset from the boundary of the application legal description metes and bounds survey. LOS analysis will also include any additional segments in the study area based on the roadway segment LOS analysis criteria in AC-13-17. A methodology meeting is required prior to submittal of the application.

    b. Map amendment - greater than 10 acres -Allowable density/intensity will be determined by Lee County Planning staff.

2. **Provide an existing and future conditions analysis for the following (see Policy 95.1.3):**
    a. Sanitary Sewer
    b. Potable Water
    c. Surface Water/Drainage Basins
    d. Parks, Recreation, and Open Space
    e. Public Schools

Analysis for each of the above should include (but is not limited to) the following (see the Lee County Concurrency Management Report):

a. Franchise Area, Basin, or District in which the property is located
b. Current LOS, and LOS standard of facilities serving the site
c. Projected 2030 LOS under existing designation
d. Projected 2030 LOS under proposed designation
e. Existing infrastructure, if any, in the immediate area with the potential to serve the subject property
f. Improvements/expansions currently programmed in 5 year CIP, 6-10 year CIP, and long range improvements
g. Provide a letter of service availability from the appropriate utility for sanitary sewer and potable water

In addition to the above analysis, provide the following for potable water:

a. Determine the availability of water supply within the franchise area using the current water use allocation (Consumptive Use Permit) based on the annual average daily withdrawal rate.
b. Include the current demand and the projected demand under the existing designation, and the projected demand under the proposed designation.
c. Include the availability of treatment facilities and transmission lines for reclaimed water for irrigation.
d. Include any other water conservation measures that will be applied to the site (see Goal 54).

3. Provide a letter from the appropriate agency determining the adequacy/provision of existing/proposed support facilities, including:

a. Fire protection with adequate response times
b. Emergency medical service (EMS) provisions
c. Law enforcement
d. Solid Waste
e. Mass Transit
f. Schools

In reference to above, the applicant must supply the responding agency with the information from application items 5, 6, and 7 for their evaluation. This application must include the applicant's correspondence/request to the responding agency.

Environmental Impacts

Provide an overall analysis of the character of the subject property and surrounding properties, and assess the site's suitability for the proposed change based upon the following:

1. A map of the Plant Communities as defined by the Florida Land Use Cover and Classification system (FLUCCS).
2. A map and description of the soils found on the property (identify the source of the information).
3. A topographic map depicting the property boundaries and 100-year flood prone areas indicated (as identified by FEMA).
4. A map delineating the property boundaries on the most recent Flood Insurance Rate Map.
5. A map delineating wetlands, aquifer recharge areas, and rare & unique uplands.
6. A table of plant communities by FLUCCS with the potential to contain species (plant and animal) listed by federal, state or local agencies as endangered, threatened or species of special concern. The table must include the listed species by FLUCCS and the species status (same as FLUCCS map).

Impacts on Historic Resources

List all historic resources (including structure, districts, and/or archaeologically sensitive areas) and provide an analysis of the proposed change's impact on these resources. The following should be included with the analysis:

1. A map of any historic districts and/or sites listed on the Florida Master Site File which are located on the subject property or adjacent properties.
2. A map showing the subject property location on the archaeological sensitivity map for Lee County.

Internal Consistency with the Lee Plan

1. Discuss how the proposal affects established Lee County population projections, Lee Plan Table 1(b) and the total population capacity of the Lee Plan Future Land Use Map.
2. List all goals and objectives of the Lee Plan that are affected by the proposed amendment or that affect the subject property. This analysis should include an evaluation of all relevant policies under each goal and objective.
3. Describe how the proposal affects adjacent local governments and their comprehensive plans.

State Policy Plan and Regional Policy Plan

List State Policy Plan and Regional Policy Plan goals, strategies and actions, and policies which are relevant to this plan amendment.

Justify the proposed amendment based upon sound planning principles

Support all conclusions made in this justification with adequate data and analysis.

Planning Communities/Community Plan Area Requirements

If located within a planning community/community plan area, provide a meeting summary document of the required public informational session [Lee Plan Goal 17].

Sketch and Legal Description

The certified legal description(s) and certified sketch of the description for the property subject to the requested change. A metes and bounds legal description must be submitted specifically describing the entire perimeter boundary of the property with accurate bearings and distances for every line. The sketch must be tied to the state plane coordinate system for the Florida West Zone (North America Datum of 1983/1990 Adjustment) with two coordinates, one coordinate being the point of beginning and the other an opposing corner. If the subject property contains wetlands or the proposed amendment includes more than one land use category a metes and bounds legal description, as described above, must be submitted in addition to the perimeter boundary of the property for each wetland or future land use category.

SUBMITTAL REQUIREMENTS

Clearly label all submittal documents with the exhibit name indicated below.

For each map submitted, the applicant will be required to submit a 24"x36" version and 8.5"x11" reduced map for inclusion in public hearing packets.

MINIMUM SUBMITTAL ITEMS (3 Copies)

X	Completed Application (Exhibit – M1)
X	Disclosure of Interest (Exhibit – M2)
X	Surrounding Property Owners List, Mailing Labels, and Map For All Parcels Within 500 Feet of the Subject Property (Exhibit – M3)
X	Existing Future Land Use Map (Exhibit – M4)
X	Map and Description of Existing Land Uses (Not Designations) of the Subject Property and Surrounding Properties (Exhibit – M5)
X	Map and Description of Existing Zoning of the Subject Property and Surrounding Properties (Exhibit – M6)
X	Signed/Sealed Legal Description and Sketch of the Description for Each FLUC Proposed (Exhibit – M7)
X	Copy of the Deed(s) of the Subject Property (Exhibit – M8)
X	Aerial Map Showing the Subject Property and Surrounding Properties (Exhibit – M9)
X	Authorization Letter From the Property Owner(s) Authorizing the Applicant to Represent the Owner (Exhibit – M10)
X	Proposed Amendments (Exhibit – M11)
X	Lee Plan Analysis (Exhibit – M12)
X	Environmental Impacts Analysis (Exhibit – M13)
X	Historic Resources Impact Analysis (Exhibit – M14)
X	Public Facilities Impacts Analysis (Exhibit – M15)
X	Traffic Circulation Analysis (Exhibit – M16)
X	Existing and Future Conditions Analysis - Sanitary Sewer, Potable Water, Surface Water/Drainage Basins, Parks and Rec, Open Space, Public Schools (Exhibit – M17)
X	Letter of Determination For the Adequacy/Provision of Existing/Proposed Support Facilities - Fire Protection, Emergency Medical Service, Law Enforcement, Solid Waste, Mass Transit, Schools (Exhibit – M18)
X	State Policy Plan and Regional Policy Plan (Exhibit – M19)
X	Justification of Proposed Amendment (Exhibit – M20)
X	Planning Communities/Community Plan Area Requirements (Exhibit – M21)

APPLICANT – PLEASE NOTE:

Changes to Table 1(b) that relate directly to and are adopted simultaneously with a future land use map amendment may be considered as part of this application for a map amendment.

Once staff has determined the application is sufficient for review, 15 complete copies will be required to be submitted to staff. These copies will be used for Local Planning Agency hearings, Board of County Commissioners hearings, and State Reviewing Agencies. Staff will notify the applicant prior to each hearing or mail out to obtain the required copies.

If you have any questions regarding this application, please contact the Planning Section at (239) 533-8585.

AFFIDAVIT

I, Patrick Murray, certify that I am the owner or authorized representative of the property described herein, and that all answers to the questions in this application and any sketches, data, or other supplementary matter attached to and made a part of this application, are honest and true to the best of my knowledge and belief. I also authorize the staff of Lee County Community Development to enter upon the property during normal working hours for the purpose of investigating and evaluating the request made through this application.

Signature of Applicant

9/12/2025
Date

Patrick Murray
Printed Name of Applicant

STATE OF FLORIDA
COUNTY OF LEE

The foregoing instrument was sworn to (or affirmed) and subscribed before me by means of ☑ physical presence or ☐ online notarization on 9/12/25 (date) by Patrick Murray (name of person providing oath or affirmation), who is personally known to me or who has produced _____(type of identification) as identification.

Signature of Notary Public

(Name typed, printed or stamped)

KEISHA MCKENZIE
MY COMMISSION EXPIRES 04-24-2026
NOTARY PUBLIC
COMM. # HH 256697
STATE OF FLORIDA

TR TRANSPORTATION CONSULTANTS, INC

2726 OAK RIDGE COURT, SUITE 503
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TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
SIGNAL SYSTEMS/DESIGN

TRAFFIC IMPACT STATEMENT

FOR

ARMEDA
COMPREHENSIVE PLAN AMENDMENT & REZONING

(PROJECT NO. F2502.01)

PREPARED BY:
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TRANSPORTATION CONSULTANTS, INC

CONTENTS

TR TRANSPORTATION CONSULTANTS, INC

I. INTRODUCTION

TR Transportation Consultants, Inc. has conducted a traffic impact statement to fulfill requirements set forth by the Lee County Department of Community Development for projects seeking amendment to the Comprehensive Land Use Plan and re-zoning approval. The subject site is located along the north side of North River Road approximately 1½ miles east of S.R. 31 in Lee County, Florida. **Figure 1** illustrates the approximate location of the subject site.

The analysis in this report will determine the impacts of change in land use designation on approximately 561-acres from DRGR/Wetlands to Rural and Wetlands land use category to permit the development of the subject site with a residential community on the overall 561-acre site. Approximately 507-acres is currently in the DR/GR Future Land Use Category and approximately 54-acres is in the Wetlands Future Land Use Category. With the proposed land use category (Rural & Wetlands), and the companion rezoning application that is being filed, the overall 561-acre site will be rezoned to permit up to 737 residential dwelling units.

The transportation related impacts of the proposed Comprehensive Plan Amendment will be assessed based on evaluation of the long-range impact (20-year horizon) and short range impact (5-year horizon) the proposed amendment would have on the existing and future roadway infrastructure. The transportation related impacts of the proposed rezoning will be evaluated based on the estimated build-out year of the project and the impacts the proposed rezoning will have on the surrounding roadway infrastructure. Access to the subject site is proposed to North River Road at a single location as shown on the Master Concept Plan.

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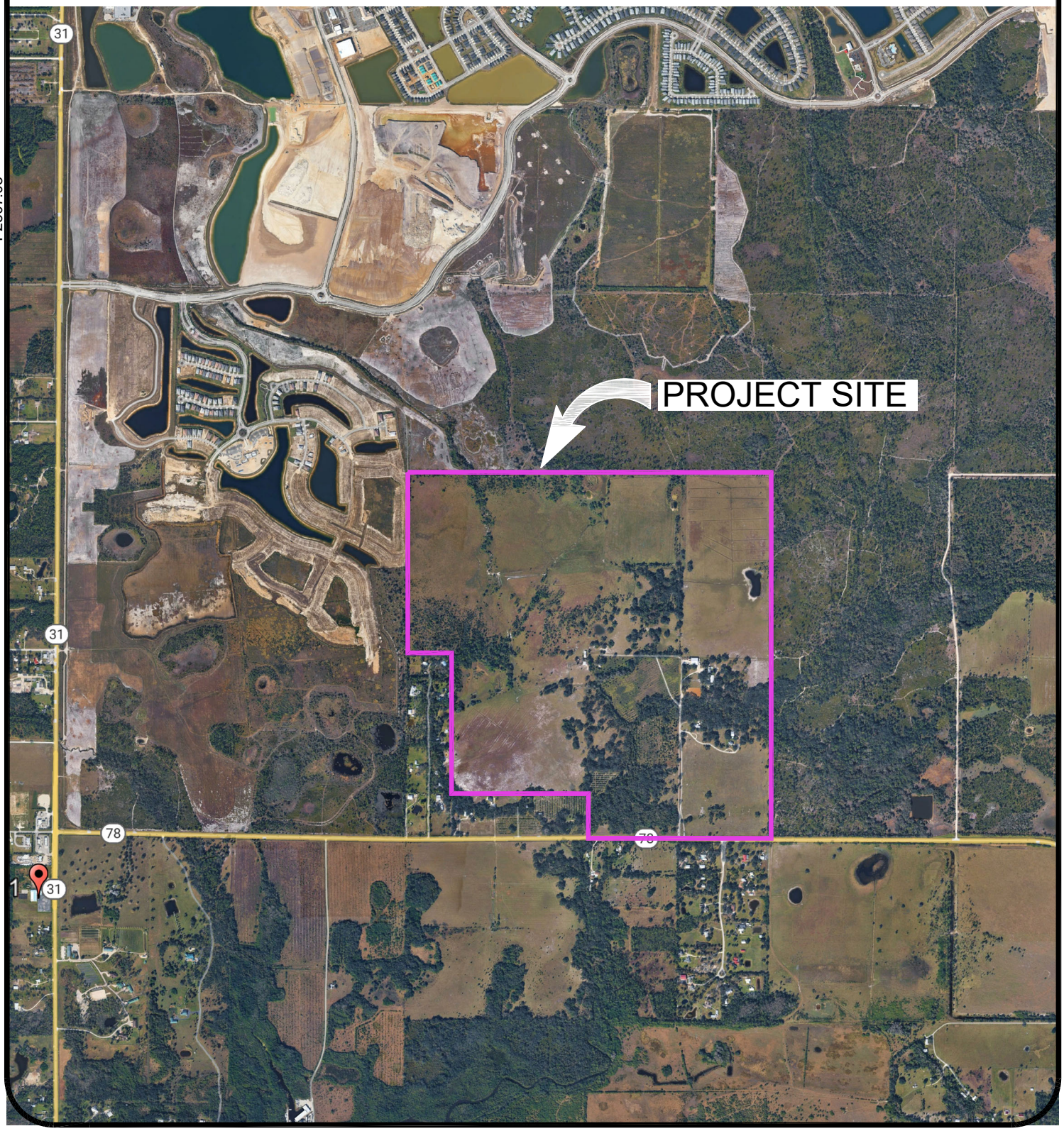

TRANSPORTATION CONSULTANTS, INC

PROJECT LOCATION MAP
ARMEDA RPD

Figure 1

This report examines the impact of the development on the surrounding roadways. Trip generation and assignments to the various roadways within the study area will be completed and analysis conducted to determine the impacts of the development on the surrounding roadways.

II. EXISTING CONDITIONS

The subject site is currently vacant. The overall site is generally bordered by vacant land to the north and east, North River Road to the south, and by residential uses to the west.

North River Road is a two-lane undivided arterial that borders the subject site to the south. North River Road has a posted speed limit of 55 mph adjacent to the site and is under the jurisdiction of the Lee County Department of Transportation.

SR 31 is currently a north/south two-lane undivided arterial within the vicinity of the subject site. SR 31 has a posted speed limit of 60 mph and is under the jurisdiction of the Florida Department of Transportation (FDOT). SR 31 is currently under construction by the Babcock Ranch Independent Special District (ISD) which is funding the construction of the widening of SR 31 from SR 78 north through Cook-Brown Road to a four-land divided roadway.

This four-lane improvement will be expandable to a future six-lane facility. Improvements to the existing signalized intersection of SR 31 and North River Road will be also provided as part of the widening project. This intersection is being designed as an R-Cut intersection. The plans for this intersection are included in the Appendix of this report for reference. The construction of the four-lane improvement is scheduled to be completed by 2027.

III. COMPREHENSIVE PLAN AMENDMENT

The Comprehensive Plan Amendment would change the future land use designation on the approximately 561-acres from DR/GR to Rural & Wetlands. Under the existing DR/GR and Wetlands land use category, the site could be developed with up to approximately 53 residential dwelling units (1 dwelling unit/10-acres on DR/GR and 1 dwelling unit/20-acres on Wetlands). **Table 1** summarizes the land uses that could be constructed under the existing land use designations and the intensity of uses under the proposed land use designation.

Table 1
Land Uses
Armeda

Existing/ Proposed	Land Use Category	Intensity
Existing	DR/GR & Wetlands	53 Dwelling Units DR/GR ≈ 507.57 acres @ 1 DU/10-Acres & Wetlands ≈ 54.06 acres @ 1 DU/20 acres
Proposed	Rural	737 Dwelling Units (Gross Density of 1.3 DU/Acre)

IV. TRIP GENERATION

The trip generation for the permitted and proposed development was determined by referencing the Institute of Transportation Engineer's (ITE) report, titled ***Trip Generation***, 12th Edition. Land Use Code 210 (Single-Family Detached Housing) was utilized for the trip generation purposes of the permitted and proposed residential uses on the subject site. The trip generation equations utilized for this land use are attached to the Appendix of this report for reference. **Table 2** and **Table 3** outline the anticipated weekday AM and PM peak hour trip generation based on the existing and proposed future land use category, respectively.

Table 2
Trip Generation
Based on Existing Land Use Category
Armeda

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Single-Family Detached Housing (53 Dwelling Units)	11	29	40	33	20	53	685

Table 3
Trip Generation
Based on Proposed Land Use Category
Armeda

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Single-Family Detached Housing (737 Dwelling Units)	135	364	499	375	229	604	6,213

Table 4 indicates the trip generation difference between the proposed and existing land use categories. The long range transportation impact (20-year horizon) and the short range transportation impact (5-year horizon) will be evaluated based on the resultant trip change illustrated in Table 4.

Table 4
Trip Generation – Resultant Trip Change
Armeda

Land Use	A.M. Peak Hour			P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Proposed Land Use Designation (737 Dwelling Units)	135	364	499	375	229	604	6,213
Existing Land Use Designation (53 Dwelling Units)	-11	-29	-40	-33	-20	-53	-685
Resultant Trip Change	**+124**	**+335**	**+459**	**+342**	**+209**	**+551**	**+5,528**

The resultant trip change in Table 4 indicates that the trip generation will be **increased** in the AM and PM peak hour conditions as a result of this land use change.

V. COMPREHENSIVE PLAN AMENDMENT ANALYSIS

The Comprehensive Plan Amendment would change the future land use designation on the approximately 561-acres from DR/GR & Wetlands to a Rural & Wetlands land use category. The transportation related impacts of the proposed Comprehensive Plan Amendment were evaluated pursuant to the criteria in the application document. This included an evaluation of the long range impact (20-year horizon) and short range impact (5-year horizon) the proposed amendment would have on the existing and future roadway infrastructure.

Long Range Impacts (20-year horizon)

The Lee County Metropolitan Planning Organization's (MPO) 2045 Long Range Transportation Plan was reviewed to determine if any future roadway improvements were planned in the vicinity of the subject site. Based on the review of the Financially Feasible Plan for 2045, SR 31 is shown as a multi-lane roadway from SR 80 north to the Charlotte County line by 2045. SR 78 is shown on the plan as a multi-lane road from SR 31 to I-75 with a reconstructed interchange and Buckingham Road is shown as a multi-lane roadway from SR 80 south to Orange River Boulevard. On the Needs Plan for 2045, SR 80 is shown to be widened from 4-lanes to 6-lanes from SR 31 to Buckingham Road and the Del Prado Extension is shown from U.S. 41 over I-75 with a new interchange to SR 31. These projects are all **within a 3-mile radius of the site** shown on the 2045 Long Rang Transportation Plan.

The Lee County Metropolitan Planning Organization's (MPO) long range transportation plan along with the FDOT District One travel model were also reviewed in order to determine the impacts the amendment would have on the surrounding area. The base 2045 loaded network volumes were determined for the roadways within the study area and then the PM peak hour trips to be generated by additional trips shown in Table 4

were then added to the projected 2045 volumes. The Level of Service for the surrounding roadways was then evaluated. The Level of Service threshold volumes were derived based on the Lee County's *Generalized Peak Hour Directional Service Volumes* table as well as FDOT's *Multi-Modal Generalized Peak Hour Directional Volumes*.

The results of the analysis indicate that the addition of the trips as a result of the proposed incentive density to the projected 2045 volumes will not cause any roadway links to fall below the recommended minimum acceptable Level of Service thresholds as recommended in Policy 37.1.1 of the Lee County Comprehensive Plan. The adopted Level of Service for SR 31 between SR 78 and North River Road is LOS" C". With the project traffic scenario, this roadway is anticipated to operate at a LOS "D". However, Transportation concurrency is non-regulatory per Florida Statutes Section 163.3180 and Lee Plan Policy 95.1.3, which provides "*Compliance with non-regulatory LOS standards will not be a requirement for continued development permitting, but will be used for facility planning purposes*."

Note, SR 80 east of SR 31 was shown to operate at a poor Level of Service in the 2045 background (without project traffic) conditions. As previously mentioned, SR 80 is shown to be widened to a six-lane facility on the Lee County's 2045 Needs Plan, which would alleviate this projected background deficiency. Therefore, no changes to the adopted long range transportation plan are required as result of the proposed Map Amendments. Attached **Table 1A** and **Table 2A** reflect the Level of Service analysis based on the 2045 conditions.

Short Range Impacts (5-year horizon)

The 2024/2025 – 2030/2030 Lee County Five Year Capital Improvement Programs (CIP) as well as the Florida Department of Transportation Adopted Work Programs were reviewed to determine the short term impacts the proposed land use change would have on the surrounding roadways. Based on the review, road improvements planned to roadway network within a 3-mile radius of the subject site on the 5-Year Capital Improvement Program for either FDOT or Lee County include the widening of SR 31

between SR 80 and SR 78 to a six-lane roadway. FDOT is currently conducting a PD&E study on SR 78 from I-75 to SR 31 to evaluate future widening of this roadway to four-lane divided facility. As previously mentioned, the segment of SR 31 from SR 78 through Cook-Brown Road is currently under construction to be widened to a 4-lane divided roadway.

As can be depicted from Table 4 of this report, the proposed map amendment will increase the overall trip generation potential of the subject site by approximately 459 vehicles during the A.M. peak hour and 551 vehicles during the P.M. peak hour. **Table 3A** and **Table 4A** attached to this report indicate the projected 5-year planning Level of Service on the area roadways based on the additional trips shown in Table 4. The existing peak hour, peak season, peak direction traffic volumes on the various roadway links maintained by Lee County were obtained from the most recent Lee County ***Public Facilities Level of Service and Concurrency Report***. The existing peak hour, peak season, peak direction traffic volumes for state maintained roadways were derived by factoring the latest AADT volumes by appropriate K & D factors. The existing peak hour, peak season, peak direction traffic volumes were then factored by the appropriate annual growth rates in order to obtain the 2029 background traffic conditions on the area roadway network. The growth rates for each roadway were calculated based on historical traffic data obtained from the FDOT's ***Florida Traffic Online*** resource as well as the traffic data from the latest ***Lee County Traffic Count Report***. Based on the projected traffic distribution, the roadway link data was analyzed for the year 2029 without the proposed amendment and year 2029 with the proposed amendment. Traffic data obtained from the aforementioned Lee County and FDOT resources is attached to the Appendix of this report for reference.

The results of the analysis indicate that the addition of the trips as a result of the proposed incentive density to the projected 2029 volumes will not cause any roadway segment to fall below their recommended minimum Level of Service threshold. SR 31 from N. River Road to SR 78 is shown to operate below the minimum threshold in 2029 without the project trips so this is considered a background Level of Service deficiency and not

caused by the project. SR 31 has been designed to be expanded to a 6-lane divided facility due to the increase growth of the Babcock Ranch community and the historical growth along this corridor may necessitate that widening sooner than anticipated. The proposed Map Amendment does not cause any other roadways in the short-range analysis to fall below the minimum acceptable Level of Service standards. Therefore, based on this analysis no modifications will be necessary to the Lee County or FDOT short term capital improvement programs. Capacity analysis will be evaluated again at the time the project will seek rezoning and local Development Order approvals.

The proposed Comprehensive Plan Amendment is to change the future land use designation on approximately 561-acres from DR/GR & Wetlands to Rural & Wetlands. Based on the analysis, no modifications will be necessary to the Lee County or FDOT short term capital improvement programs.

VI. ZONING ANALYSIS

An analysis was also completed to support the rezoning of the entire 561-acre subject site from AG-2 to RPD. The site is currently zoned AG-2. If the Comprehensive Plan change was approved on the site, under the existing AG-2 zoning, the site could be developed with up to 440 dwelling units considering the wetlands and other environmental characteristics of the parcel. **Table 5** summarizes the land uses that are being proposed for the proposed rezoning application.

Table 5
Land Uses
Armeda RPD

Land Use	Permitted [1]	Proposed
Residential	440 Dwelling Units	737 Dwelling Units

[1] Assumes the Comp Plan Amendment is approved

Access to the subject site is proposed to Nort River Road via two access connections.

The trip generation for the project was based on data from the Institute of Transportation Engineer's (ITE) report, titled ***Trip Generation Manual***, 11th Edition. Since there multiple dwelling types identified in the proposed Schedule of Uses, Land Use Code210 (Single Family Detached Housing) was utilized to formulate the trip generation for all of the dwelling units since this would represent the "worst case" in terms of trip generation for the residential units. The equations used from this land use are contained in the Appendix of this report for reference.

Table 6 outlines the anticipated weekday A.M. and P.M. peak hour and daily trip generation of the development as permitted on site should the Land Use Change be approved. **Table 7** outlines the anticipated weekday A.M. and P.M. peak hour and daily trip generation of the development as currently proposed if the rezoning change is approved.

Table 6
Trip Generation – Permitted
Armeda RPD

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Single-Family Residential (440 Units)	72	215	287	252	148	400	3,944

Table 7
Trip Generation – Proposed
Armeda RPD

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Single-Family Residential (737 Units)	135	364	499	375	229	604	6,213

Table 8 illustrates the trip change when comparing the trip generation of the permitted uses to the trip generation of the proposed uses (Table 2 vs Table 3). In a rezoning application, the analysis examines the impact of the change in the impacts the zoning will have on the infrastructure. In this case, the change in residential density results in an

increase in residential units from 440 units to 773 units. The applicant does not have to go through any zoning approvals to construct the 440 dwelling units on the subject site. At the time of the Development Order application, the impacts of the entire project (all 773 units should the rezoning be approved) will be analyzed as to the impacts on the adjacent roadways and what site specific turn lane improvements will be warranted at the site access drive intersections.

Table 8
Trip Generation Comparison– Approved Zoning vs Proposed Zoning
Table 2 vs Table 3

Land Use	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Proposed Zoning	135	364	499	375	229	604	6,213
Approved Zoning	-72	-215	-287	-252	-148	-400	-3,944
Trip Change	**+63**	**+149**	**+212**	**+123**	**+81**	**+204**	**+2,219**

The trips the proposed development is anticipated to generate were then assigned to the surrounding roadway network. The net new trips anticipated to be added to the surrounding roadway network were assigned based upon the routes drivers are anticipated to utilize to approach the subject site.

In order to determine which roadway segments surrounding the site may be significantly impacted as outlined in the Lee County Traffic Impact Statement Guidelines, **Table 5A**, in the Appendix, was created. This table indicates which roadway links will accommodate greater than 10% of the Peak Hour Level of Service "C" volumes. The Level of Service thresholds for the County maintained roadways were obtained from the Lee County's ***Generalized Peak Hour Directional Service Volumes*** table. The Level of Service thresholds for the FDOT maintained roadways were obtained from the FDOT's ***Multimodal Quality/Level of Service Handbook (2023)***. Based on Table 1A, North River Road west of site, SR 31 between SR 80 and North River Road as well as SR 78 west of SR 31 are the only roadway segments in the study area that are projected to be significantly impacted as a result of the proposed development.

A horizon year analysis of 2029 was selected as the analysis year to evaluate the future impacts this project will have on the surrounding roadway network. Based on this horizon year, a growth rate was applied to the existing traffic conditions for all roadway links in the study area. The growth rates were obtained through comparisons of annual traffic data obtained from the ***Lee County's Traffic Count Database System (TCDS)*** and ***FDOT's Florida Traffic Online*** webpage. Based on the project distribution illustrated on Figure 2, the link data was analyzed for the year 2029 without the development and year 2030 with the development.

Table 6A in the Appendix of the report indicates the methodology utilized to obtain the year 2029 build-out traffic volumes as well as the growth rate utilized for each roadway segment. The base year traffic volumes for County maintained roadways were obtained from the latest ***Lee County Public Facilities Level of Service and Concurrency Report***. The base year traffic volumes for FDOT maintained roadways were calculated by adjusting the 2024 AADT by the appropriate K and D factors as obtained from the FDOT's ***Florida Traffic Online*** webpage and growing the resultant volumes by the appropriate growth rates for each roadway segment as indicated within Table 2A.

Adverse impacts are defined as a degradation of the Level of Service beyond the adopted Level of Service Thresholds for those links as indicated in Table 5A. In comparing the links' functional classification and calculated 2029 traffic volumes to the Service Volume Tables, it was determined that all analyzed roadways are projected to operate above the minimum adopted Level of Service in 2029 both with and without the proposed development. Therefore, roadway capacity improvements will not be warranted as a result of the additional traffic to be generated by the proposed development.

Intersection analysis was conducted at the two site access drive intersections serving the site along North River Road. A summary of the analysis is contained in the Appendix of this report. There are no other intersections within ¼ mile of the subject site that are impacted by the development of the subject site.

Turn lane improvements at the site access drive intersections will be evaluated at the time the project seeks a connection permit from the Lee County Department of Transportation.

IX. CONCLUSION

The proposed development is located along the north side of North River Road 1 ½ miles east of S.R. 31 in Lee County, Florida. Based upon the roadway link Level of Service analysis conducted as a part of this report for both a Comprehensive Plan amendment and rezoning request, the development of the subject site meets the requirements set forth by the Lee County Comprehensive Plan and Land Development Code in that there is sufficient capacity available to accommodate the new trips that will be generated by the proposed development. Therefore, no roadway capacity improvements will be warranted as a result of the additional traffic to be generated by the proposed Comprehensive Plan amendment and rezoning requests.

The 2045 Financially Feasible Roadway network and the short term 5-year Capital Improvement Program currently in place in the Lee County will not require any modification in order to accommodate the proposed Land Use Change. The rezoning analysis also indicates that the subject site will not have an adverse impact on the surrounding roadway network. The project will pay road impact fees to offset the impacts to the area road network as part of the mitigation of the project.

APPENDIX

3-MILE RADIUS

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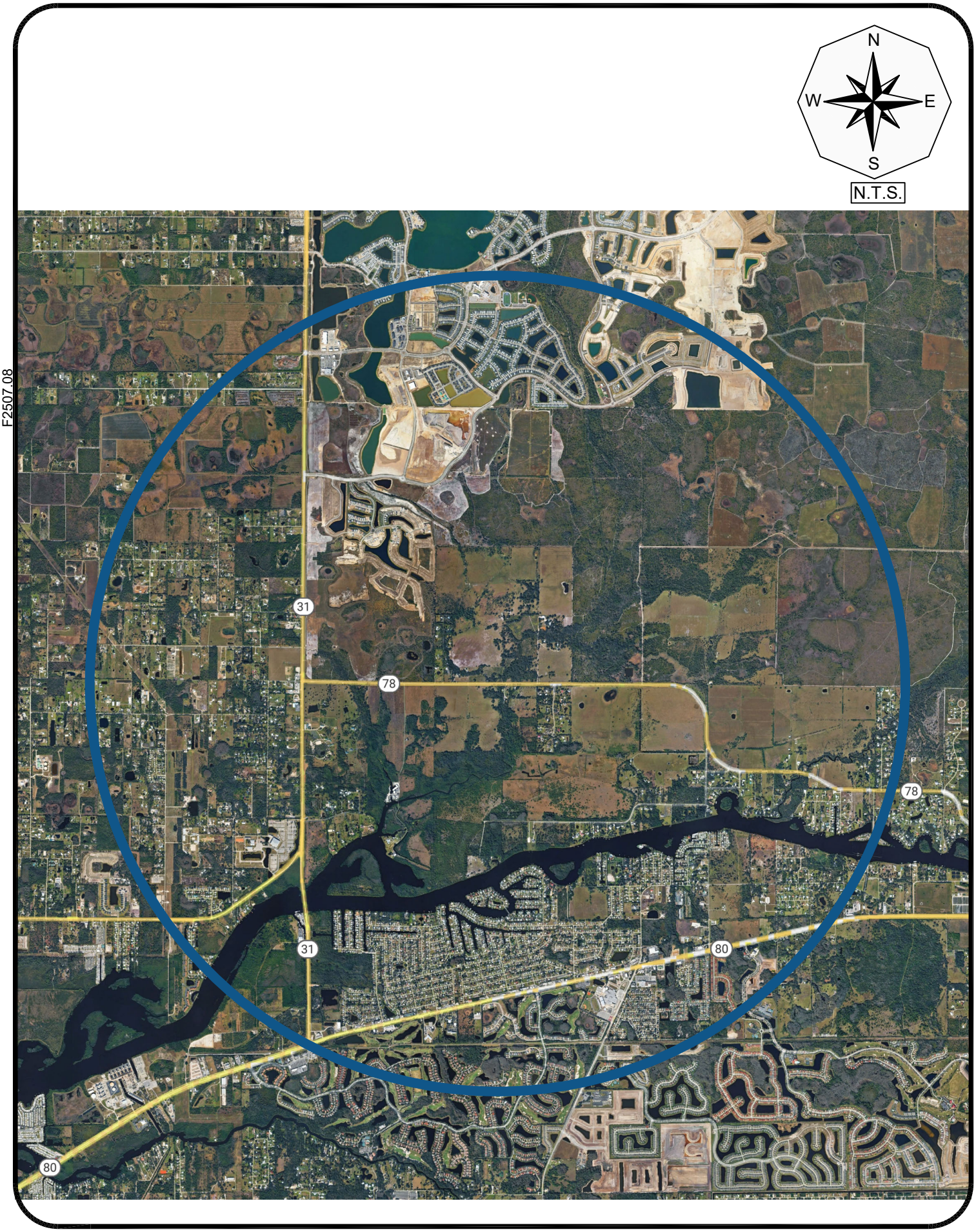


3-MILE RADIUS
ARMEDA RPD

TABLES 1A & 2A

2045 LOS ANALYSIS

TABLE 1A
LEVEL OF SERVICE THRESHOLDS
2045 LONG RANGE TRANSPORTATION ANALYSIS - ARMEDA CPA

Revsised 11-19-2025

				GENERALIZED SERVICE VOLUMES				
		2045 E + C NETWORK LANES		LOS A	LOS B	LOS C	LOS D	LOS E
ROADWAY	**ROADWAY SEGMENT**	**# Lanes**	**Roadway Designation**	**VOLUME**	**VOLUME**	**VOLUME**	**VOLUME**	**VOLUME**
N. River Rd	E. of SR 31	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640
	E. of Site	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640
SR 31	N. of North River Rd.	6LD	C3R	0	0	2,882	2,944	2,944
	S. of North River Rd	6LD	C3R	0	0	2,882	2,944	2,944
	S. of SR 78	6LD	C3R	0	0	2,882	2,944	2,944
SR 78 (Bayshore Rd)	W. of SR 31	4LD	C3R	0	0	1,870	2,036	2,036
SR 80 (Palm Beach Blvd)	W. of SR 31	6LD	C3C	0	0	2,596	2,948	2,948
	E. of SR 31	4LD	C3C	0	0	1,672	1,990	1,990

- Denotes the LOS Standard for each roadway segment

* Level of Service Thresholds for Lee County roadways were taken from the Generalized Peak Hour Directional Service Volume tables for Urbanized Areas (dated April 2016)

* Level of Service Thresholds for State mantained roadways were taken from FDOT's Multimodal Quality/Level of Service Handbook (2023)

TABLE 2A
2045 ROADWAY LINK LEVEL OF SERVICE CALCULATIONS
ARMEDA CPA

Revised 11-19-2025

TOTAL PM PEAK HOUR PROJECT TRAFFIC = 556 VPH IN= 345 OUT= 211

ROADWAY	ROADWAY SEGMENT	2045 FSUTMS AADT	COUNTY PCS / FDOT SITE #	AADT BACKGROUND TRAFFIC	K-100 FACTOR	100TH HIGHEST HOUR PK DIR 2-WAY VOLUME	D FACTOR	PM PK HR PEAK DIRECTION	2045 PEAK DIRECTION TRAFFIC VOLUMES & LOS VOLUME	LOS	PROJECT TRAFFIC DIST.	PK DIR PM PROJ TRAFFIC	2045 BACKGROUND PLUS PROJ PEAK DIRECTION TRAFFIC VOLUMES & LOS VOLUME	LOS
N. River Rd	E. of SR 31	12,426	124650	12,426	0.089	1,106	0.6	EAST	664	C	90%	311	975	D
	E. of Site	11,371	124650	11,371	0.089	1,012	0.6	EAST	607	C	10%	35	642	C
SR 31	N. of North River Rd.	69,826	120273	69,826	0.095	6,633	0.55	SOUTH	2,985	F	20%	69	3,054	F
	S. of North River Rd.	59,332	121001	59,332	0.095	5,637	0.55	NORTH	3,100	F	70%	242	3,342	F
	S. of SR 78	54,311	120030	54,311	0.090	4,888	0.55	SOUTH	2,200	C	50%	173	2,373	C
SR 78 (Bayshore Rd)	W. of SR 31	30,972	121002	30,972	0.090	2,787	0.55	EAST	1,533	C	20%	69	1,602	C
SR 80 (Palm Beach Blvd)	W. of SR 31	53,399	126005	53,399	0.090	4,806	0.55	EAST	2,643	D	35%	121	2,764	D
	E. of SR 31	50,780	120085	50,780	0.090	4,570	0.55	EAST	2,514	F	10%	35	2,549	F

* The K-100 and D factors were obtained from Florida Traffic Online resource.

TABLES 3A & 4A
5-YEAR LOS ANALYSIS

TABLE 3A
LEVEL OF SERVICE THRESHOLDS
ARMEDA CPA

Revised 11-19-2025

				GENERALIZED SERVICE VOLUMES				
				LOS A	LOS B	LOS C	LOS D	LOS E
ROADWAY	**ROADWAY SEGMENT**	**# LANES**	**ROADWAY DESIGNATION**	**VOLUME**	**VOLUME**	**VOLUME**	**VOLUME**	**VOLUME**
N. River Rd	E. of SR 31	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640
	E. of Site	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640
SR 31	N. of North River Rd.	4LD	C3R	0	0	2,882	2,944	2,944
	S. of North River Rd.	4LD	C3R	0	0	2,882	2,944	2,944
	S. of SR 78	6LD	C3R	0	0	2,882	2,944	2,944
SR 78 (Bayshore Rd)	W. of SR 31	2LU	C3R	0	0	1,870	2,036	2,036
SR 80 (Palm Beach Blvd)	W. of SR 31	6LD	C3C	0	0	2,596	2,948	2,948
	E. of SR 31	4LD	C3C	0	0	1,672	1,990	1,990

- Denotes the LOS Standard for each roadway segment

* Level of Service Thresholds for Lee County arterials/collectors taken from the Generalized Peak Hour Directional Service Volume tables for Urbanized Areas (dated April 2016)

* Level of Service Thresholds for State mantained roadways were taken from FDOT's Multi-Modal Quality/Level of Servcie Handbook (2023)

TABLE 4A
LEE COUNTY TRAFFIC COUNTS AND CALCULATIONS
ARMEDA CPA

TOTAL PROJECT TRAFFIC AM = 462 VPH IN = 126 OUT= 336

TOTAL PROJECT TRAFFIC PM = 556 VPH IN= 345 OUT= 211

FDOT Sta. #	K	D
120273	0.095	0.534
121001	0.095	0.550
120030	0.090	0.550
121002	0.090	0.550
126005	0.090	0.550
120085	0.090	0.550

Revised 11-19-2025

ROADWAY	ROADWAY SEGMENT	LCDOT PCS OR FDOT SITE #	BASE YR ADT	2021 ADT	YRS OF GROWTH. [1]	ANNUAL RATE	2024 PK HR PK SEASON PEAK DIR.[2]	2029 PK HR PK SEASON PEAK DIRECTION VOLUME	LOS	V/C Ratio	PERCENT PROJECT TRAFFIC	AM PROJ TRAFFIC	PM PROJ TRAFFIC	2029 BCKGRND + AM PROJ VOLUME	LOS	V/C Ratio	2029 BCKGRND + PM PROJ VOLUME	LOS	V/C Ratio
N. River Rd	E. of SR 31	348	2,693	3,400	8	2.96%	224	283	B	0.23	90%	302	311	585	C	0.48	593	C	0.49
	E. of Site	348	2,693	3,400	8	2.96%	224	283	B	0.23	10%	34	35	316	B	0.26	317	B	0.26
SR 31	N. of North River Rd.	120273	7,300	17,300	8	7.37%	878	1,550	C	0.53	20%	67	69	1,617	C	0.55	1,619	C	0.55
	S. of North River Rd.	121001	8,800	22,000	8	8.64%	1,150	2,231	C	0.76	70%	235	242	2,466	C	0.84	2,472	C	0.84
	S. of SR 78	120030	11,200	20,900	8	5.02%	1,035	1,531	C	0.52	50%	168	173	1,699	C	0.58	1,703	C	0.58
SR 78 (Bayshore Rd)	W. of SR 31	121002	9,200	14,500	8	3.69%	718	959	C	0.47	20%	67	69	1,026	C	0.50	1,028	C	0.50
SR 80 (Palm Beach Blvd)	W. of SR 31	126005	34,000	36,500	8	2.00%	1,807	2,117	C	0.72	35%	118	121	2,234	C	0.76	2,238	C	0.76
	E. of SR 31	120085	33,500	48,500	8	3.12%	2,401	3,070	F	1.54	10%	34	35	3,103	F	1.56	3,104	F	1.56

1 AGR for roadways was calculated based the FDOT Trends Spreadsheet from historical traffic data obtained from Florida Traffic Online webpage and Lee County Traffic Count Database System (TCDS).

2 Current peak hour peak season peak direction traffic volumes for all County roadways were obtained from the 2024 Lee County Public Facilities Level of Service and Concurrency Report.

2 Current peak hour peak season peak direction traffic volumes for state mantained roadways were obtained by adjusting the 2024 AADT by the appropriate K and D factors.

TABLES 5A & 6A
ZONING LOS ANALYSIS

TABLE 5A
LEVEL OF SERVICE THRESHOLDS
ARMEDA

Revised 11-19-2025

TOTAL AM PEAK HOUR PROJECT TRAFFIC = 499 VPH IN= 135 OUT= 364

TOTAL PM PEAK HOUR PROJECT TRAFFIC = 604 VPH IN= 596 OUT= 350

ROADWAY	ROADWAY SEGMENT	# LANES	ROADWAY DESIGNATION	LOS A VOLUME	LOS B VOLUME	LOS C VOLUME	LOS D VOLUME	LOS E VOLUME	PERCENT PROJECT TRAFFIC	PROJECT TRAFFIC	PROJ/ LOS C
N. River Rd	E. of Site	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640	10%	60	7.0%
	W. of Site	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640	90%	536	63.1%
SR 31	N. of N. River Rd.	4LD	C3R	0	0	1,874	2,040	2,040	20%	119	6.4%
	S. of N. River Rd.	4LD	C3R	0	0	1,874	2,040	2,040	70%	417	22.3%
	S. of SR 78	6LD	C3R	0	0	2,882	2,944	2,944	50%	298	10.3%
SR 78 (Bayshore Rd)	W. of SR 31	2LU	C3R	0	0	1,068	1,222	1,222	20%	119	11.2%
	W. of I-75	4LD	C3R	0	0	1,870	2,036	2,036	10%	60	3.2%
SR 80 (Palm Beach Blvd)	W. of SR 31	6LD	C3C	0	0	2,596	2,948	2,948	35%	209	8.0%
	E. of SR 31	4LD	C3C	0	0	1,672	1,990	1,990	10%	60	3.6%
I-75	N. of SR 78	6LF	Freeway	0	3,520	4,670	5,610	5,870	5%	30	0.6%
	S. of SR 78	6LF	Freeway	0	4,280	5,570	6,620	7,130	5%	30	0.5%

☐ - Denotes the LOS Standard for each roadway segment

* Level of Service Thresholds for Lee County arterials/collectors taken from the Lee County Generalized Peak Hour Directional Service Volume Tables.

* Level of Service Thresholds for State mantained roadways were taken from FDOT's Generalized Peak Hour Directional Volumes Table 7 and Table 9.

TABLE 6A
LEE COUNTY TRAFFIC COUNTS AND CALCULATIONS
ARMEDA

							FDOT Sta. #	K	D	
TOTAL PROJECT TRAFFIC AM =	499	VPH	IN =	135	OUT=	364	120273	0.095	0.550	
TOTAL PROJECT TRAFFIC PM =	604	VPH	IN=	596	OUT=	350	121001	0.095	0.550	**Revised 11-19-2025**
							120030	0.090	0.550	
							121002	0.090	0.550	

ROADWAY	ROADWAY SEGMENT	LCDOT PCS OR FDOT SITE #	BASE YR ADT	2023 ADT	YRS OF GROWTH. [1]	ANNUAL RATE	2023 PK HR PK SEASON PEAK DIR.[2]	2030 PK HR PK SEASON PEAK DIRECTION VOLUME	LOS	V/C Ratio	PERCENT PROJECT TRAFFIC	AM PROJ TRAFFIC	PM PROJ TRAFFIC	2030 BCKGRND + AM PROJ VOLUME	LOS	V/C Ratio	2030 BCKGRND + PM PROJ VOLUME	LOS	V/C Ratio
N. River Rd	E. of Site	348	2,693	3,400	8	2.96%	224	291	B	0.18	10%	36	60	328	B	0.20	351	B	0.21
	W. of Site	348	2,693	3,400	8	2.96%	224	291	B	0.18	90%	328	536	619	C	0.38	828	C	0.50
SR 31	N. of N. River Rd.	120273	5,719	11,660	15	4.86%	609	934	C	0.50	20%	73	119	1,007	C	0.54	1,053	C	0.56
	S. of N. River Rd.	121001	11,100	16,000	15	2.47%	836	1,041	C	0.56	70%	255	417	1,296	C	0.69	1,458	C	0.78
	S. of SR 78	120030	12,500	15,900	15	2.00%	787	941	C	0.32	50%	182	298	1,123	C	0.38	1,239	C	0.42
SR 78 (Bayshore Rd)	W. of SR 31	121002	8,400	12,400	15	2.63%	614	775	C	0.63	20%	73	119	848	C	0.69	895	C	0.73

1 AGR for all roadways was calculated based the historical traffic data obtained from Lee County Traffic Count Report and Florida Traffic Online webpage.

2 Current peak hour peak season peak direction traffic volumes for all County roadways were obtained from the 2024 Lee County Public Facilities Level of Service and Concurrency Report.

2 Current peak hour peak season peak direction traffic volumes for state mantained roadways were obtained by adjusting the AADT by the appropriate K and D factors.

LEE COUNTY GENERALIZED SERVICE VOLUME TABLE

Lee County
Generalized Peak Hour Directional Service Volumes
Urbanized Areas

April 2016 c:\input5

Uninterrupted Flow Highway

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	130	420	850	1,210	1,640
2	Divided	1,060	1,810	2,560	3,240	3,590
3	Divided	1,600	2,720	3,840	4,860	5,380

Arterials

Class I (40 mph or higher posted speed limit)

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	140	800	860	860
2	Divided	*	250	1,840	1,960	1,960
3	Divided	*	400	2,840	2,940	2,940
4	Divided	*	540	3,830	3,940	3,940

Class II (35 mph or slower posted speed limit)

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	*	330	710	780
2	Divided	*	*	710	1,590	1,660
3	Divided	*	*	1,150	2,450	2,500
4	Divided	*	*	1,580	3,310	3,340

Controlled Access Facilities

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	160	880	940	940
2	Divided	*	270	1,970	2,100	2,100
3	Divided	*	430	3,050	3,180	3,180

Collectors

Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	*	310	660	740
1	Divided	*	*	330	700	780
2	Undivided	*	*	730	1,440	1,520
2	Divided	*	*	770	1,510	1,600

Note: the service volumes for I-75 (freeway), bicycle mode, pedestrian mode, and bus mode should be from FDOT's most current version of LOS Handbook.

FDOT MULTIMODAL QUALITY/LEVEL OF SERVICE HANDBOOK PEAK HOUR DIRECTIONAL VOUMES

C3C & C3R

Motor Vehicle Arterial Generalized Service Volume Tables

(C3C-Suburban Commercial)

Peak Hour Directional

	B	C	D	E
1 Lane	*	760	1,070	**
2 Lane	*	1,520	1,810	**
3 Lane	*	2,360	2,680	**
4 Lane	*	3,170	3,180	**

Peak Hour Two-Way

	B	C	D	E
2 Lane	*	1,380	1,950	**
4 Lane	*	2,760	3,290	**
6 Lane	*	4,290	4,870	**
8 Lane	*	5,760	5,780	**

AADT

	B	C	D	E
2 Lane	*	15,300	21,700	**
4 Lane	*	30,700	36,600	**
6 Lane	*	47,700	54,100	**
8 Lane	*	64,000	64,200	**

(C3R-Suburban Residential)

	B	C	D	E
1 Lane	*	970	1,110	**
2 Lane	*	1,700	1,850	**
3 Lane	*	2,620	2,730	**

	B	C	D	E
2 Lane	*	1,760	2,020	**
4 Lane	*	3,090	3,360	**
6 Lane	*	4,760	4,960	**

	B	C	D	E
2 Lane	*	19,600	22,400	**
4 Lane	*	34,300	37,300	**
6 Lane	*	52,900	55,100	**

Adjustment Factors

The peak hour directional service volumes should be adjust by multiplying by 1.2 for one-way facilities
The AADT service volumes should be adjusted by multiplying 0.6 for one way facilities 2 Lane Divided Roadway with an Exclusive Left Turn Lane(s): Multiply by 1.05
2 lane Undivided Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.80
Exclusive right turn lane(s): Multiply by 1.05
Multilane Undivided Roadway with an Exclusive Left Turn Lane(s): Multiply by 0.95
Multilane Roadway with No Exclusive Left Turn Lane(s): Multiply by 0.75
Non-State Signalized Roadway: Multiply by 0.90

This table does not constitute a standard and should be used only for general planning applications. The table should not be used for corridor or intersection design, where more refined techniques exist.
* Cannot be achieved using table input value defaults.
** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached.

TRAFFIC DATA

FDOT FLORIDA TRAFFIC ONLINE

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2024 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0030 - SR 31, NORTH OF SR 80/PALM BEACH BOULEVARD LC391

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2024	20900 S	N 9900	S 11000	9.00	55.00	21.90
2023	18900 F	N 9000	S 9900	9.00	56.80	21.90
2022	16600 C	N 7900	S 8700	9.00	52.10	21.90
2021	15900 C	N 7900	S 8000	9.00	52.80	14.20
2020	13800 C	N 6600	S 7200	9.00	53.70	17.80
2019	13500 C	N 6600	S 6900	9.00	54.00	20.80
2018	11500 C	N 5600	S 5900	9.00	55.20	18.60
2017	11200 C	N 5500	S 5700	9.00	54.40	19.00
2016	11100 F	N 5500	S 5600	9.00	57.70	12.50
2015	10100 C	N 5000	S 5100	9.00	57.50	12.50
2014	8700 F	N 4300	S 4400	9.00	56.80	14.90
2013	8500 C	N 4200	S 4300	9.00	56.50	14.90
2012	8700 C	N 4400	S 4300	9.00	54.20	13.80
2011	8500 F	N 4200	S 4300	9.00	56.20	13.70
2010	8500 C	N 4200	S 4300	9.91	56.34	13.70
2009	7800 C	N 3800	S 4000	9.98	55.90	13.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2024 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0085 - SR 80/PALM BEACH BLVD, EAST OF SR 31 LC360

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2024	48500 F	E 25000	W 23500	9.00	55.00	7.50
2023	44500 C	E 23000	W 21500	9.00	56.80	7.50
2022	47000 C	E 23500	W 23500	9.00	52.10	7.40
2021	43000 C	E 21500	W 21500	9.00	52.80	7.50
2020	36500 C	E 18000	W 18500	9.00	53.70	8.30
2019	36500 C	E 18000	W 18500	9.00	54.00	9.00
2018	33500 C	E 16500	W 17000	9.00	55.20	9.30
2017	33500 C	E 16500	W 17000	9.00	54.40	8.50
2016	35000 C	E 17500	W 17500	9.00	57.70	8.20
2015	32000 C	E 16000	W 16000	9.00	57.50	9.00
2014	29500 S	E 15000	W 14500	9.00	56.80	9.20
2013	28500 F	E 14500	W 14000	9.00	56.50	9.20
2012	28500 C	E 14500	W 14000	9.00	54.20	9.20
2011	29500 F	E 14500	W 15000	9.00	56.20	9.40
2010	29500 C	E 14500	W 15000	9.91	56.34	9.40
2009	29500 C	E 14500	W 15000	9.98	55.90	9.50

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2024 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0273 - SR-31,202' NORTH OF FOXHILL ROAD,LEE CO.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2024	17364 C	N 8644	S 8720	9.50	53.40	18.40
2023	14878 C	N 7392	S 7486	9.50	52.10	19.10
2022	12799 C	N 6265	S 6534	9.50	52.10	19.90
2021	11660 C	N 5695	S 5965	9.50	52.30	21.20
2020	9182 C	N 4508	S 4674	9.50	52.70	23.40
2019	9292 C	N 4645	S 4647	9.50	52.10	25.30
2018	7959 C	N 4032	S 3927	9.50	54.10	26.90
2017	7337 C	N 3712	S 3625	9.50	53.40	28.20
2016	6620 C	N 3338	S 3282	9.50	53.90	26.60
2015	5216 C	N 2618	S 2598	9.50	55.60	28.00
2014	4653 C	N 2325	S 2328	9.50	55.60	27.00
2013	4195 C	N 2099	S 2096	9.50	55.90	29.00
2012	4217 C	N 2149	S 2068	9.50	56.40	26.90
2011	4126 C	N 2094	S 2032	9.50	55.10	25.60
2010	4034 C	N 2041	S 1993	9.79	54.46	26.00
2009	3964 C	N 1994	S 1970	9.81	52.26	25.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2024 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 1001 - SR 31, SOUTH OF CR 78/NORTH RIVER ROAD (LC393)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2024	22000 F	N 11000	S 11000	9.50	55.00	23.00
2023	19800 C	N 9800	S 10000	9.50	56.80	23.00
2022	17800 C	N 8800	S 9000	9.50	52.10	25.40
2021	16000 C	N 8000	S 8000	9.50	52.80	23.30
2020	11000 C	N 5500	S 5500	9.50	53.70	23.40
2019	11000 C	N 5500	S 5500	9.50	54.00	25.30
2018	9400 C	N 4700	S 4700	9.50	55.20	26.90
2017	8800 C	N 4500	S 4300	9.50	54.40	20.20
2016	8600 F	N 4200	S 4400	9.50	57.70	20.20
2015	7800 C	N 3800	S 4000	9.50	57.50	20.20
2014	7200 F	N 3600	S 3600	9.50	56.80	20.50
2013	7000 C	N 3500	S 3500	9.50	56.50	20.50
2012	7500 C	N 3800	S 3700	9.50	54.20	22.60
2011	7300 F	N 3700	S 3600	9.50	56.20	17.60
2010	7300 C	N 3700	S 3600	9.91	56.34	17.60
2009	7100 C	N 3600	S 3500	9.98	55.90	19.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2024 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 1002 - SR 78/BAYSHORE ROAD, SOUTHWEST OF SR 31

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2024	14500 F	E 7600	W 6900	9.00	55.00	25.40
2023	13200 C	E 6900	W 6300	9.00	56.80	25.40
2022	13600 F	E 7000	W 6600	9.00	52.10	21.80
2021	12400 C	E 6400	W 6000	9.00	52.80	21.80
2020	11000 C	E 5700	W 5300	9.00	53.70	18.90
2019	10600 C	E 5500	W 5100	9.00	54.00	22.00
2018	9600 C	E 5000	W 4600	9.00	55.20	21.60
2017	9200 C	E 4600	W 4600	9.00	54.40	13.00
2016	8600 F	E 4300	W 4300	9.00	57.70	13.00
2015	7800 C	E 3900	W 3900	9.00	57.50	13.00
2014	7300 F	E 3700	W 3600	9.00	56.80	14.00
2013	7100 C	E 3600	W 3500	9.00	56.50	14.00
2012	7500 C	E 3800	W 3700	9.00	54.20	16.40
2011	6800 F	E 3500	W 3300	9.00	56.20	14.90
2010	6800 C	E 3500	W 3300	9.91	56.34	14.90
2009	6900 C	E 3500	W 3400	9.98	55.90	17.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2024 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 6005 - SR 80/PALM BEACH BLVD, 0.25 MI W OF SR 31. PTMS 104, LCPR 05

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2024	36500 X	0	0	9.00	55.00	15.40
2023	36000 X	0	0	9.00	56.80	12.80
2022	34500 X	0	0	9.00	52.10	7.40
2021	34000 T	0	0	9.00	52.80	11.70
2020	33500 S	0	0	9.00	53.70	11.50
2019	35000 F	0	0	9.00	54.00	12.30
2018	35091 C	0	0	9.00	64.90	12.60
2017	34000 F	0	0	9.00	64.90	11.10
2016	32970 C	E 16326	W 16644	9.00	64.90	10.40
2015	30167 C	E 14945	W 15222	9.00	63.20	11.00
2014	27785 C	E 13885	W 13900	9.00	62.60	5.90
2013	26228 C	E 12981	W 13247	9.00	61.80	9.50
2012	25563 C	E 12791	W 12772	9.00	61.60	10.80
2011	26888 C	E 13397	W 13491	9.00	61.60	12.40
2010	26743 C	E 13334	W 13409	9.89	61.01	8.90
2009	25939 C	E 12914	W 13025	9.90	62.73	9.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

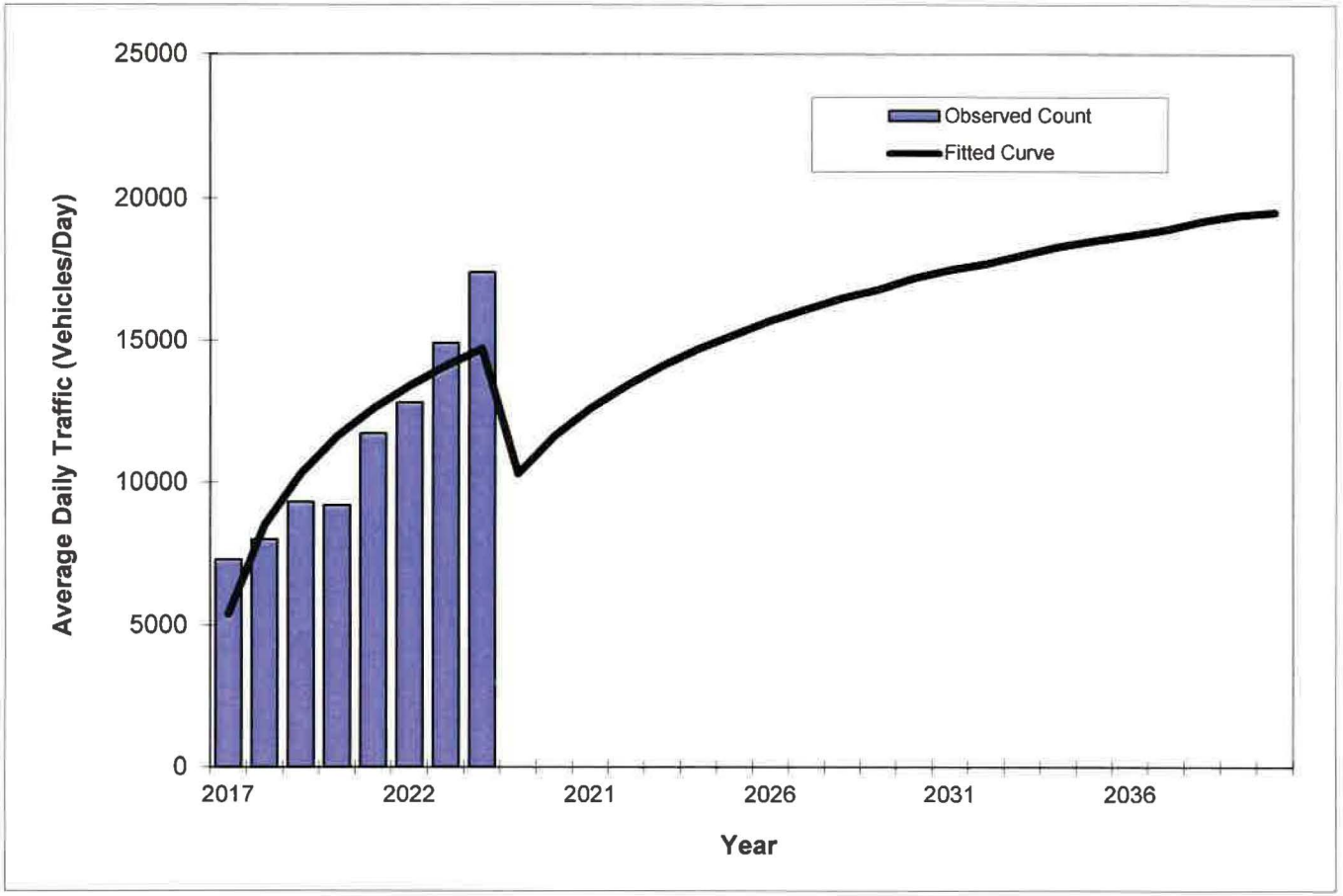
FDOT TRAFFIC TRENDS ANALYSIS

Traffic Trends - V03.a

SR 31 --

FIN#	SR 31
Location	N. of Foxhill Rd.

County:	Lee
Station #:	120273
Highway:	SR 31



Year	Traffic (ADT/AADT) Count*	Trend**
2017	7300	5400
2018	8000	8500
2019	9300	10300
2020	9200	11600
2021	11700	12600
2022	12800	13400
2023	14900	14100
2024	17400	14700
2025 Opening Year Trend		
2025	N/A	15200
2026 Mid-Year Trend		
2026	N/A	15700
2026 Design Year Trend		
2026	N/A	15700
TRANPLAN Forecasts/Trends		

Trend R-squared:	77.52%
Compounded Annual Historic Growth Rate:	7.37%
Compounded Growth Rate (2021 to Design Year):	0.00%
Printed:	9-Sep-25

Decaying Exponential Growth Option

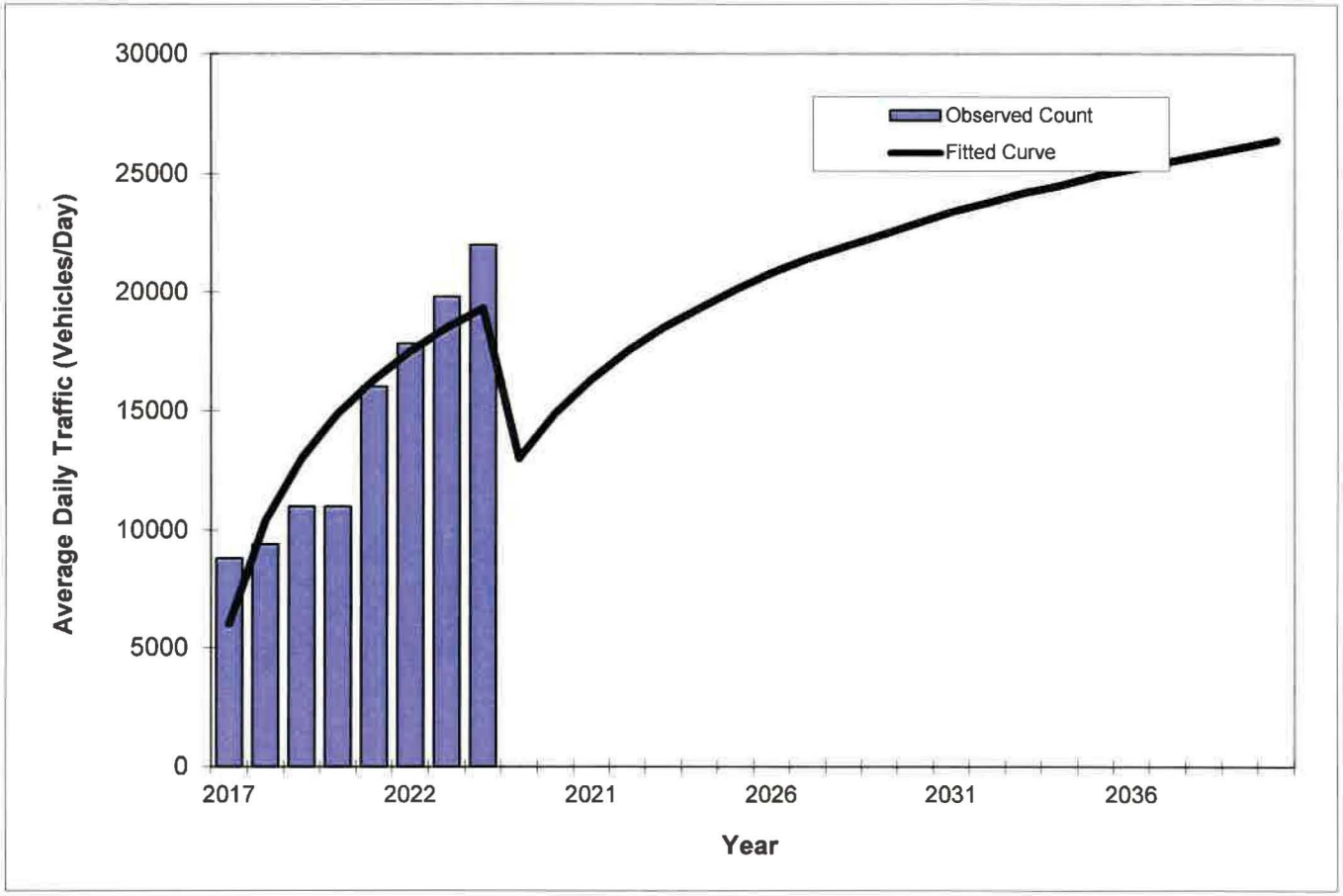
*Axle-Adjusted

Traffic Trends - V03.a

SR 31 --

FIN#	SR 31
Location	S. of N. River Rd.

County:	Lee
Station #:	121001
Highway:	SR 31



Year	Traffic (ADT/AADT) Count*	Trend**
2017	8800	6000
2018	9400	10400
2019	11000	13000
2020	11000	14900
2021	16000	16300
2022	17800	17500
2023	19800	18500
2024	22000	19300
2025 Opening Year Trend		
2025	N/A	20100
2026 Mid-Year Trend		
2026	N/A	20800
2026 Design Year Trend		
2026	N/A	20800
TRANPLAN Forecasts/Trends		

Trend R-squared:	79.34%
Compounded Annual Historic Growth Rate:	8.64%
Compounded Growth Rate (2021 to Design Year):	0.00%
Printed:	9-Sep-25

Decaying Exponential Growth Option

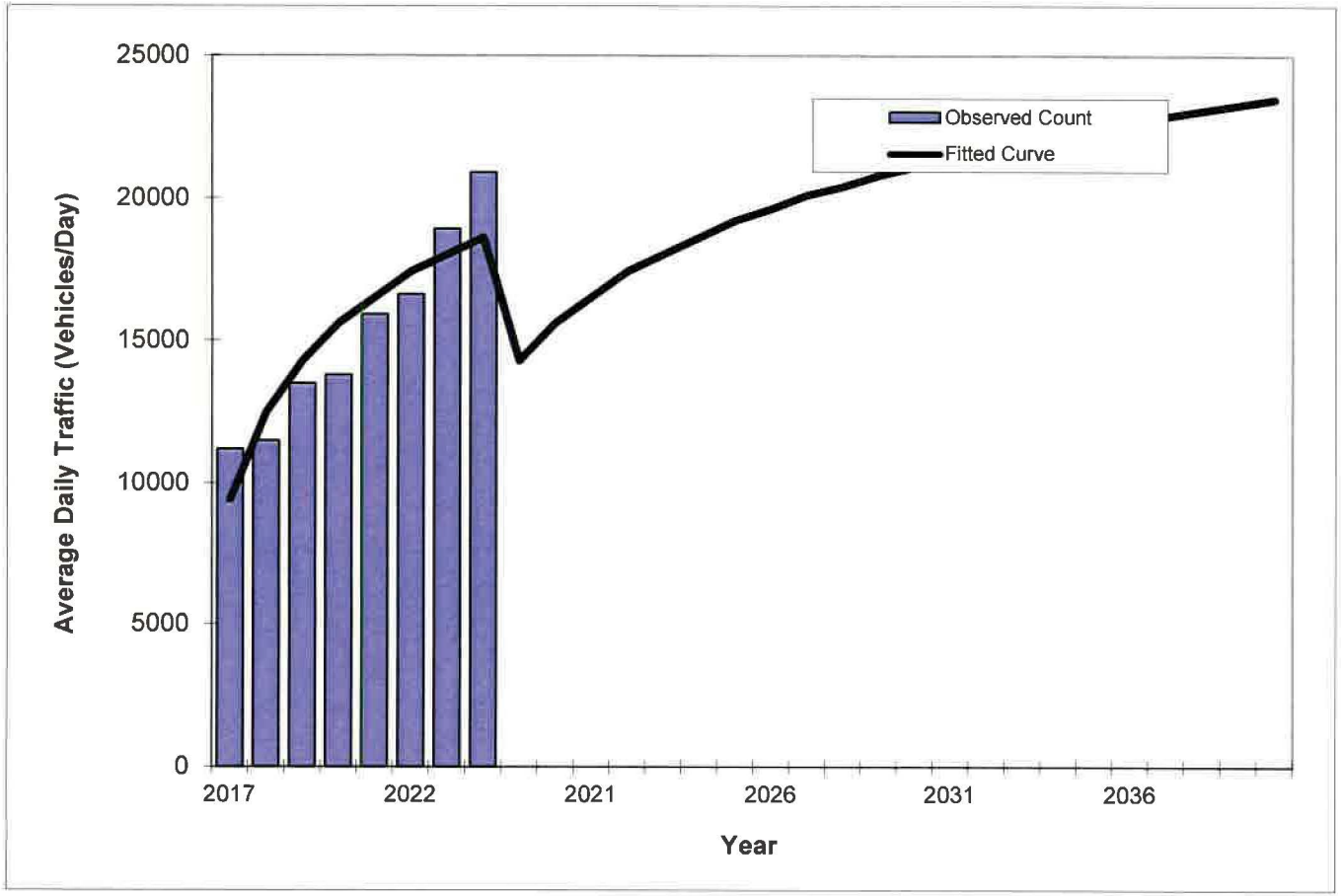
*Axle-Adjusted

Traffic Trends - V03.a

SR 31 --

FIN#	SR 31
Location	N. of SR 80

County:	Lee
Station #:	120030
Highway:	SR 31



Year	Traffic (ADT/AADT) Count*	Trend**
2017	11200	9400
2018	11500	12500
2019	13500	14300
2020	13800	15600
2021	15900	16500
2022	16600	17400
2023	18900	18000
2024	20900	18600
2025 Opening Year Trend		
2025	N/A	19200
2026 Mid-Year Trend		
2026	N/A	19600
2026 Design Year Trend		
2026	N/A	19600
TRANPLAN Forecasts/Trends		

Trend R-squared:	82.25%
Compounded Annual Historic Growth Rate:	5.02%
Compounded Growth Rate (2021 to Design Year):	0.00%
Printed:	9-Sep-25

Decaying Exponential Growth Option

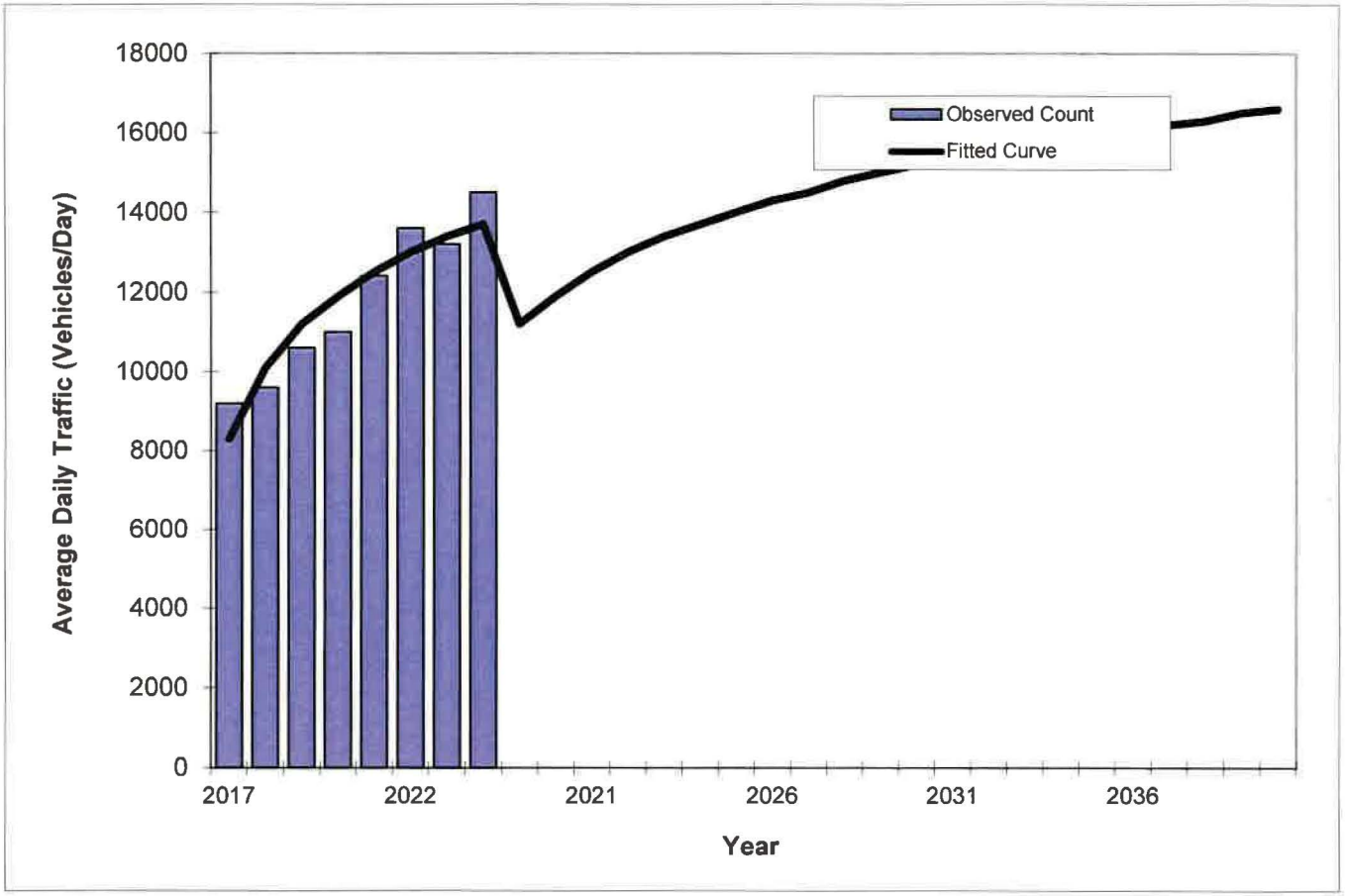
*Axle-Adjusted

Traffic Trends - V03.a

SR 78 --

FIN#	SR 78
Location	W. of SR 31

County:	Lee
Station #:	121002
Highway:	SR 78



Year	Traffic (ADT/AADT) Count*	Trend**
2017	9200	8300
2018	9600	10100
2019	10600	11200
2020	11000	11900
2021	12400	12500
2022	13600	13000
2023	13200	13400
2024	14500	13700
2025 Opening Year Trend		
2025	N/A	14000
2026 Mid-Year Trend		
2026	N/A	14300
2026 Design Year Trend		
2026	N/A	14300
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	87.70%
Compounded Annual Historic Growth Rate:	3.69%
Compounded Growth Rate (2021 to Design Year):	0.00%
Printed:	9-Sep-25

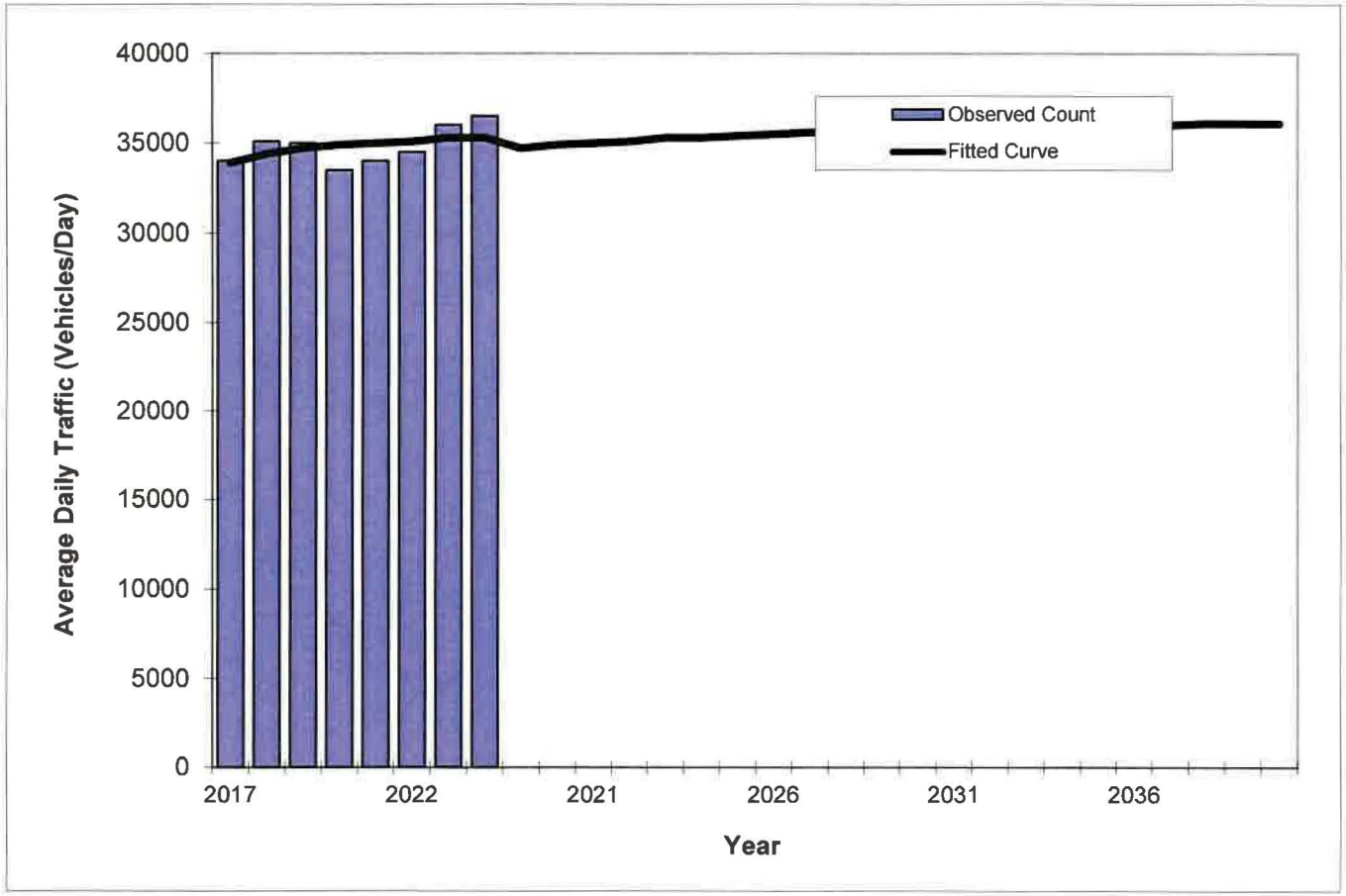
Decaying Exponential Growth Option

Traffic Trends - V03.a

SR 80 --

FIN#	SR 80
Location	W. of SR 31

County:	Lee
Station #:	126005
Highway:	SR 80



Year	Traffic (ADT/AADT) Count*	Trend**
2017	34000	33900
2018	35100	34400
2019	35000	34700
2020	33500	34900
2021	34000	35000
2022	34500	35100
2023	36000	35300
2024	36500	35300
2025 Opening Year Trend		
2025	N/A	35400
2026 Mid-Year Trend		
2026	N/A	35500
2026 Design Year Trend		
2026	N/A	35500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	22.23%
Compounded Annual Historic Growth Rate:	0.31%
Compounded Growth Rate (2021 to Design Year):	0.00%
Printed:	9-Sep-25

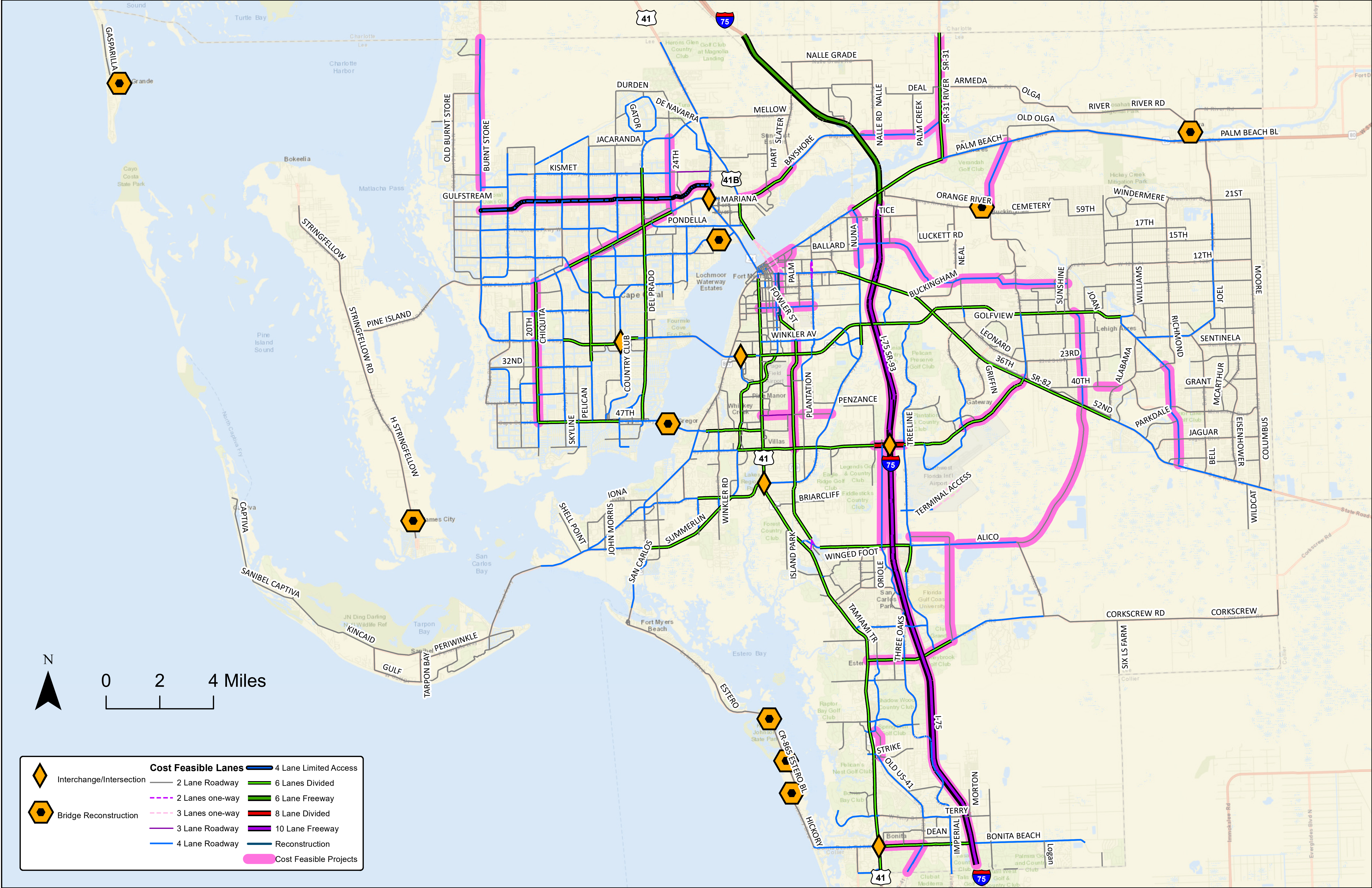
Decaying Exponential Growth Option

LEE COUNTY PUBLIC FACILITIES
LEVEL OF SERVICE AND
CONCURRENCY REPORT

LEE COUNTY ROAD LINK VOLUMES (County- and State-Maintained Roadways)

Link No.	ROAD NAME	LOCATION		ROAD TYPE	PERFORMANCE STANDARD		2023 100TH HIGHEST HOUR			2028 FUTURE FORECAST*			Notes
		FROM	TO		LOS[1]	CAPACITY[2]	LOS[1]	VOLUME[2]	V/C[3]	LOS[1]	VOLUME[2]	V/C[3]	
13900	JOEL BLVD	18TH ST	SR 80	2LN	E	1,010	D	547	0.54	D	575	0.57	
14000	JOHN MORRIS RD	BUNCHE BEACH	SUMMERLIN RD	2LN	E	860	C	65	0.08	C	68	0.08	[4]
14100	JOHN MORRIS RD	SUMMERLIN RD	IONA RD	2LN	E	860	C	210	0.24	C	221	0.26	
14200	KELLY RD	McGREGOR BLVD	SAN CARLOS BLVD	2LN	E	860	C	230	0.27	C	242	0.28	
14300	KELLY RD	SAN CARLOS BLVD	PINE RIDGE RD	2LN	E	860	C	230	0.27	C	242	0.28	
14500	LAUREL DR	BUS 41	BREEZE DR	2LN	E	860	C	338	0.39	C	355	0.41	
14600	LEE BLVD	SR 82	ALVIN AVE	6LD	E	2,840	E	2,440	0.86	E	2,564	0.90	
14700	LEE BLVD	ALVIN AVE	GUNNERY RD	6LD	E	2,840	E	2,182	0.77	E	2,293	0.81	
14800	LEE BLVD	GUNNERY RD	HOMESTEAD RD	6LD	E	2,840	E	1,944	0.68	E	2,091	0.74	pre-development order res development
14900	LEE BLVD	HOMESTEAD RD	WILLIAMS AVE	4LD	E	1,980	B	913	0.46	B	960	0.48	
14930	LEE BLVD	WILLIAMS AVE	LEELAND HEIGHTS	2LN	E	1,020	B	913	0.90	E	960	0.94	
15000	LEE RD	SAN CARLOS BLVD	ALICO RD	2LN	E	860	C	407	0.47	C	428	0.50	
15100	LEELAND HEIGHTS	HOMESTEAD RD	JOEL BLVD	4LN	E	1,800	B	764	0.42	B	803	0.45	
15200	LEONARD BLVD	GUNNERY RD	WESTGATE BLVD	2LN	E	860	D	714	0.83	F	895	1.04	Fairway Villages/pre-dev order res dev
15300	LITTLETON RD	CORBETT RD	US 41	2LN	E	860	D	587	0.68	D	617	0.72	
15400	LITTLETON RD	US 41	BUS 41	2LN	E	860	D	570	0.66	D	599	0.70	
15500	LUCKETT RD	ORTIZ AVE	I-75	2LN	E	880	C	364	0.41	C	416	0.47	Luckett Landing Hotel/Luckett Road C-Store
15600	LUCKETT RD	I-75	COUNTRY LAKES DR	2LN	E	860	C	320	0.37	C	336	0.39	
15700	MAPLE DR*	SUMMERLIN RD	2ND AVE	2LN	E	860	C	79	0.09	C	83	0.10	[4]
15800	McGREGOR BLVD	SANIBEL T PLAZA	HARBOR DR	4LD	E	1,960	A	980	0.50	B	1,030	0.53	
15900	McGREGOR BLVD	HARBOR DR	SUMMERLIN RD	4LD	E	1,960	B	1,396	0.71	B	1,467	0.75	
16000	McGREGOR BLVD	SUMMERLIN RD	KELLY RD	4LD	E	1,960	A	815	0.42	A	857	0.44	
16100	McGREGOR BLVD	KELLY RD	GLADIOLUS DR	4LD	E	1,960	A	815	0.42	A	857	0.44	
16200	McGREGOR BLVD (SR 867)	OLD McGREGOR /GLADIOLUS DR	IONA LOOP RD	4LD	D	1,942	C	1,542	0.79	C	1,658	0.85	
16300	McGREGOR BLVD (SR 867)	IONA LOOP RD	PINE RIDGE RD	4LD	D	1,942	C	1,542	0.79	C	1,658	0.85	
16400	McGREGOR BLVD (SR 867)	PINE RIDGE RD	CYPRESS LAKE DR	4LD	D	1,900	D	1,810	0.95	F	1,961	1.03	
16500	McGREGOR BLVD (SR 867)	CYPRESS LAKE DR	COLLEGE PKWY	4LD	D	1,900	D	1,810	0.95	F	1,961	1.03	
16600	McGREGOR BLVD (SR 867)	COLLEGE PKWY	WINKLER RD	2LN	D	1,124	C	775	0.69	D	842	0.75	constrained
16700	McGREGOR BLVD (SR 867)	WINKLER RD	TANGLEWOOD BLVD	2LN	D	1,224	D	1,114	0.91	D	1,208	0.99	constrained
16800	McGREGOR BLVD (SR 867)	TANGLEWOOD BLVD	COLONIAL BLVD	2LN	D	1,224	D	1,114	0.91	D	1,208	0.99	constrained
16900	METRO PKWY (SR 739)	SIX MILE PKWY	DANIELS PKWY	6LD	D	2,866	C	1,373	0.48	C	1,618	0.56	
17000	METRO PKWY (SR 739)	DANIELS PKWY	CRYSTAL DR	4LD	D	1,900	C	1,275	0.67	C	1,440	0.76	
17100	METRO PKWY (SR 739)	CRYSTAL DR	DANLEY DR	4LD	D	1,900	D	1,786	0.94	F	2,118	1.11	
17200	METRO PKWY (SR 739)	DANLEY DR	COLONIAL BLVD	4LD	D	1,900	D	1,786	0.94	F	2,118	1.11	
	MICHAEL RIPPE PKWY	US41	SIX MILES PKWY	6LD	D	2,866	C	1,766	0.62	C	2,252	0.79	
17600	MILWAUKEE BLVD	ALABAMA BLVD	BELL BLVD	2LN	E	860	C	171	0.20	C	180	0.21	[4]
17700	MILWAUKEE BLVD	BELL BLVD	COLUMBUS BLVD	2LN	E	860	C	171	0.20	C	213	0.25	[4]
17800	MOODY RD	HANCOCK B. PKWY	PONDELLA RD	2LN	E	860	C	184	0.21	C	193	0.22	[4]
17900	NALLE GRADE RD	SLATER RD	NALLE RD	2LN	E	860	C	82	0.10	C	86	0.10	
18000	NALLE RD	SR 78	NALLE GRADE RD	2LN	E	860	C	136	0.16	C	143	0.17	
18100	NEAL RD	ORANGE RIVER BLVD	BUCKINGHAM RD	2LN	E	860	C	155	0.18	C	163	0.19	
18200	NORTH RIVER RD	SR 31	FRANKLIN LOCK RD	2LN	E	1,140	B	224	0.20	B	344	0.30	The Broadlands
18300	NORTH RIVER RD	FRANKLIN LOCK RD	BROADWAY RD	2LN	E	1,140	B	224	0.20	B	358	0.31	River Run Estates
18400	NORTH RIVER RD	BROADWAY RD	COUNTY LINE	2LN	E	1,140	A	100	0.09	A	135	0.12	
18900	OLGA RD*	SR 80 W	SR 80 E	2LN	E	860	C	84	0.10	C	88	0.10	[4]
19100	ORANGE GROVE BLVD	CLUB ENTR.	HANCOCK B. PKWY	2LN	E	860	C	539	0.63	D	566	0.66	
19200	ORANGE GROVE BLVD	HANCOCK B. PKWY	PONDELLA RD	4LN	E	1,790	C	539	0.30	D	566	0.32	
19300	ORANGE RIVER BLVD	SR 80	STALEY RD	2LN	E	1,000	C	368	0.37	C	387	0.39	

LEE COUNTY MPO 2045 COST FEASIBLE HIGHWAY PLAN



Cost Feasible Lanes
Interchange/Intersection
Bridge Reconstruction
2 Lane Roadway
2 Lanes one-way
3 Lanes one-way
3 Lane Roadway
4 Lane Roadway
4 Lane Limited Access
6 Lanes Divided
6 Lane Freeway
8 Lane Divided
10 Lane Freeway
Reconstruction
Cost Feasible Projects
N
0
2
4 Miles
75
41
41B
GASPARILLA
NALLE GRADE
DURDEN
DE NAVARRA
MELLOW
DEAL
ARMEDA
OLGA
RIVER
RIVER RD
OLD OLGA
PALM BEACH BL
PALM BEACH
NALLE RD
NALLE
PALM CREEK
SR-31
SR-31 RIVER
OLD BURNT STORE
BURNT STORE
GATOR
JACARANDA
KISMET
24TH
SLATER
HART
BAYSHORE
GULFSTREAM
MARIANA
PONDELLA
TICE
ORANGE RIVER
CEMETERY
59TH
WINDERMERE
21ST
17TH
15TH
12TH
LUCKETT RD
NEAL
BALLARD
NUNA
BUCKINGHAM
SUNSHINE
JOAN
WILLIAMS
JOEL
MOORE
STRINGFELLOW
PINE ISLAND
STRINGFELLOW RD
DEL PRADO
PALM
FOWLER ST
WINKLER AV
GOLFVIEW
LEONARD
36TH
23RD
SENTINELA
RICHMOND
20TH
CHIQUITA
COUNTRY CLUB
32ND
PELICAN
SKYLINE
47TH
PLANTATION
PENZANCE
GRIFFIN
SR-82
40TH
ALABAMA
GRANT
MCARTHUR
52ND
PARKDALE
JAGUAR
BELL
EISENHOWER
COLUMBUS
TREELINE
I-75 SR-93
H STRINGFELLOW
IONA
SHELL POINT
JOHN MORRIS
SUMMERLIN
WINKLER RD
BRIARCLIFF
TERMINAL ACCESS
WILDCAT
CAPTIVA
SANIBEL CAPTIVA
SAN CARLOS
ISLAND PARK
WINGED FOOT
ORIOLE
ALICO
CORKSCREW RD
CORKSCREW
SIX LS FARM
KINCAID
PERIWINKLE
GULF
TARPON BAY
TAMIAMI TR
THREE OAKS
ESTERO
CR-865 ESTERO BL
I-75
STRIKE
OLD US-41
MORTON
TERRY
HICKORY
DEAN
IMPERIAL
BONITA BEACH

LEE COUNTY MPO 2045 NEEDS PLAN

N

0 2 4 Miles

Interchange/Intersection

Bridge Reconstruction

Needs Lanes

2 Lane Roadway

2 Lanes one-way

3 Lanes one-way

3 Lanes Divided

4 Lane Roadway

4 Lane Freeway

6 Lanes Divided

6 Lane Freeway

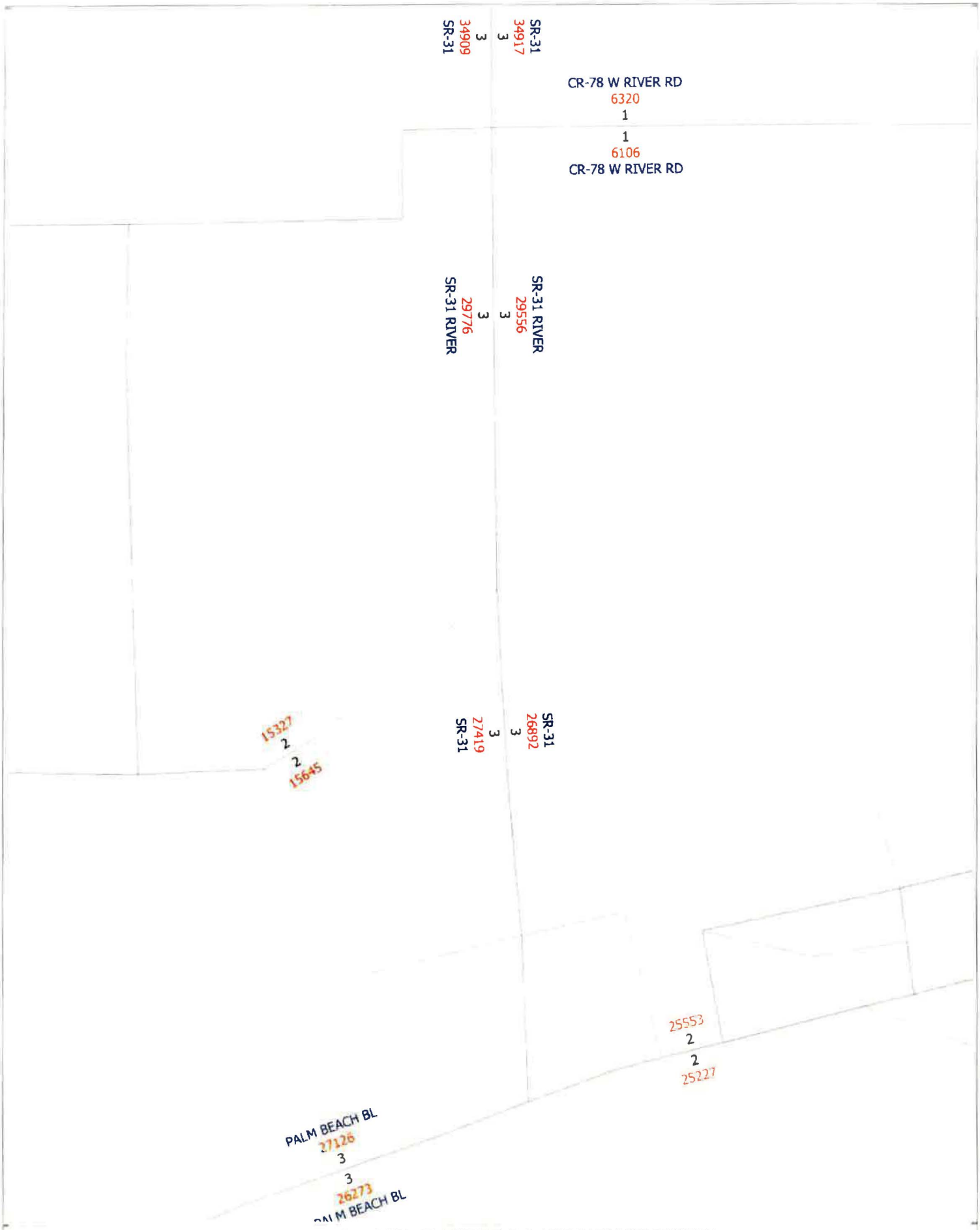
8 Lane Divided

10 Lane Freeway

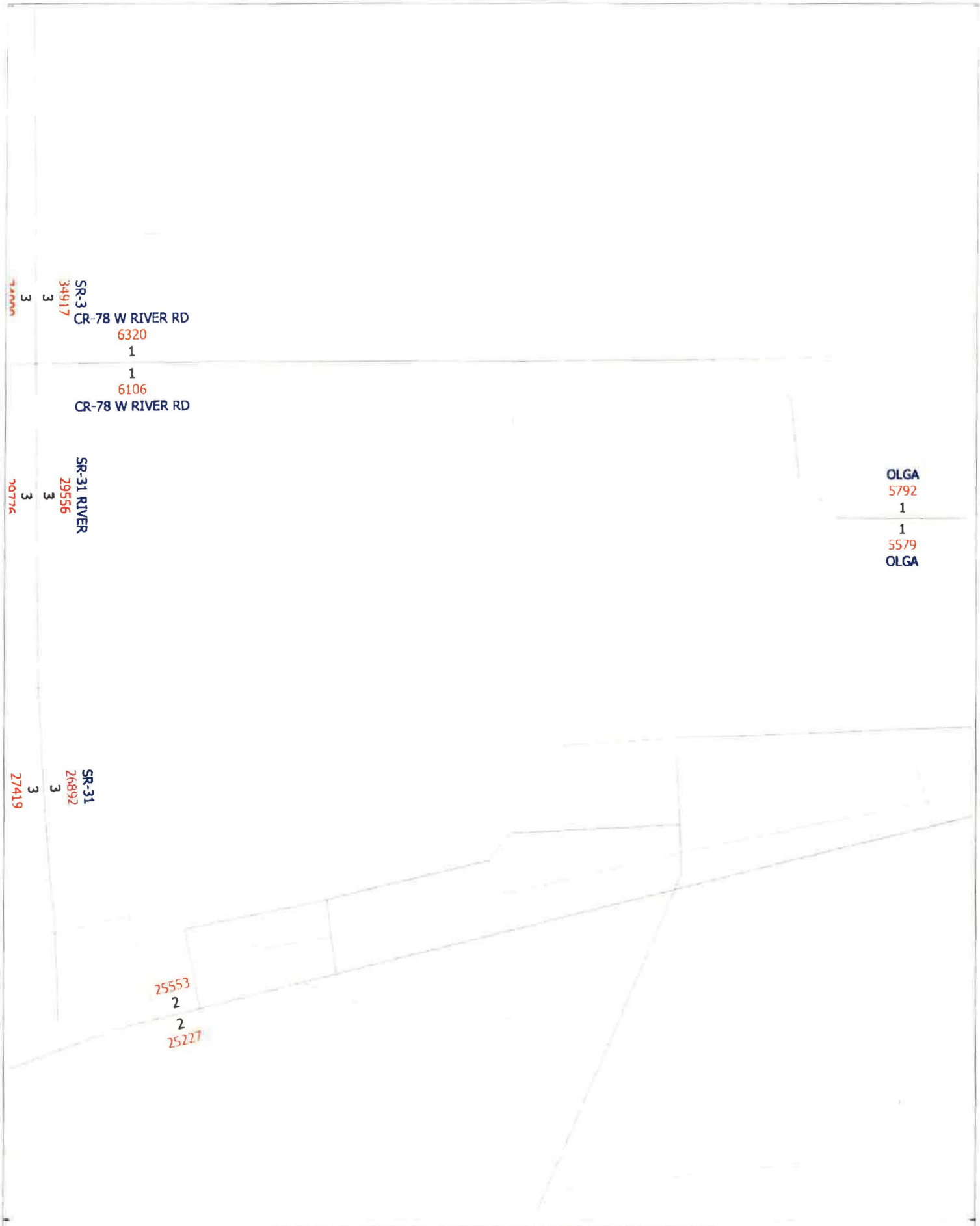
Reconstruction

MPO Needs Projects

2045 E+C NETWORK VOLUMES



2045 E+C COST FEASIBLE ROADWAY NETWORK



2045 E+C COST FEASIBLE ROADWAY NETWORK

cube

(Licensed to TR Transportation Consultants Inc)

TRAFFIC COUNTS
NORTH RIVER RD @ OLD OLGA ROAD

North River Rd @ N Olga Rd
North Fort Myers Florida
Wednesday, August 27, 2025

Time	Southbound 0						Westbound North River Rd						Northbound N Olga Dr						Eastbound North River Rd						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
12:00 AM	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	0	0	2	0	*2*	**5**
12:15 AM	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**3**
12:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	1	1	0	*2*	**2**
12:45 AM	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**2**
Hourly Total	0	0	0	0	0	*0*	0	0	6	0	0	*6*	0	0	0	0	0	*0*	0	0	3	3	0	*6*	**12**
1:00 AM	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	1	0	0	0	*1*	0	0	3	0	0	*3*	**5**
1:15 AM	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
1:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
1:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**1**
Hourly Total	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	1	0	0	0	*1*	0	0	4	0	0	*4*	**7**
2:00 AM	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
2:15 AM	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**1**
2:30 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
2:45 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**1**
Hourly Total	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**3**
3:00 AM	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	**2**
3:15 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**0**
3:30 AM	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**2**
3:45 AM	0	0	0	0	0	*0*	0	0	4	0	0	*4*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**4**
Hourly Total	0	0	0	0	0	*0*	0	0	7	0	0	*7*	0	0	0	0	0	*0*	0	0	0	1	0	*1*	**8**
4:00 AM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	**2**
4:15 AM	0	0	0	0	0	*0*	0	0	5	0	0	*5*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**6**
4:30 AM	0	0	0	0	0	*0*	0	0	8	0	0	*8*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	**8**
4:45 AM	0	0	0	0	0	*0*	0	0	6	0	0	*6*	0	1	0	0	0	*1*	0	0	0	0	0	*0*	**7**
Hourly Total	0	0	0	0	0	*0*	0	0	19	0	0	*19*	0	1	0	0	0	*1*	0	0	3	0	0	*3*	**23**
5:00 AM	0	0	0	0	0	*0*	0	0	16	0	0	*16*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	**18**
5:15 AM	0	0	0	0	0	*0*	0	0	25	0	0	*25*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	**27**
5:30 AM	0	0	0	0	0	*0*	0	0	37	0	0	*37*	0	1	0	0	0	*1*	0	0	8	0	0	*8*	**46**
5:45 AM	0	0	0	0	0	*0*	0	0	30	0	0	*30*	0	0	0	0	0	*0*	0	0	3	0	0	*3*	**33**
Hourly Total	0	0	0	0	0	*0*	0	0	108	0	0	*108*	0	1	0	0	0	*1*	0	0	15	0	0	*15*	**124**
6:00 AM	0	0	0	0	0	*0*	0	0	73	0	0	*73*	0	1	0	0	0	*1*	0	0	12	0	0	*12*	**86**
6:15 AM	0	0	0	0	0	*0*	0	0	106	0	0	*106*	0	2	0	0	0	*2*	0	0	16	0	0	*16*	**124**
6:30 AM	0	0	0	0	0	*0*	0	0	100	0	0	*100*	0	2	0	0	0	*2*	0	0	29	2	0	*31*	**133**
6:45 AM	0	0	0	0	0	*0*	0	0	105	0	0	*105*	0	2	0	1	0	*3*	0	0	21	0	0	*21*	**129**
Hourly Total	0	0	0	0	0	*0*	0	0	384	0	0	*384*	0	7	0	1	0	*8*	0	0	78	2	0	*80*	**472**
7:00 AM	0	0	0	0	0	*0*	0	0	72	0	0	*72*	0	2	0	0	0	*2*	0	0	15	1	0	*16*	**90**
7:15 AM	0	0	0	0	0	*0*	0	0	75	0	0	*75*	0	1	0	1	0	*2*	0	0	24	1	0	*25*	**102**
7:30 AM	0	0	0	0	0	*0*	0	0	85	0	0	*85*	0	3	0	0	0	*3*	0	0	23	0	0	*23*	**111**
7:45 AM	0	0	0	0	0	*0*	0	0	51	0	0	*51*	0	2	0	0	0	*2*	0	0	28	4	0	*32*	**85**
Hourly Total	0	0	0	0	0	*0*	0	0	283	0	0	*283*	0	8	0	1	0	*9*	0	0	90	6	0	*96*	**388**

8:00 AM	0	0	0	0	0	*0*	0	0	51	0	0	*51*	0	6	0	1	0	*7*	0	0	24	0	0	*24*	**82**
8:15 AM	0	0	0	0	0	*0*	0	0	46	0	0	*46*	0	2	0	1	0	*3*	1	0	15	0	0	*16*	**65**
8:30 AM	0	0	0	0	0	*0*	0	0	48	0	0	*48*	0	2	0	0	0	*2*	0	0	27	0	0	*27*	**77**
8:45 AM	0	0	0	0	0	*0*	0	1	37	0	0	*38*	0	3	0	0	0	*3*	0	0	23	2	0	*25*	**66**
Hourly Total	0	0	0	0	0	*0*	0	1	182	0	0	*183*	0	13	0	2	0	*15*	1	0	89	2	0	*92*	**290**
9:00 AM	0	0	0	0	0	*0*	0	0	29	0	0	*29*	0	1	0	0	0	*1*	0	0	27	0	0	*27*	**57**
9:15 AM	0	0	0	0	0	*0*	0	0	22	0	0	*22*	0	1	0	0	0	*1*	0	0	28	2	0	*30*	**53**
9:30 AM	0	0	0	0	0	*0*	0	0	30	0	0	*30*	0	1	0	0	0	*1*	0	0	29	1	0	*30*	**61**
9:45 AM	0	0	0	0	0	*0*	0	0	37	0	0	*37*	0	1	0	0	0	*1*	0	0	21	2	0	*23*	**61**
Hourly Total	0	0	0	0	0	*0*	0	0	118	0	0	*118*	0	4	0	0	0	*4*	0	0	105	5	0	*110*	**232**
10:00 AM	0	0	0	0	0	*0*	0	0	27	0	0	*27*	0	3	0	0	0	*3*	0	0	20	1	0	*21*	**51**
10:15 AM	0	0	0	0	0	*0*	0	0	30	0	0	*30*	0	1	0	0	0	*1*	0	0	23	0	0	*23*	**54**
10:30 AM	0	0	0	0	0	*0*	0	0	20	0	0	*20*	0	2	0	0	0	*2*	0	0	25	0	0	*25*	**47**
10:45 AM	0	0	0	0	0	*0*	0	0	17	0	0	*17*	0	2	0	1	0	*3*	0	0	24	2	0	*26*	**46**
Hourly Total	0	0	0	0	0	*0*	0	0	94	0	0	*94*	0	8	0	1	0	*9*	0	0	92	3	0	*95*	**198**
11:00 AM	0	0	0	0	0	*0*	0	0	23	0	0	*23*	0	0	0	0	0	*0*	0	0	20	1	0	*21*	**44**
11:15 AM	0	0	0	0	0	*0*	0	0	24	0	0	*24*	0	4	0	0	0	*4*	0	0	26	2	0	*28*	**56**
11:30 AM	0	0	0	0	0	*0*	0	0	31	0	0	*31*	0	0	0	0	0	*0*	0	0	23	3	0	*26*	**57**
11:45 AM	0	0	0	0	0	*0*	0	2	16	0	0	*18*	0	3	0	0	0	*3*	0	0	24	3	0	*27*	**48**
Hourly Total	0	0	0	0	0	*0*	0	2	94	0	0	*96*	0	7	0	0	0	*7*	0	0	93	9	0	*102*	**205**
12:00 PM	0	0	0	0	0	*0*	0	0	27	0	0	*27*	0	3	0	0	0	*3*	0	0	24	2	0	*26*	**56**
12:15 PM	0	0	0	0	0	*0*	0	0	24	0	0	*24*	0	4	0	2	0	*6*	0	0	30	1	0	*31*	**61**
12:30 PM	0	0	0	0	0	*0*	0	1	16	0	0	*17*	0	1	0	2	0	*3*	0	0	28	1	0	*29*	**49**
12:45 PM	0	0	0	0	0	*0*	0	0	28	0	0	*28*	0	1	0	0	0	*1*	0	0	30	1	0	*31*	**60**
Hourly Total	0	0	0	0	0	*0*	0	1	95	0	0	*96*	0	9	0	4	0	*13*	0	0	112	5	0	*117*	**226**
1:00 PM	0	0	0	0	0	*0*	0	0	16	0	0	*16*	0	1	0	0	0	*1*	0	0	36	3	0	*39*	**56**
1:15 PM	0	0	0	0	0	*0*	0	0	15	0	0	*15*	0	5	0	0	0	*5*	0	0	36	2	0	*38*	**58**
1:30 PM	0	0	0	0	0	*0*	0	0	18	0	0	*18*	0	3	0	0	0	*3*	0	0	26	4	0	*30*	**51**
1:45 PM	0	0	0	0	0	*0*	0	0	24	0	0	*24*	0	2	0	0	0	*2*	0	0	30	2	0	*32*	**58**
Hourly Total	0	0	0	0	0	*0*	0	0	73	0	0	*73*	0	11	0	0	0	*11*	0	0	128	11	0	*139*	**223**
2:00 PM	0	0	0	0	0	*0*	0	0	34	0	0	*34*	0	0	0	0	0	*0*	0	0	31	2	0	*33*	**67**
2:15 PM	0	0	0	0	0	*0*	0	0	29	0	0	*29*	0	6	0	0	0	*6*	0	0	33	2	0	*35*	**70**
2:30 PM	0	0	0	0	0	*0*	0	0	28	0	0	*28*	0	2	0	0	0	*2*	0	0	30	2	0	*32*	**62**
2:45 PM	0	0	0	0	0	*0*	0	0	31	0	0	*31*	0	0	0	0	0	*0*	0	0	28	0	0	*28*	**59**
Hourly Total	0	0	0	0	0	*0*	0	0	122	0	0	*122*	0	8	0	0	0	*8*	0	0	122	6	0	*128*	**258**
3:00 PM	0	0	0	0	0	*0*	0	0	33	0	0	*33*	0	0	0	0	0	*0*	0	0	43	2	0	*45*	**78**
3:15 PM	0	0	0	0	0	*0*	0	0	26	0	0	*26*	0	1	0	0	0	*1*	0	0	62	1	0	*63*	**90**
3:30 PM	0	0	0	0	0	*0*	0	0	27	0	0	*27*	0	1	0	0	0	*1*	0	0	51	1	0	*52*	**80**
3:45 PM	0	0	0	0	0	*0*	0	0	26	0	0	*26*	0	3	0	0	0	*3*	0	0	65	1	0	*66*	**95**
Hourly Total	0	0	0	0	0	*0*	0	0	112	0	0	*112*	0	5	0	0	0	*5*	0	0	221	5	0	*226*	**343**

4:00 PM	0	0	0	0	0	*0*	0	0	17	0	0	*17*	0	1	0	1	0	*2*	0	0	69	8	0	*77*	**96**
4:15 PM	0	0	0	0	0	*0*	0	0	29	0	0	*29*	0	4	0	1	0	*5*	0	0	87	4	0	*91*	**125**
4:30 PM	0	0	0	0	0	*0*	0	1	34	0	0	*35*	0	1	0	2	0	*3*	0	0	66	3	0	*69*	**107**
4:45 PM	0	0	0	0	0	*0*	0	0	16	0	0	*16*	0	2	0	0	0	*2*	0	0	72	6	0	*78*	**96**
	0	0	0	0	0	*0*	0	1	96	0	0	*97*	0	8	0	4	0	*12*	0	0	294	21	0	*315*	**424**
Hourly Total																									
5:00 PM	0	0	0	0	0	*0*	0	0	22	0	0	*22*	0	7	0	0	0	*7*	0	0	54	1	0	*55*	**84**
5:15 PM	0	0	0	0	0	*0*	0	0	30	0	0	*30*	0	3	0	0	0	*3*	0	0	81	1	0	*82*	**115**
5:30 PM	0	0	0	0	0	*0*	0	0	28	0	0	*28*	0	2	0	0	0	*2*	0	0	92	3	0	*95*	**125**
5:45 PM	0	0	0	0	0	*0*	0	0	25	0	0	*25*	0	2	0	0	0	*2*	0	0	61	0	0	*61*	**88**
	0	0	0	0	0	*0*	0	0	105	0	0	*105*	0	14	0	0	0	*14*	0	0	288	5	0	*293*	**412**
Hourly Total																									
6:00 PM	0	0	0	0	0	*0*	0	0	25	0	0	*25*	0	0	0	0	0	*0*	0	0	55	1	0	*56*	**81**
6:15 PM	0	0	0	0	0	*0*	0	0	24	0	0	*24*	0	1	0	0	0	*1*	1	0	42	3	0	*46*	**71**
6:30 PM	0	0	0	0	0	*0*	0	0	17	0	0	*17*	0	0	0	0	0	*0*	0	0	43	3	0	*46*	**63**
6:45 PM	0	0	0	0	0	*0*	0	0	15	0	0	*15*	0	0	0	0	0	*0*	0	0	30	1	0	*31*	**46**
	0	0	0	0	0	*0*	0	0	81	0	0	*81*	0	1	0	0	0	*1*	1	0	170	8	0	*179*	**261**
Hourly Total																									
7:00 PM	0	0	0	0	0	*0*	0	0	14	0	0	*14*	0	1	0	0	0	*1*	0	0	20	0	0	*20*	**35**
7:15 PM	0	0	0	0	0	*0*	0	0	11	0	0	*11*	0	1	0	0	0	*1*	0	0	21	0	0	*21*	**33**
7:30 PM	0	0	0	0	0	*0*	0	0	13	0	0	*13*	0	2	0	0	0	*2*	0	0	18	0	0	*18*	**33**
7:45 PM	0	0	0	0	0	*0*	0	0	9	0	0	*9*	0	0	0	0	0	*0*	0	0	20	2	0	*22*	**31**
	0	0	0	0	0	*0*	0	0	47	0	0	*47*	0	4	0	0	0	*4*	0	0	79	2	0	*81*	**132**
Hourly Total																									
8:00 PM	0	0	0	0	0	*0*	0	0	13	0	0	*13*	0	0	0	0	0	*0*	0	0	20	2	0	*22*	**35**
8:15 PM	0	0	0	0	0	*0*	0	0	12	0	0	*12*	0	0	0	0	0	*0*	0	0	19	4	0	*23*	**35**
8:30 PM	0	0	0	0	0	*0*	0	0	5	0	0	*5*	0	2	0	0	0	*2*	0	0	21	1	0	*22*	**29**
8:45 PM	0	0	0	0	0	*0*	0	0	7	0	0	*7*	0	0	0	0	0	*0*	0	0	20	2	0	*22*	**29**
	0	0	0	0	0	*0*	0	0	37	0	0	*37*	0	2	0	0	0	*2*	0	0	80	9	0	*89*	**128**
Hourly Total																									
9:00 PM	0	0	0	0	0	*0*	0	0	3	0	0	*3*	0	0	0	0	0	*0*	0	0	11	0	0	*11*	**14**
9:15 PM	0	0	0	0	0	*0*	0	0	4	0	0	*4*	0	0	0	0	0	*0*	0	0	14	1	0	*15*	**19**
9:30 PM	0	0	0	0	0	*0*	0	0	6	0	0	*6*	0	0	0	0	0	*0*	0	0	7	0	0	*7*	**13**
9:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	6	0	0	*6*	**6**
	0	0	0	0	0	*0*	0	0	13	0	0	*13*	0	0	0	0	0	*0*	0	0	38	1	0	*39*	**52**
Hourly Total																									
10:00 PM	0	0	0	0	0	*0*	0	0	4	0	0	*4*	0	0	0	0	0	*0*	0	0	3	1	0	*4*	**8**
10:15 PM	0	0	0	0	0	*0*	0	0	4	0	0	*4*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**5**
10:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	4	0	0	*4*	**4**
10:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	10	0	0	*10*	**10**
	0	0	0	0	0	*0*	0	0	8	0	0	*8*	0	0	0	0	0	*0*	0	0	18	1	0	*19*	**27**
Hourly Total																									
11:00 PM	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	5	0	0	*5*	**6**
11:15 PM	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**2**
11:30 PM	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	2	0	0	*2*	**4**
11:45 PM	0	0	0	0	0	*0*	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	0	5	0	0	*5*	**6**
	0	0	0	0	0	*0*	0	0	5	0	0	*5*	0	0	0	0	0	*0*	0	0	13	0	0	*13*	**18**
Hourly Total																									
TOTAL	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**5**	**2093**	**0**	**0**	***2098***	**0**	**112**	**0**	**13**	**0**	***125***	**2**	**0**	**2136**	**105**	**0**	***2243***	**4466**
Cars	0	0	0	0	0	*0*	0	5	2014	0	0	*2019*	0	109	0	13	0	*122*	1	0	2051	105	0	*2157*	**4298**
Heavy Vehicles	0	0	0	0	0	*0*	0	0	79	0	0	*79*	0	3	0	0	0	*3*	1	0	85	0	0	*86*	**168**
Heavy Vehicle %	0.00%	0.00%	0.00%	0.00%	0.00%	*0.00%*	0.00%	0.00%	3.77%	0.00%	0.00%	*3.77%*	0.00%	2.68%	0.00%	0.00%	0.00%	*2.40%*	50.00%	0.00%	3.98%	0.00%	0.00%	*3.83%*	**3.76%**

North River Rd @ N Olga Rd
North Fort Myers Florida
Wednesday, August 27, 2025

AM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
6:15 AM	0	0	0	0	0	*0*	0	0	106	0	0	*106*	0	2	0	0	0	*2*	0	0	16	0	0	*16*	**124**
6:30 AM	0	0	0	0	0	*0*	0	0	100	0	0	*100*	0	2	0	0	0	*2*	0	0	29	2	0	*31*	**133**
6:45 AM	0	0	0	0	0	*0*	0	0	105	0	0	*105*	0	2	0	1	0	*3*	0	0	21	0	0	*21*	**129**
7:00 AM	0	0	0	0	0	*0*	0	0	72	0	0	*72*	0	2	0	0	0	*2*	0	0	15	1	0	*16*	**90**
Peak Hour Total	0	0	0	0	0	*0*	0	0	383	0	0	*383*	0	8	0	1	0	*9*	0	0	81	3	0	*84*	**476**
Peak Hour Heavy Vehicles	0	0	0	0	0	*0*	0	0	14	0	0	*14*	0	0	0	0	0	*0*	0	0	1	0	0	*1*	**15**
Peak Hour Heavy Vehicles %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.66%	0.00%	0.00%	3.66%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.23%	0.00%	0.00%	1.19%	3.15%
PHF	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.000	0.903	0.000	0.000	*0.903*	0.000	1.000	0.000	0.250	0.000	*0.750*	0.000	0.000	0.698	0.375	0.000	*0.677*	**0.895**

PM Peak Hour

Time	Southbound						Westbound						Northbound						Eastbound						VEHICLE TOTAL
	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	U Turns	Left Turns	Straight Through	Right Turns	Crosswalk Crossings	*Vehicle Approach Total*	
4:00 PM	0	0	0	0	0	*0*	0	0	17	0	0	*17*	0	1	0	1	0	*2*	0	0	69	8	0	*77*	**96**
4:15 PM	0	0	0	0	0	*0*	0	0	29	0	0	*29*	0	4	0	1	0	*5*	0	0	87	4	0	*91*	**125**
4:30 PM	0	0	0	0	0	*0*	0	1	34	0	0	*35*	0	1	0	2	0	*3*	0	0	66	3	0	*69*	**107**
4:45 PM	0	0	0	0	0	*0*	0	0	16	0	0	*16*	0	2	0	0	0	*2*	0	0	72	6	0	*78*	**96**
Peak Hour Total	0	0	0	0	0	*0*	0	1	96	0	0	*97*	0	8	0	4	0	*12*	0	0	294	21	0	*315*	**424**
Peak Hour Heavy Vehicles	0	0	0	0	0	*0*	0	0	2	0	0	*2*	0	0	0	0	0	*0*	0	0	14	0	0	*14*	**16**
Peak Hour Heavy Vehicles %	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.08%	0.00%	0.00%	2.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.76%	0.00%	0.00%	4.44%	3.77%
PHF	0.000	0.000	0.000	0.000	0.000	*0.000*	0.000	0.250	0.706	0.000	0.000	*0.693*	0.000	0.500	0.000	0.500	0.000	*0.600*	0.000	0.000	0.845	0.656	0.000	*0.865*	**0.848**

HCS SUMMARY SHEETS

NORTH RIVER RD @

EAST SITE ACCESS

HCS Two-Way Stop-Control Report

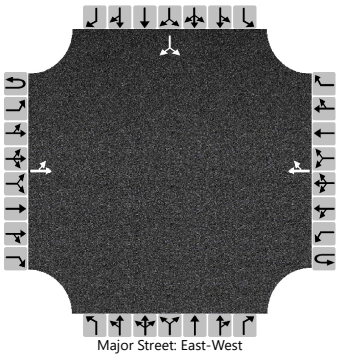
General Information

Analyst	tbt
Agency/Co.	TR Transportation
Date Performed	11/20/2025
Analysis Year	2029
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Armeda Build-Out

Site Information

Intersection	N. River Rd. East Access
Jurisdiction	Lee Co.
East/West Street	N. River Rd.
North/South Street	East Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		16	113				395	2						5		44
Percent Heavy Vehicles (%)		2												1		1
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.41		6.21
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.51		3.31

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		17													53	
Capacity, c (veh/h)		1128													605	
v/c Ratio		0.02													0.09	
95% Queue Length, Q_{95} (veh)		0.0													0.3	
95% Queue Length, Q_{95} (ft)		0.0													7.6	
Control Delay (s/veh)		8.2	0.1												11.5	
Level of Service (LOS)		A	A												B	
Approach Delay (s/veh)		1.1												11.5		
Approach LOS		A												B		

HCS Two-Way Stop-Control Report

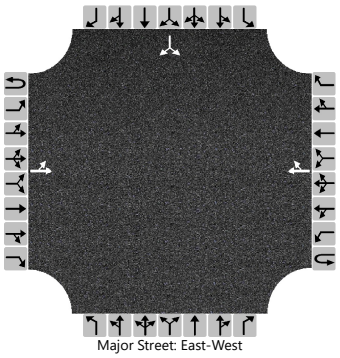
General Information

Analyst	tbt
Agency/Co.	TR Transportation
Date Performed	11/20/2025
Analysis Year	2029
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Armeda Build-Out

Site Information

Intersection	N. River Rd. East Access
Jurisdiction	Lee Co.
East/West Street	N. River Rd.
North/South Street	East Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		50	314				128	5						3		30
Percent Heavy Vehicles (%)		2												1		1
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.41		6.21
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.51		3.31

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		54													36	
Capacity, c (veh/h)		1438													831	
v/c Ratio		0.04													0.04	
95% Queue Length, Q_{95} (veh)		0.1													0.1	
95% Queue Length, Q_{95} (ft)		2.5													2.5	
Control Delay (s/veh)		7.6	0.4												9.5	
Level of Service (LOS)		A	A												A	
Approach Delay (s/veh)	1.4												9.5			
Approach LOS	A												A			

HCS SUMMARY SHEETS

NORTH RIVER RD @

WEST SITE ACCESS

HCS Two-Way Stop-Control Report

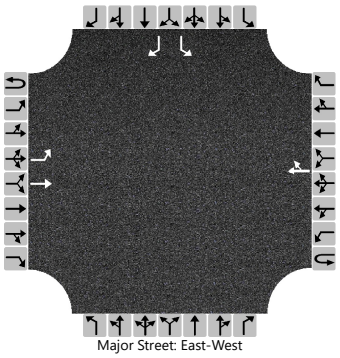
General Information

Analyst	tbt
Agency/Co.	TR Transportation
Date Performed	11/20/2025
Analysis Year	2029
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	Armeda Build-Out

Site Information

Intersection	N. River Rd. West Access
Jurisdiction	Lee Co.
East/West Street	N. River Rd.
North/South Street	West Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	T					TR						L		R
Volume (veh/h)		105	97				427	12						32		283
Percent Heavy Vehicles (%)		2												1		1
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized														No		
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.41		6.21
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.51		3.31

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		114												35		308
Capacity, c (veh/h)		1085												316		595
v/c Ratio		0.11												0.11		0.52
95% Queue Length, Q_{95} (veh)		0.4												0.4		3.0
95% Queue Length, Q_{95} (ft)		10.2												10.1		75.6
Control Delay (s/veh)		8.7												17.8		17.3
Level of Service (LOS)		A												C		C
Approach Delay (s/veh)		4.5												17.4		
Approach LOS		A												C		

HCS Two-Way Stop-Control Report

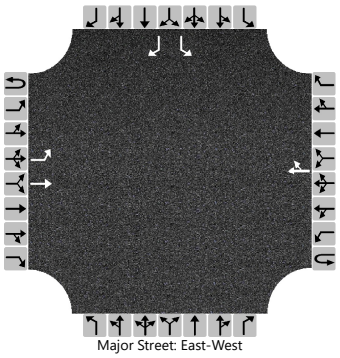
General Information

Analyst	tbt
Agency/Co.	TR Transportation
Date Performed	11/20/2025
Analysis Year	2029
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	Armeda Build-Out

Site Information

Intersection	N. River Rd. West Access
Jurisdiction	Lee Co.
East/West Street	N. River Rd.
North/South Street	West Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	T					TR						L		R
Volume (veh/h)		288	344				126	32						20		176
Percent Heavy Vehicles (%)		2												1		1
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.12												6.41		6.21
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.22												3.51		3.31

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		313												22		191
Capacity, c (veh/h)		1405												170		894
v/c Ratio		0.22												0.13		0.21
95% Queue Length, Q_{95} (veh)		0.9												0.4		0.8
95% Queue Length, Q_{95} (ft)		22.9												10.1		20.2
Control Delay (s/veh)		8.3												29.2		10.1
Level of Service (LOS)		A												D		B
Approach Delay (s/veh)	3.8												12.1			
Approach LOS	A												B			

TRIP GENERATION EQUATIONS

Single-Family Detached Housing
(210)

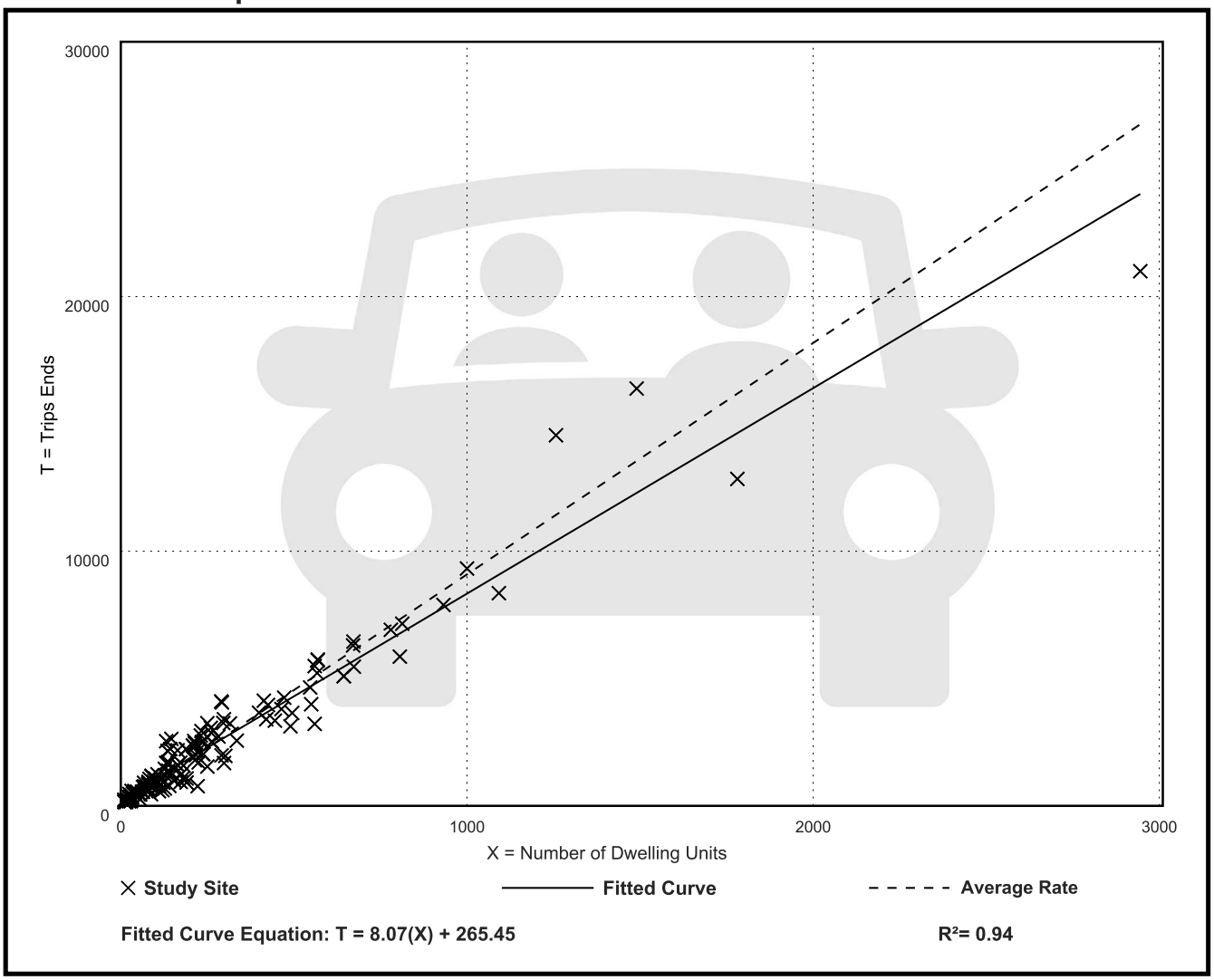
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 155
Avg. Num. of Dwelling Units: 261
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.09	3.47 - 23.80	2.29

Data Plot and Equation



Fitted Curve Equation: T = 8.07(X) + 265.45

R^2= 0.94

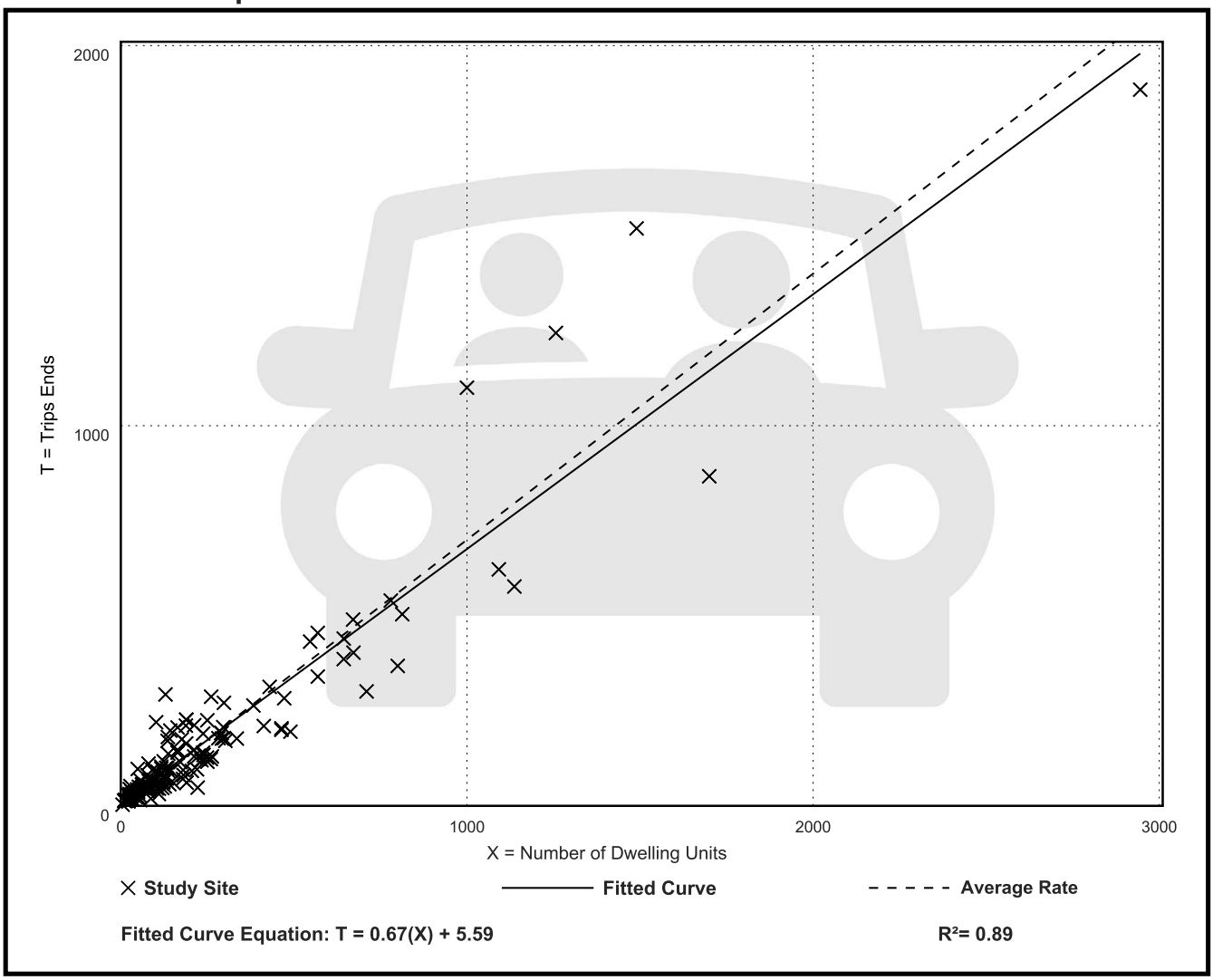
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	153
Avg. Num. of Dwelling Units:	239
Directional Distribution:	27% entering, 73% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.22 - 2.27	0.26

Data Plot and Equation



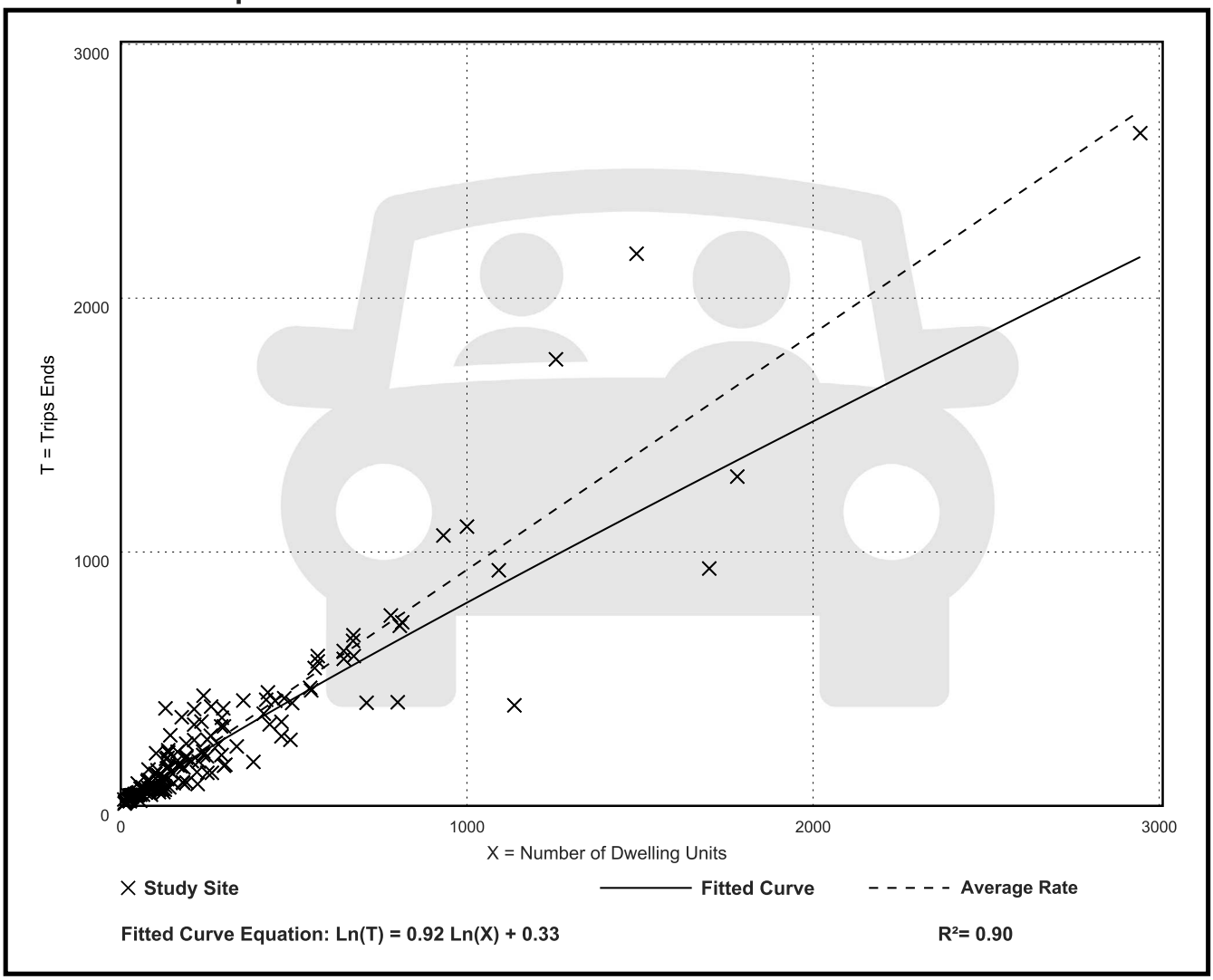
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	166
Avg. Num. of Dwelling Units:	266
Directional Distribution:	62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.93	0.35 - 2.98	0.33

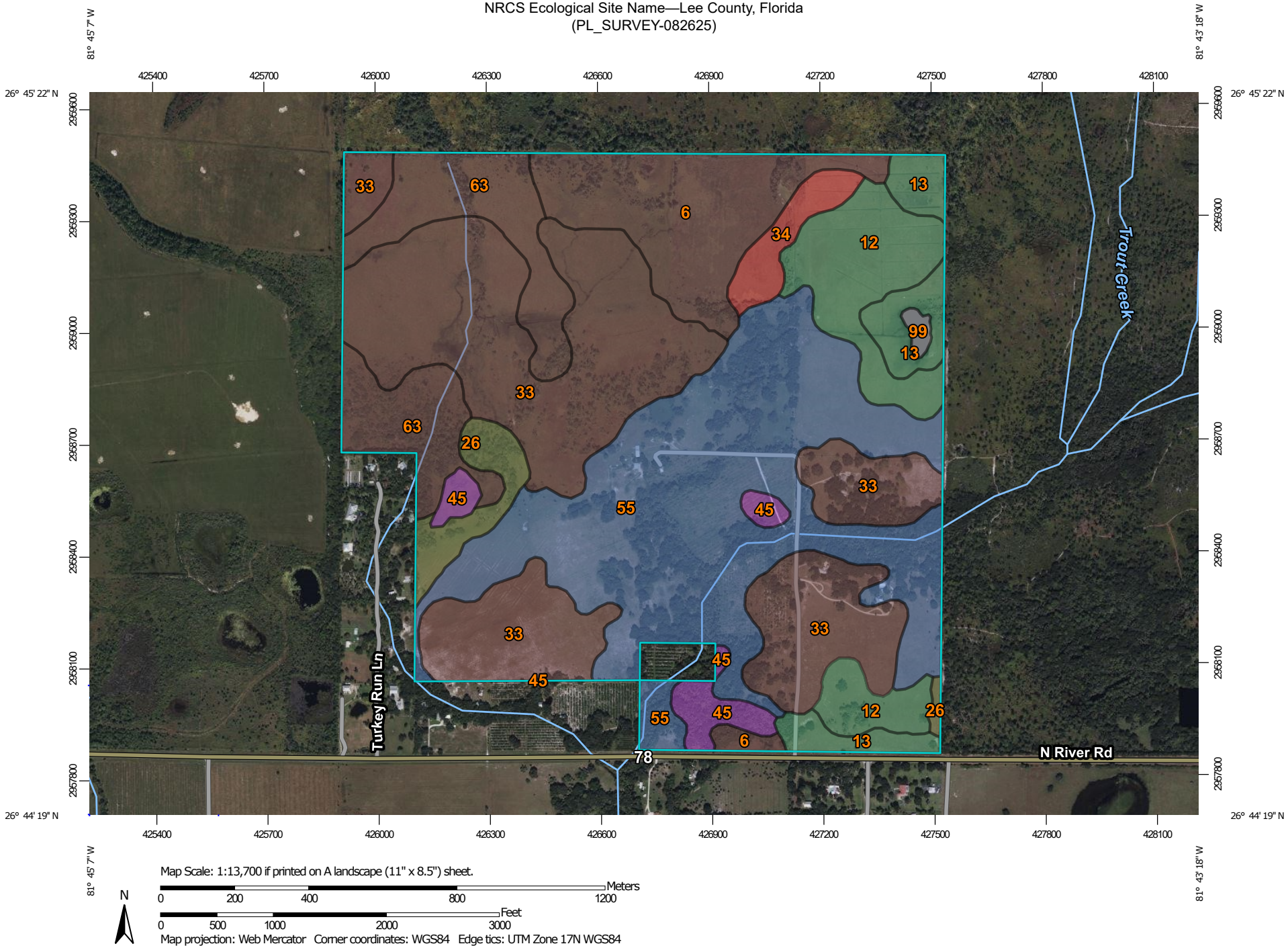
Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.92 Ln(X) + 0.33

R^2= 0.90

NRCS Ecological Site Name—Lee County, Florida
(PL_SURVEY-082625)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Loamy and Clayey Freshwater Isolated Marshes and Swamps
- Sandy Flatwoods and Hammocks
- Sandy Freshwater Isolated Marshes and Swamps
- Sandy over Loamy Flatwoods and Hammocks
- Sandy over Loamy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands
- Sandy over Loamy Freshwater Isolated Marshes and Swamps
- Not rated or not available

Soil Rating Lines

- Loamy and Clayey Freshwater Isolated Marshes and Swamps
- Sandy Flatwoods and Hammocks
- Sandy Freshwater Isolated Marshes and Swamps
- Sandy over Loamy Flatwoods and Hammocks
- Sandy over Loamy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands
- Sandy over Loamy Freshwater Isolated Marshes and Swamps
- Not rated or not available

Soil Rating Points

- Loamy and Clayey Freshwater Isolated Marshes and Swamps
- Sandy Flatwoods and Hammocks
- Sandy Freshwater Isolated Marshes and Swamps
- Sandy over Loamy Flatwoods and Hammocks
- Sandy over Loamy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands
- Sandy over Loamy Freshwater Isolated Marshes and Swamps
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lee County, Florida
Survey Area Data: Version 23, Aug 29, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 14, 2021—Nov 23, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

NRCS Ecological Site Name

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6	Brynwood fine sand, wet, 0 to 2 percent slopes	Sandy Flatwoods and Hammocks	55.5	9.7%
12	Felda fine sand, 0 to 2 percent slopes	Sandy over Loamy Flatwoods and Hammocks	45.5	8.0%
13	Cypress Lake fine sand, 0 to 2 percent slopes	Sandy over Loamy Flatwoods and Hammocks	22.2	3.9%
26	Pineda-Pineda, wet, fine sand, 0 to 2 percent slopes	Sandy over Loamy Freshwater Isolated Marshes and Swamps	14.0	2.5%
33	Oldsmar sand, 0 to 2 percent slopes	Sandy Flatwoods and Hammocks	185.4	32.4%
34	Malabar fine sand, 0 to 2 percent slopes	Sandy Freshwater Isolated Marshes and Swamps	11.2	2.0%
45	Copeland fine sandy loam, frequently ponded, 0 to 1 percent slopes	Loamy and Clayey Freshwater Isolated Marshes and Swamps	13.3	2.3%
55	Cocoa fine sand, 0 to 2 percent slopes	Sandy over Loamy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands	167.1	29.2%
63	Malabar fine sand, high, 0 to 2 percent slopes	Sandy Flatwoods and Hammocks	55.9	9.8%
99	Water		1.7	0.3%
Totals for Area of Interest			**571.9**	**100.0%**

Description

An "ecological site ID" is the symbol assigned to a specific ecological site. An "ecological site" is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. For example, the hydrology of the site is influenced by development of the soil and plant community. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production. Descriptions of ecological sites are provided in the Field Office Technical Guide, which is available in local offices of the Natural Resources Conservation Service.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	Lee County Florida (Unincorporated Areas)	NO PROJECT	1D HYDRAULIC ANALYSIS COASTAL ANALYSIS FLOODWAY UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 125124		
IDENTIFIER	OWL CREEK LOMR	APPROXIMATE LATITUDE AND LONGITUDE: 26.718, -81.754 SOURCE: Other DATUM: NAD 83	

ANNOTATED MAPPING ENCLOSURES			ANNOTATED STUDY ENCLOSURES
TYPE: FIRM*	NO.: 12071C0282G	DATE: November 17, 2022	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: November 17, 2022
TYPE: FIRM*	NO.: 12071C0303G	DATE: November 17, 2022	FLOODWAY DATA TABLE: 23
TYPE: FIRM*	NO.: 12071C0301G	DATE: November 17, 2022	

Enclosures reflect changes to flooding sources affected by this revision.
* FIRM - Flood Insurance Rate Map

FLOODING SOURCES AND REVISED REACHES

Gulf of America to Caloosahatchee River - an area centered at approximately 3,530 feet southeast of the intersection of River Road and Owl Creek Drive
Trout Creek/Curry Lake Canal - from approximately 520 feet downstream of Owl Creek Drive to approximately 1.170 feet upstream
Owl Creek - from just upstream of the confluence with Trout Creek/ Curry Lake Canal to approximately 1,280 feet upstream

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Gulf of America to Caloosahatchee River	BFEs*	BFEs	YES	YES
Trout Creek/Curry Lake Canal	Floodway	Floodway	YES	NONE
Owl Creek	Floodway	Floodway	YES	NONE

* BFEs - Base Flood Elevations

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at https://www.fema.gov/flood-insurance.

Patrick "Rick" F. Sacbibit, P.E.
Chief, Engineering Services Branch
Risk Analysis, Planning, and Information Directorate | Resilience

Federal Emergency Management Agency
Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance (base) stillwater elevations computed in the FIS for your community. A comprehensive restudy of your community's flood hazards could establish greater flood hazards in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at https://www.fema.gov/flood-insurance.

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Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Jacky Bell
Director, Mitigation Division
Federal Emergency Management Agency, Region IV
Rhodes Building, 3005 Chamblee Tucker Road
Atlanta, GA 30341
(770) 220-5406

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panels and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at https://www.fema.gov/flood-insurance.

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Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below, and through FEMA's Flood Hazard Mapping website at https://www.floodmaps.fema.gov/fhm/bfe_status/bfe_main.asp

LOCAL NEWSPAPER

Name: *The News-Press*

Dates: March 28, 2025 and April 4, 2025

Within 90 days of the second publication in the local newspaper, any interested party may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard determination presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at https://www.fema.gov/flood-insurance.

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Chief, Engineering Services Branch
Risk Analysis, Planning, and Information Directorate | Resilience

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE[2]	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A	0	165	825	1.5	*	-0.1[4]	0.9	1.0
B	1,003	740	2,972	0.4	*	4.4[4]	5.4	1.0
C	4,818	120	454	2.2	*	6.4[4]	7.4	1.0
D	6,641	125	689	1.0	10.8[3]	10.4[4]	10.9	0.5
E	7,451	120	388	1.8	11.3[3]	11.1[4]	11.4	0.3
F	9,077	148	811	1.2	18.0	18.0	19.0	1.0
G	9,582	177	887	0.3	18.0	18.0	19.0	1.0
H	10,717	169	557	0.5	18.2	18.2	19.2	1.0
I	12,282	135	251	0.2	19.8	19.8	20.7	0.9
J	12,392	115	248	0.2	20.0	20.0	21.0	1.0
K	12,632	115	225	0.2	20.0	20.0	21.0	1.0

[1]~~Floodway not computed/shown for this cross section~~

REVISED DATA

[2]Feet above mouth

[3]Combined coastal and riverine effects from Caloosahatchee River and Owl Creek

[4]Elevation computed without consideration of backwater effects from Caloosahatchee River

*Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

REVISED TO
REFLECT LOMR
EFFECTIVE: August 4, 2025

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, FLORIDA

AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: OWL CREEK

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE[2]	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A[1]	2,944	N/A	N/A	N/A	*	5.0[4]	N/A	N/A
B	5,344	3,372	10,347	0.6	*	5.6[4]	6.3	0.7
C	6,709	3,326	10,585	0.6	*	5.8[4]	6.6	0.8
D	9,347	3,338	8,622	0.7	*	6.6[4]	7.4	0.8
E	10,800	860	2,623	2.3	*	9.2[4]	9.3	0.1
F	15,216	1,191	4,019	1.1	11.8[3]	11.7[4]	12.7	1.0
G	16,366	654	2,445	1.8	12.9	12.9	13.8	0.9
H	18,151	1,053	2,817	0.6	14.4	14.4	14.9	0.5
I	19,839	1,090	1,276	1.2	16.3	16.3	17.0	0.7
J	20,799	2,580	1,558	0.7	17.9	17.9	18.3	0.4
K	21,708	2,575	2,449	0.4	19.0	19.0	19.3	0.3
L	23,137	1,703	1,528	0.7	20.3	20.3	21.0	0.7

REVISED DATA

[1]Floodway not computed/shown for this cross section
[2]Feet above mouth
[3]Combined coastal and riverine effects from Caloosahatchee River and Trout Creek/Curry Lake Canal
[4]Elevation computed without consideration of backwater effects from Caloosahatchee River
*Controlled by coastal flooding – see Flood Insurance Rate Map for regulatory base flood elevation

REVISED TO
REFLECT LOMR
EFFECTIVE: August 4, 2025

TABLE 23

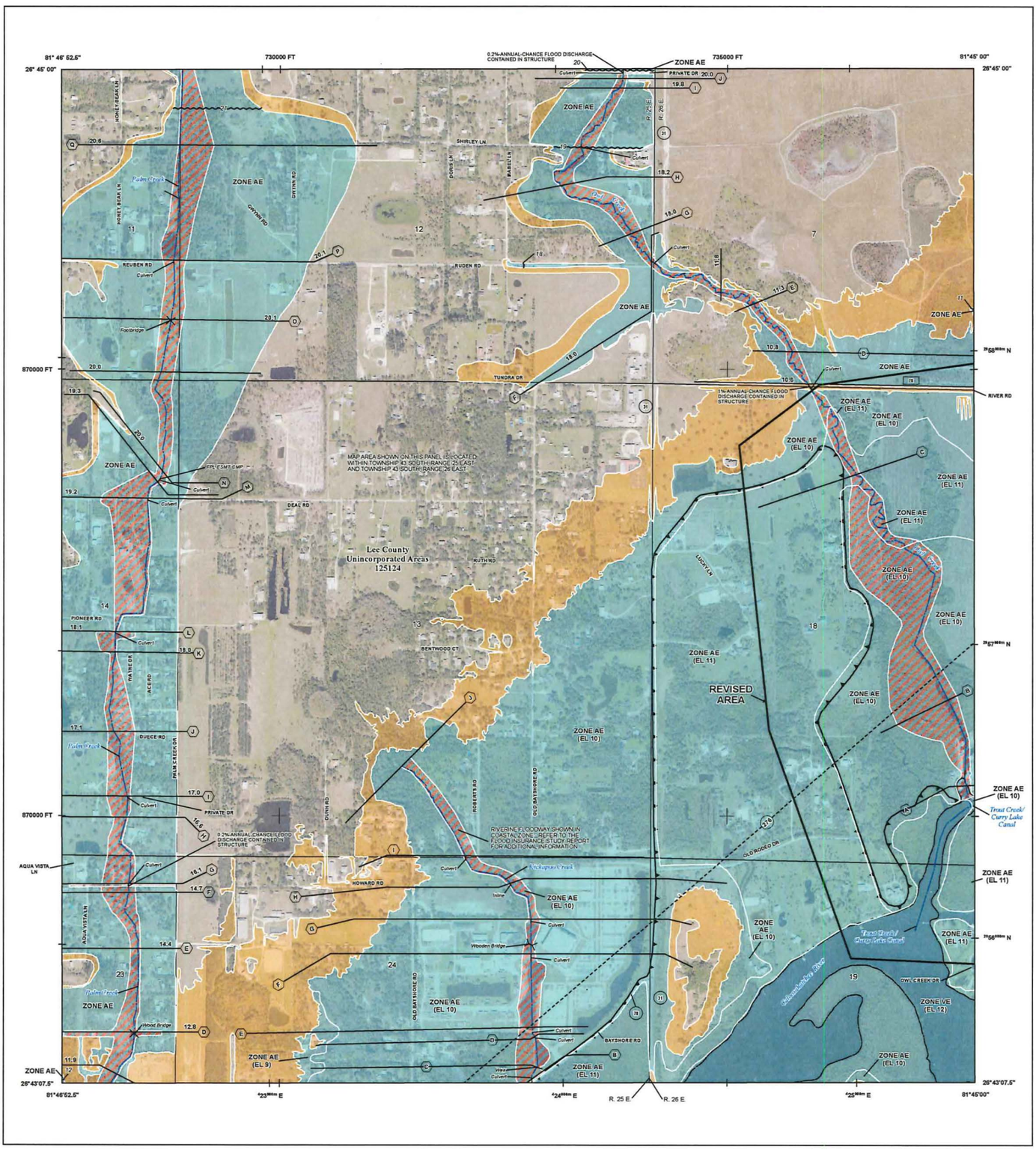
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, FLORIDA

AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: TROUT CREEK / CURRY LAKE CANAL



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT HTTPS://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) *Zone A, V, A99* With BFE or Depth *Zone AE, AO, AH, VE, AR* Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X* Future Conditions 1% Annual Chance Flood Hazard *Zone X* Area with Reduced Flood Risk due to Levee See Notes. *Zone X* Area with Flood Risk due to Levee *Zone D*
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard *Zone X* Area of Undetermined Flood Hazard *Zone D*
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
OTHER FEATURES	18.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation Coastal Transect Coastal Transect Baseline Profile Baseline Hydrographic Feature 513 Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary

NOTES TO USERS

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LIMIT OF MODERATE WAVE ACTION: Zone AE has been divided by a Limit of Moderate Wave Action (LIMWA). The LIMWA represents the approximate landward limit of the 1.5-foot breaking wave. The effects of wave hazards between the Zone VE and the LIMWA (or between the shoreline and the LIMWA for areas where Zone VE is not identified) will be similar to, but less severe than, those in the Zone VE.

Limit of Moderate Wave Action (LIMWA)

SCALE

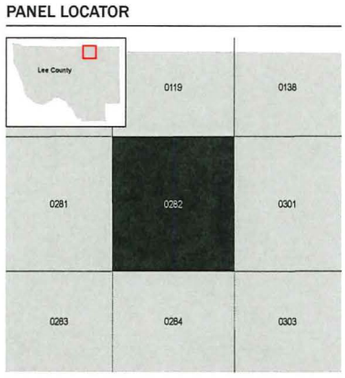
Map Projection:
State Plane Florida West FIPS 0902; North American Datum 1983;
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 500 1,000 2,000 feet

0 125 250 500 meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

LEE COUNTY, FLORIDA
and Incorporated Areas

PANEL 282 OF 685

FEMA

Panel Contains:

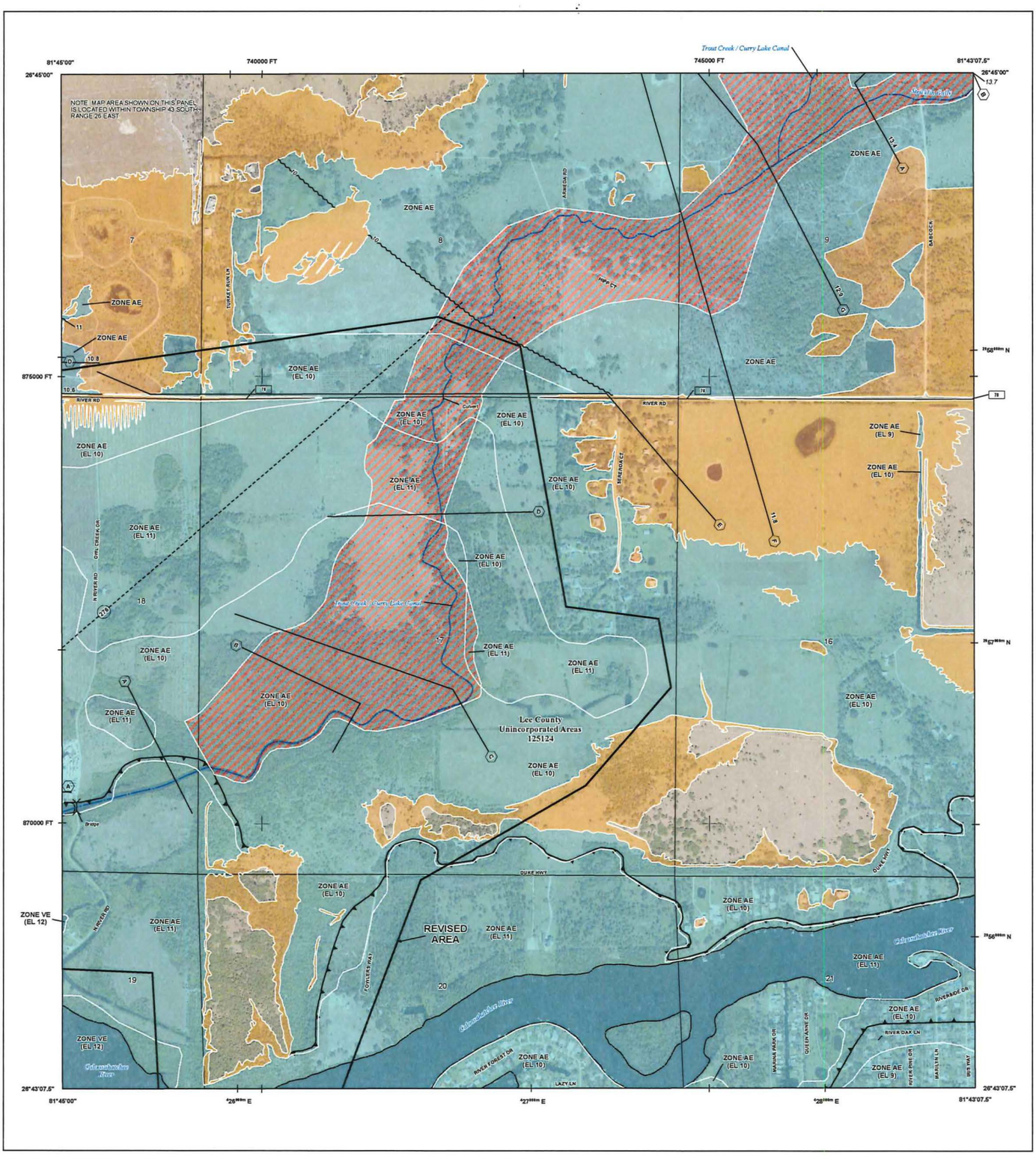
COMMUNITY	NUMBER	PANEL	SUFFIX
LEE COUNTY	125124	0282	G

REVISED TO REFLECT LOMR EFFECTIVE: August 4, 2026

VERSION NUMBER
2.4.3.5

MAP NUMBER
12071C0282G

MAP REVISED
NOVEMBER 17, 2022



FLOOD HAZARD INFORMATION

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- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 18.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

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Limit of Moderate Wave Action (LiMWA)

SCALE

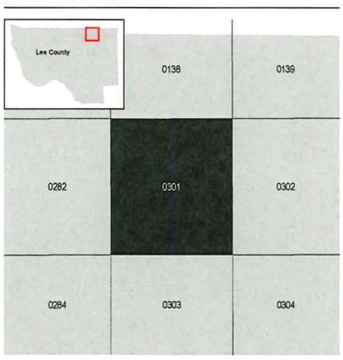
Map Projection:
State Plane Florida West FIPS 0902; North American Datum 1983;
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 500 1,000 2,000 feet

0 125 250 500 meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

LEE COUNTY, FLORIDA
and Incorporated Areas

PANEL 301 OF 685

FEMA

Panel Contains

COMMUNITY	NUMBER	PANEL	SUFFIX
LEE COUNTY	125124	0301	G

REVISED TO REFLECT LOMR EFFECTIVE: August 4, 2023

VERSION NUMBER
2.4.3.5

MAP NUMBER
12071C0301G

MAP REVISED
NOVEMBER 17, 2022

OTHER FEATURES

Limit of Moderate Wave Action

SPECIAL FLOOD HAZARD AREAS

Without Base Flood Elevation (BFE) *Zone A,V, A99*

With BFE or Depth *Zone AE, AO, AH, VE, AR*

Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*

Future Conditions 1% Annual Chance Flood Hazard *Zone X*

Area with Reduced Flood Risk due to Levee See Notes. *Zone X*

SCALE

NOTE: BASEMAP IMAGERY WAS OBTAINED FROM NAIP IN 2023.

Map Projection:
NAD 1983 StatePlane Florida West FIPS 0902 Feet;
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 250 500 1,000 Feet

0 75 150 300 Meters

National Flood Insurance Program

FEMA

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

LEE COUNTY, FLORIDA

and Incorporated Areas

PANEL 303 OF 685

Panel Contains:

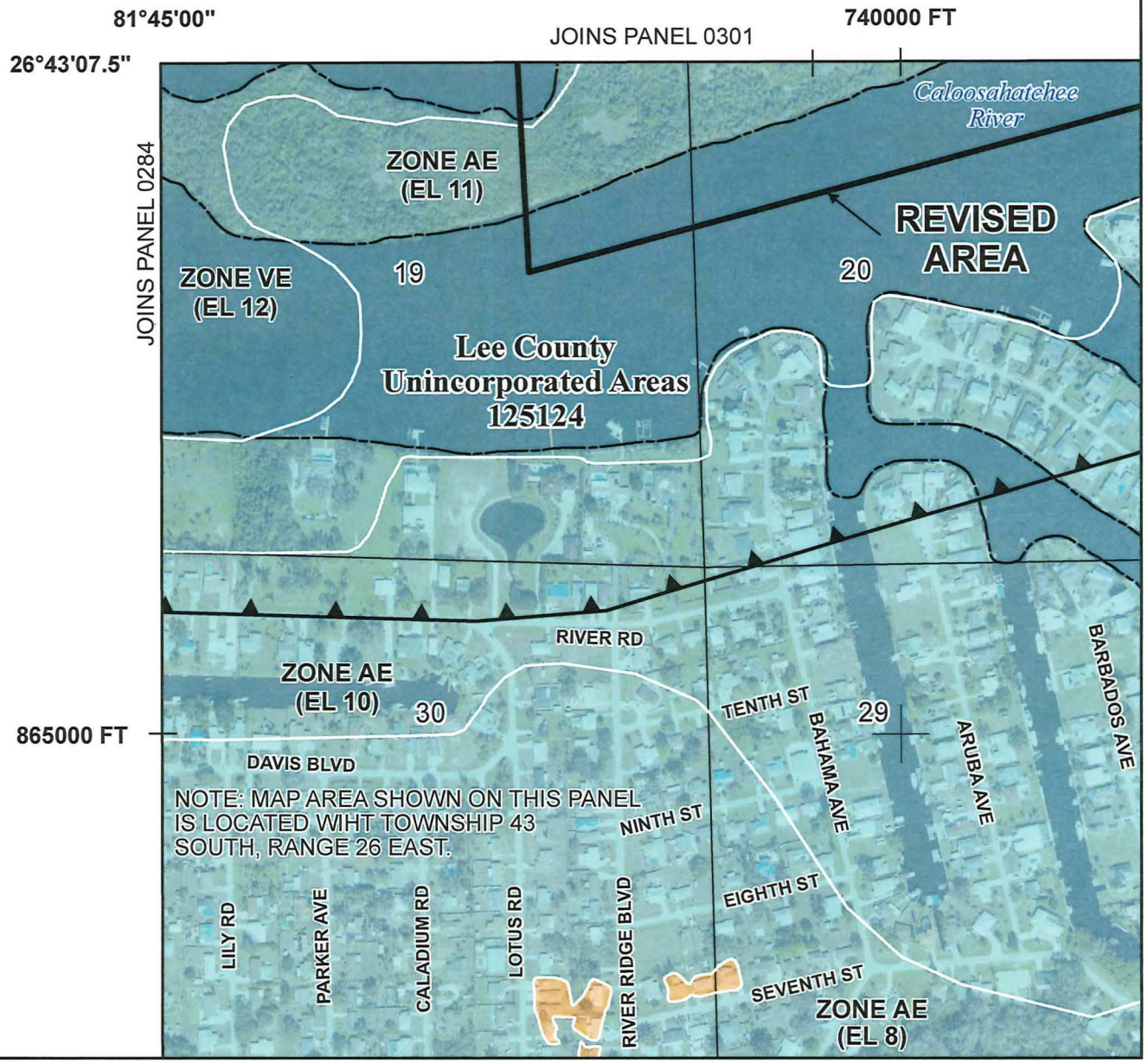
COMMUNITY	NUMBER	PANEL	SUFFIX
LEE COUNTY	125124	0303	G

REVISED TO REFLECT LOMR EFFECTIVE: August 4, 2025

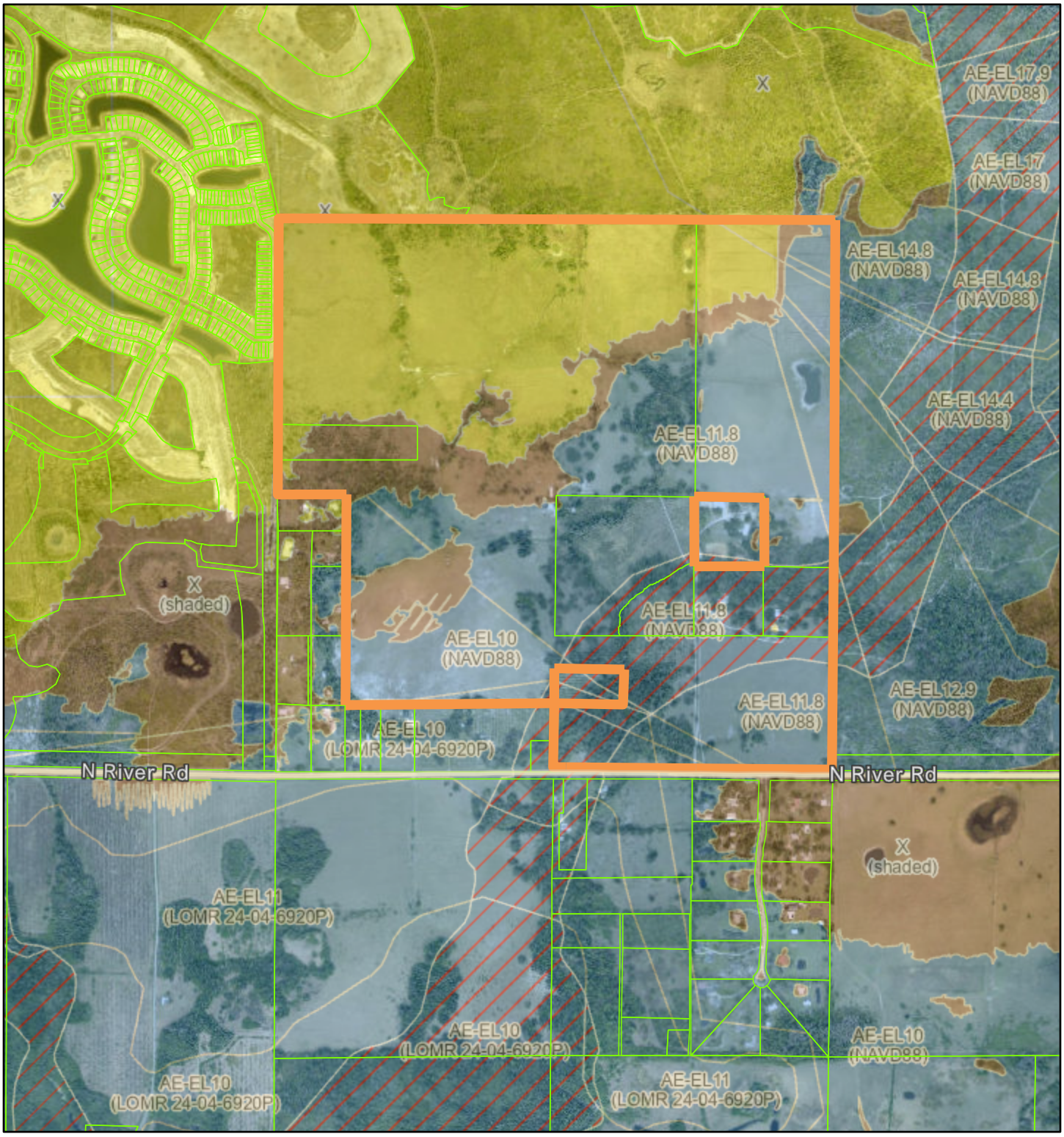
VERSION NUMBER
2.4.3.5

MAP NUMBER
12071C0303G

MAP REVISED
NOVEMBER 17, 2022



LeeGIS Data Explorer - Armeda Property - Flood



11/21/2025, 3:31:40 PM

1:16,211

0 500 1,000 2,000 ft

0 225 450 900 m

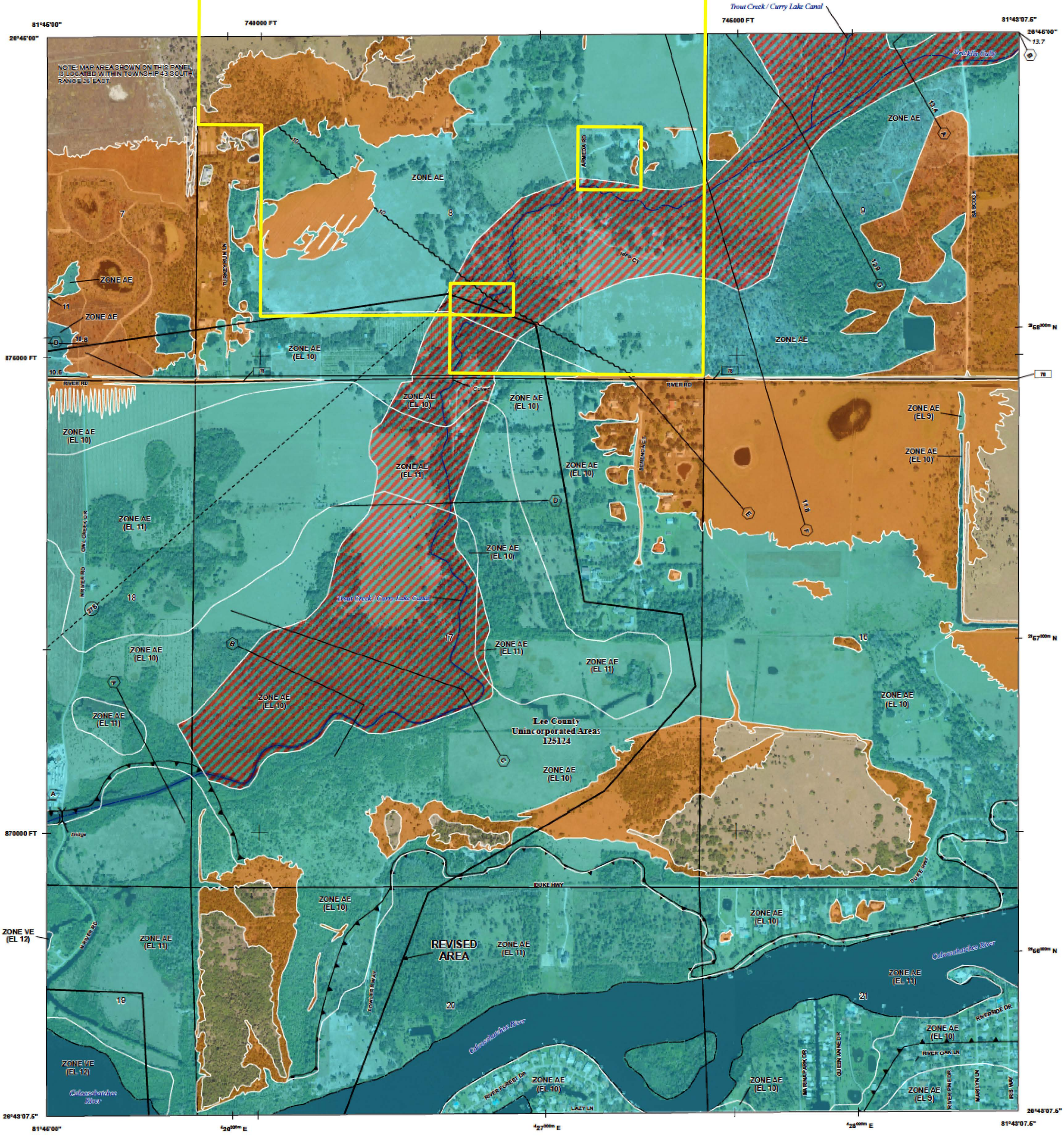
- Armeda Subject Boundary.zip - Armeda Subject Boundary
- Parcels
- Floodways

Flood Zones

- AE
- X (shaded)
- X

World Imagery
Low Resolution 15m Imagery
High Resolution 60cm Imagery
High Resolution 30cm Imagery
Citations
4.8m Resolution Metadata

Lee County, FL, State of Florida, Vantor, Lee County Property Appraiser, Lee County Government, GIS



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OTHER AREAS

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- S — Coastal Transect
- Coastal Transect Baseline
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- Hydrographic Feature
- 513 — Base Flood Elevation Line (BFE)
- Limit of Study
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Limit of Moderate Wave Action (LIMWA)

SCALE

N

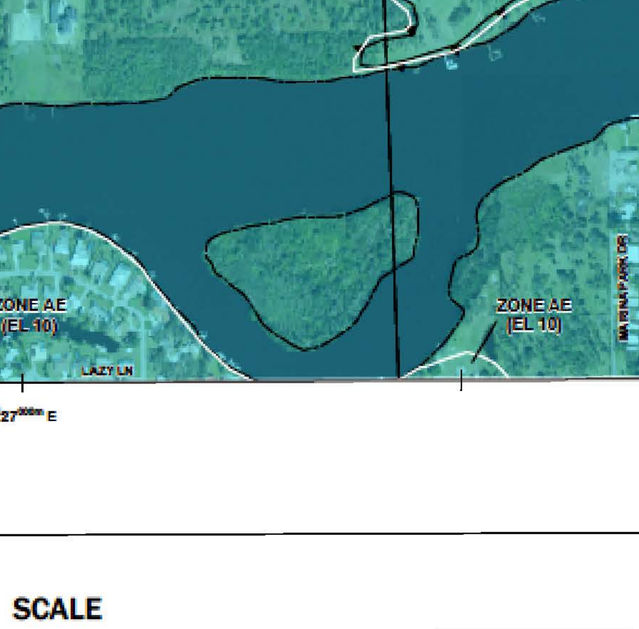
Map Projection:
State Plane Florida West FIPS 0902; North American Datum 1983;
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet — 1:6,000

0 — 500 — 1,000 — 2,000 feet

0 — 125 — 250 — 500 meters

PANEL LOCATOR



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

LEE COUNTY, FLORIDA

and Incorporated Areas

PANEL 301 OF 685

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
LEE COUNTY	125124	0301	G

REVISED TO REFLECT LOMR EFFECTIVE: August 4, 2025

VERSION NUMBER
2.4.3.5

MAP NUMBER
12071C0301G

MAP REVISED
NOVEMBER 17, 2022

ARMEDA PROPERTY • **Flood Map**

- Lee County, FL
- Date: 11/21/2025
- # 24006625
- Forestar

Subject Boundary

AE

N

0 112.5 225 450 675

Feet

RVi

111 N. Magnolia Avenue
Suite 1350
Orlando, FL 32801
Tel: 407.680.0650
www.rviplanning.com

Armeda Property Map Amendment
Lee Plan Analysis & State and Regional Policy Plan
Exhibits M12 & M19
CPA2025-00008 – Revised November 2025

INTRODUCTION

The Armeda Property is 561.63± acres consisting of seven parcels located east and west of Armeda Road on the north side of North River Road slightly under a mile east of its intersection with Babcock Ranch Road/SR 31. The Property lies within the North Olga Community Plan Area of the Northeast Lee County Community Plan Area. The property is zoned Agricultural (AG-2) and is used for agricultural pasture/grazing purposes. Lee Plan Map 1-A identifies the property as Density Reduction Groundwater Resources (DR/GR) Future Land Use Category (FLU).

Figure 1. Subject Property

This application requests to amend the Future Land Use Map (Map 1-A) to change the FLU category on 561.63± acres from DR/GR to Rural and Wetlands, amend Lee County Future Water Service Areas (Map 4-A) and Lee County Future Sewer Service Areas (Map 4-B) to add the subject property, and associated revisions to Table 1(b).

The request will facilitate the accompanying clustered residential planned development application which proposes a minimum of 40% of the property to be placed into a conservation easement consisting of wetland, upland including rare and unique, flow-way/surface water preservation and restoration to accommodate up to 737 single-family dwelling units and associated amenities. The proposed development will provide for significant environmental, storm

water, water quality and infrastructure enhancements. This request will allow an increase of 684 dwelling units from the 53 dwelling units that could be developed today.

The following summarizes benefits that will be accomplished by approval of this request through compliance with the accompanying residential planned development application:

1. Provide a connection between adjacent preserves that will continue the environmental preservation and enhanced drainage ways that will be improved by reduced runoff rate and reduced nutrient runoff.
2. Amendment will result in clustered development as encouraged in this area as demonstrated by the proposed Master Concept Plan with the concurrent residential planned development application.
3. Provide Wetland Protection and Enhancements including exotic removal and maintenance and restoration areas.
4. 270± acres (48% of property) placed into conservation easement including portions of Trout Creek flow-way.
5. 200± acre onsite wildlife corridor connection to portions of Trout Creek located on adjacent preservation lands on Babcock Ranch MPD that connect to Telegraph Creek and Bob Janes Preserves to the east (see Figure 2 on following page and submitted Preserves Map)
6. Connection to adjacent preservation lands to north, south, east and west
7. Wildlife management and co-existence plans
8. Minimum 60% open space (336± acres)
9. Preserve 48± acres of wetlands.
10. Surface and Ground Water Monitoring
11. Remove potential for up to 53 private septic tanks and wells
12. Removal of cattle grazing will significantly reduce onsite nutrient generation adjacent to the Trout Creek flow-way
13. Additional 50% water quality treatment
14. Reduced rate of run-off and associated nutrient loads
15. Stormwater enhancements
16. Green infrastructure
17. Connection to privately funded expansion of water and sewer to the area by others (as encouraged/anticipated by existing Lee Plan policies
18. Minimum 30 foot tract setback and 40 foot perimeter principal building setback
19. Provision for payment in lieu of multi-use path along North River Road since it will be located along the south side
20. Protect existing groundwater levels and improve existing wetland hydroperiods in onsite preserve areas
21. Provide Rare and Unique Upland habitat preservation (39± acres) and restoration (141± acres)
22. Preservation to maximum extent of historic flow-way associated with Trout Creek and associated wetlands

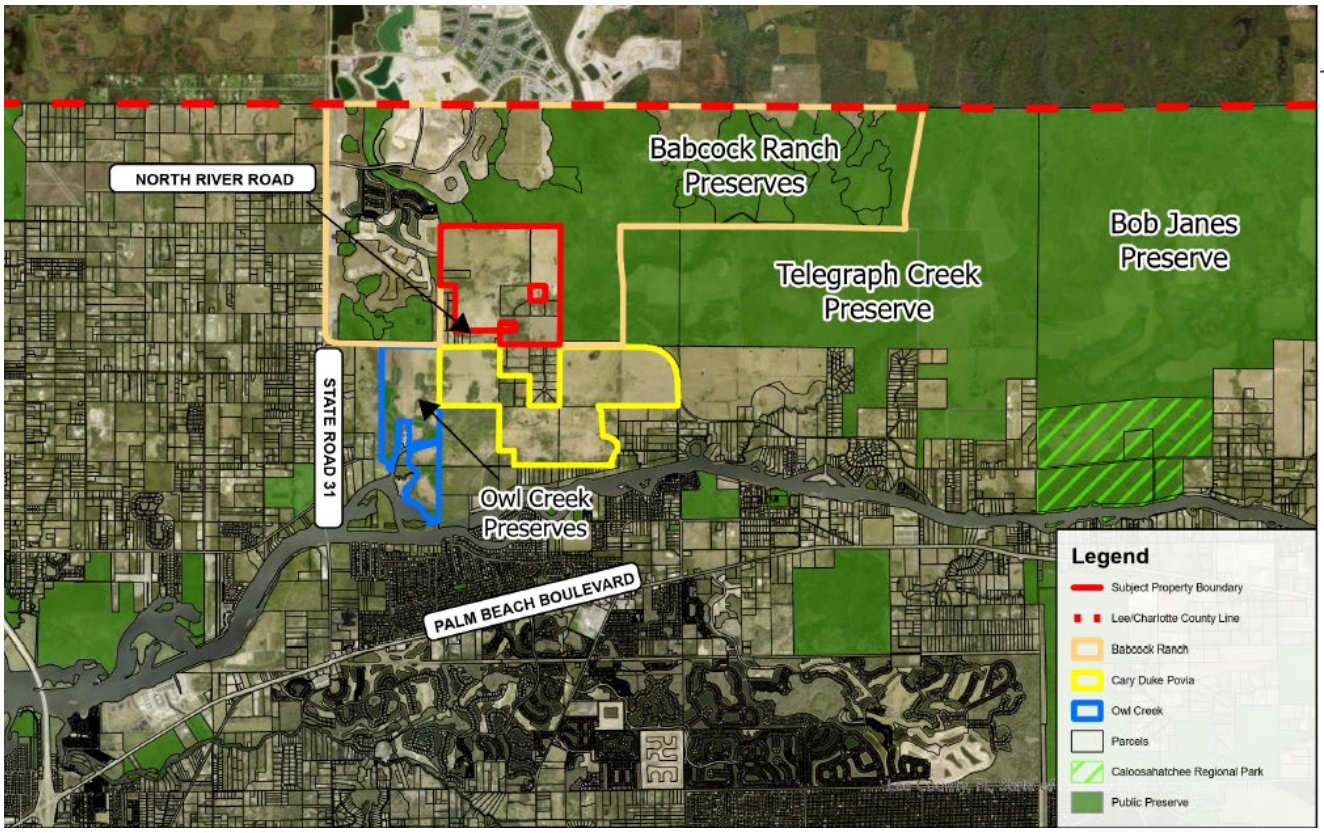


Figure 2. Adjacent Private and Public Preserves

CONCURRENT ZONING APPLICATION

The applicant is filing a companion rezoning application that is being reviewed concurrently with this plan amendment application. Chapter 163.3184(12), F.S. provides: "At the request of an applicant, a local government shall consider an application for zoning changes that would be required to properly enact any proposed plan amendment transmitted pursuant to this subsection."

The applicant, Forestar (USA) Real Estate Group Inc., is requesting to rezone the property from AG-2 to Residential Planned Development (RPD) to allow for the development of a clustered residential community containing a maximum of 737 single-family dwelling units, private, on-site recreation facilities and supportive infrastructure while providing for significant environmental, storm water and water quality enhancements. The maximum building height is 35 feet. The site will connect to centralized water and sewer services.

LEE PLAN ANALYSIS

The proposed Map Amendments are consistent with the following goals, objectives, standards and policies of the Lee Plan:

Future Land Use

The 561.63± acre subject property is currently within the DR/GR FLU category with existing wetlands as demonstrated by the submitted environmental reports.

> ***POLICY 1.4.5: The Density Reduction/Groundwater Resource (DR/GR) future land use category includes upland areas that provide substantial recharge to aquifers most suitable for future wellfield development. These areas also are the most favorable locations for physical withdrawal of water from those aquifers. Only minimal public facilities exist or are programmed.***
>
> 1. ***New land uses in these areas that require rezoning or a development order must demonstrate compatibility with maintaining surface and groundwater levels at their historic levels utilizing hydrologic modeling, the incorporation of increased storage capacity, and inclusion of green infrastructure. The modeling must also show that no adverse impacts will result to properties located upstream, downstream, as well as adjacent to the site. Offsite mitigation may be utilized, and may be required, to demonstrate this compatibility. Evidence as to historic levels must be submitted as part of the rezoning application and updated, if necessary, as part of the mining development order application.***
> 2. ***Permitted land uses include agriculture, natural resource extraction and related facilities, conservation uses, public and private recreation facilities, and residential uses at a maximum standard density of one dwelling unit per ten acres (1 du/10 acres). See Objectives 33.2 and 33.3 for potential density adjustments resulting from concentration or transfer of development rights.***
> 3. ***Private Recreational Facilities may be permitted in accordance with the site locational requirements and design standards, as further defined in Goal 13. No Private Recreational Facilities may occur within the DR/GR land use category without a rezoning to an appropriate Planned Development zoning category, and compliance with the Private Recreation Facilities performance standards, contained in Goal 13.***

Policy 1.4.5 provides that maximum density in the DR/GR category is 1 dwelling unit per 10 acres for the 507.57± acres allowing 50.7 dwelling units. Policy 1.5.1 provides that the Wetlands category has a maximum density of 1 dwelling unit per 20 acres for the 54.06± acres of wetlands allowing an additional 2.70± dwelling units for a total maximum density of 53 dwelling units. The 53 dwelling units could be developed in the DR/GR with private wells and septic without requiring preservation areas. The subject property is located in a rapidly transitioning area proximate to the intersection of two arterial roadways: North River Road and Babcock Ranch Road/S.R. 31. The surrounding area has been progressively evolving with shifting land use approval patterns and infrastructure improvements such as roads, utilities and fire and emergency medical services. The Northeast Lee County and North Olga Community Planning area goals, objectives and policies encourage clustered development that maximizes preservation which the requested map amendment facilitates. The

subject property is surrounded by recent development approvals that make it appropriate and logical for the subject property to be removed from DR/GR and placed into the Rural future land use category which will be in the best interest of Lee County and the public in order to fill in this critical missing piece between the preservation lands to the north and south along Trout Creek and its associated flowway and wetlands. The request also brings the density on the subject property more consistent with the New Community future land use category to the west, north, and east which allows up to one dwelling unit per 1.9 acre; and the Rural future land use category to the south which allows 1 dwelling unit per acre along with additional density incentives. Please see Exhibit M20 – Justification of Proposed Amendment for a timeline demonstrating the evolution of this area. The properties to the west, north and east were redesignated from DR/GR to New Community FLU to facilitate the Babcock Ranch Mixed Use Planned Development which is approved for 2,078 dwelling units, 250 hotel rooms and 1,170,000 square feet of commercial and retail uses. Ordinance 23-03 was adopted for the Greenwell SR 31 future land use amendment which redesignated approximately 265 acres along Babcock Ranck Road/SR 31 south of its intersection with North River Road from Rural and Wetlands to Outlying Suburban future land use category which transitioned a future non-urban area to a future suburban area, tripling the allowable density. Properties to the south across North River Road are within the Rural FLU category and as demonstrated in Figure 3.

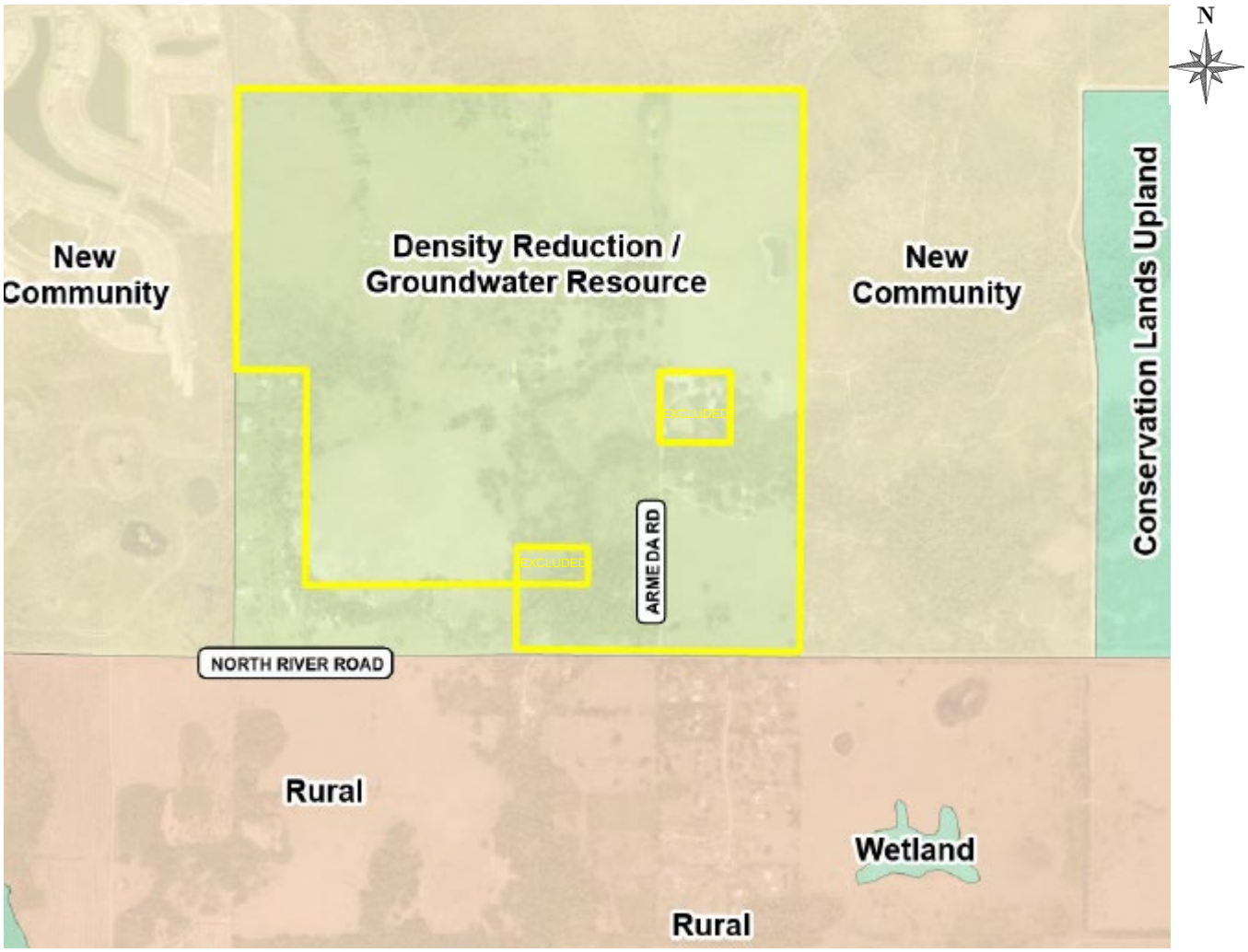


Figure 3. Existing Future Land Use Designation

There have been recent development approvals for Cary Duke Povia RPD to the south and Owl Creek RPD to the southwest across North River Road providing clustered developments that establish extensive preservation areas and provide for privately funded extension of water and sewer services to the area as shown in Figure 2. See attached Exhibits M5 and M6 for further description of the subject property and surrounding properties.

The Armeda Property's proximity to the New Community FLU category to the west, north and east and Rural FLU category to the south furthers the appropriateness of the requested map amendments which will accommodate clustered development with ample view of wooded areas, open spaces, and river fronts and will allows for the protection of environmentally sensitive lands and historic heritage. The proposed clustered project will provide preservation areas along Trout Creek connecting the Babcock Ranch MPD preservation areas to the west, north and east and the Owl Creek RPD and Cary Duke Povia RPD preservation areas to the south, expanding the significant

environmental, storm water, water quality, aquifer recharge and infrastructure enhancements required in these developments that develop utilizing incentives in Lee Plan Policy 123.2.17. Please see submitted Characterization of Ground and Surface Water Resources Report. The applicant is in the process of preparing the Environmental Resource Permit (ERP) application submittal which will establish the information needed to prepare the integrated surface and ground water model that will be provided in the next submittal package. Approval of the requested map amendments will facilitate the concurrent planned development application which provides additional details regarding the development of the request and will provide conditions of approval that will ensure compliance with the requirements of this Policy providing environmental enhancements and monitoring of storm water and ground water. The result will be 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or created rare and unique upland habitat.

> ***POLICY 1.4.1: The Rural future land use category are areas that are to remain predominantly rural – that is, low density residential, agricultural uses, and minimal non-residential land uses that are needed to serve the rural community. Natural resource extraction may be permitted in accordance with Policy 10.1.4. These areas are not to be programmed to receive urban-type capital improvements, and they can anticipate a continued level of public services below that of the urban areas. Maximum density in the Rural future land use category is one dwelling unit per acre (1 du/acre). See Policy 123.2.17 for a potential density incentive resulting from preservation and/or restoration of Rare and Unique Upland Habitat.***

The Armeda Property will be consistent with Rural Policy 1.4.1 upon approval of the proposed map amendments. The proposed Future Land Use Map is shown in Figure 4 on the following page. This exhibit will be updated to reflect the proposed Wetland FLU areas prior to sufficiency. Amending the subject property's FLU to Rural and adding the property to Lee County Utilities Future Water and Sewer Service areas provides an appropriate transition and will facilitate the concurrent clustered planned development application which will include conditions to ensure that the subject property is developed at a low residential density of 1.31 du/ac that complies with the incentive requirements to provide preservation and restoration of rare and unique uplands as incentivized by Policy 123.2.17. The proposed density of 1.31 du/ac is consistent with a base density of 1 du/acre and additional density incentive dwelling units generated through the proposed rare and unique upland preserves. The amendment of the subject property to the Rural future land use category will make the subject property's allowable density more consistent with the abutting properties. The allowable density in DR/GR is 1 dwelling unit per 10 acres, while the New Community areas to the west, north and east allow 1 dwelling unit per 1.9 acres and the Rural areas to the south allow 1 dwelling unit per acre with additional density incentives. The proposed map amendments are consistent with Policy 1.4.1

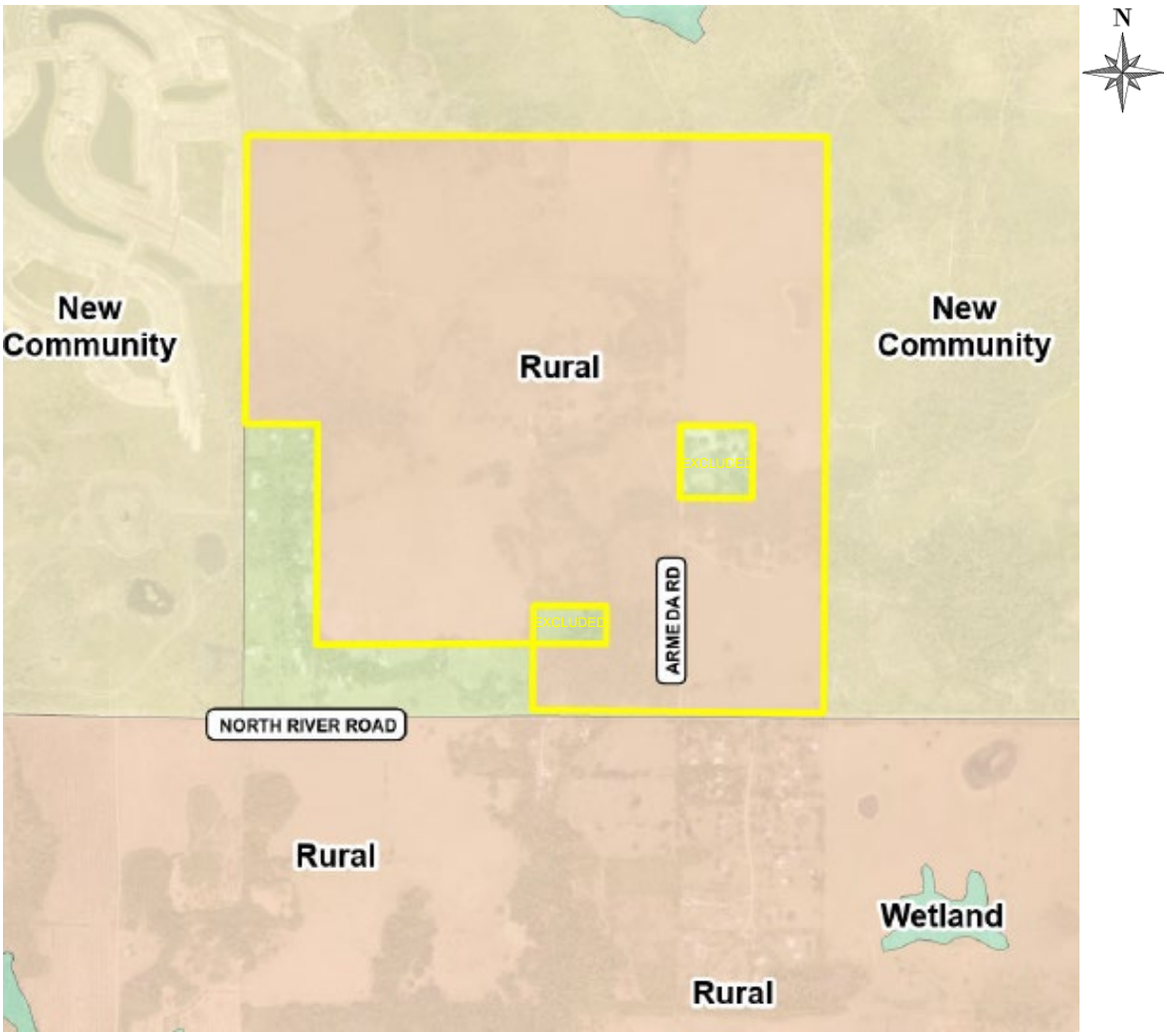


Figure 4. Proposed Future Land Use Designation

POLICY 1.5.1: Permitted land uses in Wetlands consist of very low density residential uses and recreational uses that will not adversely affect the ecological functions of wetlands. All development in Wetlands must be consistent with Goal 124. The maximum density is one dwelling unit per twenty acres (1 du/20 acre) except as otherwise provided in Table 1(a) and Chapter XIII.

Please refer to the submitted environmental reports depicting 54.06 acres of existing wetlands. Only minimal wetland impacts are proposed which are mostly limited to hydric pasture. The density calculations for the concurrent planned development upon approval of the requested amendment are provided on the following page and utilize a density calculation for impacted wetlands of 1 du/20 acres. Preserved wetlands utilize a density calculation of 1 unit per acre consistent with Table 1(a) Note 8.

Rural (507.57± AC) AT 1 DU/AC:	507.57 DU
Preserved Wetlands 48.65± AC transferred to adjacent uplands at 1 DU/AC:	48.65 DU
Impacted Wetlands 5.41± AC at 1 DU/20 AC:	0.27 DU
Preserved Rare & Unique Upland Habitat 38.93± AC Additional 1 DU/AC:	38.93 DU
Restored Rare & Unique Upland Habitat 141.06± AC Additional 1 DU/AC:	141.06 DU
Total Maximum Density:	737 DU

The proposed map amendments are consistent with Policy 1.5.1, as well as Policy 124.4.1.

> ***POLICY 1.6.5: The Planning Districts Map and Acreage Allocation Table (Map 1-B and Table 1(b)) depict the proposed distribution, extent, and location of generalized land uses through the Plan's horizon. Acreage totals are provided for land in each Planning District in unincorporated Lee County. No development orders or extensions to development orders will be issued or approved by Lee County that would allow the acreage totals for residential, commercial or industrial uses contained in Table 1(b) to be exceeded. This policy will be implemented as follows:***
>
> 1. ***For each Planning District the County will maintain a parcel based database of existing land use.***
> 2. ***Project reviews for development orders must include a review of the capacity, in acres, that will be consumed by buildout of the development order. No development order, or extension of a development order, will be issued or approved if the acreage for a land use, when added to the acreage contained in the updated existing land use database, exceeds the limitation established by Table 1(b) regardless of other project approvals in that Planning District.***
> 3. ***When updating the Lee Plan's planning horizon, a comprehensive evaluation of the Planning Districts Map and Acreage Allocation Table will be conducted.***

The proposed amendment will increase the Rural future land use acreage within the Northeast Lee County Planning Community by 151+/- acres of residential lots. Correspondingly, the DR/GR acreage will be reduced by 561+/- acres.

Pursuant to coordination with staff, Northeast Lee County has an 81 percent occupancy rate and 2.75 person per household. With incentive density allowed per Policy 123.2.17, the resulting maximum unit count within the proposed Rural lands will be 737 units, supporting a population of 1,642 persons (737 DU X 81% occupancy X 2.75 persons). The current non-regulatory population of the Planning Community is 8,235 persons. With the proposed amendment, the population will increase to 9,877 persons. This growth is in response to the planned expansion of public infrastructure, including Fire/EMS, potable water and sanitary sewer services to the area.

It is the Applicant's position that the population allocations in Table 1(b) are non-regulatory and can be increased via amendments to the Lee Plan, where it is demonstrated that adequate infrastructure and services exist, the amendment will be compatible the development pattern and protective of natural resources.

Growth Management

> ***OBJECTIVE 2.1: DEVELOPMENT LOCATION. Contiguous and compact growth patterns will be promoted through the rezoning process to contain urban sprawl, minimize energy costs, conserve land, water, and natural resources, minimize the cost of services, and prevent development patterns where large tracts of land are by-passed in favor of development more distant from services and existing communities.***

The Armeda Property is located in a transitioning area as evidenced by changes to the Lee Plan for New Community FLU and the recent amendment from Rural to Outlying Suburban along Babcock Ranch Road/SR 31, the incentivized clustered Owl Creek RPD and Cary Duke Povia RPD development approvals which included privately funded utility expansion to the area, minimizing the public cost of services. The proposed map amendments facilitate a project that promotes a contiguous and compact growth pattern by providing additional preservation areas connecting to the approved Babcock Ranch MPD to the west, north and east and the Owl Creek RPD and Cary Duke Povia RPD approvals proximate to the Caloosahatchee River to the south, extending the conservation of land and natural resources required in the North Olga Community Plan. The proposed project does not constitute urban sprawl which is defined in the Lee Plan Glossary as "The uncontrolled, premature, or untimely expansion and spreading out of urban levels of density or intensity into outlying non-urban areas." The development will be required to be controlled by planned development zoning approval with conditions providing a minimum 60 percent open space and compact development footprint to ensure compliance with the North Olga Community Plan and compliance with the goals, objectives policies, and standards of the Lee Plan. The request is consistent with Objective 2.1

> ***OBJECTIVE 2.2: DEVELOPMENT TIMING. Direct new growth to those portions of the future urban areas where adequate public facilities exist or are assured and where compact and contiguous development patterns can be created. Development orders and permits (as defined in §163.3164, Fla. Stat.) will be granted only when consistent with the provisions of §163.3202(2)(g) and § 163.3180, Fla. Stat. and the concurrency requirements in the LDC.***
>
> > ***POLICY 2.2.1: Rezoning and DRI proposals will be evaluated as to the availability and proximity of the road network; central sewer and water lines; community facilities and services such as schools, EMS, fire and police***

protection, and other public facilities; compatibility with surrounding land uses; and any other relevant facts affecting the public health, safety, and welfare.

While the Rural category is a future non-urban area, public facilities exist or are assured which make the request appropriate and further justify the amendment from DR/GR to Rural. The requested map amendments will facilitate the concurrent residential planned development request which will have or assure access to all required public facilities. Please see attached separate Public Facilities Impacts Analysis (Exhibit – M15) and Letters of Determination of the Adequacy/Provision of Existing/Proposed Support Facilities (Exhibit – M18). These exhibits demonstrate that there is adequate capacity to accommodate the requested additional 684 dwelling units, exceeding the current density of 53 dwelling units associated with this request. The subject property is contiguous to developed or developing properties in the Northeast Lee County community, representing compact and contiguous development patterns. The concurrent residential planned development will provide conditions requiring setbacks, preservation areas and buffers ensuring compatibility with surrounding land uses. The connection to public water and sewer facilities will prevent additional private wells and septic systems providing a significant benefit to water quality and natural resource areas in North Olga along portions of Trout Creek and proximate to the Caloosahatchee River and will provide less drawdown on the groundwater resources providing further protections to the public health, safety, and welfare. The requested map amendments are consistent with Objective 2.2 and Policy 2.2.1.

OBJECTIVE 2.3: FUTURE LAND USE MAP AMENDMENTS. To require formal findings for certain Future Land Use Map amendments.

POLICY 2.3.1: All proposed changes to the Future Land Use Map in critical areas for future potable water supply (Lehigh Acres as described in Policy 54.1.9 and all land in the DR/GR land use category) will be subject to a special review by the staff of Lee County. This review will analyze the proposed land uses to determine the short-term and long-term availability of irrigation and domestic water sources, and will assess whether the proposed land uses would cause any significant impact on present or future water resources. If the Board of County Commissioners wishes to approve any such changes to the Future Land Use Map, it must make a formal finding that no significant impacts on present or future water resources will result from the change.

Although a companion zoning application has been submitted concurrently, the proposed Future Land Use Map amendment is utilized to support the overall request, with the proposed amendment, the zoning request will be conditioned to connect to potable water and sewer, eliminating the potential for 53 private wells and septic systems on the subject property and will require groundwater

and surface water monitoring. Removal of cattle grazing will significantly reduce onsite nutrient generation adjacent to the Trout Creek flow-way. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. As noted in the Characterization of Ground and Surface Water Resources Report, Lee Plan Map 4-C (depicting iso-travel times of 6-months, 1 year, 5-years and 10-years), as depicted in Figure 5 below, shows proposed public supply wells located immediately south of the Armeda Property along North River Road which are part of the North Lee County Public Supply Wellfield). A review of the Water Use Permit, No. 36-00152-W, for this facility indicates that in February 2024, these proposed production wells were relocated to the east on land owned by Lee County near the Telegraph Creek Preserve. The proposed production wells are to be constructed into the Lower Hawthorn Aquifer which is separated from the Sandstone Aquifer by hundreds of feet of confining unit sediments. A copy of the Water Use Permit Modification is provided as Attachment 3 to this referenced Report. Therefore, based on the recent permit modification, there are no wellfield protection zones south of the proposed development. Water quality and groundwater recharge are essential to ensure adequate groundwater levels in this area which has residential and agricultural properties in the area that utilize private wells. Connecting to central water will provide less drawdown on the groundwater resources in this area of the county, which will help protect the County's wellfields and the private systems in the area. The Lee Plan contains numerous provisions intended to protect groundwater levels and quality, including, but not limited to, Goals 63 and 126, Objectives 63.2 and 126.1, and Policy 126.4. Additionally, the subject property is immediately adjacent to Trout Creek which flows south to the Caloosahatchee River. Placement of septic tanks in proximity to surface water bodies such as these has been shown to degrade water quality if not properly maintained. The Lee Plan contains numerous provisions intended to protect or enhance surface water quality. Lee County Utilities has provided a letter of availability (see Exhibit – M18) demonstrating sufficient capacity for water and sewer service to serve the development. No significant impacts on present or future water resources will result for the proposed map amendments. The request is consistent with Policy 2.3.1.

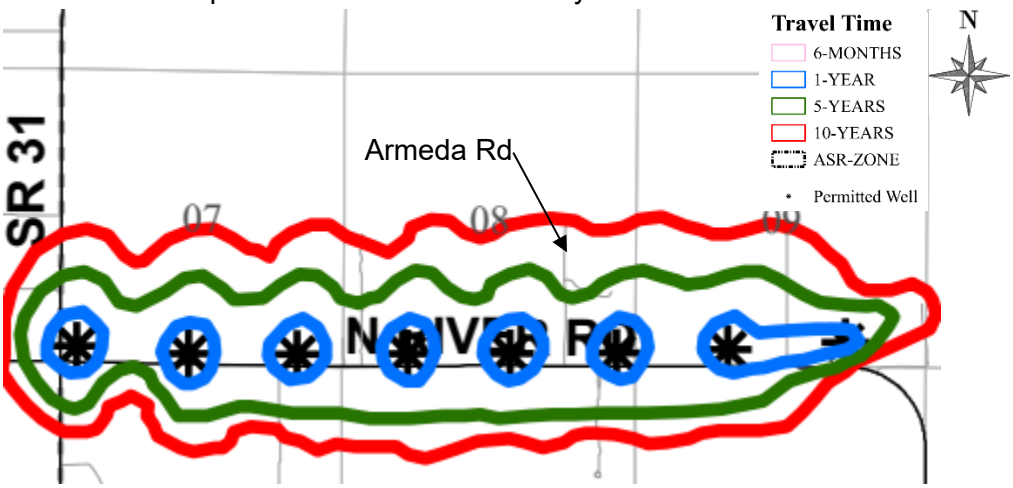


Figure 5. Wellfield Protection Zones

OBJECTIVE 4.1: WATER, SEWER, AND ENVIRONMENTAL STANDARDS. Consider water, sewer, and environmental standards during the rezoning process. Ensure the standards are met prior to issuing a local development order.

STANDARD 4.1.1: WATER.

1. Any new residential development that exceeds 2.5 dwelling units per gross acre, and any new single commercial or industrial development in excess of 30,000 square feet of gross leasable (floor) area per parcel, must connect to a public water system (or a "community" water system as that is defined by Fla. Admin. Code R. 62-550).

Although the companion residential planned development rezoning application proposes a density below 2.5 dwelling units per acre, the incorporation of the Property into Map 4A and proposed zoning conditions of approval requiring connection to a public water system facilitates benefits to the natural resources in the area. The proposed community design provides for a compact form of development which provides significant preservation and restoration of rare and unique uplands, and wetland preservation and restoration while also removing the potential for up to 53 private wells providing less drawdown on the groundwater resources in the area.

3. The developer must provide proof that the prior commitments of the water utility, plus the projected need of the developer, do not exceed the supply and facility capacity of the utility.

A letter of availability is included in Exhibit M-18 by Lee County Utilities identifying the facility's capacity for the development of projected water and sewer demand.

4. All waterline extensions to new development will be designed to provide minimum fire flows, as well as adequate domestic services as required by Fla. Admin. Code R. 62-555.

Privately funded waterline extensions by others and if required for this development will be designed to meet minimum fire flows and provide adequate domestic service water flows as required by the Florida Administrative Code.

6. If a development lies outside any service area as described above, the developer may:

- ***request that the service area of Lee County Utilities or an adjacent water utility be extended to incorporate the property;***
- ***establish a community water system for the development; or***
- ***develop at an intensity that does not require a community water system.***

The subject property is immediately adjacent to the existing Lee County Future Water Service Areas shown on Map 4A along the south property line. Although the companion residential planned development rezoning application proposes a density below 2.5 dwelling units per acre, the incorporation of the Property into Map 4A and proposed zoning conditions of approval requiring connection to a public water system facilitates benefits to the natural resources in the area. The request is consistent with Standard 4.1.1.

STANDARD 4.1.2: SEWER.

1. Any new residential development that exceeds 2.5 dwelling units per gross acre, and any new single commercial or industrial development that generates more than 5,000 gallons of sewage per day, must connect to a sanitary sewer system.

Although the request proposes a density below 2.5 dwelling units per acre, the applicant proposes a condition of approval requiring connection to a public sanitary sewer system, consistent with Policy 123.2.17.3, facilitating benefits to the natural resources in the area. The proposed community design provides for a compact form of development which provides significant preservation and restoration of rare and unique uplands and wetland preservation while also removing the potential for up to 53 private septic systems providing further protection to surface and ground water quality and natural resource areas along portions of Trout Creek and proximate to the Caloosahatchee River.

5. If a development lies outside any service area as described above, the developer may:

- ***request that the service area of Lee County Utilities or an adjacent sewer utility be expanded to incorporate the property;***
- ***establish a self-provided sanitary sewer system for the development;***
- ***develop at an intensity that does not require sanitary sewer service; or***
- ***if no more than 5000 gallons of effluent per day per parcel is produced, an individual sewage disposal system per Fla. Admin. Code R. 64E-6 may be utilized, contingent on approval by all relevant authorities.***

The subject property is immediately adjacent to the existing Lee County Future Sewer Service Areas shown on Map 4B along the south property line. Although the companion residential planned development rezoning application proposes a density below 2.5 dwelling units per acre, the incorporation of the Property into Map 4B and proposed zoning conditions of approval requiring connection to a public sanitary sewer system facilitates benefits to the natural resources in the area. The request is consistent with Standard 4.1.2.

STANDARD 4.1.4: ENVIRONMENTAL FACTORS.

1. ***In any case where there exists or there is the probability of environmentally sensitive areas (as identified by Lee County, the Corps of Engineers, Department of Environmental Protection, South Florida Water Management District (SFWMD), or other applicable regulatory agency), the developer/applicant must prepare an environmental assessment that examines the existing conditions, addresses existing or anticipated environmental problems, and proposes means and mechanisms to protect, conserve, or preserve the environmental and natural resources.***
2. ***Ensure that land uses and structures are well integrated, properly oriented, and functionally related to the topographic and natural features of the site.***
3. ***Ensure development minimizes the need for expansion and construction of street and utility improvements.***

Please see attached Environmental Impacts Analysis (Exhibit – M13) demonstrating the existing condition and location of environmentally sensitive areas of the site. The site has been significantly impacted from decades of agricultural use. Approval of the map amendments facilitate the concurrent residential planned development which will include conditions requiring significant preservation and restoration of rare and unique uplands and wetland preservation and restoration. The concurrent planned development application will ensure that the clustered development is well integrated, properly oriented and functionally related to the natural features of the site and that the internal street and utility improvements are minimized to the maximum extent possible. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of the Trout Creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or created rare and unique upland habitat. Please see submitted Indigenous Habitat Management Plan. The request is consistent with Standard 4.1.4.

GOAL 5: RESIDENTIAL LAND USES. To accommodate the projected population of Lee County in the year 2045 in appropriate locations, guided by the Future Land Use Map, and in attractive and safe neighborhoods with a variety of price ranges and housing types.

OBJECTIVE 5.1: All development approvals for residential, commercial, and industrial land uses must be consistent with the following policies, the general standards under Goal 4, and other provisions of this plan.

POLICY 5.1.1: Residential developments requiring rezoning and meeting Development of County Impact (DCI) thresholds must be developed as Planned Developments except if located within the Mixed Use Overlay.

POLICY 5.1.5: Protect existing and future residential areas from any encroachment of uses that are potentially destructive to the character

and integrity of the residential environment. Requests for conventional rezonings will be denied in the event that the buffers provided in the LDC, Chapter 10, are not adequate to address potentially incompatible uses in a satisfactory manner. If such uses are proposed in the form of a Planned Development or special exception and generally applicable development regulations are deemed to be inadequate, conditions will be attached to minimize or eliminate the potential impacts or, where no adequate conditions can be devised, the application will be denied altogether. The LDC will continue to require appropriate buffers for new developments.

The Armeda Property is located outside of the Coastal High Hazard Area and has previously been disturbed by decades of agricultural use. This amendment requires a concurrent planned development application to be filed including conditions with stringent development criteria ensuring the adjusted site design and clustered density development with environmental and water quality enhancements. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or created rare and unique upland habitat. The property development regulations will require a minimum perimeter setback of 50 feet adjacent to large lot residential, agricultural uses and North River Road and 30 feet for tracts/40 feet for principal structures abutting all other areas. Although single-family does not require buffers for the private preserves, agricultural and single-family uses surrounding the site, conditions will require preservation areas which will be supplemented if necessary to ensure minimum 30-foot Type “F” buffer containing 10 trees per 100 linear feet and a double-staggered hedge row are provided adjacent to large lot residential and agricultural areas excluding areas abutting Trout Creek or the proposed natural waterway buffers. Minimum 50-foot wide preservation areas will be provided along North River Road, exceeding the 25-foot buffer requirement. There are two parcels shown in Figures 1, 3 and 4 that are within the overall boundary that are not included in the application. The western excluded parcel is an existing agricultural operation, and the eastern excluded parcel is an existing single-family residence accessed from Armeda Road. Armeda Road will remain as a single-family driveway within the existing 30-foot ingress and egress easement and the site will be surrounded by the proposed preservation areas conditioned to meet the Type “F” buffer as described. The request will be consistent with Goal 5, Objective 5.1, Policies 5.1.1 and 5.1.5.

POLICY 5.1.6: Maintain development regulations that require high-density, multi-family, cluster, and mixed use developments to have open space, buffering, landscaping, and recreation areas appropriate to their density and design.

The request will be consistent with Policies 5.1.6 as it will facilitate a clustered single-family development. The proposed concurrent planned development application conditions of approval will include development regulations for the clustered development to provide a minimum of 60% open space, extensive preservation areas and onsite private recreation area. These areas will be appropriate for the density and design and will be functionally related to all dwelling units. No multi-family residential is proposed for the site.

Community Planning

OBJECTIVE 17.3: PUBLIC INPUT. To provide opportunities for public input as part of the comprehensive plan and land development code amendment process.

POLICY 17.3.2: One public information meeting is required for privately-initiated applications that propose a text change within a community plan or revises a map designation within a community plan area boundary. The meeting must be conducted before the application can be found complete.

POLICY 17.3.3: Public information meetings required pursuant to the provisions of this subelement must be held within the established community plan area boundary that is affected by the amendment.

POLICY 17.3.4: For required public information meetings, the applicant must provide the following:

- ***Adequate meeting space to accommodate projected attendance and security measures (as needed).***
- ***Advance notice of the meeting in a publication of local distribution provided at least ten calendar days prior to the meeting, unless otherwise specified herein.***
- ***At the meeting, a general overview of the text or map amendment and effect thereof.***
- ***After the meeting, a meeting summary document submitted to the County that contains the following information: the date, time, and location of the meeting; a list of attendees; a summary of the concerns or issues that were raised at the meeting; and the applicant's response to any issues that were raised.***

POLICY 27.1.8: The owner or agent of a rezoning or special exception request within the Northeast Lee County Community Plan area must conduct two public information meetings, in accordance with Policies 17.3.3 and 17.3.4, prior to the application being found sufficient. One meeting must be held within the Alva

Community Plan area boundary and the other in the North Olga Community Plan area boundary.

Pursuant to Policies 17.3.2, 17.3.3 including footnote 7, and 27.1.8, the applicant will schedule the two required Public Information Meetings within Alva and North Olga Community Planning Areas after receiving review comments on this application from staff. Pursuant to Policy 17.3.4, the applicant will provide the required meeting summaries prior to the application being found sufficient. Please see attached Exhibit M21. The requested Map Amendments will be consistent with Objective 17.3 and Policies 17.3.2, 17.3.3 17.3.4 and Policy 27.1.8.

GOAL 27: NORTHEAST LEE COUNTY COMMUNITY PLAN. Maintain, enhance, and support the heritage and rural character, natural resources, and agricultural lands. Alva and North Olga will work cooperatively toward this goal through the objectives and policies that follow, and through their individual community plans.

27.1: AGRICULTURAL AND RURAL CHARACTER. Maintain and enhance the viability of the existing and evolving commercial agricultural operations, preserve open space, and retain the rural character of Northeast Lee County. For the purposes of this objective, rural character is defined as those characteristics that convey a sense of rural lifestyle such as large lots or clustered development, ample views of wooded areas, open spaces, and river fronts, working farms and productive agricultural uses, and the protection of environmentally sensitive lands.

POLICY 27.1.1: Support the agricultural and rural character within Northeast Lee County by encouraging continued commercial agricultural operations and encourage new development to be clustered to conserve large areas of open lands.

POLICY 27.1.5: In all discretionary actions, consider the effect on Northeast Lee County's commercial agricultural operations and rural character.

POLICY 27.1.6: Coordinate planning activities in the Alva and North Olga Community Plan area boundaries to maintain and enhance the rural character, natural resources, agriculture, and connectivity of Northeast Lee County.

The Armeda Property proposes to preserve large open space areas and will retain the rural character by proposing clustered development with ample views of wooded areas, open spaces and river

fronts, while balancing the removal of agricultural grazing lands and the enhancement and protection of environmentally sensitive lands, water quality and connectivity. Portions of Trout Creek and its associated wetlands and flow-way bifurcate the property and will be preserved to the maximum extent possible. Minimal impacts limited to providing access to the northwestern development area will be mitigated with compensating storage. The onsite preserves along Trout Creek will provide further enhancements upstream of the Cary Duke Povia RPD and Owl Creek RPD preserves south of North River Road proximate to the Caloosahatchee River which implement and further the County's long-term goals of protecting groundwater and improving surface water management in northern Lee County. These enhancements will be conditioned as part of the concurrent planned development application, consistent with Goal 27, Objective 27.1 and Policies 27.1.1, 27.1.5 and 27.1.6. Removal of cattle grazing will significantly reduce onsite nutrient generation adjacent to the Trout Creek flow-way. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. Without the proposed map amendments, the site could be developed with 53 dwelling units without requiring open lands to be preserved.

OBJECTIVE 27.2: RURAL PLANNING TOOLBOX. To develop and further the use of a rural toolbox of incentives, programs, and regulations that enhance and maintain Northeast Lee County's sense of place and provide for the long-term preservation of large tracts of contiguous natural resource and open space areas, while providing the regulatory flexibility needed to support commercial agricultural operations.

Objective 27.2 and its attendant polices direct Lee County to work with Alva and North Olga to develop and use a rural planning toolbox of incentives, programs and regulations that enhance and maintain the sense of place and provide for long-term preservation of contiguous natural resource and open space areas. The Armeda Property will be required by conditions of approval within the concurrent planned development rezoning to provide long-term preservation areas placed into a conservation easement. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. Policy 123.2.17 was originally approved by Ordinance 22-25 to provide additional incentives within the North Olga Community Plan area that provided rural planning tools which would result in increased preservation areas and conservation easements. This Policy was then relocated to the current Policy by Ordinance 22-29 to allow the incentive to apply to Rural areas countywide. Approval of the proposed amendment will result in the preservation of natural assets such as facilitating the restoration and connection of portions of the Trout Creek Wildlife Corridors and flow-ways to adjacent preservation areas.

OBJECTIVE 27.3: NATURAL RESOURCES. To enhance, preserve and protect the physical integrity, ecological standards, and rural character of Northeast Lee County

by focusing on: water basins; native vegetation; wildlife habitat and resources; and areas designated for long-term conservation.

POLICY 27.3.2: Identify, maintain, and enhance appropriate public access to Northeast Lee County's public lands and surface waters, balanced with new and ongoing efforts to protect and enhance the community's water quality and natural resources.

Portions of Trout Creek and its associated wetlands and flow-way bifurcate the subject property and will be preserved to the maximum extent possible. These preserves will connect to the Cary Duke Povia RPD and Owl Creek RPD preserves south of North River Road proximate to the Caloosahatchee River. Although there are existing agricultural uses of cattle grazing on site, the concurrent planned development will contain conditions that require connection to public water and sewer and preserve large open space areas by proposing clustered development with ample views of wooded areas, open spaces and creek fronts, while balancing the removal of agricultural grazing lands and the enhancement and protection of environmentally sensitive lands, flow-ways and water resources. Removal of cattle grazing will significantly reduce onsite nutrient generation adjacent to the Trout Creek flow-way. Approval of the map amendments will result in the concurrent planned development conditions providing preservation and restoration of habitats in the form of rare and unique upland habitat and long-term conservation resulting in 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. The request is consistent with Objective 27.3 and Policy 27.3.2 by balancing efforts to protect and enhance the community's water quality.

OBJECTIVE 27.4: CONNECTIVITY. Enhance and maintain high levels of connectivity across the Northeast Lee County Planning Community.

POLICY 27.4.1: Work to preserve the rural character and scenic qualities of North River Road, and support multiple modes of travel for residents, businesses, visitors, and commercial agriculture within Northeast Lee County. Implementation of this policy will not impact the function or operation of agricultural lands within the Planning Community for the purposes of scenic preservation.

POLICY 27.4.2: Plan and implement alternatives to roadways (e.g., greenways, blueways, equestrian trails, and other pedestrian pathways) within Northeast Lee County connecting people to public lands, recreation areas, public facilities, and the rural mixed use villages.

POLICY 27.4.3: Proactively plan for wildlife connections within Northeast Lee County that support habitat needs of native animals on public lands and waters.

POLICY 27.4.4: Evaluate funding opportunities and feasibility of creating a multipurpose path to run the entire length of North River Road.

The requested map amendments will facilitate the concurrent planned development application which will include conditions requiring buffering and setbacks along North River Road. The onsite preservation areas will provide wildlife connection to portions of Trout Creek located on adjacent preservation lands on Babcock Ranch MPD that connect to Telegraph Creek and Bob Janes Preserves to the east as shown on Figure 2. A condition will be proposed for provision for payment in lieu of multi-use path along North River Road since it will be located along the south side. The request is consistent with Objective 27.4 and Policies 27.4.1, 27.4.2, 27.4.3 and 27.4.4.

GOAL 29: NORTH OLGA COMMUNITY PLAN. Promote and support the unique rural character, heritage, economy, quality of life, and natural resources in the North Olga Community Plan area.

OBJECTIVE 29.1: COMMUNITY CHARACTER. To establish comprehensive plan policies, land development regulations, and other planning and development tools to manage future community development in a manner that protects and enhances the rural character and aesthetic appearance of the North Olga Community Plan area, while supporting the continued viability of commercial agricultural businesses.

POLICY 29.1.1: Protect the community's rural aesthetic qualities, preserve the natural and historic resources, and support a diverse rural economy by promoting compact or clustered development areas that maintain large, contiguous tracts of open space, while supporting commercial agricultural businesses.

The requested amendments facilitate utilizing the planning and development tools in the form of incentives for the protection and enhancement of natural resources including wetlands, flow-ways and rareand unique upland habitat provided in Policy 123.2.17 which were originally established specifically for the North Olga Community Plan area. The concurrent planned development protects and enhances the rural character and aesthetic qualities of the area, preserves and enhances natural resources and promotes clustered development areas that preserves large, contiguous tracts of open space and preservation areas. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. Although there are existing agricultural uses

of cattle grazing on site, the Armeda Property proposes to preserve large open space areas by proposing clustered development as demonstrated in the concurrent planned development application, balancing efforts to protect and enhance the community's water quality. Removal of cattle grazing will significantly reduce onsite nutrient generation adjacent to the Trout Creek flow-way. The request will also remove the potential for up to 53 private septic tanks and wells on the site. The requested map amendments are consistent with Goal 29, Objective 29.1 and Policy 29.1.1.

> ***OBJECTIVE 29.2: RESIDENTIAL LAND USES. Protect and enhance the rural character of the North Olga Community by evaluating residential development proposals for consistency with the community's rural character and sense of community. Rural character is defined as those characteristics that convey the rural lifestyle such as: large lots or clustered development, ample view of wooded areas, open spaces, and river fronts, working farms, productive agricultural uses, and the protection of environmentally sensitive lands.***
>
> > ***POLICY 29.2.1: Proposed planned developments will be encouraged to provide a mix of unit types and flexible lot sizes to allow for clustering, affordability, preservation of open space, natural assets, and diversity of choice within the community.***
> >
> > ***POLICY 29.2.2: Proposed residential development adjacent to an existing large lot residential area or commercial agriculture business will provide appropriate separation, such as a minimum lot size of one unit per acre for lots abutting the perimeter of property line(s). For the purposes of this policy, large lot residential uses are defined as those residential uses with lot sizes equal to or greater than one acre.***
> >
> > ***POLICY 29.2.3: Encourage proposed planned developments to provide community gardens to allow for social, recreational and education activities for the residents of the planned development.***

The Armeda Property map amendments will facilitate the concurrent planned development resulting in a clustered development with ample views of wooded areas, open spaces and creek fronts and will allow for the enhancement of environmentally sensitive lands including the Trout Creek flow-way, wetlands and rare and unique upland habitat. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. The property development regulations will require a minimum perimeter setback of 50 feet adjacent to large lot residential, agricultural uses and North River Road and 30 feet for tracts/40 feet for principal structures abutting all other areas. Although single-family does not require buffers

for the uses surrounding the site, conditions will require preservation areas which will be supplemented if necessary to ensure minimum 30-foot Type “F” buffer containing 10 trees per 100 linear feet and a double-staggered hedge row are provided adjacent to large lot residential and agricultural uses which provides appropriate separation without providing one acre lot sizes. Community gardens are included in the schedule of uses for the concurrent planned development application. The request isconsistent with Objective 29.2 and Policies 29.2.1, 29.2.2 and 29.2.3.

OBJECTIVE 29.7: CONSERVATION. Preserve, protect, and, where possible, enhance the physical integrity, rural character, ecological values, and natural beauty of the North Olga Community Plan area, focusing upon the Caloosahatchee River, native vegetation, wildlife resources, and areas designated for long-term conservation.

POLICY 29.7.2: Encourage future development to maintain on-site native vegetation communities.

POLICY 29.7.3: Proposed planned developments will consider the incorporation of “Firewise” principles in site design, including building orientation, access management, landscaping type and placement. For the purposes of this policy, Firewise principles are those guidelines developed by the National Fire Protection Association to mitigate the risk of wildland fire to homes in the wildland/urban interface.

The site has been significantly impacted from decades of agricultural use. Approval of the map amendments facilitate the concurrent residential planned development which will include conditions requiring significant preservation and restoration of rare and unique uplands and wetland preservation and restoration. Removal of cattle grazing will significantly reduce onsite nutrient generation adjacent to the Trout Creek flow-way. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. The onsite preserves along Trout Creek will provide further enhancements upstream of the Cary Duke Povia RPD and Owl Creek RPD preserves south of North River Road proximate to the Caloosahatchee River which implement and further the County’s long-term goals of protecting groundwater and improving surface water management in northern Lee County. The request also removes the potential for up to 53 private septic tanks and wells. The property development regulations will require minimum 30-foot setbacks for indigenous plant communities subject to fire. The requested map amendments are consistent with Objective 29.7 and Policies 29.7.2 and 29.7.3.

Community Facilities and Services

OBJECTIVE 60.1: SURFACE WATER. Develop a surface water management program that is multi-objective in scope, geographically based on basin boundaries, and incorporates the requirements of applicable adopted Basin Management Action Plans.

POLICY 60.1.1: Require design of surface water management systems to protect or enhance the groundwater.

POLICY 60.1.2: Incorporate, utilize, and where practicable restore natural surface water flowways and associated habitats.

A surface water management system is proposed, which will provide water quality treatment before discharging into Trout Creek. Proposed Rural Future Land Use category, along with the concurrent planned development application, the applicant has included a stormwater narrative and hydrological report. These supporting documents outline the requirements of the South Florida Water Management District's new Water Quality Rules. Additionally, it is noted that Trout Creek is an impaired water body, and the system will be designed to ensure that, if the property is developed, effluent nutrient levels do not exceed those in the existing pre-development condition. Further, the companion rezoning application is to include conditions requiring significant preservation areas which will maintain the existing flow-ways and associated habitats to the maximum extent practicable. Additionally, compensating storage areas will be provided. Please refer to the submitted Characterization of Ground and Surface Water Resources Report. The requested map amendments are consistent with Objective 60.1 and Policies 60.1.1 and 60.1.2.

OBJECTIVE 60.4: INCORPORATION OF NATURAL SYSTEMS INTO THE SURFACE WATER MANAGEMENT SYSTEM: Incorporate natural systems into surface water management systems to improve water quality, air quality, water recharge/infiltration, water storage, wildlife habitat, recreational opportunities, and visual relief.

POLICY 60.4.2: The County encourages new developments to design their surface water management system to incorporate existing wetland systems

POLICY 60.4.3: The County encourages the preservation of existing natural flow-ways and the restoration of historic natural flow-ways

The proposed MCP incorporates preservation of portions of Trout Creek and associated floodway and wetlands to the maximum extent practicable.

The proposed amendment and companion RPD request demonstrate alignment with Lee County's Policies 60.4.2 and 60.4.3 by incorporating and enhancing existing portions of Trout Creek and associated floodway and wetland systems to the maximum extent possible. Compensating storage

areas are also proposed which, along with the preserved and restored rare and unique uplands, provides for wildlife habitat.

POLICY 61.1.6: When and where available, reuse water should be the first option for meeting irrigation needs of a development. Where reuse water is not available, surface water or low quality groundwater should be utilized for irrigation. All other potential water sources must be eliminated prior to selecting potable water as the sole source for meeting the irrigation needs of a development. New developments will coordinate with County staff regarding the source of irrigation water.

Please see attached Characterization of Ground and Surface Water Resources Report. Based on the Water Use Permit No. 36-07306-W for the historic citrus grove, the Sandstone Aquifer alone is capable of providing adequate irrigation supplies. However, to safeguard the Sandstone Aquifer, the Applicant proposes to conjunctively use surface water from the development's numerous stormwater wet-detention lakes. This approach prevents overuse of the Sandstone Aquifer and helps protect surrounding legal users that may also be utilizing the same aquifer for drinking water. The request is consistent with Policy 61.1.6.

<u>Conservation and Coastal Management</u>

POLICY 123.1.5: Encourage private restoration of natural habitats to support connectivity between public and private conservation and preservation efforts.

POLICY 123.2.4: Encourage the protection of viable tracts of sensitive or high-quality natural plant communities within developments.

POLICY 123.2.8: Promote the long-term maintenance of natural systems through such instruments as conservation easements, transfer of development rights, restrictive zoning, public acquisition, and appropriate other means.

POLICY 123.2.10: Require that development adjacent to aquatic and other nature preserves, wildlife refuges, and recreation areas be designed to protect the natural character and public investment in these areas.

POLICY 123.2.15: Protect Rare and Unique upland habitats from development impacts, to the maximum extent possible, through conservation and/or site design.

The site has been significantly impacted from decades of agricultural use. Approval of the map amendments facilitate the concurrent residential planned development which will include conditions requiring significant preservation and restoration of rare and unique uplands, and wetland preservation ad restoration. Due to the historical use of the site, much of the natural character has been lost. However, the proposed project aims to privately restore natural habitats under conditions

that support high-quality native plants and wildlife. With required, long-term maintenance of the natural systems, the site will contribute to conservation efforts that extend beyond the property boundaries.

Further, the companion zoning request conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. The onsite preservation areas will provide wildlife connection to portions of Trout Creek located on adjacent preservation lands on Babcock Ranch MPD that connect to Telegraph Creek and Bob Janes Preserves to the east as shown on Figure 2. The requested map amendments are consistent with Policies 123.1.5, 123.2.4, 123.2.8, 123.2.10, and 123.2.15.

POLICY 123.3.2: Participate in the development of a regional plan to identify and protect areas utilized by wildlife, including panthers and bears, so as to promote the continued viability and diversity of regional species.

The proposed request includes areas identified as protected preservation areas that are utilized by wildlife. Additionally, supporting documents such as the Protected Species Assessment and Hydrological Report outline the specific areas of the site that are characteristic of wildlife habitats and encourage restoring natural habitats through the proposed requests. Please refer to the Indigenous Habitat Management Plan which specifies connections between onsite preserves and adjacent preservation areas. The requested map amendments are consistent with Policy 123.3.2.

POLICY 123.2.17: As an incentive to preserve, enhance, and restore indigenous Rare and Unique upland habitat, on land within the Rural future land use category, one (1) additional dwelling unit may be created for each one (1) acre of created, preserved and/or restored indigenous Rare and Unique upland habitat if approved and developed as a unified Planned Development that meets all the following criteria:

1. ***Development must be a minimum of 10 acres.***
2. ***Development must have direct access to an arterial road.***
3. ***Development must provide connection to public water and sewer services.***
4. ***Development is clustered so as to maintain large, contiguous tracts of open space and protect environmentally sensitive areas. To comply with this criteria, a minimum of 60% open space is required, of which 50% must be indigenous preserve. The indigenous preserve may consist of created or restored wetlands, flowways/creeks, or Rare and Unique upland habitats. Management and monitoring of the indigenous preserve must be in compliance with the indigenous management plan required by the LDC. Monitoring timelines will be***

extended as needed to assure success criteria established in the indigenous management plan is achieved for at least five consecutive years.

5. ***Creation, preservation, and/or restoration of indigenous Rare and Unique upland habitats, as defined, must meet the following:***
   a. ***The area of the Rare and Unique upland habitats must comply with the minimum dimensions required for indigenous open space areas set forth in the LDC.***
   b. ***The land where creation and/or restoration of indigenous Rare and Unique upland habitats will occur must contain the soil(s) needed to support the establishment and success of the indigenous Rare and Unique upland habitats.***
   c. ***Habitats impacted by logging, drainage, and/or exotic infestation may not count towards the density incentive unless restored to standards established in an approved site-specific ecological restoration plan. The ecological restoration plan must include, at a minimum, a replanting plan, habitat restoration plan, success criteria, and long-term monitoring and maintenance criteria.***
   d. ***A Conservation Easement, to be dedicated to the appropriate maintenance entity that provides Lee County or some other public agency, acceptable to Lee County, with third party enforcement rights must be recorded for areas used towards the density incentive. All Conservation Easements required as part of the Planned Development must be recorded within 5 years from first development order approval.***

Approval of the requested map amendments will facilitate the concurrent clustered planned development application which will provide preservation and restoration of rare and unique uplands as incentivized by Policy 123.2.17. The subject property exceeds the minimum 10 acres, has direct access to North River Road which is an arterial roadway and will include conditions of approval requiring connection to public water and sewer as described throughout this report. Although only 50% or 168.49± acres of indigenous preserve would be required, conditions of approval will require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of preserved or restored wetlands, 8± acres of preserved surface waters, 180± acres of preserved or restored rare and unique upland habitat, and 34± acres of upland restoration. Conditions of approval will ensure that management and monitoring of the preserve will be provided consistent with this Policy and the LDC. Please see submitted Indigenous Habitat Management Plan. The proposed rare and unique uplands meet the minimum dimensions required for indigenous open space areas and contain soils needed to support establishment and success. The requested map amendments are consistent with Policy 123.2.7.

POLICY 123.4.1: Identify, inventory, and protect flora and fauna indicated as endangered, threatened, or species of special concern in the "Official Lists of Endangered and Potentially Endangered Fauna and Flora of Florida," Florida Fish and Wildlife Conservation Commission (FWC), as periodically updated.

As noted previously, the proposed request includes supporting documents such as a Protected Species Assessment and Indigenous Habitat Management Plan. These document outlines the species listed by either Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (FWS). Although a few species were observed during the time of survey, any relocation of listed species will be relocated as required by local, state, or federal requirements. Further, in addition to the site inspections, a search of the FWC species database revealed no additional known protected species within or immediately adjacent to the project limits.

POLICY 125.1.2: New development and additions to existing development must not degrade surface and ground water quality.

The requested map amendments will facilitate the concurrent residential planned development which will be conditioned to connect to potable water and sewer, eliminating the potential for 53 private wells and septic systems on the subject property and will require groundwater and surface water monitoring. Removal of cattle grazing will significantly reduce onsite nutrient generation adjacent to the Trout Creek flow-way. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. The subject property is shown in the 1-year, 5-year, and 10-year protection zones identified in Lee County's Wellfield Protection Ordinance as shown in Figure 5.. Water quality and groundwater recharge are essential to ensure adequate groundwater levels in this area which has residential and agricultural properties in the area that utilize private wells. Connecting to central water will provide less drawdown on the groundwater resources in this area of the county, which will help protect the County's wellfields and the private systems in the area. The Lee Plan contains numerous provisions intended to protect groundwater levels and quality, including, but not limited to, Goals 63 and 126, Objectives 63.2 and 126.1, and Policy 126.4. Additionally, the subject property is immediately adjacent to Trout Creek which flows south to the Caloosahatchee River. Placement of septic tanks in proximity to surface water bodies such as these has been shown to degrade water quality if not properly maintained. The Lee Plan contains numerous provisions intended to protect or enhance surface water quality. Incorporation of the Property into Map 4A and Map 4B removes potential impacts from up to 53 private wells and septic systems. The requested map amendments are consistent with Policy 125.1.2.

STATE COMPREHENSIVE PLAN CONSISTENCY

The Community Planning Act of 2011 (HB7207) removed the requirement to address consistency with the local comprehensive plan and state comprehensive plan, however, the proposed amendment is consistent with the State Comprehensive Land Use Plan's intent to ensure the protection of natural resources. Specifically, the amendment is consistent with the following guiding policies:

> ***187.201 (15) Land Use.***
> ***(a) Goal.—In recognition of the importance of preserving the natural resources and enhancing the quality of life of the state, development shall be directed to those areas which have in place, or have agreements to provide, the land and water resources, fiscal abilities, and service capacity to accommodate growth in an environmentally acceptable manner.***
> ***(b) Policies.—***
> 1. ***Promote state programs, investments, and development and redevelopment activities which encourage efficient development and occur in areas which will have the capacity to service new population and commerce.***
> 2. ***Develop a system of incentives and disincentives which encourages a separation of urban and rural land uses while protecting water supplies, resource development, and fish and wildlife habitats.***

The requested map amendments will facilitate the concurrent residential planned development request which will have or assure access to all required public facilities. Please see attached separate Public Facilities Impacts Analysis (Exhibit – M15) and Letters of Determination of the Adequacy/Provision of Existing/Proposed Support Facilities (Exhibit – M18). These exhibits demonstrate that there is adequate capacity to accommodate the requested additional 684 dwelling units, exceeding the current density of 53 dwelling units associated with this request. The requested map amendment will facilitate the concurrent residential planned development which will be conditioned to connect to potable water and sewer, eliminating the potential for 53 private wells and septic systems on the subject property and will require groundwater and surface water monitoring. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat.

> **187.201 (17) PUBLIC FACILITIES.—**
> **(a) Goal.—Florida shall protect the substantial investments in public facilities that already exist and shall plan for and finance new facilities to serve residents in a timely, orderly, and efficient manner.**
> **(b) Policies.—**

1. **Provide incentives for developing land in a way that maximizes the uses of existing public facilities.**
3. **Allocate the costs of new public facilities on the basis of the benefits received by existing and future residents.**

Adjacent development approvals for Owl Creek RPD and Cary Duke Povia RPD included privately funded utility expansion to the area, minimizing the public cost of services. The extension of services will provide service to residents concurrently with new development. The requested map amendments support the companion rezoning request which will utilize established incentives that result in a clustered community design with significant preservation areas on site.

REGIONAL POLICY PLAN CONSISTENCY

The proposed amendment is consistent with the Southwest Florida Regional Policy Plan (SWFRPP) as follows:

Water Resources

Goal 3: Water Management Districts and local governments must have programs based on scientific modeling to protect surface water, potable water wells, wellfields and contributing areas from contamination.

As discussed in detail on pages 9 and 10 of this report, through the companion zoning application submitted concurrently, the proposed Future Land Use Map amendment will be utilized to facilitate the overall request, with the proposed amendment, the zoning request will be conditioned to connect to potable water and sewer, eliminating the potential for 53 private wells and septic systems on the subject property and will require groundwater and surface water monitoring. Removal of cattle grazing will significantly reduce onsite nutrient generation adjacent to the Trout Creek flow-way. Conditions will also require 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat.

CONCLUSIONS

The plan amendment is consistent with and in furtherance of the intent of the Lee Plan as discussed in this analysis. The plan amendments for the Armeda Property represents an opportunity to incentivize the preservation of significant on-site natural resources such as natural waterways and adjacent wetlands, flow-ways, and rare and unique upland habitat on the property by facilitating a clustered planned development. The proposed plan amendment for the Armeda Property is consistent with and generally furthers the State Comprehensive Plan and Regional Policy Plan. For

these reasons, the applicant respectfully submits that the requested amendments to Lee Plan Map 1-A to change the FLU category from DR/GR to Rural and Wetlands, Lee Plan Map 4-A to include the property within the Lee County Utilities Future Water Service Areas, and Lee Plan Map 4-B to include the property within the Lee County Future Sewer Service Areas, and associated amendment to Table 1(b) should be approved.

CHARACTERIZATION OF GROUND AND SURFACE WATER RESOURCES

Armeda Residential Development

Lee County, Florida

November 2025

1953 aerial photograph, obtained from the University of Florida Digital Collection

CONTENTS

EXECUTIVE SUMMARY

The proposed Armeda Residential Development encompasses approximately 562 acres located north of State Highway 78 (North River Road) and about five miles east of Interstate 75 in Lee County, Florida. The property lies within the Northeast Lee County Density Reduction/Groundwater Resource (DR/GR) area and is currently zoned AG-2 (Agricultural). The project proposes to convert the site from predominantly agricultural use to residential development. Because of this land use change and the site's location within the DR/GR, an evaluation of groundwater and surface water resources is required, including measures to protect local water levels and maintain or improve water quality.

The property is situated north of the Caloosahatchee River within the Trout Creek watershed, identified as Water Body Identification (WBID) No. 3240G. The Trout Creek watershed encompasses approximately 16,273 acres, of which the project area represents roughly 3.5 percent. The Florida Department of Environmental Protection (FDEP) has classified Trout Creek as impaired for fecal coliform bacteria. According to FDEP's March 2010 Total Maximum Daily Load (TMDL) report, agricultural land uses account for about 41 percent of the watershed. Elevated fecal coliform concentrations are often associated with stormwater runoff from areas where livestock are present or have direct access to surface waters and tributaries. Additional sources may include birds, aquatic fauna, and other wildlife.

A significant hydrologic feature of the site is Trout Creek, which bisects the southeastern section of the property. The Armeda property generally drains toward this feature, with land surface elevations ranging from approximately 19 feet NAVD88 in the northwestern portion of the site (farthest from Trout Creek) to approximately 6 feet NAVD88 in the southeast, adjacent to Trout Creek. Trout Creek flows beneath North River Road to the south, where it ultimately discharges to the Caloosahatchee River.

A review of Florida Land Use and Cover Classification System (FLUCCS) data produced by the FDEP indicates that most of the property is classified as improved pasture and used for livestock grazing. The remainder of the property consists of freshwater marshes, wetland hardwoods and upland hardwoods, pursuant to the FLUCCS map submitted with the application. In addition, an approximately 25-acre parcel in the southeastern portion of the site has historically been used for citrus cultivation, which has since become fallow.

A single Sandstone Aquifer irrigation well supplied water to the citrus crops and is still authorized for use under Water Use Permit No. 36-07306-W, included as **Attachment 1**. Historical aerial imagery indicates that citrus cultivation has occurred onsite continuously since the early 1940s. In addition to citrus, row crop farming appears to have periodically taken place in the northeastern portion of the site. Please note that Water Use Permit No. 36-07306-W is proposed to be canceled upon approval of the Armeda residential development. The cancellation of this citrus irrigation permit will result in a groundwater savings of 23.52 million gallons (or 64,438 gallons per day) on an annual basis, which accounts for an offset of approximately 33 percent of the proposed landscape irrigation quantities.

According to Natural Resources Conservation Service (NRCS) data, the predominant soil type on the site, covering approximately 45 percent of the property, is Oldsmar sand, a fine-grained, poorly drained soil formed from sandy and loamy marine deposits. The seasonal high water table for this soil type typically occurs about 18 inches below the land surface, with local variations related to changes in surface elevation. Given the property's inclusion of Trout Creek, much of the southeastern portion of the site lies within Federal Emergency Management Agency (FEMA) Flood Zone A, and the Trout Creek stream channel itself is designated as a Regulatory Floodway.

The development proposes numerous stormwater lakes ranging in size from approximately 0.5 acres to 4.4 acres. In total, the stormwater lakes will occupy approximately 37 acres, or about 7 percent of the site. Proposed stormwater outfalls for the lakes will generally follow the existing land surface gradient toward Trout Creek, in accordance with Lee Plan Goal 60. The number of proposed stormwater lakes, i.e., wet detention areas, will increase overall recharge potential to the underlying aquifers and help improve water resource conditions within the DR/GR, consistent with Lee Plan Goal 27.3.

To provide further assurance that DR/GR water resources will be protected, the Applicant proposes collecting baseline surface water quality samples from Trout Creek near the point where it exits the property at North River Road. Samples are proposed to be analyzed for nutrients, a select group of metals, and fecal coliform bacteria. In addition, groundwater levels within the Sandstone Aquifer are proposed to be monitored daily at two locations, on the eastern and western sides of the property, prior to operation of the development's irrigation system. These monitor wells will help ensure that existing groundwater conditions are maintained and that adjacent legal users are protected. The Applicant proposes to initiate both surface water quality and groundwater level monitoring following construction completion of the stormwater management system and to continue collecting data during both wet and dry seasons (semiannually) for a period of five years. These efforts demonstrate the project's consistency with Lee Plan Goal 27.

Following completion of the stormwater lakes, the development's landscape irrigation system will be installed and proposed to be supplied primarily by captured stormwater, with seasonal augmentation from groundwater withdrawn from the Sandstone Aquifer. Irrigation volumes will be regulated by the South Florida Water Management District (SFWMD) and managed through a central control system that prevents individual residents from modifying irrigation scheduling or duration. The use of surface water from the stormwater management lakes will substantially reduce groundwater demand during periods of adequate rainfall (i.e., post–rainy season) and is expected to help maintain surface water quality while preserving natural surface water flow gradients, consistent with the goals and policies of the Lee Plan. All irrigation quantities (ground and surface water) are proposed to be metered.

1.0 INTRODUCTION

As shown in **Figure 1**, the subject property is located in the northeastern section of Lee County, north of the Caloosahatchee River, and occupies nearly all of the Northeast Lee County DR/GR designated area. This portion of the DR/GR is unique in that it encompasses only about one square mile and is completely isolated from the much larger Southeast Lee County DR/GR. Despite its isolation, the

conceptual site plan must still demonstrate increased protection of, and potential enhancement to, existing water resource conditions.

Consistent with existing drainage patterns, the proposed residential development's stormwater runoff is proposed to be routed toward Trout Creek and eventually to the Caloosahatchee River, in accordance with Lee Plan Policy 61.1.4. As shown in **Figure 2**, the development's design incorporates multiple stormwater lakes that are intended to mimic the existing flow directions and gradients of both stormwater runoff and groundwater, in accordance with Lee County Land Development Code (LDC) Section 34-373(b)(1).

In addition, the development's large open spaces and preservation of natural wetland features along Trout Creek help integrate the project with the surrounding rural landscape, as required by Lee Plan Policy 27.4.1. The site plan's preservation areas also serve to protect native plant communities and hydrologic features associated with Trout Creek. Collectively, the stormwater management design and preserve areas help maintain the existing seasonal range in water table elevations, consistent with Lee Plan Policy 126.1.4.

2.0 PROPERTY SETTING

In its predevelopment state, the subject property was predominantly characterized by open rangeland interspersed with remnant pine flatwoods and intermittent drainage tributaries bordered by shallow freshwater wetlands, as shown in the 1940s aerial image provided as **Figure 3**. However, similar to other properties in northern Lee County, agricultural operations on the Armeda property had already begun and were initially comprised of citrus cultivation. These and other farming activities necessitated the construction of drainage ditches that altered the naturally occurring surface water flow patterns and lowered shallow groundwater levels. By 1953, farming activities had expanded, and additional areas of the property were converted to improved pasture, as shown in **Figure 4**.

As farming expanded, so did the drainage features on the site, as evidenced by the grid-like pattern of parallel farm ditches in the northeastern and southwestern portions of the property, visible in LiDAR imagery, included as **Figure 5**. Enhanced drainage of agricultural areas in South Florida is common practice, as it expedites the removal of excess stormwater and enables cultivation of crops that are vulnerable to oversaturated soils. Improved drainage also promotes the growth of pasture grasses, which can outcompete native plant species. Cattle grazing further contributes to this gradual transition in vegetation composition. All of these factors modified and eventually degraded the historic hydrology of the site.

Farm-field drainage ditches associated with agricultural activities also reduce water table elevations and subsequently lower recharge potential to the underlying aquifers. Depending on ditch configuration and maintenance, they can also produce adverse impacts on nearby environmental features (e.g., wetlands) by redirecting runoff and shortening hydroperiods. These types of hydrologic alterations, combined with decades of cattle grazing, favor the establishment of exotic and nuisance plant species, which further degrade natural flow regimes and surface water quality.

The FEMA National Flood Hazard Map indicates that a small portion of the southeastern section of the Armeda property lies within Flood Zone X (0.2 percent annual chance of flooding). Larger areas are designated as Flood Zone AE (1 percent annual chance of flooding), and areas along the Trout Creek stream channel are classified as a Regulatory Floodway, as shown in **Figure 6**. Due to the availability of surface water, these same areas have been frequented by cattle, further increasing fecal coliform loading. The resulting site conditions, evident in recent (2025) aerial imagery provided as **Figure 7**, contrast sharply with the earlier aerial imagery from the 1940s and 1953.

A review of FLUCCS data produced by the FDEP, illustrated in **Figure 8**, indicates that most of the property is classified as improved pasture and used for livestock grazing. The remainder of the property consists of freshwater marshes, wetland hardwoods and upland hardwoods. In addition, an approximately 25-acre parcel in the southeastern portion of the site has historically been used for citrus cultivation.

3.0 PROPOSED IRRIGATION SUPPLIES

Three principal aquifer systems underlie the subject property: (1) the unconfined Water Table Aquifer, (2) the confined Intermediate Aquifer System (IAS), which includes the Sandstone, Mid-Hawthorn, and Lower Hawthorn Aquifers, and (3) the confined Upper Floridan Aquifer System (UFAS). In northeast Lee County, groundwater quality declines rapidly with depth, and suitable water supplies are generally found at depths no greater than 300 feet below land surface (bls). At greater depths, groundwater becomes highly mineralized, saline, and typically artesian. Consequently, groundwater withdrawals for irrigation are generally limited to depths shallower than 300 feet bls, excluding the lower IAS and UFAS as viable irrigation sources.

Suitable water quality for agricultural or residential irrigation is available from both the Water Table Aquifer and the Sandstone Aquifer. Based on Water Use Permit No. 36-07306-W for the historic citrus grove, shown in **Figure 9**, the Sandstone Aquifer alone is capable of providing adequate irrigation supplies. However, to safeguard the Sandstone Aquifer, the Applicant proposes conjunctive use of surface water from the development's numerous stormwater wet-detention lakes. This approach prevents overuse of the Sandstone Aquifer and helps protect surrounding legal users who may also utilize the same aquifer for drinking water.

The Sandstone Aquifer underlies the Water Table Aquifer and is comprised predominantly of clastic sediments, including sandy limestone, cemented sands (sandstone), sandy dolomite, and calcareous sands. Due to the occurrence of low-permeability sediments separating the Sandstone Aquifer from the overlying Water Table Aquifer, the potential for groundwater withdrawals from the Sandstone Aquifer to cause adverse drawdown in the Water Table Aquifer is considered remote. The proposed Sandstone Aquifer irrigation wells are intentionally located away from the property boundary to prevent potential interference with existing legal users.

To quantify irrigation demands for the Armeda development, the Blaney-Criddle Irrigation Allocation Calculator, developed by the SFWMD, was used to determine both annual and maximum month (dry season) demands for approximately 55.68 acres of turfgrass. In accordance with Lee Plan Policy

28.5.5, Florida Friendly landscaping will be implemented to the greatest extent practicable to reduce overall irrigation requirements.

As shown in **Attachment 2**, the modified Blaney-Criddle–derived annual and maximum month allocations are estimated at 71.51 million gallons per year (approximately 195,920 gallons per day) and 9.61 million gallons per month (approximately 310,000 gallons per day), respectively. To meet irrigation demands while minimizing impacts on groundwater systems, the development will utilize seven of the proposed stormwater lakes as primary irrigation sources. Groundwater from the Sandstone Aquifer will serve only as a backup supply for lake augmentation during the dry season. As shown on **Figure 10**, seven surface water irrigation pumps are proposed, each paired with a backup Sandstone Aquifer well for residential irrigation.

Irrigation volumes will be regulated by a centrally controlled system, preventing individual residents from modifying the timing or duration of irrigation events. The use of surface water from the stormwater lakes significantly reduces groundwater withdrawals when adequate water supplies are available (i.e., post–rainy season) and is anticipated to help maintain existing groundwater levels both on and off the property. Maintaining the site's hydrologic characteristics while conserving water resources is consistent with Lee Plan goals and policies. Coupled with the proposed management practices, this approach provides a proactive framework to safeguard and enhance water resource protection.

4.0 GROUNDWATER FLOW MODELING FOR THE MAXIMUM MONTH IRRIGATION ALLOCATION

To demonstrate that the proposed use of the Sandstone Aquifer for supplemental irrigation will not cause adverse impacts to surrounding existing legal users, a single-layer groundwater flow model representing the Sandstone Aquifer was developed using AquiferWin32 to evaluate potential drawdown impacts resulting from the proposed maximum monthly groundwater withdrawals.

The analytical groundwater modeling scenario includes a single stress period, representing transient/future hydrologic conditions, and was run for 90 days with no recharge to simulate the maximum monthly irrigation allocation for the three driest months of the year (March, April, and May). The Hantush and Jacob (1955) leaky aquifer solution was applied in this modeling scenario.

The results of the 90-day maximum monthly modeling scenario for the Sandstone Aquifer are shown in Figure 11. The greatest predicted drawdown associated with the requested maximum monthly allocation is approximately 1.1 feet, occurring within the property boundary at the proposed well nodes. As also shown in **Figure 11**, no drawdown greater than 1.0 foot is predicted outside the project boundary. Therefore, the potential for harm to existing legal users as a result of the requested allocation is considered de minimis.

To further protect existing legal users, a groundwater monitoring plan is proposed, including two dedicated Sandstone Aquifer monitor wells, as shown in **Figure 12**.

5.0 ENHANCED LAKE MANAGEMENT PRACTICES

In order to protect water resources, the following management practices are proposed for the Armeda residential development's stormwater lakes. It is important to note that, as the Armeda

residential development evolves, the Best Management Practices (BMPs) proposed to protect water resources must also evolve. The following management actions provide a framework of ground and surface water protection measures that will not only safeguard but help to sustain water resource conditions. Please note that no motorized boats will be allowed on any of the project's stormwater management lakes.

5.1 WATER RESOURCES BEST MANAGEMENT PRACTICES

As the project progresses from predominately a "construction phase" to "partial construction" and then ultimately to a "post-construction" phase, the BMPs must change to sustain the water resource protection measures. Construction of the proposed stormwater management system will occur relatively quickly. However, it is important that proper management practices be maintained to safeguard the water resources through the long-term operational phase.

5.1.1 CONSTRUCTION PHASE BMPS

During construction of the proposed stormwater management system, the greatest potential for impacts is associated with increased turbidity and/or potential spills of fuels/oils (hydrocarbons), otherwise known as Volatile Organic Compounds (VOCs), used to power earthmoving equipment, etc. Specific BMPs associated with the construction phase are provided below. The Developer will be responsible for maintaining compliance with all the Enhanced Lake Management BMPs in perpetuity.

Specific Construction Phase BMPs

1. The site's general contractor shall be responsible for assuring that each contractor or subcontractor evaluates the work area before construction is started to determine if site conditions may pose problems for the safe and secure handling of any regulated substances.
2. If any regulated substances are stored on the construction site during the construction process, they shall be stored in a location and manner which will minimize any possible risk of release to the environment. There will be no intention to use, handle, produce or store any regulated substances in violation of the Lee County Land Development Code Section 14-477 [Stormwater Pollution Prevention Plan (SWP3) criteria. Strict compliance is mandatory.
3. Each contractor/subcontractor shall familiarize themselves with the manufacturer's safety data sheet supplied with each material containing a regulated substance and shall be familiar with procedures required to contain and clean up any releases of the regulated substance. Any tools or equipment necessary to accomplish the same shall be available in case of an accidental release.
4. In the event of a spill of a regulated substance, the contractor/subcontractor will immediately notify the Developer, who will in turn notify the Lee County Division of Natural Resources at (239) 533-8811 and the FDEP South District Office at (239) 344-5600.
5. Upon completion of construction, all unused quantities of regulated substances and their containment systems shall be completely removed from the construction site.
6. Proper turbidity abatement measures, as required by the SFWMD, the Florida Stormwater Sedimentation Control Inspector's Manual standards, and the FDEP National Pollutant

Discharge Elimination System (NPDES) permit criteria will be maintained while construction is ongoing or until adequate vegetation or other stabilization measures have been established.

5.1.2 POST-CONSTRUCTION PHASE BMPS

After the Lee County Certificate of Compliance or the SFWMD Stormwater Management System Certification is completed, the primary focus of the Enhanced Lake Management BMPs will be to maintain the stormwater management system lakes, since all runoff will be routed to these features for treatment. It is also anticipated that the Developer will establish an entity that will be responsible for the maintenance of all aspects of the stormwater management system, including the lake and associated stormwater system conveyance and control components, in perpetuity. At a minimum, the operation and maintenance of all stormwater management systems and water quality testing will require compliance with the terms and conditions contained herein.

5.2 LAKE MAINTENANCE

Proper maintenance of stormwater wet detention areas is essential in Florida to ensure long-term water quality protection and flood control. These systems are designed to capture and treat runoff by allowing suspended solids, nutrients, and other pollutants to settle before the water is discharged downstream. Without regular upkeep, such as managing vegetation, removing accumulated sediment, and maintaining control structures, detention ponds can lose storage capacity and treatment efficiency, leading to degraded water quality and increased flood risk. Routine maintenance of these areas helps preserve the ecological function of these systems and supports compliance with state and local water management regulations.

5.2.1 GENERAL PROVISIONS

The proposed residential development wet detention lakes will not be constructed to a depth greater than 20 feet below the lake's normal pool water level. Proper lake maintenance is an integral aspect of the BMPs since stormwater runoff is directed to this feature for treatment and attenuation. The proposed stormwater management lakes will be excavated near to the upper contact of the Water Table Aquifer. As an added protection to underlying groundwater resources, the excavation of the stormwater lakes will not penetrate underlying clays or limestone, whichever is encountered first. Several stormwater management system lakes are proposed for water quality sampling four times per year

Surface water irrigation pump stations are proposed to "re-pump" groundwater supplies and detained stormwater (surface water) for the irrigation of the development. The recycling of surface water quantities is expected to help maintain water quality in the lakes. The stormwater lakes must be maintained in perpetuity and the following management actions are proposed. Specific post-construction BMPs are provided below.

5.2.2 STORMWATER LAKE DEPTH

As shown in **Figure 2**, there are several stormwater detention lakes, all of which are proposed to be deeper than 12 feet in depth. In accordance with Lee County Land Development Code Section 10-329(d)(3), these lakes are therefore designated as "deep lakes" and are subject to specific criteria.

Based on Lee County Code, the proposed deep lakes will satisfy the following criteria:

1. The stormwater detention deep lakes will not exceed a maximum water depth of 20 feet and will not penetrate any continuous impervious layer of soil or rock.
2. A destratification (i.e., aeration) system will be installed in any lake that exceeds a 12-foot water depth. Documentation that the proposed destratification system is adequately sized and designed for each lake deeper than 12 feet will be submitted to Lee County for approval. An example of a deep lake aeration device is provided as **Attachment 3**.
3. Native shade trees, meeting the specifications of Lee County Land Development Code Section 10-420 will be planted around each deep lake perimeter, at approximately one tree per 100 feet of lake shoreline measured at the detention lake's water level control elevation. Trees and other plants may be grouped or clustered together around the lake perimeter.
4. The deep lake management techniques, including operation of the destratification system, will be maintained for the life of the lake and will be recorded in the development's covenants in accordance with the County Attorney's office.
5. A post-construction bathymetric survey verifying each deep lake's finished water depth, sealed by a professional surveyor and mapper, will be submitted to Lee County for approval.

5.2.3 NUISANCE AND EXOTIC VEGETATION CONTROL

The controlling entity will be responsible for the removal (in perpetuity) of all nuisance and exotic vegetation from the stormwater management system as defined by the Lee County Land Development Code.

5.2.4 NUISANCE AND EXOTIC VEGETATION CONTROL BMPS

The stormwater lakes must be inspected annually, and any prohibited vegetation must be removed by the use of hand-clearing or appropriate chemical treatment. Only aquatic-approved compounds may be utilized in the stormwater management system lake. Herbicides and/or algaecides may only be applied by a licensed professional applicator who meets the requirements of Lee County, and in accordance with manufacturer specifications. All applicable local, state and/or federal guidelines and requirements will also be followed.

5.2.5 LITTORAL VEGETATION PRESERVATION

Littoral zone vegetation is required to be installed and maintained. The littoral zone provides habitat for wading birds, fish and aquatic invertebrates. Littoral vegetation also helps stabilize the lake shoreline and helps prevent erosion.

5.2.6 LITTORAL VEGETATION PRESERVATION BMPS

Littoral plants that die will be replaced in accordance with Lee County Land Development Code requirements. The presence of littoral plants in the lake is desirable and may also help to improve the water quality. The spread of littoral plants will be encouraged throughout the designated littoral areas. Mechanical trimming, mowing or the use of land-based herbicides on desirable littoral plants is prohibited. Any trimming or removal of vegetation required to promote the survival and viability of littoral vegetation will be performed by hand or by approved aquatic herbicides and methods.

5.2.7 FERTILIZER APPLICATION

Strict adherence will be maintained with Lee County's Fertilizer Ordinance No. 08-08. Any person(s) applying fertilizers must have received a limited certification in compliance with Florida Statute (F.S.) 482.1562 prior to application of any and all fertilizers. Additionally, fertilizer content and application rate(s) must be in compliance with Lee County's Fertilizer Ordinance. In addition, guidelines of the Golf Course Superintendents Association of America (GCSAA) and the regarding fertilization BMPs will be followed.

5.2.8 FERTILIZER APPLICATION BMPS

All professional landscape businesses must register with Lee County prior to performing landscape fertilization services within unincorporated Lee County. At least one (1) employee of a firm employed to perform landscape fertilization services must be a Certified Professional Landscaper. Proof of completion of a Lee County-approved BMP training program must be provided to the Division of Lee County Natural Resources. At least one (1) BMP-trained employee must be onsite while fertilizers are applied. A registration decal provided by the division must be displayed on all company vehicles.

5.3 EROSION PROTECTION AND LAKE BANK MAINTENANCE

Lake banks are generally susceptible to erosion due to overland flow of stormwater runoff, wave action, and the natural seasonal fluctuation of water levels. Accordingly, lake banks are designed to minimize this potential for erosion.

5.3.1 EROSION PROTECTION AND LAKE BANK BMPS

Lake banks will be inspected annually to identify areas of erosion. Once identified, the erosion will be repaired and the source of erosion shall be eliminated, if possible. Where excessive erosion occurs, repair of the lake banks and/or enhancement of stabilization measures may be necessary.

5.4 PESTICIDE, HERBICIDE AND/OR FUNGICIDE APPLICATIONS

All applications of pesticides, herbicides, algaecides and/or fungicides shall be applied by a licensed professional applicator, meet the requirements of Lee County, be applied in accordance with the manufacturer's specifications, and shall meet all applicable local, state and/or federal guidelines and requirements. Only approved aquatic herbicides may be used to treat the stormwater management system. The following BMPs are part of an Integrated Pest, Disease, and Herbicide Program.

5.4.1 INTEGRATED PESTICIDE, HERBICIDE, ALGAECIDE OR FUNGICIDE APPLICATION BMPS

The application of pesticides, herbicides and/or fungicides will only be performed by certified contractors. The use of any chemical product in a manner that will allow airborne or waterborne entry of such products into the surface water management system is prohibited. This requirement shall not apply to the chemical agents used by certified lake management specialists for the control of algae and nuisance vegetation within the stormwater management system lakes. However, application of such agents shall be in compliance with the requirements of Lee County, applied in accordance with the manufacturer's specifications, and meet all applicable local, state and/or federal guidelines and requirements. Pesticides, fungicides, and herbicides will be used only in response to a specific problem and in the manner and amount recommended by the manufacturer.

Broad application of pesticides, fungicides and herbicides as a preventative measure is strongly discouraged.

5.4.2 OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM

The Homeowners Association (HOA) and/or Community Development District (CDD) will be responsible for the perpetual removal of all nuisance and exotic vegetation from the stormwater management system, in accordance with Lee Plan Policy 61.3.6. Lakes will be inspected annually, and any prohibited vegetation will be removed using hand-clearing or appropriate chemical treatment. Only aquatic-approved compounds will be utilized in the stormwater management system lakes. Herbicides and algaecides will be applied exclusively by a licensed professional applicator in compliance with Lee County requirements and the manufacturer's specifications. All applicable local, state, and federal guidelines will also be followed.

Strict adherence to Lee County's Fertilizer Ordinance will be maintained for all irrigated areas. Individual lot owners will be prohibited from applying fertilizer. Anyone applying fertilizer must possess a limited certification in compliance with Florida Statute 482.1562 prior to application. Fertilizer content and application rates must comply with the Lee County Fertilizer Ordinance. Frequent water quality testing is proposed to verify that nutrient levels do not exceed state standards.

All applications of pesticides, herbicides, and fungicides on residential lots and common areas will be performed by a licensed professional applicator, in accordance with Lee County requirements, manufacturer specifications, and all applicable local, state, and federal guidelines. These compounds will be applied only in response to a specific problem and in the recommended manner and amount. Broad, preventative application of pesticides, herbicides, or fungicides on residential lots will be prohibited.

5.5 WELLFIELD PROTECTION

As shown in Lee Plan Map 4-C (depicting iso-travel times of 6-months, 1 year, 5-years and 10-years), there are proposed public supply wells located immediately south of the Armeda Property along North River Road which are part of the North Lee County Public Supply Wellfield.

A review of the Water Use Permit, No. 36-00152-W, for this facility indicates that in February 2024, these proposed production wells were relocated to the east on land owned by Lee County near the Telegraph Creek Preserve. The proposed production wells are to be constructed into the Lower Hawthorn Aquifer which is separated from the Sandstone Aquifer by hundreds of feet of confining unit sediments. A copy of the Water Use Permit Modification is provided as **Attachment 4**. Therefore, based on the recent permit modification, there are no wellfield protection zones south the proposed development, and Lee Plan Map 4-C should be updated.

6.0 SURFACE WATER AND GROUNDWATER MONITORING

6.1 GENERAL DATA QUALITY OBJECTIVES

All surface water quality samples will be collected in accordance with Chapter 62-160, Florida Administrative Code (F.A.C.), and the FDEP's Standard Operating Procedures (SOPs) DEP-SOP-

001/01 FQ 100 Field Quality Control Requirements. Surface water quality sampling will be performed four (4) times per year (March, June, September, and December). Groundwater levels will be recorded by a dedicated data logger and referenced to a surveyed elevation (NAVD88).

6.2 SURFACE WATER MONITORING GOALS

The purpose of the surface water monitoring program is to assure stormwater discharges from the subject property meet all applicable requirements of the SFWMD Environmental Resource Permit (ERP) program authorized pursuant to Part IV of Chapter 373, F.S. and all applicable requirements of Chapter 62-302, F.A.C., Surface Water Quality Standards, before discharging surface water from the stormwater management system.

Additionally, monitoring the lakes will verify the efficacy of the BMP's described above and ensure the lake's overall health. Please note that if there is no flow observed from the stormwater management system lake outfalls at the time of sample collection, the "no -flow" condition will be noted, and no surface water sample will be taken. If flow has occurred in the last 30 days, a sample shall be collected just upstream of the control structure to represent the discharged water.

6.3 SURFACE WATER QUALITY MONITORING

As shown in **Figure 13** four (4) lakes are proposed for water quality after construction completion in addition to the Trout Creek location chosen for the baseline sample. All surface water sampling locations shown on **Figure 13** (SW-1 through SW-5) will then be sampled four times per year (March, June, September, and December) in accordance with Chapter 62-160, F.A.C. Surface water quality grab samples will be collected per FDEP SOP protocol and analyzed by a National Environmental Laboratories Accreditation Conference (NELAC/TNI)-certified laboratory. The surface water quality parameters to be tested, as well as the laboratory's Accuracy, Precision, and Minimum Method Detection Limit (MDL), are summarized in **Table 1**. Please note that the Practical Quantitation Limit (PQL) for each parameter varies between laboratories; however, the PQL typically equates to four times the MDL.

Field Parameters – Depth of Water, Dissolved Oxygen (DO), pH, Temperature, Specific Conductance, and Turbidity

Lab Parameters – Total Kjeldahl Nitrogen (TKN), Nitrate, Orthophosphate, Chloride, Copper, Zinc, Lead, Biological Oxygen Demand, and Hardness

Quarterly surface water quality monitoring shall be continued for a minimum of five (5) years after operational completion of the stormwater management system. After five (5) consecutive years of testing, a request for modification in the monitoring requirements may be proposed to the Lee County Natural Resources Department if it can be demonstrated that surface water quality is being maintained within applicable State standards. All surface water quality data will be supplied to Lee County as described below.

6.4 GROUNDWATER LEVEL MONITORING

Groundwater level monitoring is a critical component of resource management in the DR/GR, particularly for verifying the protection of the Sandstone Aquifer. As a key source of potable and

irrigation water within the region, the Sandstone Aquifer must be safeguarded against over-withdrawal and potential degradation. Monitoring groundwater levels allows for the detection of trends in aquifer groundwater levels to evaluate potential constraints on withdrawals. Groundwater level monitoring will be added to the request for the new Water Use Permit necessary to operate the proposed lawn and landscape irrigation system.

6.5 GROUNDWATER MONITORING GOALS

The Sandstone Aquifer will be monitored via two (2) monitor wells (MW-1 and MW-2) as shown on **Figure 12.** The two (2) monitor wells are proposed to record daily water levels through the use of a transducer, which will be downloaded and reported monthly. All water level data will be supplied to Lee County as described below.

6.6 WATER QUALITY AND WATER LEVEL DATA REPORTING AND ANALYSIS

Surface and groundwater data will be submitted to Lee County Natural Resources Department staff in an approved electronic format within 30 days of receiving the water quality results from the contract laboratory. The submittal will include all field notes and field and laboratory water quality results, as well as all previously collected water quality data (i.e. the period of record). The submittals will also include a brief narrative on the most recent sample collection, sample chain of custody, descriptions of any re-testing of erroneous values, and any water quality exceedances. Water levels will be provided in tabular and graphical forms.

By April 1 of each year, a Water Resource Summary Report for the preceding calendar year shall be supplied to Lee County Natural Resources staff that summarizes the surface and groundwater monitoring results for the Armeda residential development. The results will include a summary table that lists all the field and laboratory parameters for surface water, consistent with requirements of F.A.C. 62-160. Laboratory parameter concentrations that fall below the PQL for that parameter will be reported with no value; however, a value qualifier of “I” (between the MDL and PQL) or “U” (below the MDL) will be included in the summary table.

All water quality data for the analytes listed in **Table 1** that are detected in concentrations above the laboratory PQL will be reviewed, graphed and statistically analyzed for trends and exceedances above two (2) standard deviations of the mean of all values above the MDL. Any reported concentrations above the MDL will be clearly identified as well as remedial actions that were used to timely reduce that particular analyte’s concentration. Details regarding remedial actions are provided in the Remedial Actions Section (**Section 7**).

7.0 REMEDIAL ACTIONS

In the unforeseen event that any significant surface water impacts (as defined below) are identified as a result of a hydrocarbon spill or pesticide/herbicide application at the property, the Developer or designee will notify the Director of the Natural Resources Division within no more than 12 hours (or next business day). If a spill or release “presents an immediate threat to human health and/or the environment,” the FDEP Office of Emergency Response (OER) will be contacted within 24 hours.

Guidance outlining the definition of a release as well as reporting procedures is presented in the OER web page located at:

https://floridadep.gov/dle/oer/content/reportable-incident

The Developer or their successor(s) will coordinate contamination assessment and remediation efforts with Lee County and will comply with applicable local, state and federal permitting requirements. The initial phase of the remediation may consist of additional temporary monitor wells installed for short-term temporal monitoring of potential subsurface impacts and to evaluate the horizontal and vertical distribution of the impacted area. Based on the findings of the initial phase, if necessary, a comprehensive assessment may be required.

8.0 CONCLUSIONS

Proper maintenance of stormwater detention areas is critical in southwest Florida due to the state's high rainfall, flat topography, and naturally high groundwater levels. Detention areas are designed to capture and temporarily store stormwater runoff, allowing sediments and pollutants to settle before water is released to downstream systems or aquifers. Regular inspection, sediment removal, and vegetation management ensure that these systems continue to function effectively, preventing flooding, minimizing nutrient and contaminant loading to surface waters, and protecting both aquatic ecosystems and potable groundwater resources.

In addition, well-maintained stormwater facilities help sustain natural hydrologic patterns, support the recharge of underlying aquifers such as the Sandstone Aquifer, and ensure compliance with local, state, and federal water quality regulations, including the Lee County Comprehensive Plan and relevant FDEP and SFWMD requirements.

Table 1 - Surface Water Quality Analytes and Proposed Schedule for Sampling

Field Parameters					
Parameter	Units	Precision (%RPD)	Accuracy (%Recovery)	MDL	Sampling Frequency
Depth of Water	Feet	0.01	NA	NA	Semiannually
Dissolved Oxygen	mg/L	FT 1000-1	FT 1000-1	NA	Semiannually
pH	SU	FT 1000-1	FT 1000-1	NA	Semiannually
Temperature	Deg C	FT 1000-1	FT 1000-1	NA	Semiannually
Specific Conductance	µS/cm	FT 1000-1	FT 1000-1	NA	Semiannually
Turbidity	NTU	FT 1000-1	FT 1000-1	NA	Semiannually
Laboratory Parameters					
Total Kjeldahl Nitrogen	mg/L	*10	90-110	0.05	Semiannually
Orthophosphate	mg/L	*10	85-115	0.002	Semiannually
Chloride	mg/L	*5	90-110	0.353	Semiannually
Nitrate	mg/L	*5	90-110	0.02	Semiannually
Copper	ug/L	*10	70-130	0.346	Semiannually
Zinc	mg/L	*10	70-130	0.0014	Semiannually
Lead	ug/L	*10	70-130	0.67	Semiannually
Biological Oxygen Demand	mg/L	*28	84.6-115	1	Semiannually
Hardness	mg/L	*5	90-110	NA	Semiannually

*Value represents percent (%) relative standard deviation (RSD).

**All values within the table above were supplied by Benchmark Enviroanalytical Laboratory and are specific to the water quality laboratory that performs the analyses.

FIGURES

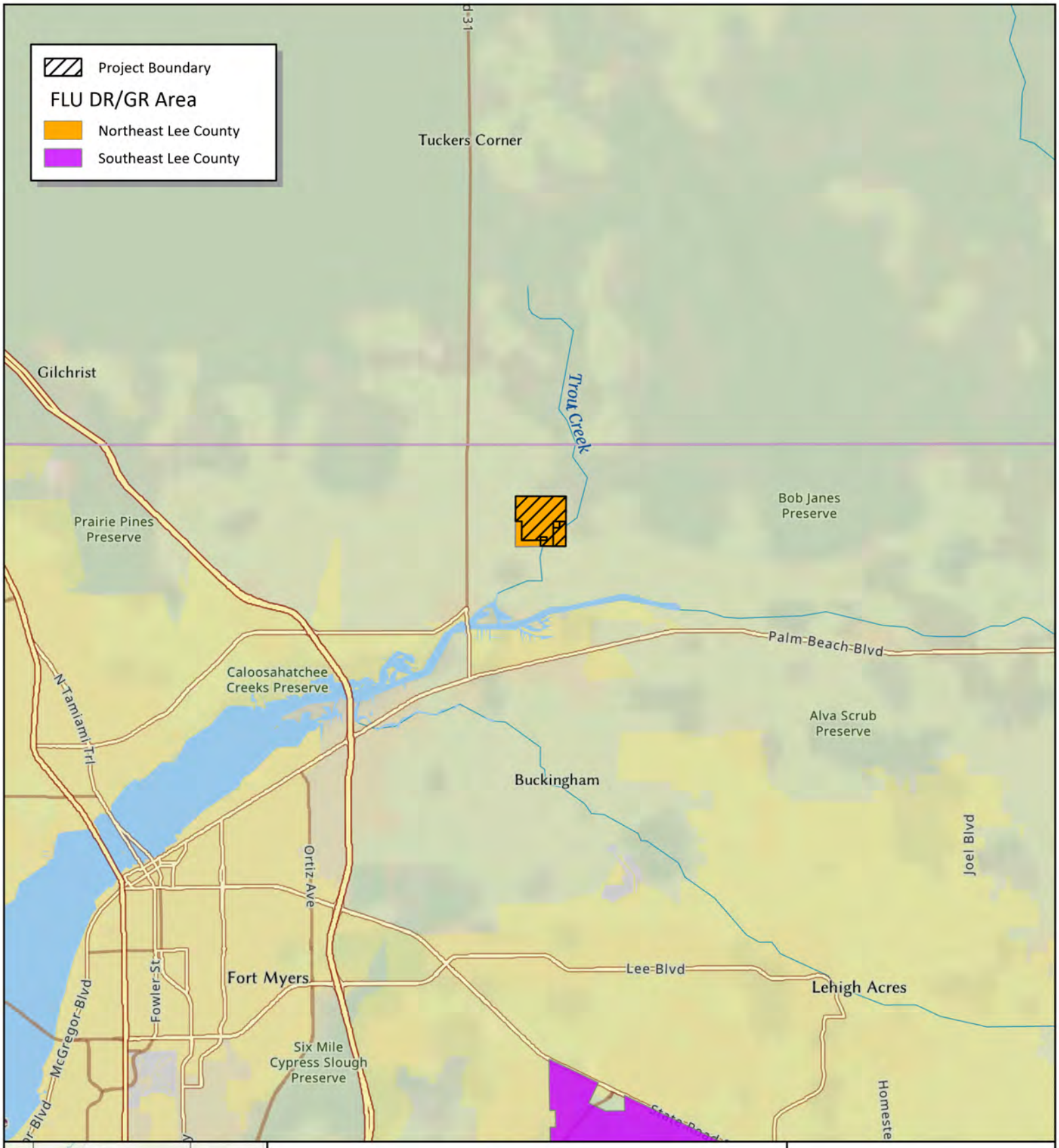


Figure 1
General Location
Armeda
Lee County, Florida

N

0 0.75 1.5 3 Mi

Scale: 1:165,000

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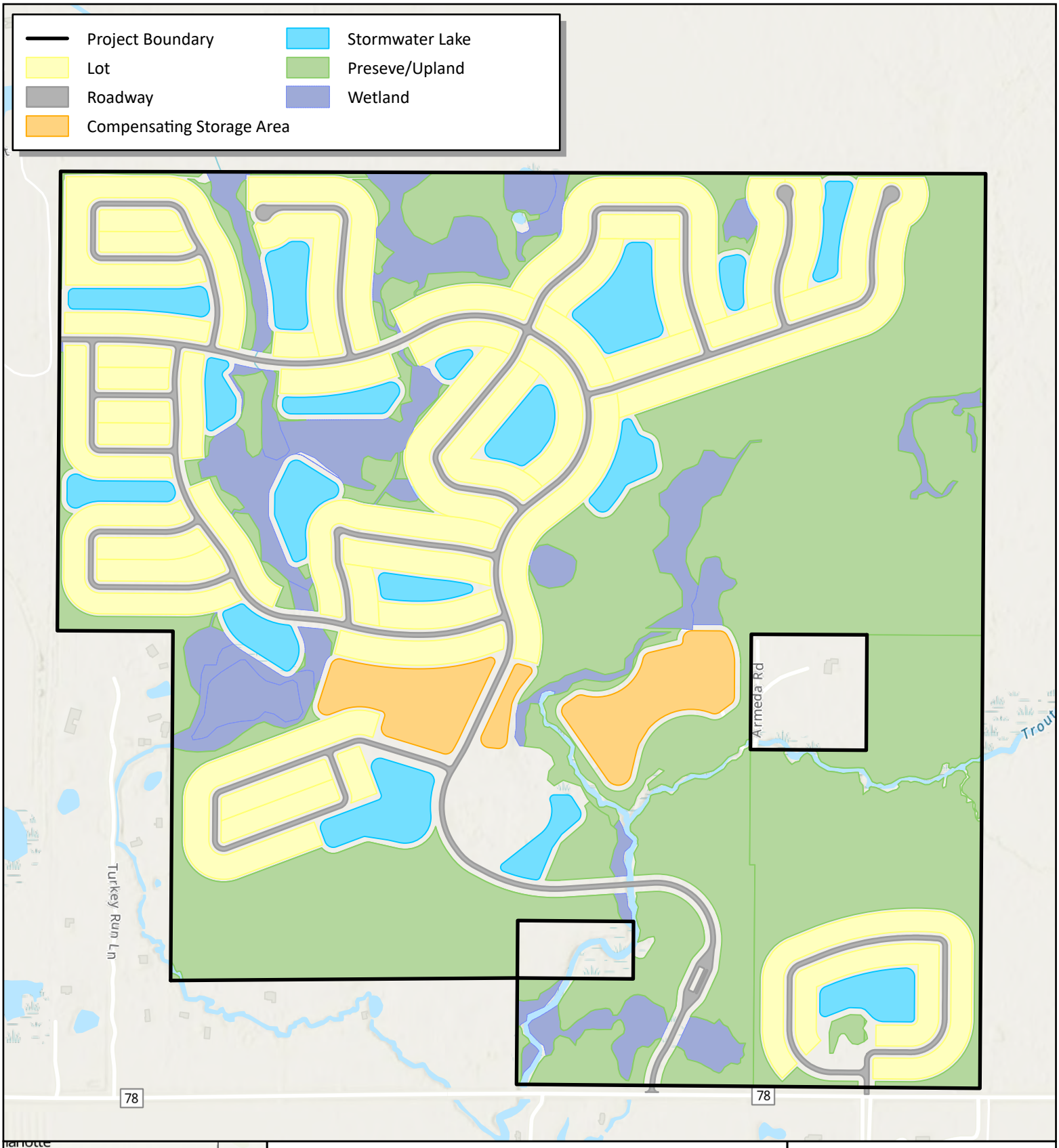
10/10/2025

Image: ESRI World Imagery

RESPEC



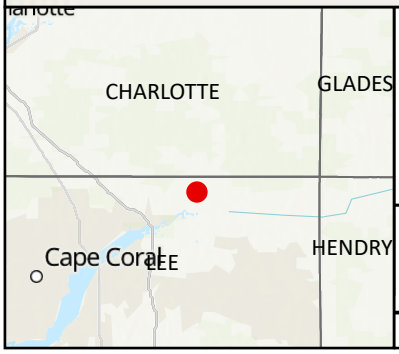


Figure 2
Master Concept Plan
Armeda
Lee County, Florida

N

0 375 750 US Feet

Scale: 1:9,000

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11/20/2025

Image: Atwell, ESRI World Topographic Map

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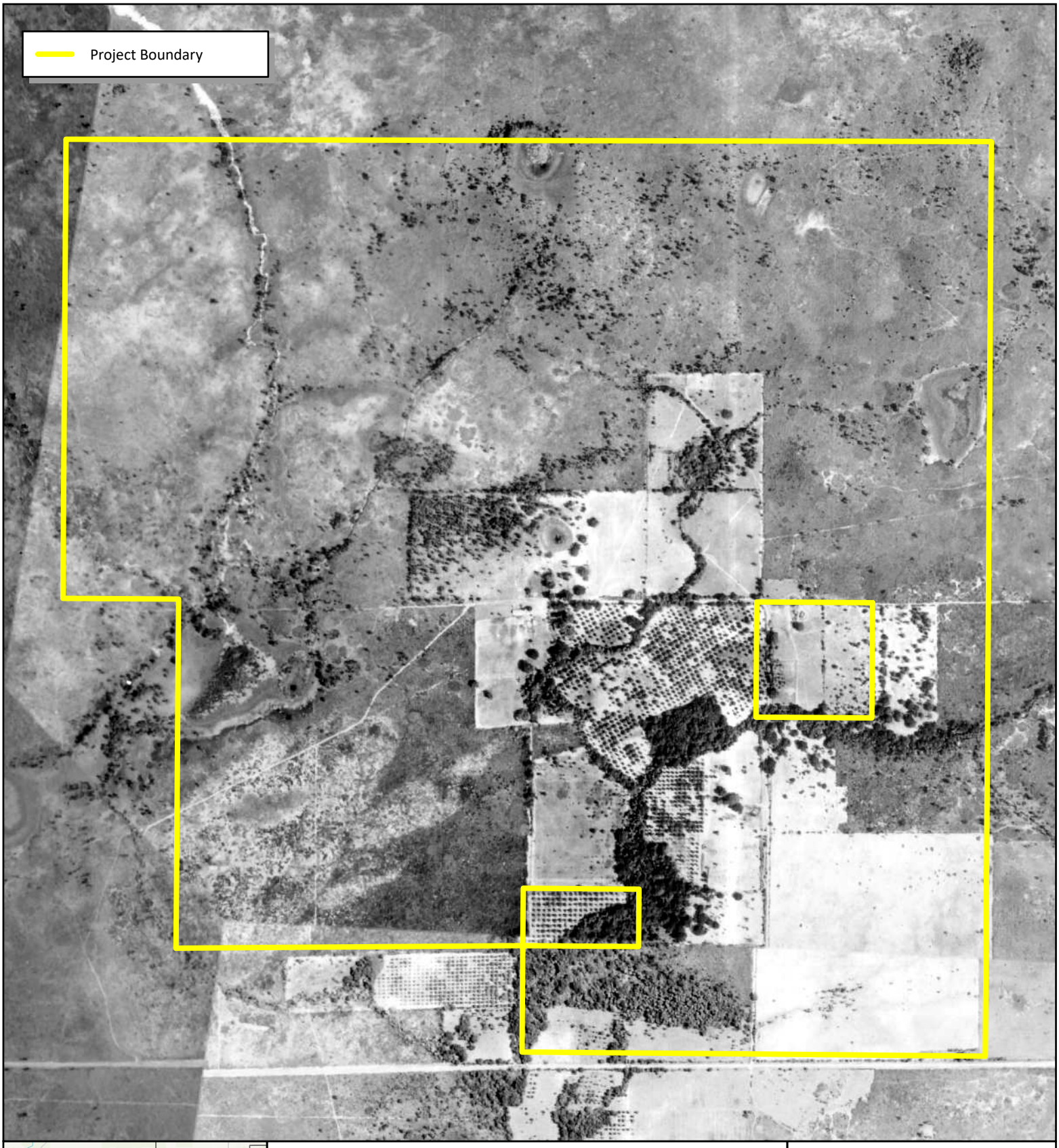

Figure 3
1940s Historic Imagery
Armeda
Lee County, Florida

N

0 375 750 Feet

Scale: 1:9,000

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10/7/2025

Image: Florida Department of Environmental Protection

RESPEC

Figure 4
1953 Historic Imagery
Armeda
Lee County, Florida

N

0 375 750 Feet

Scale: 1:9,000

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10/7/2025

Image: Florida Department of Environmental Protection

RESPEC

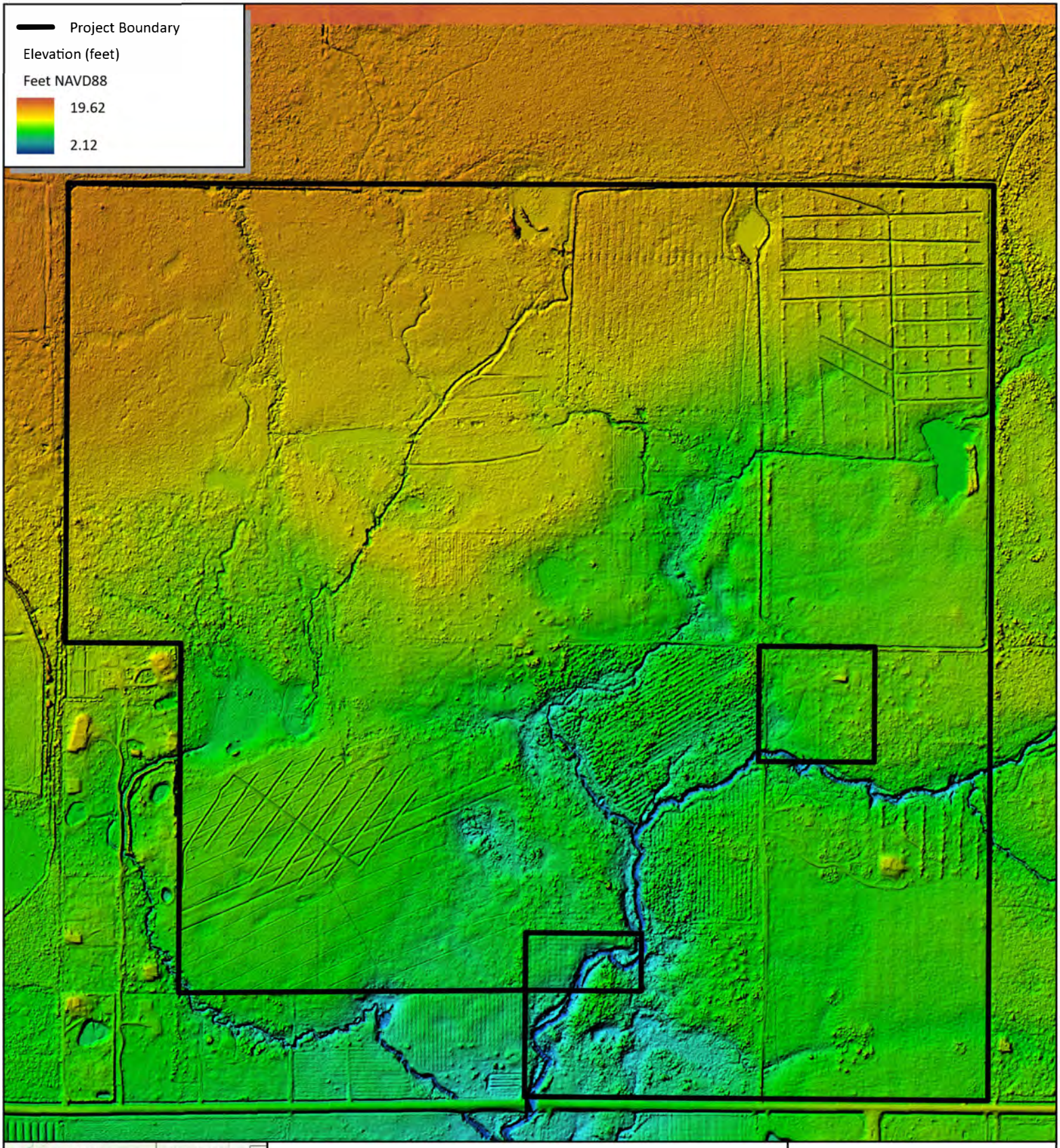

Figure 5
LiDAR Imagery
Armeda
Lee County, Florida

N

0 375 750 Feet

Scale: 1:9,000

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10/8/2025

Image: Lee County 1M DEM (NAVD 88)

RESPEC

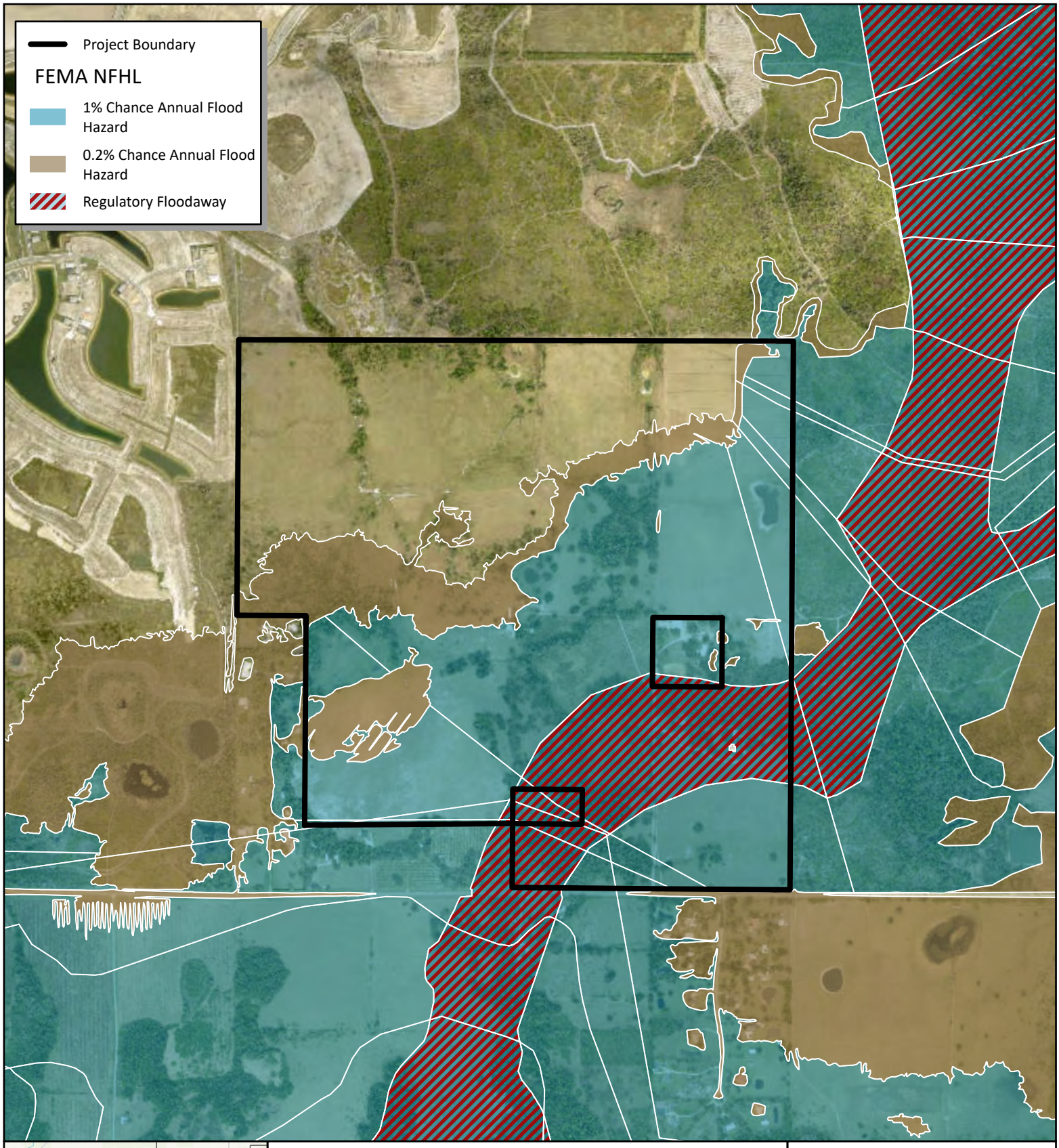

Figure 6
FEMA Flood Zones
Armeda
Lee County, Florida

N

0 375 750 1,500 Feet

Scale: 1:15,000

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10/7/2025

Image: ESRI World Imagery, FEMA

RESPEC

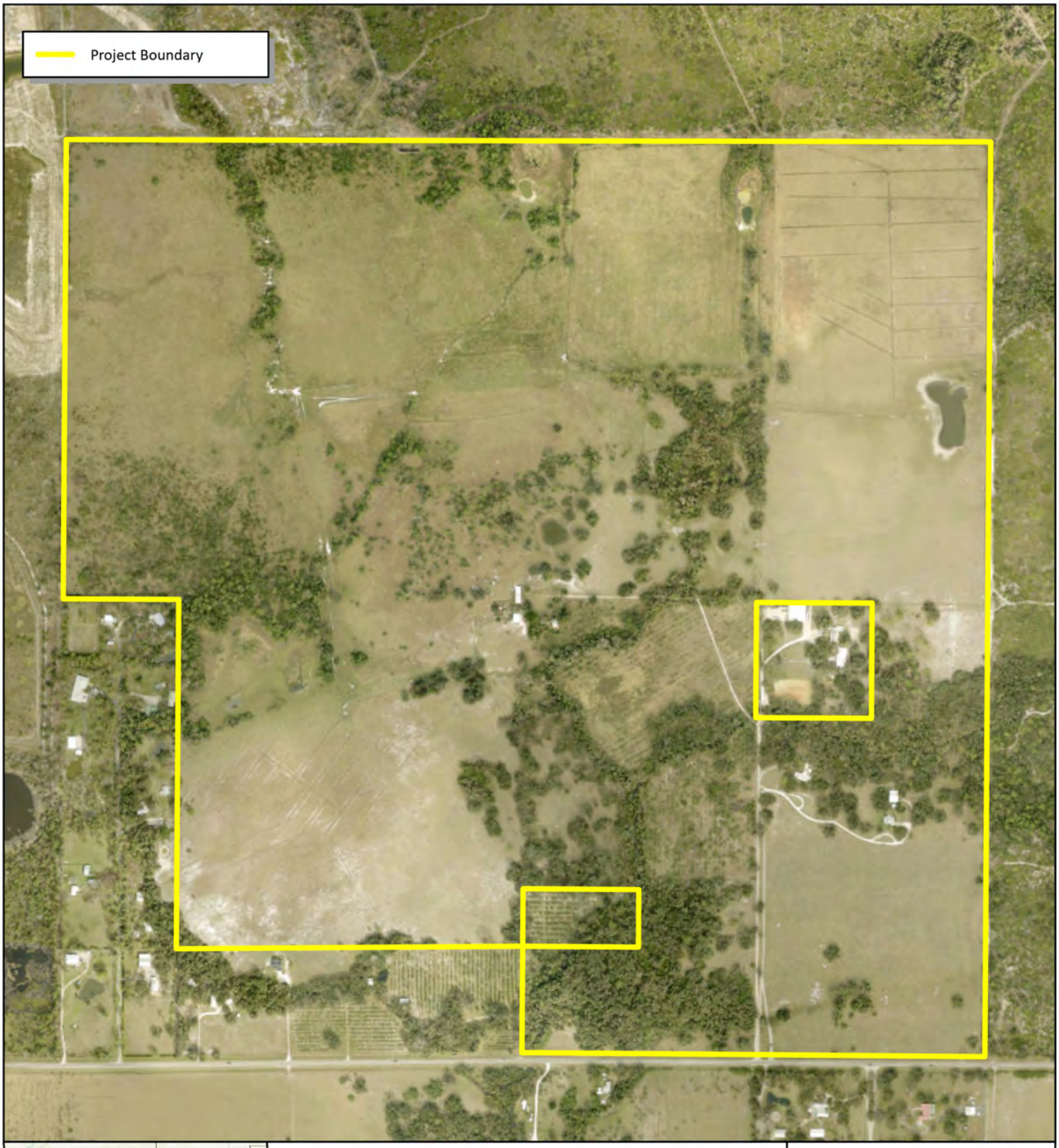

Figure 7
2025 Aerial Imagery
Armeda
Lee County, Florida

N

0 375 750 Feet

Scale: 1:9,000

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10/7/2025

Image: ESRI World Imagery

RESPEC

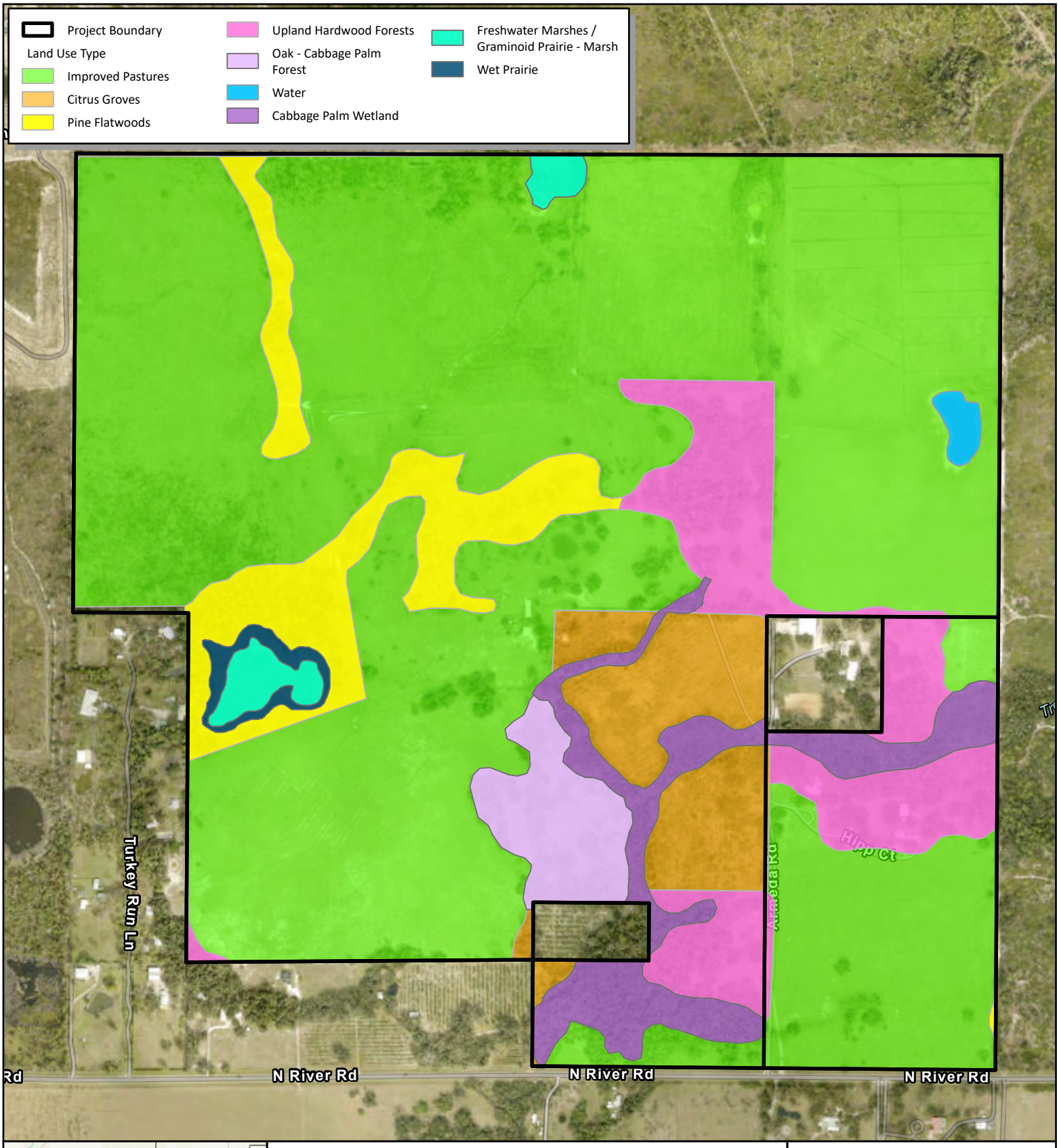

Figure 8
Existing Land Use
Armeda
Lee County, Florida

N

0 375 750 Feet

Scale: 1:9,000

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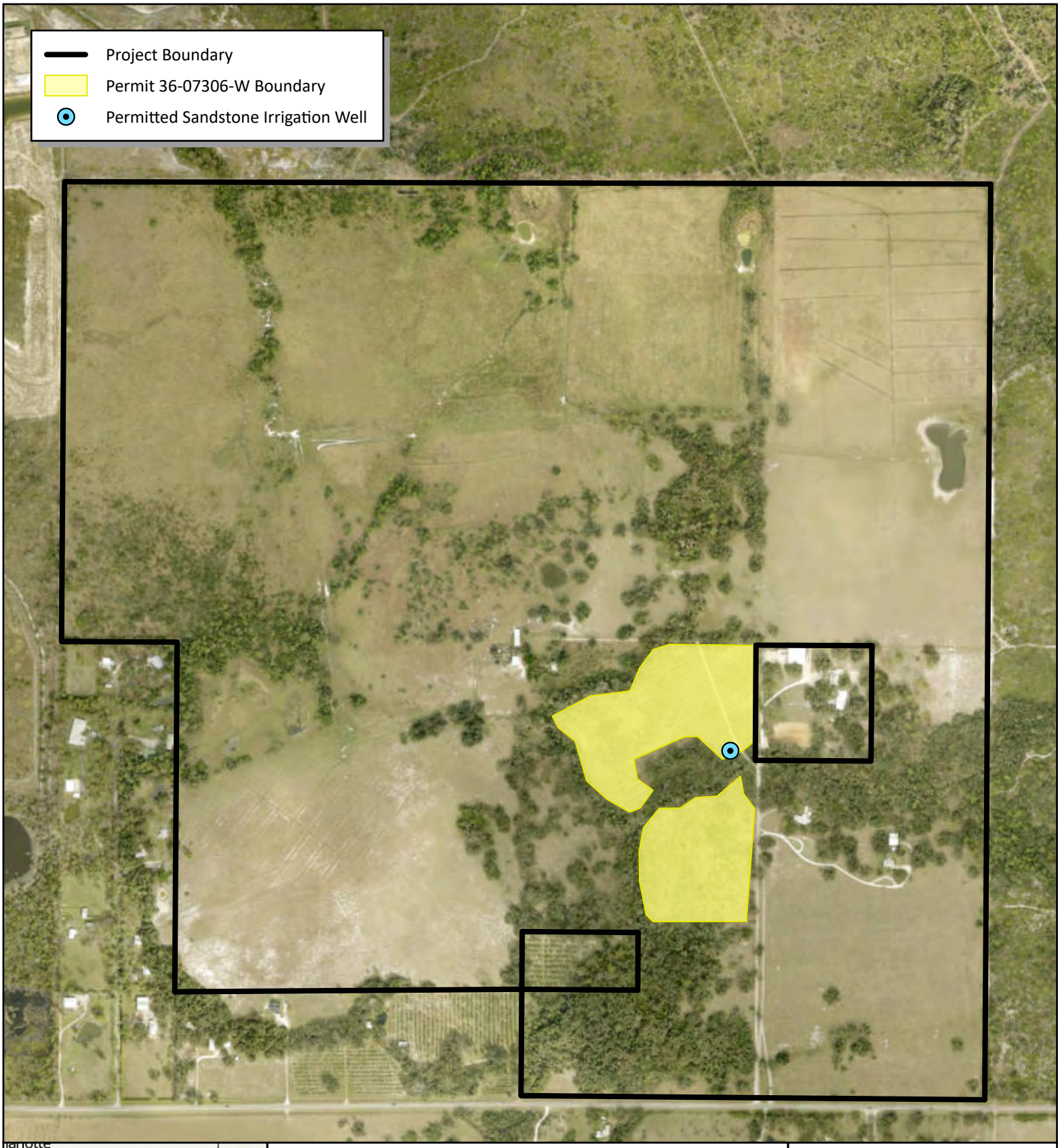
10/7/2025

Image: Florida Department of Environmental Protection

RESPEC



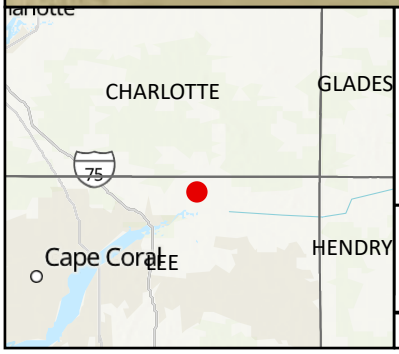


Figure 9
SFWMD Permit No. 36-07306-W
Armeda
Lee County, Florida

N

0 375 750 US Feet

Scale: 1:9,000

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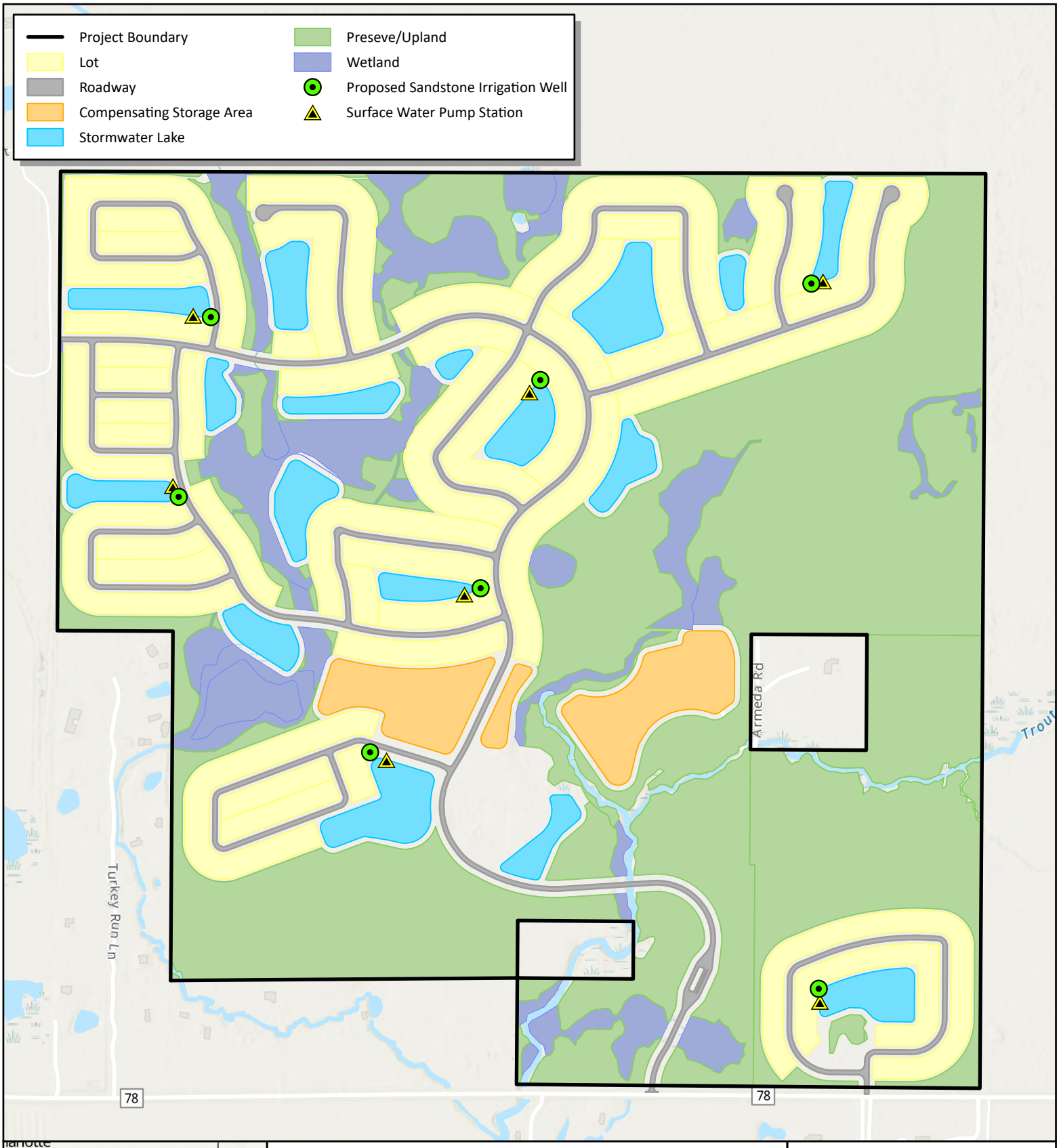
10/7/2025

Image: ESRI World Imagery, SFWMD

RESPEC



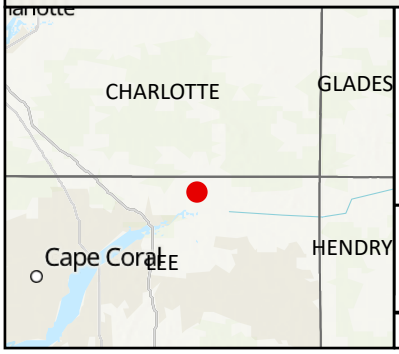


Figure 10
Proposed Irrigation Withdrawals
Armeda
Lee County, Florida

N

0 375 750 US Feet

Scale: 1:9,000

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11/20/2025

Image: Atwell, ESRI World Topographic Map

RESPEC

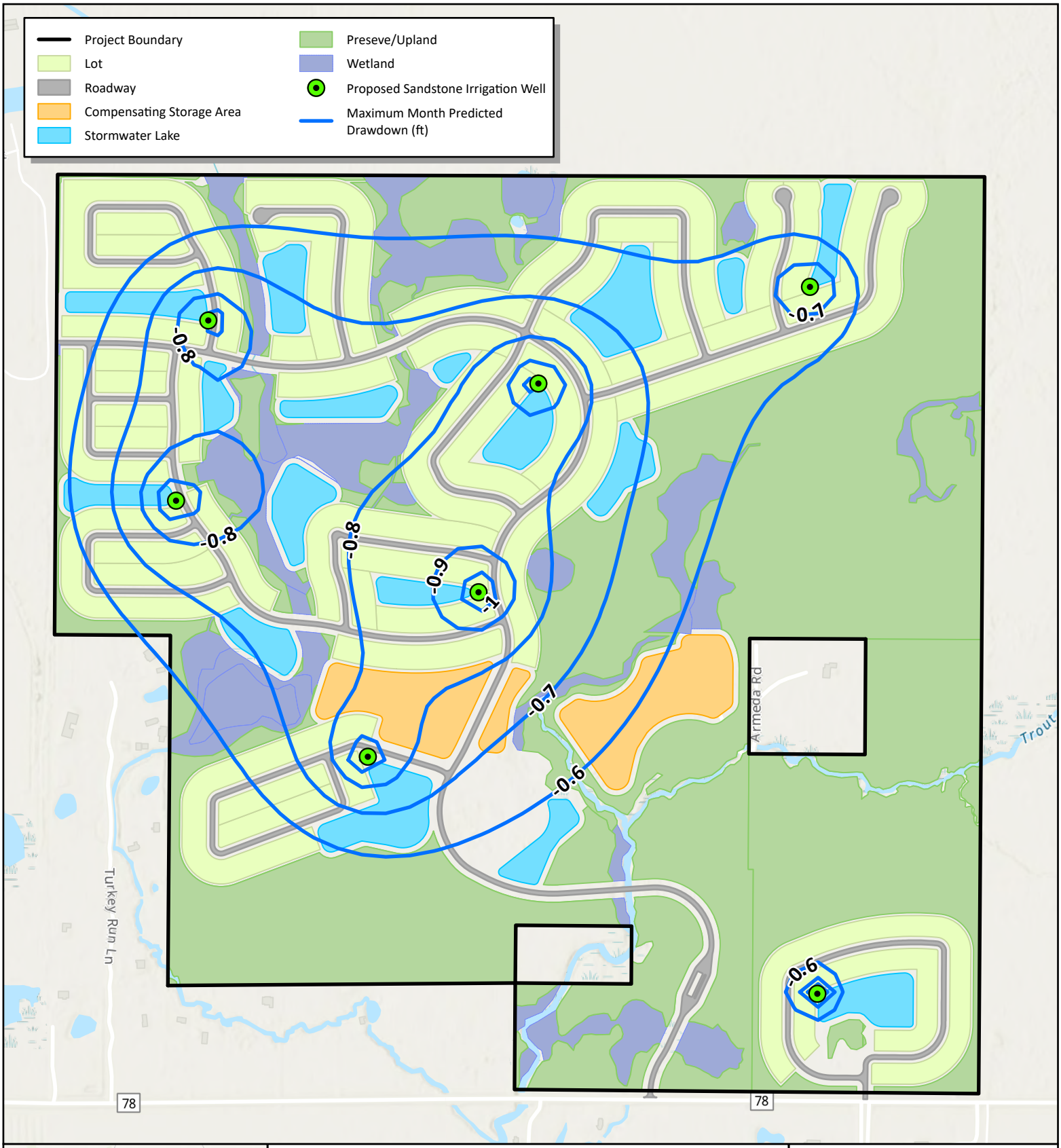

Figure 11
Maximum Month Groundwater Modeling Scenario
Predicted Sandstone Aquifer Drawdown
Armeda
Lee County, Florida

N

0 200 400 800 US Feet

Scale: 1:9,000

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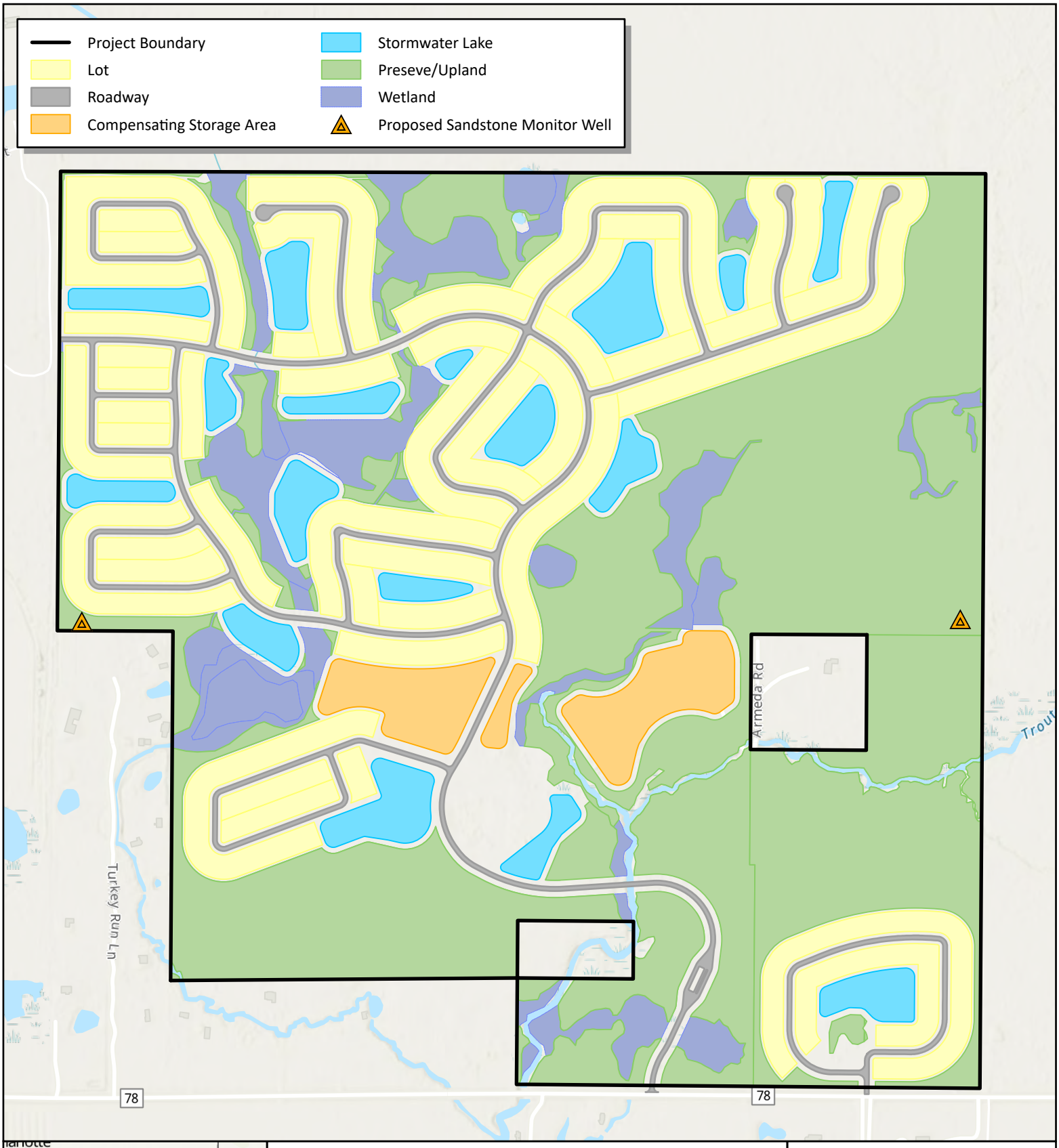
11/20/2025

Image: Atwell, ESRI World Topographic Map

RESPEC



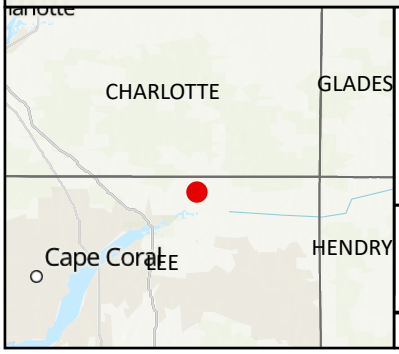


Figure 12
Proposed Sandstone Aquifer Monitor Wells
Armeda
Lee County, Florida

N

0 375 750 US Feet

Scale: 1:9,000

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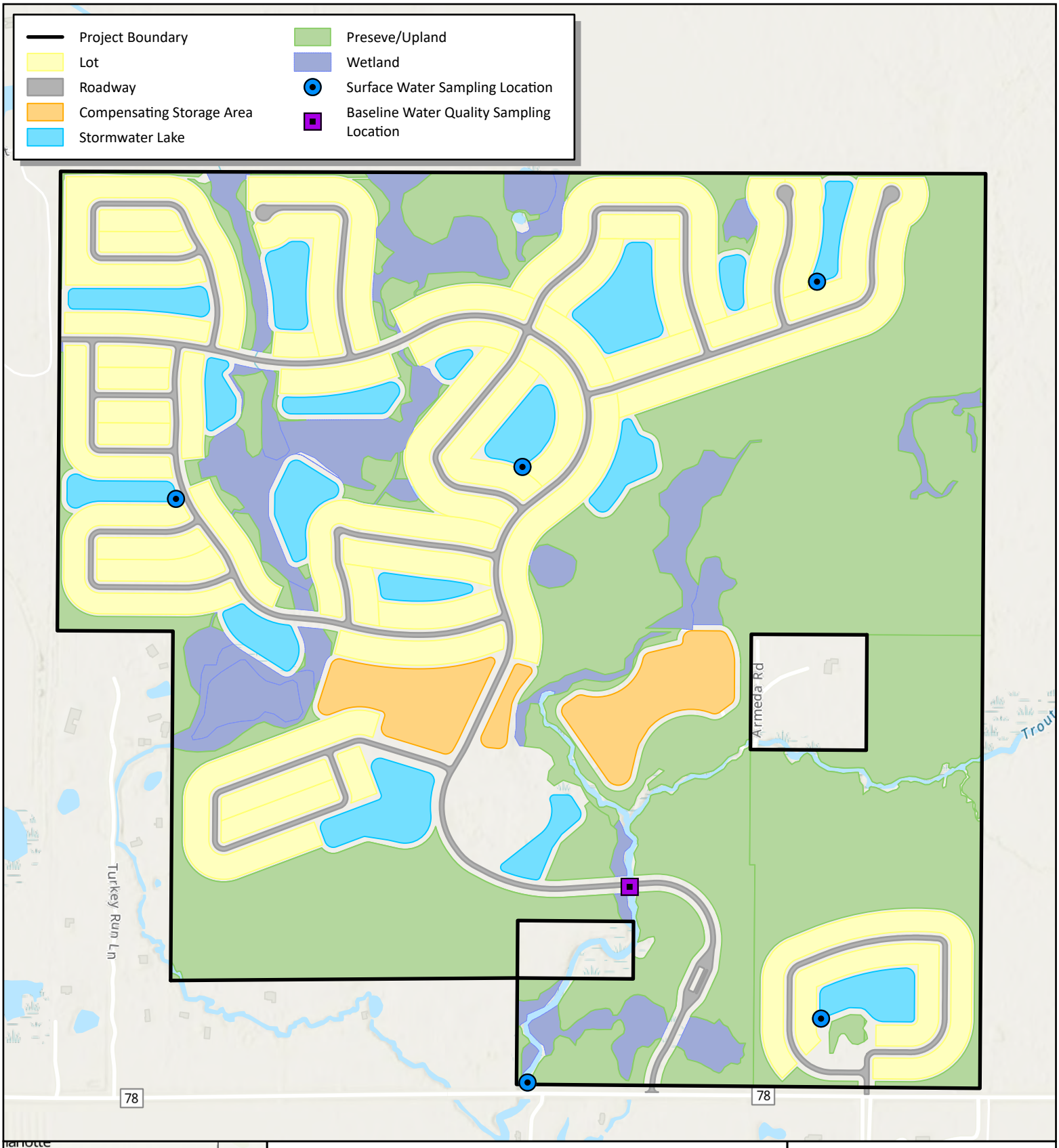
11/20/2025

Image: Atwell, ESRI World Topographic Map

RESPEC



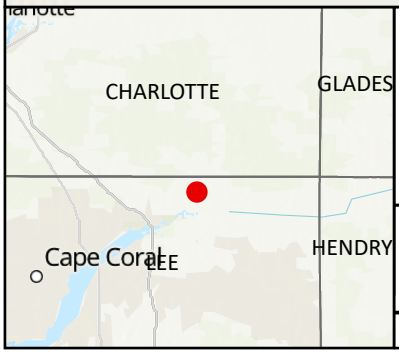


Figure 13
Proposed Surface Water Sampling
Armeda
Lee County, Florida

N

0 375 750 US Feet

Scale: 1:9,000

RESPEC Company, LLC has provided the images or data presented in this map for informational purposes only. This data is not intended to be used in lieu of official survey data provided by a Professional Surveyor licensed by the State of Florida

11/20/2025

Image: Atwell, ESRI World Topographic Map

RESPEC

ATTACHMENT 1
EXISTING AGRICULTURAL WUP NO. 36-07306-W

RESPEC.COM

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

WATER USE INDIVIDUAL PERMIT

APPLICATION NO: 150423-3 **PERMIT NUMBER:** 36-07306-W

DATE ISSUED: May 21, 2015 **EXPIRATION DATE:** May 21, 2035

PERMITTEE: ARMEDA FAMILY, L L C
19440 ARMEDA ROAD
ALVA, FL 33920

PROJECT NAME: ARMEDA FAMILY

PROJECT LOCATION: Lee County, S8/T43S/R26E

PROJECT DESCRIPTION/AUTHORIZING:

Authorizing: The use of groundwater from the Sandstone aquifer for agricultural irrigation of 25 acres of citrus using a micro-sprinkler irrigation system with an annual allocation of 23.52 million gallons.

This is to notify you of South Florida Water Management District's (District) agency action concerning Permit Application Number 150423-3, received April 23, 2015. This action is taken pursuant to Chapter 373, Part II, Florida Statutes (F.S.), Rule 40E-1.603 and Chapter 40E-2, Florida Administrative Code (F.A.C). Based on the information provided, District rules have been adhered to and a Water Use Individual Permit is in effect for this project subject to:

1. Not receiving a filed request for an administrative hearing pursuant to Section 120.57 and Section 120.569 (F.S.), or request a judicial review pursuant Section 120.68, F.S.; and
2. The attached 22 permit conditions.
3. The attached 6 exhibits.

By acceptance and utilization of the water authorized under this permit, the Permittee agrees to hold and save the District and its successors harmless from any and all damages, claims or liabilities that may arise by reason of the construction, maintenance or use of activities authorized by this permit. Should you object to the permit, please refer to the attached "Notice of Rights" that addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Should you wish to object to the proposed agency action or file a petition or request, please provide written objections, petitions, requests and/or waivers to the District, attention of Office of the District Clerk, South Florida Water Management District, Post Office Box 24680, West Palm Beach, FL 33416-4680.

CERTIFICATION OF SERVICE

I HEREBY CERTIFY THAT this written notice has been mailed or electronically transmitted to the Permittee (and the persons listed in the attached distribution list) this 21st day of May, 2015, in accordance with Section 120.60(3), F.S. Notice was also electronically posted on this date through a link on the home page of the District's website (my.sfwmd.gov/ePermitting).

BY: Maria Clemente

Maria C. Clemente, P.E.
Bureau Chief
Water Use Bureau

SPECIAL PERMIT CONDITIONS

1. This permit is issued to:
   Armeda Family, LLC
   19440 Armeda Road
   Alva, FL 33920

2. This permit shall expire on May 21, 2035.

3. Use classification is:

   Agricultural Irrigation

4. Source classification is:

   Groundwater from:
   Sandstone Aquifer

5. Allocation:

   Total annual allocation is 23.52 million gallons (MG). (64,438 GPD)

   Total maximum monthly allocation is 4.32 million gallons (MG).

   These allocations represent the amount of water required to meet the water demands as a result of a rainfall deficit during a drought with the probability of recurring one year in ten. The Permittee shall not exceed these allocations in hydrologic conditions less than a 1-in-10 year drought event. Compliance with the annual allocation is based on the quantity withdrawn over a 12-month time period. Compliance with the maximum monthly allocation is based on the greatest quantity withdrawn in any single month. The annual allocation expressed in GPD or MGD is for informational purposes only.

   If the rainfall deficit is more severe than that expected to recur once every ten years, the withdrawals shall not exceed that amount necessary to continue to meet the reasonable-beneficial demands under such conditions, provided no harm to the water resources occur and:

   1. All other conditions of the permit are met; and

   2. The withdrawal is otherwise consistent with applicable declared Water Shortage Orders in effect pursuant to Chapter 40E-21, F.A.C.

6. Withdrawal facilities:

   Groundwater - Existing:

   1 - 8" X 80' X 200 GPM Well Cased To 70 Feet

7. The Permittee shall submit all data as required by the implementation schedule for each of the permit conditions to: SFWMD at www.sfwmd.gov/ePermitting, or Regulatory Support, MSC 9611, P.O. Box 24680, West Palm Beach, FL 33416-4680.

8. The Permittee must submit the appropriate application form incorporated by reference in Rule 40E-2.101, F.A.C., to the District prior to the permit expiration date in order to continue the use of water.

9. The Permittee shall secure a well construction permit prior to construction, repair, or abandonment of all wells, as described in Chapter 40E-3, F.A.C.

10. If at any time there is an indication that the well casing, valves, or controls leak or have become inoperative, repairs or replacement shall be made to restore the system to an operating condition. Failure to make such repairs shall be cause for filling and abandoning the well, in accordance with procedures outlined in Chapter 40E-3, F.A.C.

11. If reclaimed water becomes available prior to the expiration date of this permit, the Permittee shall apply for a modification of the water use permit to reflect that portion of the allocation which is to be provided for by reclaimed water. The permittee is required to request a permit modification when an agreement has been executed between both parties, the transmission lines are constructed to the project site, and the necessary on-site modifications and authorizations are obtained.

STANDARD PERMIT CONDITIONS

1. All water uses authorized by this permit shall be implemented as conditioned by this permit, including any documents incorporated by reference in a permit condition. The District may revoke this permit, in whole or in part, or take enforcement action, pursuant to Section 373.136 or 373.243, F.S., unless a permit modification has been obtained to address the noncompliance.

   The Permittee shall immediately notify the District in writing of any previously submitted material information that is later discovered to be inaccurate.

2. The Permittee is advised that this permit does not relieve any person from the requirement to obtain all necessary federal, state, local and special district authorizations.

3. The Permittee shall notify the District in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of permitted legal control of the Project and/or related facilities from which the permitted consumptive use is made. Where Permittee's control of the land subject to the permit was demonstrated through a lease, the Permittee must either submit a new or modified lease showing that it continues to have legal control or documentation showing a transfer in control of the permitted system/project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of Rule 40E-1.6107, F.A.C. Alternatively, the Permittee may surrender the consumptive use permit to the District, thereby relinquishing the right to conduct any activities under the permit.

4. Nothing in this permit should be construed to limit the authority of the District to declare a water shortage and issue orders pursuant to Chapter 373, F.S. In the event of a declared water shortage, the Permittee must adhere to the water shortage restrictions, as specified by the District. The Permittee is advised that during a water shortage, reports shall be submitted as required by District rule or order. The Permittee is advised that during a water shortage, pumpage, water levels, and water quality data shall be collected and submitted as required by District orders issued pursuant to Chapter 40E-21, F.A.C.

5. This permit does not convey to the Permittee any property rights or privileges other than those specified herein, nor relieve the permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.

6. With advance notice to the Permittee, District staff with proper identification shall have permission to enter, inspect, observe, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications. The Permittee shall either accompany District staff onto the property or make provision for access onto the property.

7. A. The Permittee may seek modification of any term of an unexpired permit. The Permittee is advised that Section 373.239, F.S., and Rule 40E-2.331, F.A.C., are applicable to permit modifications.

   B. The Permittee shall notify the District in writing 30 days prior to any changes to the project that

could potentially alter the reasonable demand reflected in the permitted allocation. Such changes include, but are not limited to, change in irrigated acreage, crop type, irrigation system, large users agreements, or water treatment method. Permittee will be required to apply for a modification of the permit for any changes in permitted allocation.

8. If any condition of the permit is violated, the permit shall be subject to review and modification, enforcement action, or revocation pursuant to Chapter 373, F.S.

9. The Permittee shall mitigate interference with existing legal uses that was caused in whole or in part by the Permittee's withdrawals, consistent with the approved mitigation plan. As necessary to offset the interference, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means.

   Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1-in-10 year drought event that results in the:

   A. Inability to withdraw water consistent with provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; or

   B. Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent.

10. The Permittee shall mitigate harm to the natural resources caused by the Permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the Permittee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to the conditions for permit issuance includes:

    A. Reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface,

    B. Reduction in water levels that harm the hydroperiod of wetlands,

    C. Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,

    D. Harmful movement of contaminants in violation of state water quality standards, or

    E. Harm to the natural system including damage to habitat for rare or endangered species.

11. The Permittee shall mitigate harm to existing off-site land uses caused by the Permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the Permittee to modify withdrawal rates or mitigate the harm. Harm as determined through reference to the conditions for permit issuance, includes:

A. Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other governmental authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g. fill for construction, mining, drainage canal, etc.)

B. Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or,

C. Land collapse or subsidence caused by reduction in water levels associated with consumptive use.

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., the following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a SFWMD decision which does or may affect their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

Filing Instructions

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery, or e-mail. **Filings by facsimile will not be accepted after October 1, 2014.** A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the District Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the District Clerk. **Delivery of a petition to the SFWMD's security desk does not constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office**. An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by e-mail must be transmitted to the District Clerk's Office at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed.

Initiation of an Administrative Hearing

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, SFWMD file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency decision.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If the SFWMD takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

Mediation

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the District Clerk within 30 days of rendering of the final SFWMD action.

Last Date for Agency Action:
July 22, 2015

WATER USE STAFF REPORT

Application Number: 150423-3

Permit Number: 36-07306-W

Project Name: ARMEDA FAMILY

Water Use Permit Status: RENEWAL

Location: LEE COUNTY, S8/T43S/R26E

Applicant's Name and Address: ARMEDA FAMILY, L L C
19440 ARMEDA ROAD
ALVA, FL 33920

Water Use Classification: Agricultural

Total Serviced Acreage: 25 (25 acres of citrus)

Sources:

Groundwater from: Sandstone Aquifer

Authorized Allocation:

Annual Allocation: 23.5 Million Gallons (MG)

Maximum Monthly Allocation: 4.3 Million Gallons (MG)

Existing Withdrawal Facilities - Groundwater

Source: Sandstone Aquifer
1 - 8" X 80' X 200 GPM Well Cased to 70 Feet

Rated Capacity Source	Status Code	GPM	MGM	MGY
Sandstone Aquifer	E	200	8.8	105
Totals:		**200**	**8.8**	**105**

PURPOSE

The purpose of this application is to renew a water use permit for agricultural irrigation of 25 acres of citrus using a micro-sprinkler irrigation system. Withdrawals are from the Sandstone aquifer via one existing withdrawal facility.

PROJECT DESCRIPTION

Armeda Family, LLC (Project) is an existing citrus grove located on Armeda Road in Lee County, Florida on the north side of North River Road (County Road 78) approximately 1.5 miles east of State Road 31 (Exhibits 1 and 2). The source of water for the Project is

PROJECT DESCRIPTION (CONTINUED)

an existing Sandstone aquifer well. The well location is shown on Exhibit 3 and well details are shown in Exhibit 4.

Permit History:
The Armeda family began growing citrus on the property in the 1960s and the grove encompassed approximately 500 acres. By 2010, the existing grove had been reduced to 25 acres due to citrus greening. The water use permit was originally issued in July 2010 (Application 100224-11) for agricultural irrigation of 25 acres of citrus using the Sandstone aquifer with an allocation of 4.3 million gallons per month (MGM) and 24.9 million gallons per year (MGY). Water use was reported between December 2010 and May 2012 and ranged from approximately 0.0 to 0.8 MGM. This application seeks to renew the existing water use permit with a small decrease in allocation from 24.94 to 23.52 million gallons a year due to updated rainfall station data.

PROJECTED WATER USE DEMANDS

The annual and maximum monthly allocations for citrus irrigation are calculated using the Modified Blaney Criddle method as described in Section 2.3.2 of the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District, (AH). Using this method, the total Project demands were calculated as 4.32 MGM and 23.52 MGY. Calculations of the supplemental irrigation requirements are detailed in Exhibit 5.

WATER RESOURCE IMPACT EVALUATION

Water Resource Availability

Sandstone Aquifer

The land surface elevation at the Project is approximately 10 feet National Geodetic Vertical Datum (NGVD). The top of the Sandstone aquifer in the Project area is approximately 95 feet below ground surface or approximately -85 feet NGVD. United States Geological Survey well L-1975 located approximately 1.5 miles southeast of the Project has a water level record since 1975 and the lowest recorded potentiometric surface of the Sandstone aquifer is 4.1 feet NGVD in April 2012. Therefore, there is a minimum of 90 feet of water above the top of the aquifer and 70 feet of water above the maximum developable limit (MDL). Based on the previous water use permit, the Project has withdrawn water from the Sandstone aquifer since 1965 with no observed or reported adverse impacts to the resource. Therefore, the potential for harm to the resource due to the withdrawal of the recommended allocation is considered minimal.

Existing Legal Users

Sandstone Aquifer

The nearest existing legal user of the Sandstone aquifer is Trout Creek Grove (Water Use Permit 36-02399-W) which is located apporoximately 0.5 mile southwest of the Project. The Project has utilized the Sandstone aquifer for irrigation water supply since the 1960s without reported or identified harm to existing legal users. Therefore, the potential for harm to occur to existing legal users due to the withdrawal of the

recommended allocation is minimal.

Existing Off Site Land Uses

Sandstone Aquifer

The surrounding land is primarily agricultural. The Sandstone aquifer is hydraulically separated from the Water Table aquifer by approximately 65 feet of confining material. Therefore, pursuant to Section 3.6.2 of the AH, the use is not expected to result in significant reduction in water levels on the property of an existing offsite land use to the extent that the designed function of a water body and related surface water management improvements are damaged (not including aesthetic values), damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use, or land collapse or subsidence caused by reduction in water levels associated with consumptive use.

Migration of Saline Water

Sandstone Aquifer

The nearest surface source of saline water is the Caloosahatchee River, which is located approximately 1.7 miles south of the Project. According to the most recent chloride data (2013) provided by Blackburn Groves (Water Use Permit 36-00594-W), located 1.0 mile southwest of the Project, the chloride concentration in the Sandstone aquifer is around 175 milligrams per liter (mg/L). The Project has historically utilized the Sandstone aquifer for irrigation without identified saline intrusion. Therefore, the potential for saline water migration or intrusion due to the withdrawal of the recommended allocation is considered minimal.

Wetland Environments

Sandstone Aquifer

The Project site includes 25 acres of citrus trees with one connected cabbage palm Category 2 wetland. The Sandstone aquifer is hydraulically separated from the Water Table aquifer by approximately 65 feet of confining material. This Project has historically withdrawn from the Sandstone aquifer with no reported or identified harm to wetlands. Therefore, the potential adverse impacts to wetlands due to the withdrawal of the recommended allocation are minimal.

Sources of Pollution

Sandstone Aquifer

There are no known sources of pollution in the Sandstone aquifer within one mile of the Project. Therefore, the potential for movement of contaminants, if present, from known pollution sources as a result of the withdrawal of the recommended allocation is considered minimal.

ADDITIONAL INFORMATION

Regional Issues

Restricted Allocation Areas or Maximum Developable Limits

This Project does not occur or draw from water from an area with a Restricted Allocation. The Sandstone aquifer has a MDL of 20 feet above the uppermost strata of the aquifer. Section 3.9.3 of the AH states that the water level in the aquifer shall not drop below the MDL during a 1-in-10 drought condition. As stated in the Water Resource Availability section of this staff report, withdrawal of the recommended allocation for this water use permit does not impact the MDL for the Sandstone aquifer in the vicinity of the Project.

Project Site Issues

Legal Control and Land Use

Information supplied by Armeda Family, LLC (Owner) and records from the Florida Division of Corporations demonstrate that the Permittee maintains legal control over the Project site. All withdrawal facilities are located within the Project site. The water allocation requested for agricultural irrigation is compatible with the land use categories at this site (Section 2.1 of the AH).

Water Use Accounting

Pursuant to Section 4.1.1 of the AH, Permittees with an average daily allocation less than 100,000 gallons per day are not required to monitor and report withdrawal quantities.

Potential Use of Reclaimed Water

The Permittee has provided documentation from Lee County Utilities that indicates reclaimed water is not available to the Project at this time. If reclaimed water becomes available prior to the expiration date of this permit, the Permittee shall apply for a modification of the water use permit to reflect that portion of the allocation which is to be provided for by reclaimed water. The permittee is required to request a permit modification when an agreement has been executed between both parties, the transmission lines are constructed to the project site, and the necessary on-site modifications and authorizations are obtained. (Special Condition 11).

Permit Duration

The Project is renewing its water use permit and has historically used the source listed in this permit since 1965. The source of water for this Project is the Sandstone aquifer. Pursuant to Section 1.5.1 of the AH, staff recommends a water use permit duration of 20 years.

ENVIRONMENTAL RESOURCE PERMIT STATUS:

Not Applicable

RIGHT OF WAY PERMIT STATUS:

Not Applicable

RECOMMENDATIONS

Project Name: ARMEDA FAMILY

Application Number: 150423-3

Permit Number: 36-07306-W

RECOMMENDATION

Authorizing: The use of ground water from the Sandstone aquifer for agricultural irrigation of 25 acres of citrus using a micro-sprinkler irrigation system with an annual allocation of 23.52 million gallons.

STAFF EVALUATION

REVIEWER:

Jewelene S. Harris, NRM

Toby Schwetje, WU

SUPERVISOR:

Laura Layman, NRM

Brad D. Cook, P.G., WU

CONSULTING HYDROGEOLOGIST:

Stephanie Lancaster, P.G. **Date:** 5/21/15

SPECIAL PERMIT CONDITIONS

1. This permit is issued to:
   Armeda Family, LLC
   19440 Armeda Road
   Alva, FL 33920

2. This permit shall expire 20 years from final action date.

3. Use classification is:

   Agricultural Irrigation

4. Source classification is:

   Groundwater from:
   Sandstone Aquifer

5. Allocation:

   Total annual allocation is 23.52 million gallons (MG). (64,438 GPD)

   Total maximum monthly allocation is 4.32 million gallons (MG).

   These allocations represent the amount of water required to meet the water demands as a result of a rainfall deficit during a drought with the probability of recurring one year in ten. The Permittee shall not exceed these allocations in hydrologic conditions less than a 1-in-10 year drought event. Compliance with the annual allocation is based on the quantity withdrawn over a 12-month time period. Compliance with the maximum monthly allocation is based on the greatest quantity withdrawn in any single month. The annual allocation expressed in GPD or MGD is for informational purposes only.

   If the rainfall deficit is more severe than that expected to recur once every ten years, the withdrawals shall not exceed that amount necessary to continue to meet the reasonable-beneficial demands under such conditions, provided no harm to the water resources occur and:

   1. All other conditions of the permit are met; and

   2. The withdrawal is otherwise consistent with applicable declared Water Shortage Orders in effect pursuant to Chapter 40E-21, F.A.C.

6. Withdrawal facilities:

   Groundwater - Existing:

SPECIAL PERMIT CONDITIONS

1 - 8" X 80' X 200 GPM Well Cased To 70 Feet

7. The Permittee shall submit all data as required by the implementation schedule for each of the permit conditions to: SFWMD at www.sfwmd.gov/ePermitting, or Regulatory Support, MSC 9611, P.O. Box 24680, West Palm Beach, FL 33416-4680.

8. The Permittee must submit the appropriate application form incorporated by reference in Rule 40E-2.101, F.A.C., to the District prior to the permit expiration date in order to continue the use of water.

9. The Permittee shall secure a well construction permit prior to construction, repair, or abandonment of all wells, as described in Chapter 40E-3, F.A.C.

10. If at any time there is an indication that the well casing, valves, or controls leak or have become inoperative, repairs or replacement shall be made to restore the system to an operating condition. Failure to make such repairs shall be cause for filling and abandoning the well, in accordance with procedures outlined in Chapter 40E-3, F.A.C.

11. If reclaimed water becomes available prior to the expiration date of this permit, the Permittee shall apply for a modification of the water use permit to reflect that portion of the allocation which is to be provided for by reclaimed water. The permittee is required to request a permit modification when an agreement has been executed between both parties, the transmission lines are constructed to the project site, and the necessary on-site modifications and authorizations are obtained.

STANDARD PERMIT CONDITIONS

1. All water uses authorized by this permit shall be implemented as conditioned by this permit, including any documents incorporated by reference in a permit condition. The District may revoke this permit, in whole or in part, or take enforcement action, pursuant to Section 373.136 or 373.243, F.S., unless a permit modification has been obtained to address the noncompliance.

   The Permittee shall immediately notify the District in writing of any previously submitted material information that is later discovered to be inaccurate.

2. The Permittee is advised that this permit does not relieve any person from the requirement to obtain all necessary federal, state, local and special district authorizations.

3. The Permittee shall notify the District in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of permitted legal control of the Project and/or related facilities from which the permitted consumptive use is made. Where Permittee's control of the land subject to the permit was demonstrated through a lease, the Permittee must either submit a new or modified lease showing that it continues to have legal control or documentation showing a transfer in control of the permitted system/project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of Rule 40E-1.6107, F.A.C. Alternatively, the Permittee may surrender the consumptive use permit to the District, thereby relinquishing the right to conduct any activities under the permit.

4. Nothing in this permit should be construed to limit the authority of the District to declare a water shortage and issue orders pursuant to Chapter 373, F.S. In the event of a declared water shortage, the Permittee must adhere to the water shortage restrictions, as specified by the District. The Permittee is advised that during a water shortage, reports shall be submitted as required by District rule or order. The Permittee is advised that during a water shortage, pumpage, water levels, and water quality data shall be collected and submitted as required by District orders issued pursuant to Chapter 40E-21, F.A.C.

5. This permit does not convey to the Permittee any property rights or privileges other than those specified herein, nor relieve the permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.

6. With advance notice to the Permittee, District staff with proper identification shall have permission to enter, inspect, observe, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications. The Permittee shall either accompany District staff onto the property or make provision for access onto the property.

7. A. The Permittee may seek modification of any term of an unexpired permit. The Permittee is advised that Section 373.239, F.S., and Rule 40E-2.331, F.A.C., are applicable to permit modifications.

   B. The Permittee shall notify the District in writing 30 days prior to any changes to the project that could potentially alter the reasonable demand reflected in the permitted allocation. Such changes include, but are not limited to, change in irrigated acreage, crop type, irrigation system, large users agreements, or water treatment method. Permittee will be required to apply for a modification of the permit for any changes in permitted allocation.

8. If any condition of the permit is violated, the permit shall be subject to review and modification, enforcement action, or revocation pursuant to Chapter 373, F.S.

9. The Permittee shall mitigate interference with existing legal uses that was caused in whole or in part by the Permittee's withdrawals, consistent with the approved mitigation plan. As necessary to offset the interference, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means.

   Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1-in-10 year drought event that results in the:

   A. Inability to withdraw water consistent with provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; or

   B. Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent.

10. The Permittee shall mitigate harm to the natural resources caused by the Permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the Permittee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to the conditions for permit issuance includes:

    A. Reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface,

    B. Reduction in water levels that harm the hydroperiod of wetlands,

    C. Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,

D. Harmful movement of contaminants in violation of state water quality standards, or

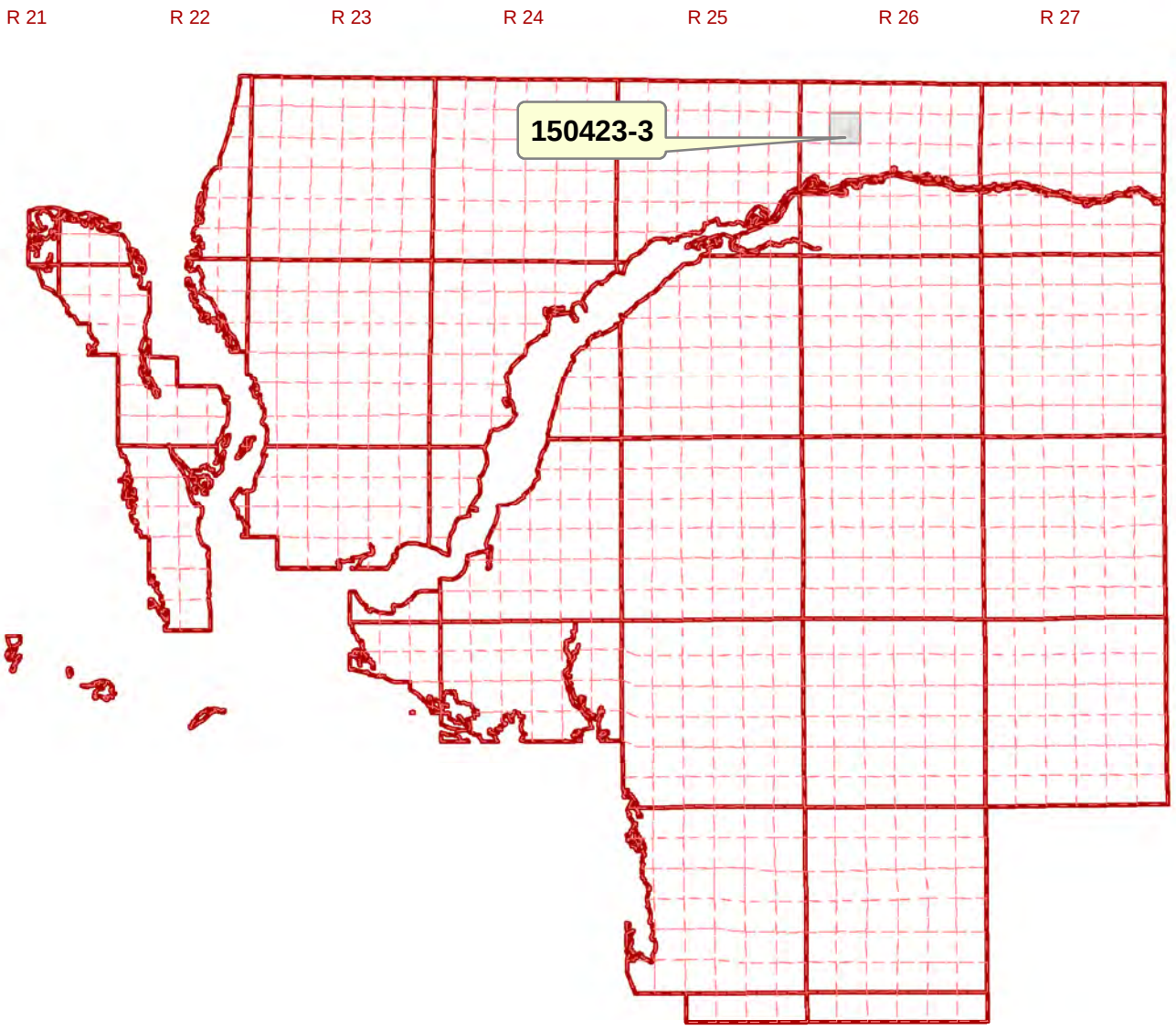
E. Harm to the natural system including damage to habitat for rare or endangered species.

11. The Permittee shall mitigate harm to existing off-site land uses caused by the Permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the Permittee to modify withdrawal rates or mitigate the harm. Harm as determined through reference to the conditions for permit issuance, includes:

    A. Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other governmental authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g. fill for construction, mining, drainage canal, etc.)

    B. Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or,

    C. Land collapse or subsidence caused by reduction in water levels associated with consumptive use.



LEE COUNTY, FLORIDA

N

Application No: 150423-3

Map Date: 2015-04-27

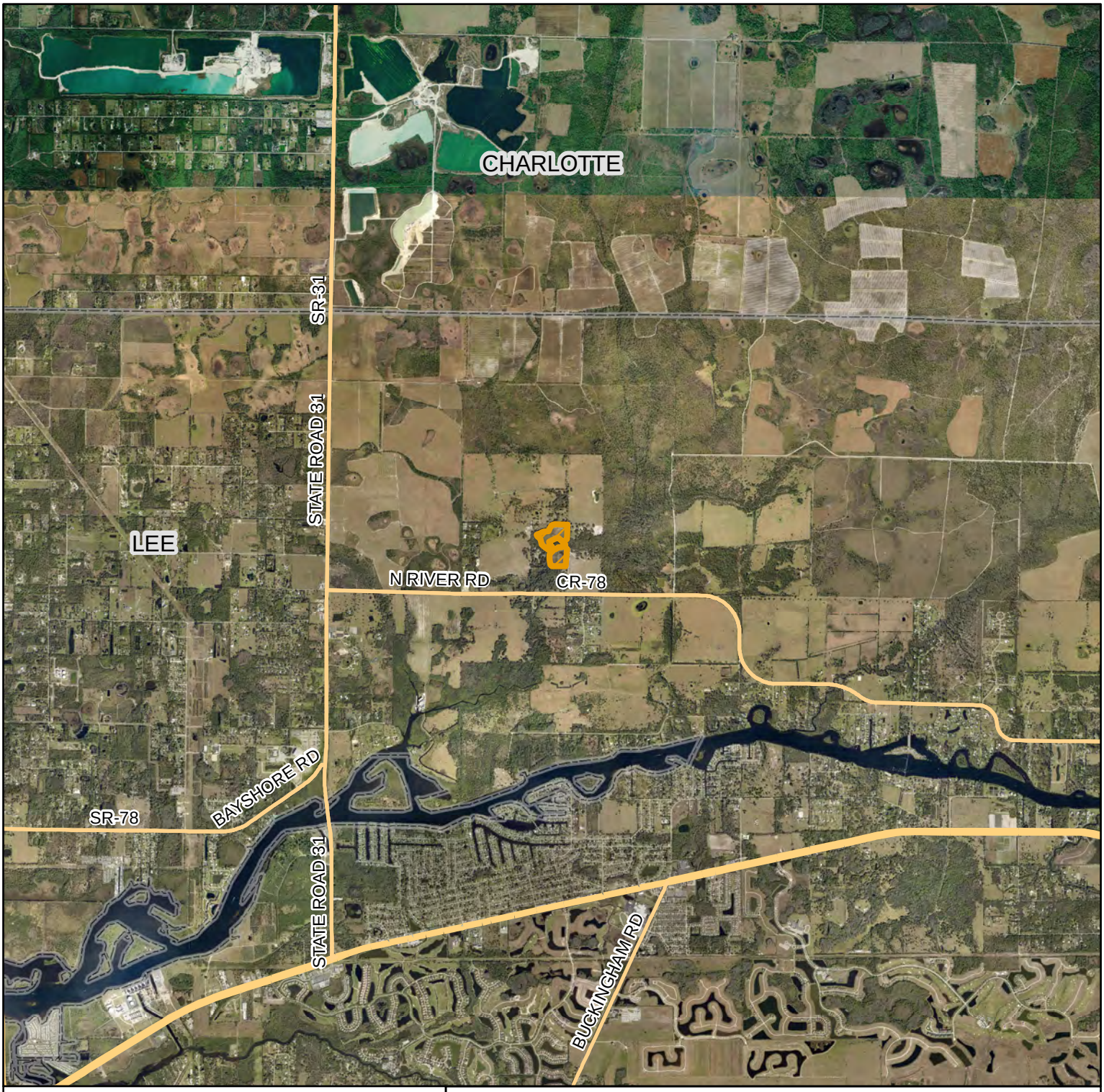
Permit No: 36-07306-W

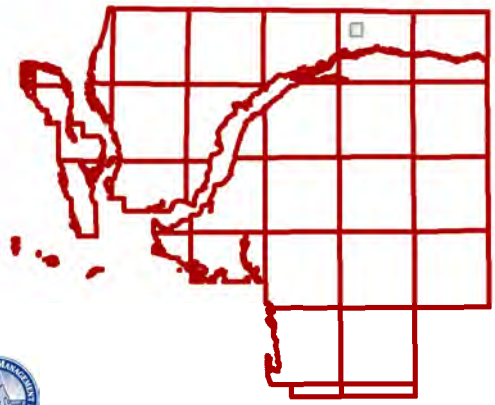
Sec 8 / Twp 43 / Rge 26

Project Name: ARMEDA FAMILY

0 5 10 Miles

Exhibit No: 1





LEE COUNTY, FLORIDA

Legend

Application

Application No: 150423-3

Sec 8 / Twp 43 / Rge 26

Project Name: ARMEDA FAMILY

N

Map Date: 2015-04-27

Permit No: 36-07306-W

0 0.5 1 2

Miles

Exhibit No: 2

LEE COUNTY, FLORIDA

Application

WELL

Application No: 150423-3

Sec 8 / Twp 43 / Rge 26

Project Name: ARMEDA FAMILY

N

Map Date: 2015-04-27

Permit No: 36-07306-W

0 125 250 500

Feet

Exhibit No: 3

TABLE - A

Description Of Wells.

Application Number: 150423-3

Well ID	254459
Name	Well 1
Map Designator	Well 1
FLUWID Number	
Well Field	
Existing/Proposed	E
Well Diameter(Inches)	8
Total Depth(feet)	80
Cased Depth(feet)	70
Facility Elev. (ft. NGVD)	
Screened Interval	
From	
To	
Pumped Or Flowing	P
Pump Type	Centrifugal
Pump Int. Elev.	
Feet (NGVD)	
Feet (BLS)	0
Pump Capacity(GPM)	200
Year Drilled	
Planar Location	
Source	REVIEWER
Feet East	416834
Feet North	877404
Accounting Method	Flow Meter
Use Status	Primary
Water Use Type	Irrigation
Aquifer	Sandstone Aquifer

Exhibit No: 4

Calculations Of Irrigation Requirements

APPLICATION NUMBER: 150423-3

RAINFALL STATION: Ft. Myers
IRRIGATION SYSTEM: Micro-Sprinkler
PARCEL ACREAGE: 25
LAND USE: Agricultural

CROP: Citrus
SOIL TYPE: 0.8
PARCEL NAME: ARMEDA FAMILY LLC
IRR. MULTIPLIER: 1.18

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
MEAN RAINFALL	1.90	2.00	1.50	1.90	4.10	9.40	8.70	8.60	8.40	3.50	1.50	1.50	53.00
EVAPOTRANSPIRATION	2.39	2.48	3.44	4.21	5.39	5.87	6.21	6.02	5.22	4.24	3.07	2.50	51.04
AVG. EFFECTIVE RAIN	0.91	0.96	0.78	1.01	2.13	4.45	4.25	4.17	3.91	1.74	0.76	0.74	25.81
DROUGHT RAINFALI	0.77	0.81	0.65	0.85	1.79	3.74	3.57	3.50	3.28	1.46	0.64	0.62	21.68
AVERAGE IRRIGATION	1.48	1.52	2.66	3.20	3.26	1.42	1.96	1.85	1.31	2.50	2.31	1.76	25.23
DROUGHT IRRIGATION	1.62	1.67	2.79	3.36	3.60	2.13	2.64	2.52	1.94	2.78	2.43	1.88	29.36

ANNUAL SUPPLEMENTAL CROP REQUIREMENT: 29.36 **INCHES**

ANNUAL SUPPLEMENTAL CROP WATER USE:

29.36 IN X 25 AC X 1.18 X 0.02715 MG/AC-IN = 23.52 **MG**

MAXIMUM MONTHLY SUPPLEMENTAL CROP REQUIREMENT: 5.39 **INCHES**

MAXIMUM MONTHLY SUPPLEMENTAL CROP WATER USE:

5.39 IN X 25 AC X 1.18 X 0.02715 MG/AC-IN = 4.32 **MG**

TOTAL ANNUAL DEMAND: 23.52 **MG**

TOTAL MAXIMUM MONTHLY DEMAND: 4.32 **MG**

Exhibit No: 5

STAFF REPORT DISTRIBUTION LIST

ADDRESSES

Armeda Family, L L C
19440 Armeda Road
Alva FL 33920
bcook@sfwmd.gov

Application No: 150423-3

Exhibit No:6

ATTACHMENT 2
BLANEY-CRIDDLE IRRIGATION DEMANDS

Calculations of Irrigation Requirements (1-in-10)

Rainfall Station:	Ft. Myers 1-in-10	**Crop No.:**	1
Irrigation System:	Sprinkler	**Parcel Name:**	
Irrigated Acreage:	55.68	**Crop No. in Parcel:**	1
Crop:	Turf Grass		
Soil Type:	0.80		
Multiplier	1.30		
Efficiency	0.77		

Calculations	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Average Rainfall (inches)	1.90	2.00	1.50	1.90	4.10	9.40	8.70	8.60	8.40	3.50	1.50	1.50	53.00
Evapotranspiration (inches)	1.86	2.14	3.70	5.11	6.83	7.60	8.05	7.72	6.48	4.92	3.07	2.15	59.63
Average Effective Rainfall (inches)	0.88	0.94	0.79	1.06	2.31	4.91	4.71	4.58	4.19	1.81	0.76	0.72	27.66
1-in-10 Effective Rainfall (inches)	0.74	0.79	0.66	0.89	1.94	4.12	3.96	3.85	3.52	1.52	0.64	0.61	23.24
Average Irrigation (inches)	0.98	1.20	2.91	4.05	4.52	2.69	3.34	3.14	2.29	3.11	2.31	1.43	31.97
1-in-10 Irrigation (inches)	1.12	1.35	3.04	4.22	4.89	3.48	4.09	3.87	2.96	3.40	2.43	1.54	36.39

1-in-10 Annual Supplemental Crop Requirement = 36.39 inches

Annual Supplemental Crop Water Use:

36.39 inches X 55.68 Acres X 1.3 X 0.02715 MG/AC-IN = 71.51 MG

1-in-10 Maximum Monthly Supplemental Crop Requirement = 4.89 inches

Maximum Monthly Supplemental Crop Water Use:

4.89 inches X 55.68 Acres X 1.3 X 0.02715 MG/AC-IN = 9.61 MG

Notes:

Evapotranspiration was calculated using a modified Blaney-Criddle method.
Average effective rainfall is the amount that is useful to crops in an average year
Drought rainfall is the rainfall minimum representative of a 1-in-10 year drought
Drought effective rainfall is the amount that is useful to crops in a 1-in-10 year drought event.
Average irrigation is the net amount that should be required for maximum yields during an average year.
Drought irrigation is the net amount that should be required for maximum yields during a 1-in-10 year drought.

EXHIBIT

ATTACHMENT 3
DEEP LAKE AERATION DEVICE

RESPEC.COM

Vertex Water Features
Pond and Lake Aeration
BOTTOM AERATION

With Vertex MicronBubble™ Technology

AIR3 XL2™

The Vertex Air3 XL2™ pond aerator is a super-efficient, affordable and safe system. In a typical pond, an Air3 XL2™ can aerate approximately 3-4 acres depending on shape, slope, oxygen demand and other factors. A 1/2hp (0.37kW) Brookwood™ SafeStart™ compressor, housed in our rustproof aluminum outdoor cabinet, feeds three bottom mounted CoActive AirStations™ utilizing Vertex's MicronBubble™ technology. The rising force of millions of bubbles circulates the entire water column, entraining bottom water up to the surface allowing vital oxygen to be absorbed and poisonous gasses expelled. With no electricity in the water, Vertex's aeration systems are safe for any type of water recreation.

Our systems have a full 3-year Vertex warranty, excluding wearable parts (air filters and compressor maintenance kits) plus a Limited Lifetime warranty against rust and corrosion on the cabinet, 5-year warranty on the AirStations™ and a 15-year warranty on BottomLine™ supply tubing.

FEATURES

AIRSTATIONXL2™
- Total pumping capacity of up to 11,400 GPM
- Six 9" flexible membrane discs with MicronBubble™ technology
- Shallow water Airstation optional for depths lower than 8'
- Self-cleaning, low maintenance
- Powder-coated stainless steel self-sinking base unit designed to prevent sinking into soft bottom sediments
- 5-year "No Questions" warranty

BROOKWOOD™ COMPRESSOR
- 3-year Vertex warranty, excluding wearable parts (air filters and compressor maintenance kits)
- Vertex SafeStart™ Technology
- UL, 115v or 230v, 35 Max PSI
- Thermal overload protection
- 1/2hp (0.37kW): low electrical costs
- 2-3 year extended duty cycle between scheduled maintenance

QUIETAIR™ CABINET
- Class "A" GFCI protection on all 115v circuits
- Powder coated aluminum for a durable attractive finish
- High capacity 290 CFM fan
- Easy access design with cam lock
- Easy plug-in connection to waterside electrical service
- Disconnect switch
- Heavy duty, light weight mounting pad included
- Sound dampening kit optional
- Limited lifetime warranty against rust

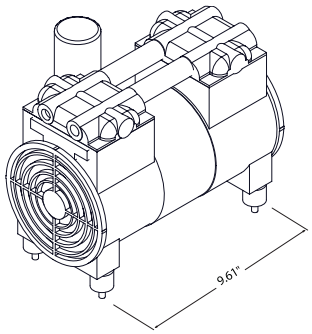
BOTTOMLINE™ TUBING
- Over-sized I.D. for high flow
- Self-weighted for easy installation
- Available in 100' and 500' increments
- 15-year Vertex warranty

BENEFITS TO THE LAKE
- High pumping rate easily penetrates stratification layers
- Circulates entire water column
- Increases oxygen levels throughout water column
- Promotes beneficial bacteria growth
- Prevents low oxygen fish kills
- Reduces nutrient levels and associated algae growth
- Oxidizes/reduces bottom muck
- Expands oxygenated habitat for improved fisheries
- Reduces aquatic midge and mosquito insect hatches
- Eliminates foul odors from undesirable dissolved gases
- Safe entry – no electricity in the water
- Extremely energy efficient

SPECIFICATIONS: AIR3 XL2™ LAKE AERATION SYSTEM

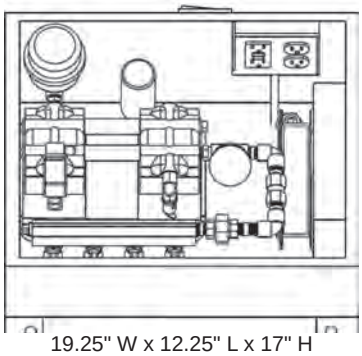
BROOKWOOD™ COMPRESSOR

1/2hp (0.37kW), 115v or 230v, Single Phase piston type compressor. Built for continuous 24/7 operation and equipped with Vertex SafeStart™ technology allowing auto restart under maximum rated pressure without motor damage. Super-duty Brookwood™ compressors incorporate upgraded rotors, stators, valve plates, bearings and capacitors and are thermally protected, oil-free, and require no lubrication; just periodic cleaning of included washable air filter. Extended duty cycle is approximately 2 to 3 years for compressor maintenance, about 2 to 3 times the duty cycle of ordinary piston and rotary vane compressors. All Brookwood™ SafeStart™ compressors carry a 3-year Vertex warranty, excluding wearable parts (air filters and compressor maintenance kits).



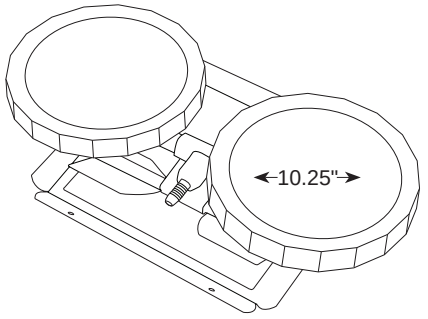
QUIETAIR™ CABINET

Enclosure comes equipped with cam lock for security, fully gasketed and constructed of aluminum with gray electrostatically-bonded powder coating to provide Limited Lifetime warranty against cabinet rust and corrosion. Enclosure furnished with stamped ventilation grills to insure forced air circulation and an integral cooling fan with thermal protection, producing 290 CFM to guard against excessive compressor operating temperatures. Cabinet provided with HDPE mounting pad. Enclosure comes with class a GFCI protection on both the compressor and fan circuits. Quick disconnect switch included. Side mounted muffler box and additional insulation optional for quiter operation.



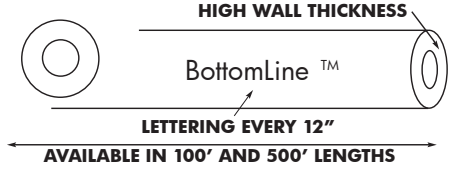
AIRSTATION XL2™ ASSEMBLY

Diffuser station consists of two self-cleaning, 9" diameter, flexible membrane diffusers of EPDM compound with 100% rebound memory, each producing millions of fine 500 to 3000 micron bubbles – the majority 500 to 1000 microns. Each diffuser station base unit is made of powder-coated stainless steel and designed to prevent settling into soft bottom sediments. AIRSTATION™ is designed with adjustable diffuser riser to accommodate any site requirements. AirStations are independently tested and verified to provide stated pumping rates. 5-year warranty.



BOTTOMLINE™ SUPPLY TUBING

Self-weighted, direct burial submersible tubing for connection from compressor to diffuser stations. Tubing is flexible PVC composite construction for use with standard PVC solvent weld cement and insert fittings. Tubing has 0.58" I.D. and high wall thickness for long term durability and protection against punctures. Remains flexible in cold temperatures.



Vertex Water Features
Pond and Lake Aeration
(844) 432-4303 • info@vertexwaterfeatures.com
www.vertexwaterfeatures.com

Install all electrical equipment in accordance with Article 682 of the National Electrical Code and all local codes. Vertex Water Features reserves the right to improve and change our designs and/or specifications of our aerators without notice or obligation.

ATTACHMENT 4
LEE COUNTY
WUP NO.36-00152-W

RESPEC.COM

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

WATER USE
LETTER MODIFICATION

APPLICATION NUMBER: 240105-8 **PERMIT NUMBER:** 36-00152-W

DATE ISSUED: February 9, 2024 **EXPIRATION DATE:** August 26, 2040

PERMITTEE: LEE COUNTY UTILITIES
1500 MONROE STREET, THIRD FLOOR
FORT MYERS, FL 33902

PROJECT NAME: NORTH LEE COUNTY PWS

PROJECT LOCATION: LEE COUNTY, SS1-4, 9-11, 15, 16, 21/T44S/R24E
SS14-16, 19-22, 25-31/T44S/R25E
SS3-5, 8-11, 14-16, 22-29, 33-36/T43S/R24E

District staff has reviewed the information submitted in support of the referenced application for permit modification(s) and determined that the proposed activities are in compliance with the previous permit and the appropriate provisions of Rule 40E-2.331 (4)(a), Florida Administrative Code. The permit modification(s) include the following:

The purpose of this letter modification is to relocate five of the permitted proposed production wells (PW-37, PW-38, PW-39, PW-40 and PW-41) approximately 0.5 mile to 1 mile east of the original locations, as shown in Exhibit 1. Additionally, the Permittee is requesting to remove from the permit one of the monitoring wells (TW-7). Monitoring well TW-7 is located within the right-of-way of North River Road and will be plugged and abandoned due to the proposed road widening. The proposed locations of the production wells are on parcels owned by Lee County along North River Road and Telegraph Creek Preserve. No changes to the construction details for the proposed Lower Hawthorn aquifer (LHA) production wells are requested. The project well locations are shown in Exhibit 1 and their construction details are shown in Exhibit 2.

In support of this letter modification, the Permittee provided results of the groundwater flow and solute transport model utilized in the previous permit (Application 200604-15). Model results (Exhibit 3) show that the drawdown due to withdrawals from the new locations of the production wells is expected to provide a slight improvement to the combined feedwater to the North Lee County Reverse Osmosis Water Treatment Plant, because the proposed production wells will be installed in an area with better water quality (lower chloride concentration) in the LHA. A hydrograph of the historic chloride concentrations for the project's wellfield is provided in Exhibit 4. The model predicts an estimated chloride concentration of approximately 1,514 milligrams per liter (mg/L) for 2041 due to the relocation of the proposed production wells versus 1,526 mg/L for the currently permitted wellfield without the relocation of the five proposed production wells. The LHA area near the proposed relocation wells will be monitored by an existing monitoring well (TW-14, installed in 2022)) located in the easternmost portion of the wellfield (Exhibit 1). More precise predictions will be provided by solute transport model results after completion of the construction of the proposed production wells. No other changes to the permit are requested.

This permit remains subject to the 29 Limiting Conditions and all other terms of the permit authorization as previously issued.

Brad D. Cook, P.G.
Section Leader
Water Use Bureau

SPECIAL PERMIT CONDITIONS

1. This permit is issued to:

   Lee County Utilities
   1500 Monroe Street, Third Floor
   Fort Myers, FL 33902

2. This permit shall expire on August 26, 2040.

3. Use classification is:

   Public Water Supply

4. Source classification is:

   Groundwater from:
   Lower Hawthorn Aquifer

5. Allocation:

   Total annual allocation is 5,667.50 million gallons (MG). (15.53 MGD)

   Total maximum monthly allocation is 587.30 million gallons (MG).

   These allocations represent the amount of water required to meet the water demands as a result of a rainfall deficit during a drought with the probability of recurring one year in ten. The Permittee shall not exceed these allocations in hydrologic conditions less than a 1-in-10 year drought event. Compliance with the annual allocation is based on the quantity withdrawn over a 12-month time period. Compliance with the maximum monthly allocation is based on the greatest quantity withdrawn in any single month. The annual allocation expressed in GPD or MGD is for informational purposes only.

   If the rainfall deficit is more severe than that expected to recur once every ten years, the withdrawals shall not exceed that amount necessary to continue to meet the reasonable-beneficial demands under such conditions, provided no harm to the water resources occur and:

   1. All other conditions of the permit are met; and
   2. The withdrawal is otherwise consistent with applicable declared Water Shortage Orders in effect pursuant to Chapter 40E-21, F.A.C.

6. Withdrawal facilities:

Groundwater - Proposed:

21 - 17" X 700' X 700 GPM Wells Cased To 500 Feet

Groundwater - Existing:

1 - 17" X 653' X 780 GPM Well Cased To 451 Feet
1 - 17" X 700' X 725 GPM Well Cased To 500 Feet
1 - 16" X 803' X 700 GPM Well Cased To 597 Feet
1 - 14" X 747' X 700 GPM Well Cased To 538 Feet
1 - 17" X 592' X 800 GPM Well Cased To 441 Feet
1 - 14" X 639' X 0 GPM Well Cased To 541 Feet
1 - 14" X 800' X 700 GPM Well Cased To 572 Feet
1 - 17" X 670' X 550 GPM Well Cased To 500 Feet
1 - 16" X 500' X 700 GPM Well Cased To 418 Feet
1 - 17" X 637' X 700 GPM Well Cased To 500 Feet
1 - 16" X 734' X 725 GPM Well Cased To 530 Feet
1 - 14" X 700' X .001 GPM Well Cased To 590 Feet
1 - 16" X 667' X 700 GPM Well Cased To 542 Feet
1 - 17" X 642' X 0 GPM Well Cased To 540 Feet
1 - 17" X 600' X 700 GPM Well Cased To 470 Feet
1 - 16" X 489' X 725 GPM Well Cased To 457 Feet
1 - 16" X 748' X 725 GPM Well Cased To 538 Feet
1 - 17" X 700' X 700 GPM Well Cased To 478 Feet
1 - 16" X 700' X 700 GPM Well Cased To 513 Feet
1 - 17" X 700' X 700 GPM Well Cased To 493 Feet

7. The Permittee shall submit all data as required by the implementation schedule for each of the permit conditions to: SFWMD at www.sfwmd.gov/ePermitting, or Regulatory Support, 3301 Gun Club Road, West Palm Beach, FL 33406.

8. The Permittee must submit the appropriate application form incorporated by reference in Rule 40E-2.101, F.A.C., to the District prior to the permit expiration date in order to continue the use of water.

9. The Permittee shall secure a well construction permit prior to construction, repair, or abandonment of all wells, as described in Chapter 40E-3, F.A.C.

10. Prior to any withdrawals at the project, the Permittee shall provide the results of the calibration testing of the identified water accounting method(s) and equip all existing and proposed withdrawal facilities with approved water use accounting method(s) pursuant to Subsection 4.1.1 of the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District.

11. Every five years from the date of last calibration, the Permittee shall submit re-calibration data for each withdrawal facility.

12. Monthly withdrawals for each withdrawal facility shall be reported to the District quarterly. The water accounting method and means of calibration shall be stated on each report.

13. The Permittee shall notify the District within 30 days of any change in service area boundary that results in a change in demand that affects its permitted allocation. The allocation shall be modified to effectuate such change.

14. The Permittee shall maintain an accurate flow meter at the intake of the water treatment plant for the purpose of measuring daily inflow of water.

15. If at any time there is an indication that the well casing, valves, or controls leak or have become inoperative, repairs or replacement shall be made to restore the system to an operating condition. Failure to make such repairs shall be cause for filling and abandoning the well, in accordance with procedures outlined in Chapter 40E-3, F.A.C.

16. The Standard Water Conservation Plan described in Subsection 2.3.2.F.1.a of the Applicant's Handbook for Water Use Permits within the South Florida Water Management District and Exhibit 13 (Application 200604-15) must continue being implemented.

17. The Permittee shall submit to the District an updated "Summary of Groundwater (Well) Facilities" table ("Section IV - Sources of Water", Water Use Permit Application Form 1379) within 90 days of completion of the proposed wells identifying the actual total and cased depths, pump manufacturer and model numbers, pump types, intake depths and type of meters.

18. The Permittee shall notify the District within 30 days of entering into an inter-local agreement, contract, or other similar instrument to deliver or receive water outside of its service area or to serve a demand not identified to determine the allocation described in this permit. A copy of such agreement shall be provided to the District. The monthly volume of water delivered and/or received via each inter-local agreement, contract, or other similar instrument shall be submitted to the District at the same reporting frequency as the withdrawals for each withdrawal facility required in this permit.

19. The Permittee shall implement the wellfield operating plan submitted in support of the permit application, as described in the District staff report.
Details of the wellfield operation plan are shown on Exhibit 12 (Application 200604-15).

20. The Permittee shall determine unaccounted-for distribution system losses (for the entire distribution system) on a monthly basis, including the way these losses are calculated. Reports shall be submitted to the District on a yearly basis and are due by April 30th of each year.

    If unaccounted-for distribution system losses are greater than 10 percent for any given year, the Permittee shall submit to the District for approval, a formal leak detection program that meets the requirements of Subsection 4.1.2 of the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District, to address the reduction of such water loss.

21. The Permittee shall maintain an accurate flow meter at the point of discharge from the treatment plant for the purpose of measuring the daily flow of water.

22. Entities that control, either directly or indirectly, a wastewater treatment plant and/or reuse distribution system, and which have determined pursuant to Section 403.064, F.S., that use of reclaimed water is feasible, must provide the District with annual updates of the following information: (A) the status of distribution system construction, including location and capacity of lines; (B) a summary of uncommitted supplies for the next year; (C) copies of any new or amended local mandatory reclaimed water reuse zone ordinances; and (D) a list of end-users who have contracted to receive reclaimed water and the agreed upon quantity of water to be delivered.
    Reports shall be submitted to the District annually and are due by April 30th of each year.

23. If a proposed well location is different from a location specified in the application, the Permittee shall submit to the District an evaluation of the impact of pumpage from the proposed well location on adjacent existing legal uses, pollution sources, environmental features, the saline water interface, and water bodies one month prior to all new well construction. The Permittee is advised the proposed well locations and resulting impacts must be in compliance with all permitting criteria and performance standards in effect at that time.

24. The Permittee shall submit to the District an updated "Summary of Groundwater (Well) or Surface Water (Pump or Culvert) Facilities" table ("Section IV - Sources of Water", Water Use Permit Application Form 1379) at least 30 days prior to a change in any facility status (e.g. installation, relocation, abandonment) to include all specifications of the well, pump or culvert (e.g. actual total and cased depths, pump manufacturer and model numbers, pump types, intake depths and type of meters, culvert type, length, cross-section, diameter, height, width, invert elevation, control device, and water use accounting method).

25. The Permittee shall implement the following saline water intrusion monitoring program:
Water samples from all production and monitoring wells shall be analyzed monthly for dissolved chloride concentration and the results shall be submltted to the District on quarterly basis.

26. The Permittee shall continue to submit monitoring data in accordance with the approved water level monitoring program for this project.
The Permittee shall continue monthly water level monitoring in each production and monitor well and submit data to the District on a quarterly basis.

27. Pursuant to Section 373.236(4), F.S., every ten years from the date of permit issuance, the Permittee shall submit a water use compliance report for review and approval by District Staff to SFWMD at www.sfwmd.gov/ePermitting, or Regulatory Support, 3301 Gun Club Road, West Palm Beach, FL 33406.

28. Thirty (30) days prior to installation of any of the proposed wells located outside the current service area, the Permittee shall provide to the District ownership or lease documentation proving the Permittee has legal control of the well site.

29. The Permittee shall provide a quarterly report that identifies the number of days

Olga plant was shut down, the reason for the shut down and monthly amount of water supplied by North Lee County WTP (to be submitted to the District on the quarterly basis).

EXHIBIT 1- AERIAL PHOTO SHOWING LOCATION OF NORTH LEE COUNTY WELLFIELD AND PROPOSED MODIFICATION.

APPL. # 240105-8

TABLE - A

Description Of Wells.

Application Number: 240105-8

Well ID	142438	142439	142440	142450	142441	142442
Name	PW-1	PW-2	PW-3	PW-4	PW-5	PW-6
Map Designator	PW-1	PW-2	PW-3	PW-4	PW-5	PW-6
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	A
Well Diameter(Inches)	17	17	17	17	17	17
Total Depth(feet)	637	700	592	653	670	700
Cased Depth(feet)	500	493	441	451	500	475
Facility Elev. (ft. NGVD)	25	25	25	25	25	25
Screened Interval From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Submersible	Submersible	Turbine	Submersible	Submersible	None
Pump Int. Elev. Feet (NGVD)	-95	-95	-95	-95	-95	
Feet (BLS)	120	120	120	120	120	
Pump Capacity(GPM)	700	700	800	780	550	0
Year Drilled	2003	2003	2002	2002	2002	2003
Planar Location Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	398380	398396	398305	397297	397311	397333
Feet North	872896	872249	871294	870522	871368	871842
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	None
Use Status	Standby	Primary	Primary	Primary	Standby	Abandoned
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

TABLE - A

Description Of Wells.

Application Number: 240105-8

Well ID	142449	142443	142545	142546	142547	142548
Name	PW-7	PW-8	MW-2 (PW-9)	PW-10	PW-11	PW-12
Map Designator	PW-7	PW-8	MW-2 (PW-9)	PW-10	PW-11	PW-12
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	17	17	14	14	16	16
Total Depth(feet)	700	600	639	747	748	734
Cased Depth(feet)	478	470	541	538	538	530
Facility Elev. (ft. NGVD)	25	25	16.5	17	16	21
Screened Interval						
From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Submersible	Turbine	None	Submersible	Turbine	Turbine
Pump Int. Elev.						
Feet (NGVD)	-115	-95		-103	-104	-99
Feet (BLS)	140	120		120	120	120
Pump Capacity(GPM)	700	700	0	700	725	725
Year Drilled	2002	2003	2008	2008	2010	2012
Planar Location						
Source	APPLICANT	APPLICANT	APPLICANT	DIGITIZED	APPLICANT	DIGITIZED
Feet East	397301	397670	395477	393675	391822	389254
Feet North	872914	871043	870587	870272	870317	870363
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Primary	Primary	Primary	Standby	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Monitor Public Water Supply	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

TABLE - A

Description Of Wells.

Application Number: 240105-8

Well ID	142637	142638	142639	142640	220604	220605
Name	PW-13A	PW-14	PW-15	PW-16A	PW-17A	PW-18A
Map Designator	PW-13A	PW-14	PW-15	PW-16A	PW-17A	PW-18A
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	16	16	16	16	16	14
Total Depth(feet)	489	700	803	667	500	800
Cased Depth(feet)	457	513	597	542	418	572
Facility Elev. (ft. NGVD)	21	21	20	13	8	12
Screened Interval From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Turbine	Turbine	Turbine	Turbine	Turbine	Submersible
Pump Int. Elev. Feet (NGVD)	-99	-99	-100	-107	-112	-108
Feet (BLS)	120	120	120	120	120	120
Pump Capacity(GPM)	725	700	700	700	700	700
Year Drilled	2011	2012	2011	2010	2010	2009
Planar Location Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	386308	384970	383325	393596	393268	392563
Feet North	871026	870455	871313	868045	866240	868941
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Standby	Standby	Primary	Standby	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

TABLE - A

Description Of Wells.

Application Number: 240105-8

Well ID	262850	262851	262852	262853	262854	262855
Name	PW-19	PW-20	PW-21	PW-22	PW-23	PW-24
Map Designator	PW-19	PW-20	PW-21	PW-22	PW-23	PW-24
FLUWID Number						
Well Field						
Existing/Proposed	E	P	P	E	P	P
Well Diameter(Inches)	14	17	17	17	17	17
Total Depth(feet)	700	700	700	700	700	700
Cased Depth(feet)	590	500	500	500	500	500
Facility Elev. (ft. NGVD)	25					
Screened Interval From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Turbine	Turbine	Turbine	Turbine	Turbine	Turbine
Pump Int. Elev. Feet (NGVD)	-95					
Feet (BLS)	120	120	120	120	120	120
Pump Capacity(GPM)	.001	700	700	725	700	700
Year Drilled	2015	2021	2021	2021	2022	2022
Planar Location Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	382404	378774	378514	377065	378972	381084
Feet North	872654	876821	879065	880756	881126	880971
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Standby	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

TABLE - A

Description Of Wells.

Application Number: 240105-8

Well ID	262856	285295	285296	285297	285298	285299
Name	PW-25	PW-26	PW-27	PW-28	PW-29	PW-30
Map Designator	PW-25	PW-26	PW-27	PW-28	PW-29	PW-30
FLUWID Number						
Well Field						
Existing/Proposed	P	P	P	P	P	P
Well Diameter(Inches)	17	17	17	17	17	17
Total Depth(feet)	700	700	700	700	700	700
Cased Depth(feet)	500	500	500	500	500	500
Facility Elev. (ft. NGVD)						
Screened Interval From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Turbine	Turbine	Turbine	Turbine	Turbine	Turbine
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	120	120	120	120	120	120
Pump Capacity(GPM)	700	700	700	700	700	700
Year Drilled	2022	2023	2023	2023	2023	2023
Planar Location Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	383120	384210	384195	388914	388988	388758
Feet North	880911	882100	883614	880949	879979	878867
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

TABLE - A

Description Of Wells.

Application Number: 240105-8

Well ID	285300	285301	285302	285303	285304	285305
Name	PW-31	PW-32	PW-33	PW-34	PW-35	PW-36
Map Designator	PW-31	PW-32	PW-33	PW-34	PW-35	PW-36
FLUWID Number						
Well Field						
Existing/Proposed	P	P	P	P	P	P
Well Diameter(Inches)	17	17	17	17	17	17
Total Depth(feet)	700	700	700	700	700	700
Cased Depth(feet)	500	500	500	500	500	500
Facility Elev. (ft. NGVD)						
Screened Interval From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Turbine	Turbine	Turbine	Turbine	Turbine	Turbine
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)	120	120	120	120	120	120
Pump Capacity(GPM)	700	700	700	700	700	700
Year Drilled	2023	2023	2026	2026	2028	2028
Planar Location Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	390470	392455	394106	408102	410138	412116
Feet North	880782	880804	880743	875791	875131	875608
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Primary	Primary	Primary	Primary	Primary	Primary
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

TABLE - A
Description Of Wells.

Application Number: 240105-8

Well ID	285306	285307	285308	285309	285310	262857
Name	PW-37	PW-38	PW-39	PW-40	PW-41	PW-42 (ASR)
Map Designator	PW-37	PW-38	PW-39	PW-40	PW-41	PW-42 (ASR)
FLUWID Number						
Well Field						
Existing/Proposed	P	P	P	P	P	E
Well Diameter(Inches)	17	17	17	17	17	17
Total Depth(feet)	700	700	700	700	700	642
Cased Depth(feet)	500	500	500	500	500	540
Facility Elev. (ft. NGVD)						
Screened Interval						
From						
To						
Pumped Or Flowing	P	P	P	P	P	P
Pump Type	Turbine	Turbine	Turbine	Turbine	Turbine	Turbine
Pump Int. Elev.						
Feet (NGVD)						
Feet (BLS)	120	120	120	120	120	120
Pump Capacity(GPM)	700	700	700	700	700	0
Year Drilled	2028	2032	2032	2034	2034	1999
Planar Location						
Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	421259	421388	422694	424385	423352	382564
Feet North	875648	877806	877201	877297	875147	865467
Accounting Method	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter	Flow Meter
Use Status	Primary	Primary	Primary	Primary	Primary	Standby
Water Use Type	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor	Public Water Supply Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

TABLE - A
Description Of Wells.

Application Number: 240105-8

Well ID	142805	285312	285314	262846	285315	285316
Name	MW-1	TW-1	TW-2	TW-4	TW-6	TW-7
Map Designator	MW-1	TW-1	TW-2	TW-4	TW-6	TW-7
FLUWID Number						
Well Field						
Existing/Proposed	E	E	E	E	E	E
Well Diameter(Inches)	8	8	8	8	8	8
Total Depth(feet)	612	750	776	624	725	750
Cased Depth(feet)	537	478	461	414	538	528
Facility Elev. (ft. NGVD)	26	26	26	25	25	25
Screened Interval From						
To						
Pumped Or Flowing	F	F	F	F	F	F
Pump Type	None	None	None	None	None	None
Pump Int. Elev. Feet (NGVD)						
Feet (BLS)						
Pump Capacity(GPM)	0	0	0	0	0	0
Year Drilled	2002	2018	2018	2019	2019	2019
Planar Location Source	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT	APPLICANT
Feet East	397309	382141	378730	394429	422600	408003
Feet North	872419	875860	876141	881320	875282	875629
Accounting Method	None	None	None	None	None	None
Use Status	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Water Use Type	Monitor	Monitor	Monitor	Monitor	Monitor	Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

TABLE - A

Description Of Wells.

Application Number: 240105-8

Well ID	285317	295146
Name	TW-10	TW-14
Map Designator	TW-10	TW-14
FLUWID Number		
Well Field		
Existing/Proposed	E	E
Well Diameter(Inches)	8	8
Total Depth(feet)	810	792
Cased Depth(feet)	542	587
Facility Elev. (ft. NGVD)	25	
Screened Interval		
From		
To		
Pumped Or Flowing	F	
Pump Type	None	None
Pump Int. Elev.		
Feet (NGVD)		
Feet (BLS)		
Pump Capacity(GPM)	0	0
Year Drilled	2019	2022
Planar Location		
Source	APPLICANT	APPLICANT
Feet East	388786	426156
Feet North	880945	877690
Accounting Method	None	None
Use Status	Monitor	Monitor
Water Use Type	Monitor	Monitor
Aquifer	Lower Hawthorn Aquifer	Lower Hawthorn Aquifer

Exhibit No: 2

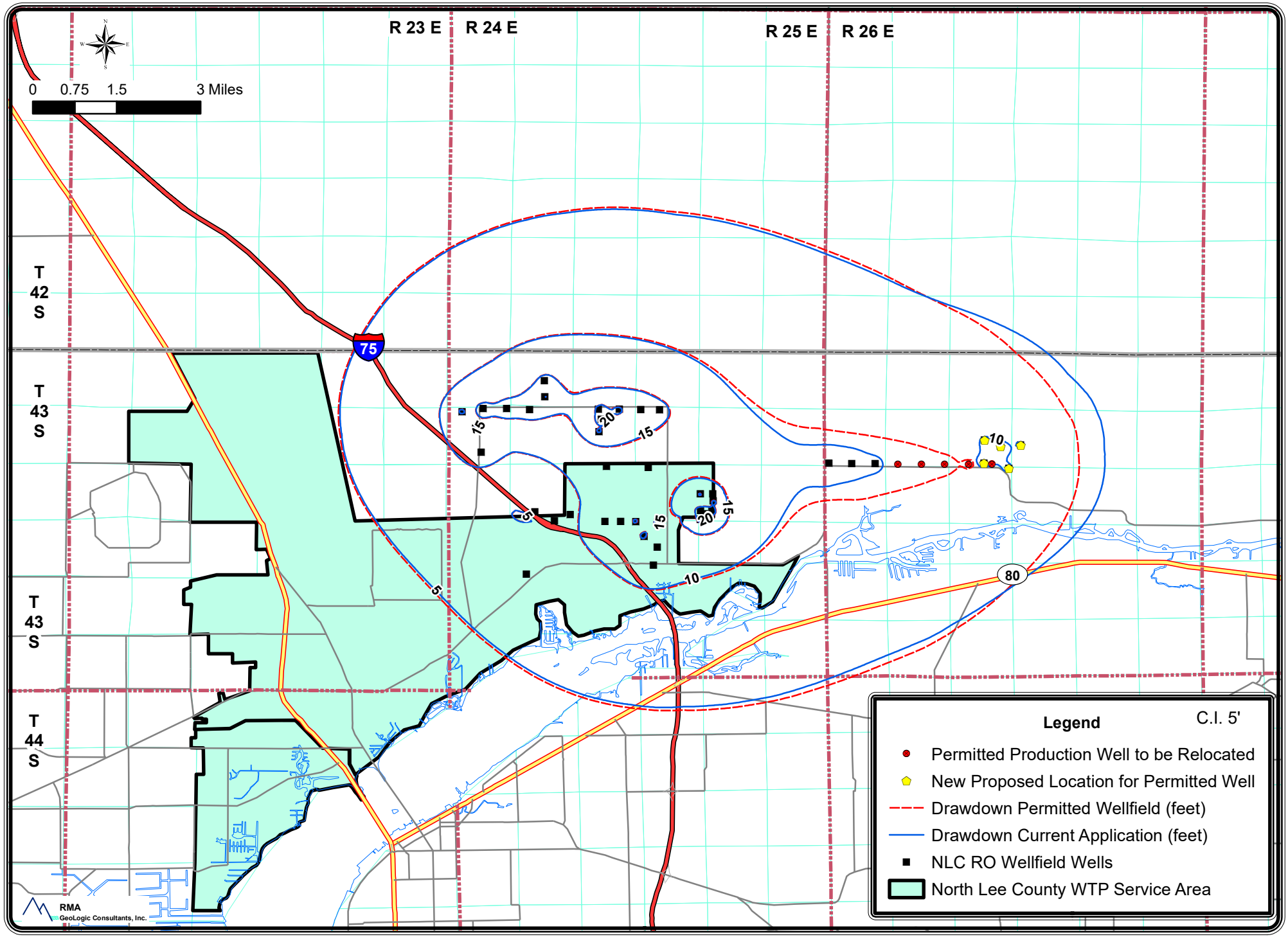
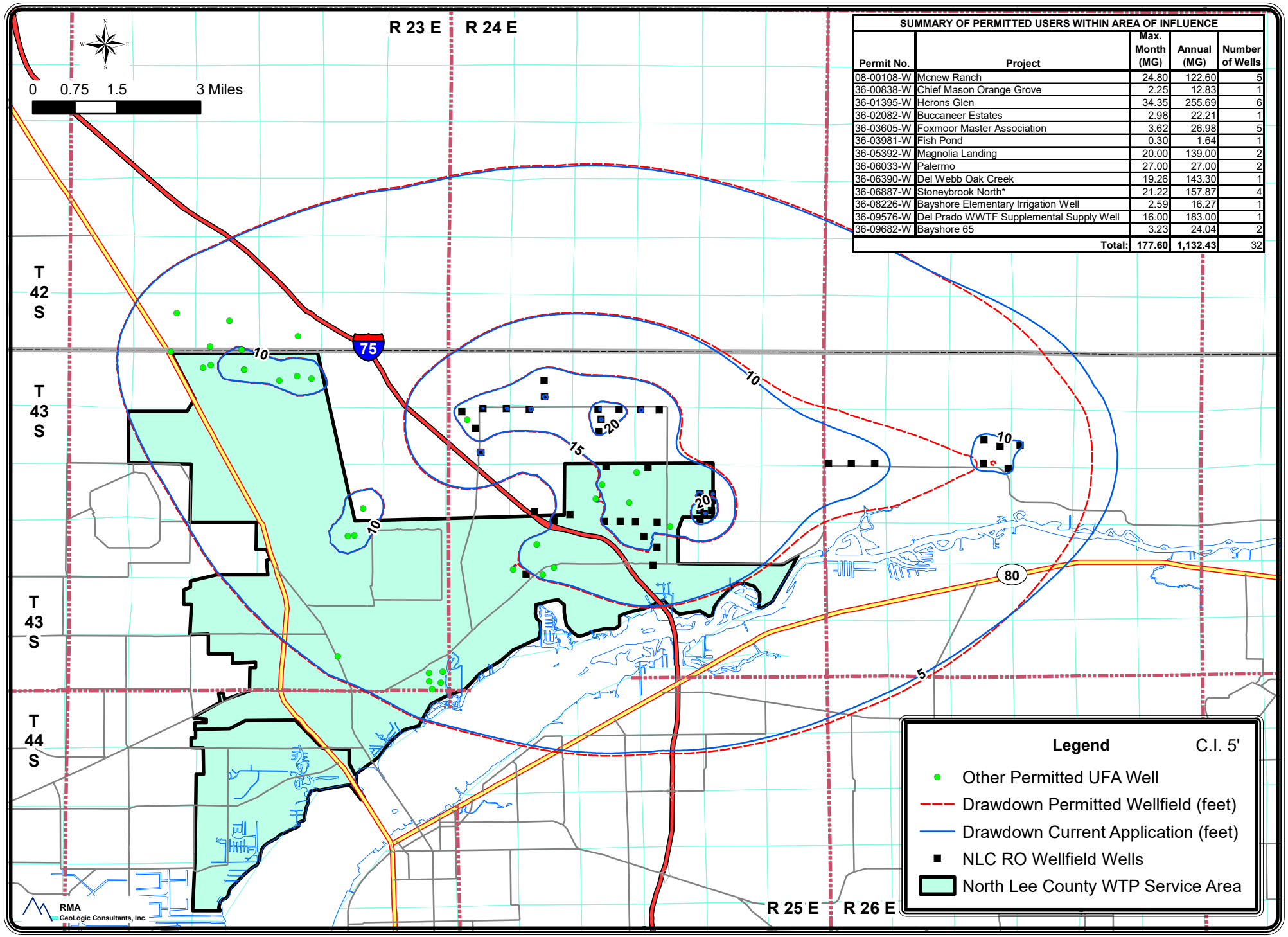


EXHIBIT 3- INDIVIDUAL POTENTIOMETRIC WATER LEVEL DRAWDOWN CONTOUR MAP BY THE END OF MAY IN THE UPPER FLORIDAN AQUIFER DUE TO THE PERMITTED MAXIMUM DAILY QUANTITY (19.3 MGD) WITHDRAWAL FROM THE NORTH LEE COUNTY WELLFIELD.

APPL. # 240105-8



SUMMARY OF PERMITTED USERS WITHIN AREA OF INFLUENCE

Permit No.	Project	Max. Month (MG)	Annual (MG)	Number of Wells
08-00108-W	Mcnew Ranch	24.80	122.60	5
36-00838-W	Chief Mason Orange Grove	2.25	12.83	1
36-01395-W	Herons Glen	34.35	255.69	6
36-02082-W	Buccaneer Estates	2.98	22.21	1
36-03605-W	Foxmoor Master Association	3.62	26.98	5
36-03981-W	Fish Pond	0.30	1.64	1
36-05392-W	Magnolia Landing	20.00	139.00	2
36-06033-W	Palermo	27.00	27.00	2
36-06390-W	Del Webb Oak Creek	19.26	143.30	1
36-06887-W	Stoneybrook North*	21.22	157.87	4
36-08226-W	Bayshore Elementary Irrigation Well	2.59	16.27	1
36-09576-W	Del Prado WWTF Supplemental Supply Well	16.00	183.00	1
36-09682-W	Bayshore 65	3.23	24.04	2
	Total:	**177.60**	**1,132.43**	32

EXHIBIT 3 - CUMULATIVE POTENTIOMETRIC WATER LEVEL DRAWDOWN CONTOUR MAP BY THE END OF MAY IN THE UPPER FLORIDAN AQUIFER DUE TO THE PERMITTED MAXIMUM DAILY QUANTITY (19.3 MGD) WITHDRAWAL FROM THE NORTH LEE COUNTY WELLFIELD AND PERMITTED ALLOCATIONS FROM NEARBY UFA USERS.

APPL. # 240105-8

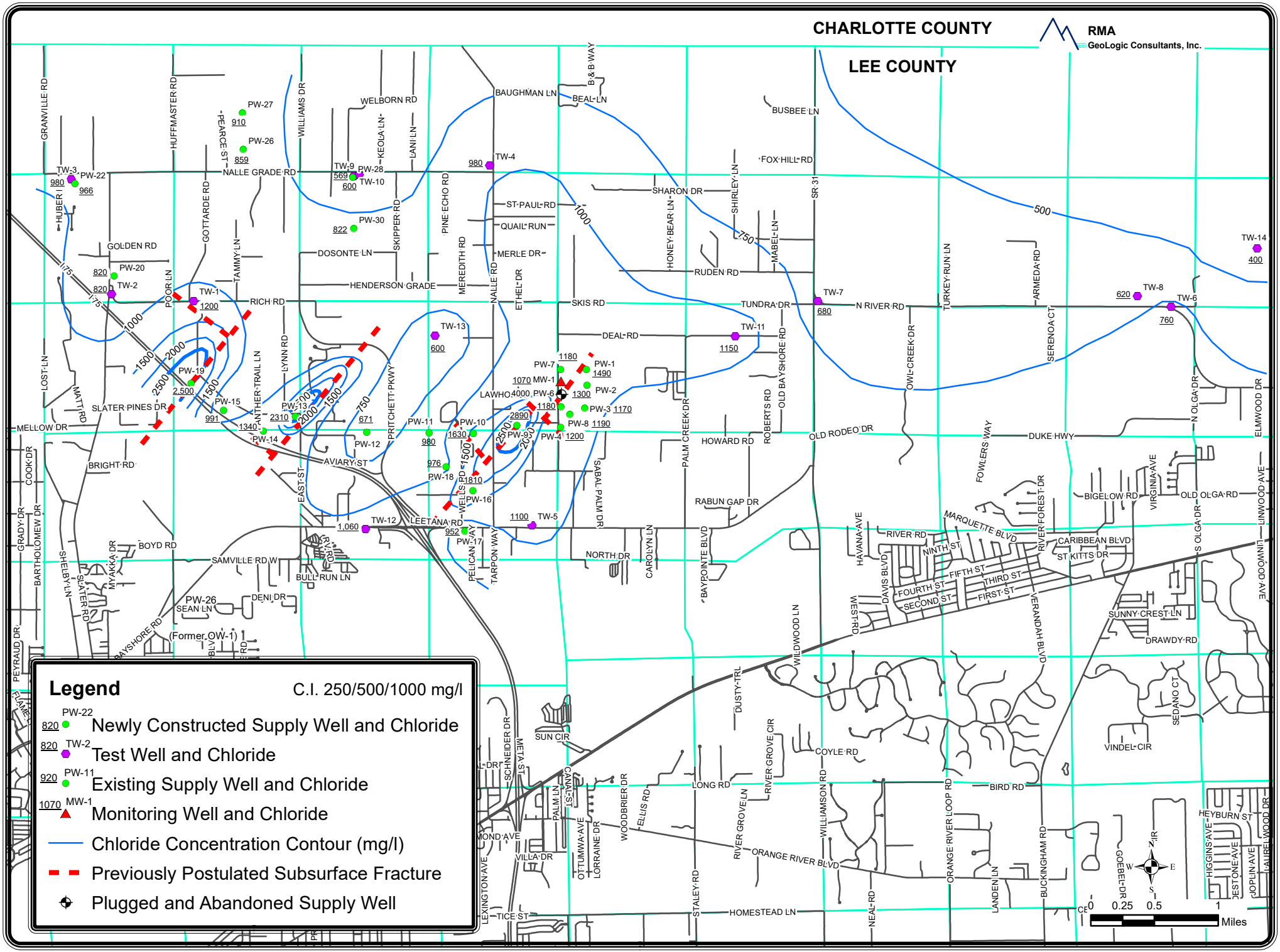
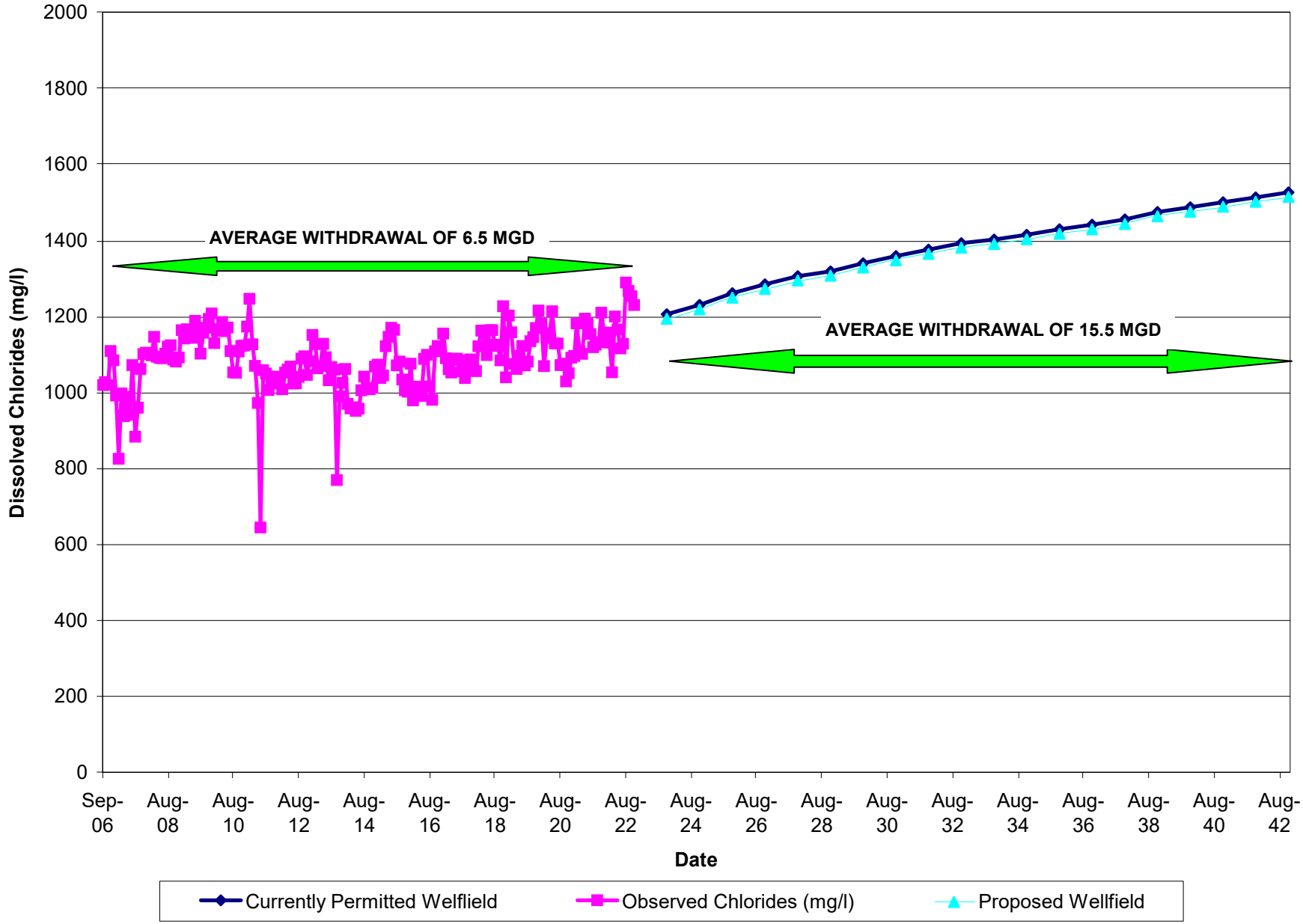


EXHIBIT 4 - CHLORIDE CONTOUR MAP FOR THE NORTH LEE COUNTY WELFIELD UPDATED WITH DATA FROM THE TEST WELLS AND NEWLY CONSTRUCTED SUPPLY WELLS.

APPL. # 240105-8

FIGURE 6- PLOT OF PROJECTED CHLORIDE CONCENTRATIONS FOR THE NEXT 20 YEARS FOR THE COMBINED PRODUCED GROUNDWATER FROM THE NORTH LEE COUNTY WELLFIELD (AVERAGE WITHDRAWAL RATE OF 15.5 MGD).



Requirement by Permit Condition Report

App No: 240105-8
Permit No: 36-00152-W
Project Name: NORTH LEE COUNTY PWS

Permit Condition No: 11 **Permit Condition Code:** WUSTD021-2

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - PW-1	Calibration report for WELL PW-1	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-2	Calibration report for WELL PW-2	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-3	Calibration report for WELL PW-3	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-5	Calibration report for WELL PW-5	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-8	Calibration report for WELL PW-8	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-7	Calibration report for WELL PW-7	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-4	Calibration report for WELL PW-4	Every Five Years	Every Five Years	31-MAR-2027
WELL - MW-2 (PW-9)	Calibration report for WELL MW-2 (PW-9)	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-10	Calibration report for WELL PW-10	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-11	Calibration report for WELL PW-11	Every Five Years	Every Five Years	30-APR-2027
WELL - PW-12	Calibration report for WELL PW-12	Every Five Years	Every Five Years	30-APR-2027
WELL - PW-13A	Calibration report for WELL PW-13A	Every Five Years	Every Five Years	30-APR-2027
WELL - PW-14	Calibration report for WELL PW-14	Every Five Years	Every Five Years	30-APR-2027
WELL - PW-15	Calibration report for WELL PW-15	Every Five Years	Every Five Years	30-APR-2027
WELL - PW-16A	Calibration report for WELL PW-16A	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-17A	Calibration report for WELL PW-17A	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-18A	Calibration report for WELL PW-18A	Every Five Years	Every Five Years	31-MAR-2027
WELL - PW-19	Calibration report for WELL PW-19	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-20	Calibration report for WELL PW-20	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-21	Calibration report for WELL PW-21	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-22	Calibration report for WELL PW-22	Every Five Years	Every Five Years	30-APR-2027
WELL - PW-23	Calibration report for WELL PW-23	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-24	Calibration report for WELL PW-24	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-25	Calibration report for WELL PW-25	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-42 (ASR)	Calibration report for WELL PW-42 (ASR)	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-26	Calibration report for WELL PW-	Every Five Years	Every Five Years	31-OCT-2024

Exhibit No: 5

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
	26			
WELL - PW-27	Calibration report for WELL PW-27	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-28	Calibration report for WELL PW-28	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-29	Calibration report for WELL PW-29	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-30	Calibration report for WELL PW-30	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-31	Calibration report for WELL PW-31	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-32	Calibration report for WELL PW-32	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-33	Calibration report for WELL PW-33	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-34	Calibration report for WELL PW-34	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-35	Calibration report for WELL PW-35	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-36	Calibration report for WELL PW-36	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-37	Calibration report for WELL PW-37	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-38	Calibration report for WELL PW-38	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-39	Calibration report for WELL PW-39	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-40	Calibration report for WELL PW-40	Every Five Years	Every Five Years	31-OCT-2024
WELL - PW-41	Calibration report for WELL PW-41	Every Five Years	Every Five Years	31-OCT-2024

Permit Condition No: 12 **Permit Condition Code:** WUSTD022-2

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - PW-1	Monthly withdrawal for WELL PW-1	Monthly	Quarterly	31-MAR-2027
WELL - PW-2	Monthly withdrawal for WELL PW-2	Monthly	Quarterly	31-MAR-2027
WELL - PW-3	Monthly withdrawal for WELL PW-3	Monthly	Quarterly	31-MAR-2027
WELL - PW-5	Monthly withdrawal for WELL PW-5	Monthly	Quarterly	31-MAR-2027
WELL - PW-8	Monthly withdrawal for WELL PW-8	Monthly	Quarterly	31-MAR-2027
WELL - PW-7	Monthly withdrawal for WELL PW-7	Monthly	Quarterly	31-MAR-2027
WELL - PW-4	Monthly withdrawal for WELL PW-4	Monthly	Quarterly	31-MAR-2027
WELL - MW-2 (PW-9)	Monthly withdrawal for WELL MW-2 (PW-9)	Monthly	Quarterly	31-MAR-2027
WELL - PW-10	Monthly withdrawal for WELL PW-10	Monthly	Quarterly	31-MAR-2027

Exhibit No: 5

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - PW-11	Monthly withdrawal for WELL PW-11	Monthly	Quarterly	30-APR-2027
WELL - PW-12	Monthly withdrawal for WELL PW-12	Monthly	Quarterly	30-APR-2027
WELL - PW-13A	Monthly withdrawal for WELL PW-13A	Monthly	Quarterly	30-APR-2027
WELL - PW-14	Monthly withdrawal for WELL PW-14	Monthly	Quarterly	30-APR-2027
WELL - PW-15	Monthly withdrawal for WELL PW-15	Monthly	Quarterly	30-APR-2027
WELL - PW-16A	Monthly withdrawal for WELL PW-16A	Monthly	Quarterly	31-MAR-2027
WELL - PW-17A	Monthly withdrawal for WELL PW-17A	Monthly	Quarterly	31-MAR-2027
WELL - PW-18A	Monthly withdrawal for WELL PW-18A	Monthly	Quarterly	31-MAR-2027
WELL - PW-19	Monthly withdrawal for WELL PW-19	Monthly	Quarterly	31-OCT-2024
WELL - PW-20	Monthly withdrawal for WELL PW-20	Monthly	Quarterly	31-OCT-2024
WELL - PW-21	Monthly withdrawal for WELL PW-21	Monthly	Quarterly	31-OCT-2024
WELL - PW-22	Monthly withdrawal for WELL PW-22	Monthly	Quarterly	31-OCT-2024
WELL - PW-23	Monthly withdrawal for WELL PW-23	Monthly	Quarterly	31-OCT-2024
WELL - PW-24	Monthly withdrawal for WELL PW-24	Monthly	Quarterly	31-OCT-2024
WELL - PW-25	Monthly withdrawal for WELL PW-25	Monthly	Quarterly	31-OCT-2024
WELL - PW-42 (ASR)	Monthly withdrawal for WELL PW-42 (ASR)	Monthly	Quarterly	31-OCT-2024
WELL - PW-26	Monthly withdrawal for WELL PW-26	Monthly	Quarterly	31-OCT-2024
WELL - PW-27	Monthly withdrawal for WELL PW-27	Monthly	Quarterly	31-OCT-2024
WELL - PW-28	Monthly withdrawal for WELL PW-28	Monthly	Quarterly	31-OCT-2024
WELL - PW-29	Monthly withdrawal for WELL PW-29	Monthly	Quarterly	31-OCT-2024
WELL - PW-30	Monthly withdrawal for WELL PW-30	Monthly	Quarterly	31-OCT-2024
WELL - PW-31	Monthly withdrawal for WELL PW-31	Monthly	Quarterly	31-OCT-2024
WELL - PW-32	Monthly withdrawal for WELL PW-32	Monthly	Quarterly	31-OCT-2024
WELL - PW-33	Monthly withdrawal for WELL PW-33	Monthly	Quarterly	31-OCT-2024
WELL - PW-34	Monthly withdrawal for WELL PW-34	Monthly	Quarterly	31-OCT-2024
WELL - PW-35	Monthly withdrawal for WELL	Monthly	Quarterly	31-OCT-2024

Exhibit No: 5

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
	PW-35			
WELL - PW-36	Monthly withdrawal for WELL PW-36	Monthly	Quarterly	31-OCT-2024
WELL - PW-37	Monthly withdrawal for WELL PW-37	Monthly	Quarterly	31-OCT-2024
WELL - PW-38	Monthly withdrawal for WELL PW-38	Monthly	Quarterly	31-OCT-2024
WELL - PW-39	Monthly withdrawal for WELL PW-39	Monthly	Quarterly	31-OCT-2024
WELL - PW-40	Monthly withdrawal for WELL PW-40	Monthly	Quarterly	31-OCT-2024
WELL - PW-41	Monthly withdrawal for WELL PW-41	Monthly	Quarterly	31-OCT-2024

Permit Condition No: 17 **Permit Condition Code:** WUWC004-1

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - PW-19	Table "A" for Well PW-19	One time Only	One time Only	01-MAY-2024
WELL - PW-20	Table "A" for Well PW-20	One time Only	One time Only	01-MAY-2024
WELL - PW-21	Table "A" for Well PW-21	One time Only	One time Only	01-MAY-2024
WELL - PW-23	Table "A" for Well PW-23	One time Only	One time Only	01-MAY-2024
WELL - PW-24	Table "A" for Well PW-24	One time Only	One time Only	01-MAY-2024
WELL - PW-25	Table "A" for Well PW-25	One time Only	One time Only	01-MAY-2024
WELL - PW-26	Table "A" for Well PW-26	One time Only	One time Only	01-MAY-2024
WELL - PW-27	Table "A" for Well PW-27	One time Only	One time Only	01-MAY-2024
WELL - PW-28	Table "A" for Well PW-28	One time Only	One time Only	01-MAY-2024
WELL - PW-29	Table "A" for Well PW-29	One time Only	One time Only	01-MAY-2024
WELL - PW-30	Table "A" for Well PW-30	One time Only	One time Only	01-MAY-2024
WELL - PW-31	Table "A" for Well PW-31	One time Only	One time Only	01-MAY-2024
WELL - PW-32	Table "A" for Well PW-32	One time Only	One time Only	01-MAY-2024
WELL - PW-33	Table "A" for Well PW-33	One time Only	One time Only	01-MAY-2024
WELL - PW-34	Table "A" for Well PW-34	One time Only	One time Only	01-MAY-2024
WELL - PW-35	Table "A" for Well PW-35	One time Only	One time Only	01-MAY-2024
WELL - PW-36	Table "A" for Well PW-36	One time Only	One time Only	01-MAY-2024
WELL - PW-37	Table "A" for Well PW-37	One time Only	One time Only	01-MAY-2024
WELL - PW-38	Table "A" for Well PW-38	One time Only	One time Only	01-MAY-2024
WELL - PW-39	Table "A" for Well PW-39	One time Only	One time Only	01-MAY-2024
WELL - PW-40	Table "A" for Well PW-40	One time Only	One time Only	01-MAY-2024
WELL - PW-41	Table "A" for Well PW-41	One time Only	One time Only	01-MAY-2024

Permit Condition No: 18 **Permit Condition Code:** WUPWS009-1

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Bulk water delivered to PERMIT	Monthly	Quarterly	30-APR-2024

Permit Condition No: 20 **Permit Condition Code:** WUPWS003-1

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Unaccounted for Water Loss Report for NORTH LEE COUNTY PWS	Monthly	Yearly	30-APR-2024

Permit Condition No: 22 **Permit Condition Code:** WURWF007-2

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date

Exhibit No: 5

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Reuse Information Update for NORTH LEE COUNTY PWS	Yearly	Yearly	30-APR-2024

Permit Condition No: 25 **Permit Condition Code:** WUSLT001-2

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - PW-1	Chloride for WELL PW-1	Monthly	Quarterly	30-APR-2024
WELL - PW-2	Chloride for WELL PW-2	Monthly	Quarterly	30-APR-2024
WELL - PW-3	Chloride for WELL PW-3	Monthly	Quarterly	30-APR-2024
WELL - PW-4	Chloride for WELL PW-4	Monthly	Quarterly	30-APR-2024
WELL - PW-5	Chloride for WELL PW-5	Monthly	Quarterly	30-APR-2024
WELL - PW-7	Chloride for WELL PW-7	Monthly	Quarterly	30-APR-2024
WELL - PW-8	Chloride for WELL PW-8	Monthly	Quarterly	30-APR-2024
WELL - MW-2 (PW-9)	Chloride for WELL MW-2 (PW-9)	Monthly	Quarterly	30-APR-2024
WELL - PW-10	Chloride for WELL PW-10	Monthly	Quarterly	30-APR-2024
WELL - PW-11	Chloride for WELL PW-11	Monthly	Quarterly	30-APR-2024
WELL - PW-12	Chloride for WELL PW-12	Monthly	Quarterly	30-APR-2024
WELL - PW-13A	Chloride for WELL PW-13A	Monthly	Quarterly	30-APR-2024
WELL - PW-14	Chloride for WELL PW-14	Monthly	Quarterly	30-APR-2024
WELL - PW-15	Chloride for WELL PW-15	Monthly	Quarterly	30-APR-2024
WELL - PW-16A	Chloride for WELL PW-16A	Monthly	Quarterly	30-APR-2024
WELL - PW-17A	Chloride for WELL PW-17A	Monthly	Quarterly	30-APR-2024
WELL - PW-18A	Chloride for WELL PW-18A	Monthly	Quarterly	30-APR-2024
WELL - PW-19	Chloride for WELL PW-19	Monthly	Quarterly	30-APR-2024
WELL - PW-20	Chloride for WELL PW-20	Monthly	Quarterly	30-APR-2024
WELL - PW-21	Chloride for WELL PW-21	Monthly	Quarterly	30-APR-2024
WELL - PW-22	Chloride for WELL PW-22	Monthly	Quarterly	30-APR-2024
WELL - PW-23	Chloride for WELL PW-23	Monthly	Quarterly	30-APR-2024
WELL - PW-24	Chloride for WELL PW-24	Monthly	Quarterly	30-APR-2024
WELL - PW-25	Chloride for WELL PW-25	Monthly	Quarterly	30-APR-2024
WELL - PW-26	Chloride for WELL PW-26	Monthly	Quarterly	30-APR-2024
WELL - PW-27	Chloride for WELL PW-27	Monthly	Quarterly	30-APR-2024
WELL - PW-28	Chloride for WELL PW-28	Monthly	Quarterly	30-APR-2024
WELL - PW-29	Chloride for WELL PW-29	Monthly	Quarterly	30-APR-2024
WELL - PW-30	Chloride for WELL PW-30	Monthly	Quarterly	30-APR-2024
WELL - PW-31	Chloride for WELL PW-31	Monthly	Quarterly	30-APR-2024
WELL - PW-32	Chloride for WELL PW-32	Monthly	Quarterly	30-APR-2024
WELL - PW-33	Chloride for WELL PW-33	Monthly	Quarterly	30-APR-2024
WELL - PW-34	Chloride for WELL PW-34	Monthly	Quarterly	30-APR-2024
WELL - PW-35	Chloride for WELL PW-35	Monthly	Quarterly	30-APR-2024
WELL - PW-36	Chloride for WELL PW-36	Monthly	Quarterly	30-APR-2024
WELL - PW-37	Chloride for WELL PW-37	Monthly	Quarterly	30-APR-2024
WELL - PW-38	Chloride for WELL PW-38	Monthly	Quarterly	30-APR-2024
WELL - PW-39	Chloride for WELL PW-39	Monthly	Quarterly	30-APR-2024
WELL - PW-40	Chloride for WELL PW-40	Monthly	Quarterly	30-APR-2024
WELL - PW-41	Chloride for WELL PW-41	Monthly	Quarterly	30-APR-2024
WELL - PW-42 (ASR)	Chloride for WELL PW-42	Monthly	Quarterly	30-APR-2024
WELL - MW-1	Chloride for WELL MW-1	Monthly	Quarterly	30-APR-2024

Exhibit No: 5

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - TW-1	Chloride for WELL TW-1	Monthly	Quarterly	30-APR-2024
WELL - TW-2	Chloride for WELL TW-2	Monthly	Quarterly	30-APR-2024
WELL - TW-4	Chloride for WELL TW-4	Monthly	Quarterly	30-APR-2024
WELL - TW-6	Chloride for WELL TW-6	Monthly	Quarterly	30-APR-2024
WELL - TW-7	Chloride for WELL TW-7	Monthly	Quarterly	30-APR-2024
WELL - TW-10	Chloride for WELL TW-10	Monthly	Quarterly	30-APR-2024
WELL - TW-14	Chloride for WELL TW-14	Monthly	Quarterly	30-APR-2024

Permit Condition No: 26 **Permit Condition Code:** WUWLM001-4

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - PW-1	Water Level for Well PW-1	Monthly	Quarterly	30-APR-2024
WELL - PW-2	Water Level for Well PW-2	Monthly	Quarterly	30-APR-2024
WELL - PW-3	Water Level for Well PW-3	Monthly	Quarterly	30-APR-2024
WELL - PW-4	Water Level for Well PW-4	Monthly	Quarterly	30-APR-2024
WELL - PW-5	Water Level for Well PW-5	Monthly	Quarterly	30-APR-2024
WELL - PW-7	Water Level for Well PW-7	Monthly	Quarterly	30-APR-2024
WELL - PW-8	Water Level for Well PW-8	Monthly	Quarterly	30-APR-2024
WELL - MW-2 (PW-9)	Water Level for Well MW-2 (PW-9)	Monthly	Quarterly	30-APR-2024
WELL - PW-10	Water Level for Well PW-10	Monthly	Quarterly	30-APR-2024
WELL - PW-11	Water Level for Well PW-11	Monthly	Quarterly	30-APR-2024
WELL - PW-12	Water Level for Well PW-12	Monthly	Quarterly	30-APR-2024
WELL - PW-13A	Water Level for Well PW-13A	Monthly	Quarterly	30-APR-2024
WELL - PW-14	Water Level for Well PW-14	Monthly	Quarterly	30-APR-2024
WELL - PW-15	Water Level for Well PW-15	Monthly	Quarterly	30-APR-2024
WELL - PW-16A	Water Level for Well PW-16A	Monthly	Quarterly	30-APR-2024
WELL - PW-17A	Water Level for Well PW-17A	Monthly	Quarterly	30-APR-2024
WELL - PW-18A	Water Level for Well PW-18A	Monthly	Quarterly	30-APR-2024
WELL - PW-19	Water Level for Well PW-19	Monthly	Quarterly	30-APR-2024
WELL - PW-20	Water Level for Well PW-20	Monthly	Quarterly	30-APR-2024
WELL - PW-21	Water Level for Well PW-21	Monthly	Quarterly	30-APR-2024
WELL - PW-22	Water Level for Well PW-22	Monthly	Quarterly	30-APR-2024
WELL - PW-23	Water Level for Well PW-23	Monthly	Quarterly	30-APR-2024
WELL - PW-24	Water Level for Well PW-24	Monthly	Quarterly	30-APR-2024
WELL - PW-25	Water Level for Well PW-25	Monthly	Quarterly	30-APR-2024
WELL - PW-26	Water Level for Well PW-26	Monthly	Quarterly	30-APR-2024
WELL - PW-27	Water Level for Well PW-27	Monthly	Quarterly	30-APR-2024
WELL - PW-28	Water Level for Well PW-28	Monthly	Quarterly	30-APR-2024
WELL - PW-29	Water Level for Well PW-29	Monthly	Quarterly	30-APR-2024
WELL - PW-30	Water Level for Well PW-30	Monthly	Quarterly	30-APR-2024
WELL - PW-31	Water Level for Well PW-31	Monthly	Quarterly	30-APR-2024
WELL - PW-32	Water Level for Well PW-32	Monthly	Quarterly	30-APR-2024
WELL - PW-33	Water Level for Well PW-33	Monthly	Quarterly	30-APR-2024
WELL - PW-34	Water Level for Well PW-34	Monthly	Quarterly	30-APR-2024
WELL - PW-35	Water Level for Well PW-35	Monthly	Quarterly	30-APR-2024
WELL - PW-36	Water Level for Well PW-36	Monthly	Quarterly	30-APR-2024
WELL - PW-37	Water Level for Well PW-37	Monthly	Quarterly	30-APR-2024

Exhibit No: 5

Requirement by Permit Condition Report

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
WELL - PW-38	Water Level for Well PW-38	Monthly	Quarterly	30-APR-2024
WELL - PW-39	Water Level for Well PW-39	Monthly	Quarterly	30-APR-2024
WELL - PW-40	Water Level for Well PW-40	Monthly	Quarterly	30-APR-2024
WELL - PW-41	Water Level for Well PW-41	Monthly	Quarterly	30-APR-2024
WELL - PW-42 (ASR)	Water Level for Well PW-42 (ASR)	Monthly	Quarterly	30-APR-2024
WELL - TW-1	Water Level for Well TW-1	Monthly	Quarterly	30-APR-2024
WELL - MW-1	Water Level for Well MW-1	Monthly	Quarterly	30-APR-2024
WELL - TW-2	Water Level for Well TW-2	Monthly	Quarterly	30-APR-2024
WELL - TW-4	Water Level for Well TW-4	Monthly	Quarterly	30-APR-2024
WELL - TW-6	Water Level for Well TW-6	Monthly	Quarterly	30-APR-2024
WELL - TW-7	Water Level for Well TW-7	Monthly	Quarterly	30-APR-2024
WELL - TW-10	Water Level for Well TW-10	Monthly	Quarterly	30-APR-2024
WELL - TW-14	Water Level for Well TW-14	Monthly	Quarterly	30-APR-2024

Permit Condition No: 27 **Permit Condition Code:** WUCOMP010-1

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Ten Year Water Use Compliance Report for NORTH LEE COUNTY PWS	Every Ten Years	Every Ten Years	30-APR-2034

Permit Condition No: 29 **Permit Condition Code:** WUZZUD001-2

Facility Name	Requirement Name	Col Freq	Sub Freq	Due Date
PERMIT	Quarterly Report for Olga WTP shut-down and deliveries	Monthly	Quarterly	30-APR-2024
PERMIT	Monthly Withdrawals (Quarterly Report) Delivered to Olga Service Area	Monthly	Quarterly	30-APR-2024

Exhibit No: 5

STAFF REPORT DISTRIBUTION LIST

NORTH LEE COUNTY PWS

Application No: 240105-8

Permit No: 36-00152-W

INTERNAL DISTRIBUTION

X N. Maska

EXTERNAL DISTRIBUTION

X Permittee - Lee County Utilities

X Agent - R M A Geologic Consultants

GOVERNMENT AGENCIES

X Div of Recreation and Park - District 4

Exhibit No:6

Armeda Property Map Amendment
Justification of Proposed Amendment
Exhibit M20
CPA2025-00008 – Revised November 2025

The subject property is located in a rapidly transitioning area proximate to the intersection of two arterial roadways: North River Road and Babcock Ranch Road/S.R. 31. The surrounding area has been progressively evolving with shifting land use approval patterns and infrastructure improvements such as roads, utilities and fire and emergency medical services. The Northeast Lee County and North Olga Community Planning area goals, objectives and policies encourage clustered development that maximizes preservation which the requested map amendment facilitates.

The subject property is surrounded by recent development approvals that make it appropriate and logical for the subject property to be removed from DR/GR and placed into the Rural future land use category which will be in the best interest of Lee County and the public in order to fill in this critical missing piece between the preservation lands to the north and south along Trout Creek and its associated flowway and wetlands. The request also brings the density on the subject property more consistent with the New Community future land use category to the west, north, and east which allows up to one dwelling unit per 1.9 acre; and the Rural future land use category to the south which allows 1 dwelling unit per acre along with additional density incentives.

The below timeline demonstrates the evolution of this area including the change from DR/GR to New Community abutting property to the west south and east further justifying the request.

- **2006 – 2009**: In 2006 Bob Janes Preserve established and is the largest Conservation 20/20 preserve, totaling 5,620 acres. In 2009 Telegraph Creek Preserve established which consists of 1,726.84 acres
- **September 28, 2011:** Northeast Lee County / North Olga Community Plan implemented encouraging clustered development, ample views of wooded areas, open spaces, and riverfronts, protection of environmentally sensitive lands among other considerations.
- **September 6, 2017**: Ordinance 17-13 amended the Lee Plan under case number CPA2017-01 which permitted neighborhood commercial uses serving Lee Civic Center within one quarter mile of SR 31 between North River Road and the Caloosahatchee River in the North Olga Community Planning Area. It also provided that Neighborhood Commercial may be expanded to Community Commercial when approved as part of a Planned Development that is located at the intersection of two arterial roadways and has direct access to, or the ability to extend, existing water and sanitary sewer utilities.
- **2017-2020**: Commercial development and redevelopment along the SR 31 corridor including the 31 Produce Market, café and attraction; Sweetwater Landing Marina's redevelopment in resulting in a 275-slip marina, boater lounge and restaurant and bar; a gas station and market development in 2017 at the northwest corner of SR 31 and North River Road and veterinary clinic in 2018 just west of this gas station; and a convenience store and gas station development in 2020 at the southwest corner of North River Road and SR 31.
- **February 17, 2018:** Ordinance 18-06 was adopted which ***changed the future land use category of 4,157-acres that surround the Armeda Property from DR/GR and Wetlands***

to New Community and Wetlands and established the New Community Future Land Use Category within the North Olga Community Planning Area for the Babcock Ranch property. ***This changed the density from 1 dwelling unit per 10 acres to 1 dwelling unit per 2.5 gross acres***.

- **February 7, 2018**: Babcock Mixed Use Planned Development (MPD), approved by zoning resolution number Z-17-026/case number DCI2016-00022 which allowed 1 dwelling unit per 2.5 gross acres up to 1,630 dwelling units, 600 hotel rooms and 1,170,000 square feet of commercial office and retail uses on property abutting Armeda Property to west, north and east. This approval resulted in a proposed fire station site on S.R. 31.
- **December 5, 2018**: Ordinance 18-28 was adopted under case number CPA2017-06, conservation and coastal management amendment to Lee Plan which highlighted importance of rare and unique upland habitats and their prevalence of it in Northeast Lee County.
- **2021**: Publix opens in Babcock Ranch.
- **May 26, 2021:** FDOT approved the SR 31 State Environmental Impact Report for SR 31 from SR 78 (Bayshore Road) to Cook Brown Road in Lee and Charlotte Counties.
- **September 7, 2022:** Ordinance 22-25 was adopted under case number CPA2020-00004 for Owl Creek which provided incentives for preservation, restoration and creation of rare and unique upland habitat in the North Olga Community Planning Area.
- **November 2, 2022**: Ordinance 22-29 for Bayshore Ranch was adopted which expanded the rare and unique preservation, restoration and creation incentive to all Rural areas throughout Lee County.
- **September 7, 2022**: Owl Creek Residential Planned Development (RPD) approved by resolution number Z-22-022 which allowed 1.1 dwelling units per gross acre on approximately 345 acres with a private multi-slip docking facility and amenities. The approval resulted in 168.41 acres indigenous open space consisting of 111.97 acres of wetlands/other surface waters (OSW) and 56.44 acres of rare & unique upland habitat, established natural waterway buffers and maintenance easements along Owl & Trout Creeks, and provided a public kayak launch on the Calusa Blueway. The approval included privately funded water and sewer extensions.
- **February 10, 2023:** Ordinance 23-03 was adopted for the Greenwell SR 31 future land use amendment which ***redesignated approximately 265 acres along Babcock Ranck Road/SR 31 south of its intersection with North River Road. from Rural and Wetlands to Outlying Suburban future land use category which transitioned a future non-urban area to a future suburban area, tripling the allowable density.***
- **January 22, 2025**: Ordinance 25-02 was adopted for Babcock Lee which amended the Lee Plan to increase allowed density from 1 dwelling unit per 2.5 acres to 1 dwelling unit per 1.9 acres, increased dwelling units from 1630 to 2078, kept the 1,170,000 square feet of commercial, and reduced hotel rooms from 600 to 250.
- **March 5, 2025**: Cary Duke RPD approved by resolution Z-24-024 which allowed 1.39 dwelling units per gross acre on approximately 789 acres. The approval resulted in 420.20 acres of indigenous open space including 328.72 acres of rare and unique uplands and 60.12 acres of wetlands/OSW, established natural waterway buffer and maintenance easement along portion of Trout Creek. The approval included privately funded water and sewer extensions.

- **May 7, 2025**: Babcock Ranch MPD was amended by Z-25-004 which increased allowed density from 1 dwelling unit per 2.5 acres to 1 dwelling unit per 1.9 acres, increased dwelling units from 1630 to 2078, kept the 1,170,000 square feet of commercial, and reduced hotel rooms from 600 to 250 with 2,613 acres of preservation.
- **2024 – 2027**: SR 31 expansion - Babcock Ranch Community Independent Special District (ISD), in coordination with the Florida Department of Transportation (FDOT), is making improvements to S.R. 31 from S.R. 78 (Bayshore Road) to Lake Babcock Drive. These interim improvements include building a new four-lane roadway east of the existing S.R. 31 roadway that will tie-in to the existing two-lane roadway. Additional improvements to the project corridor include separated multi-use trail facilities along both sides of S.R. 31, lighting enhancements at all major intersections, and significant enhancements to stormwater facilities.
- **October 17, 2025**: Design bid posted for the design of the Babcock Emergency Medical Service and Fire Station.

The plan amendment which provides for significant environmental, storm water and water quality enhancements facilitating the clustered development of the Armeda Property represents sound planning principles.

The following summarizes benefits that will be accomplished by approval of this request through compliance with the accompanying residential planned development application:

1. Provide a connection between adjacent preserves that will continue the environmental preservation and enhanced drainage ways that will be improved by reduced runoff rate and reduced nutrient runoff.
2. Amendment will result in clustered development as encouraged in this area as demonstrated by the proposed Master Concept Plan with the concurrent residential planned development application.
3. Provide Wetland Protection and Enhancements including exotic removal and maintenance and restoration areas.
4. 270± acres (48% of property) placed into conservation easement including portions of Trout Creek flow-way.
5. 200± acre onsite wildlife corridor connection to portions of Trout Creek located on adjacent preservation lands on Babcock Ranch MPD that connect to Telegraph Creek and Bob Janes Preserves to the east (Indigenous Habitat Management Plan)
6. Connection to adjacent preservation lands to north, south, east and west
7. Wildlife management and co-existence plans
8. Minimum 60% open space (336± acres)
9. Preserve 48± acres of wetlands
10. Surface and Ground Water Monitoring
11. Remove potential for up to 53 private septic tanks and wells
12. Removal of cattle grazing will significantly reduce onsite nutrient generation adjacent to the Trout Creek flow-way
13. Additional 50% water quality treatment
14. Reduced rate of run-off and associated nutrient loads
15. Stormwater enhancements
16. Green infrastructure
17. Connection to privately funded expansion of water and sewer to the area by others (as encouraged/anticipated by existing Lee Plan policies

18. Minimum 30 foot tract setback and 40 foot perimeter principal building setback
19. Provision for payment in lieu of multi-use path along North River Road since it will be located along the south side
20. Protect existing groundwater levels and improve existing wetland hydroperiods in onsite preserve areas
21. Provide Rare and Unique Upland habitat preservation (39± acres) and restoration (141± acres)
22. Preservation to maximum extent of historic flow-way associated with Trout Creek and associated wetlands

The Lee Plan recognizes that enhancement and conservation of environmental, stormwater, and enhanced water quality is a public priority. The plan amendment balances this public interest with those of the property owner. The plan amendment represents a kind of public-private partnership. The public interests for Armeda Property outlined above will be conditioned in the concurrent Planned Development Zoning application. The private interest in utilizing and developing the property is satisfied in a responsible environmental manner. This represents sound planning.

The plan amendment utilizes the planning principle of clustered development. Clustered development is a development arrangement that stresses people living in harmony with nature and locates buildings in concentrated portions of a site, leaving the remainder of the site undeveloped. Typically, this form of development is utilized to limit sprawling development patterns while protecting such things as open space, environmentally sensitive areas and natural resources.

The Armeda project also utilizes the planning principle of conservation design or designing with nature. The process of selecting the appropriate preservation and development scenario for the property utilized an analysis of the property's attributes such as property location and location of adjacent uses, soils, topography, previous uses and associated impacts and natural resources. One guiding principle of conservation design is that environmentally sensitive areas must be first identified and designated for preservation to the maximum extent practicable. The proposed clustered project will provide preservation areas along Trout Creek connecting the Babcock Ranch MPD preservation areas to the west, north and east and the Owl Creek RPD and Cary Duke Povia RPD preservation areas to the south, expanding the significant environmental, storm water, water quality, aquifer recharge and infrastructure enhancements required in these developments that develop utilizing incentives in Lee Plan Policy 123.2.17. Approval of the requested map amendments will facilitate the concurrent planned development application which provides additional details regarding the development of the request and will provide conditions of approval that will ensure compliance with the requirements of this Policy providing environmental enhancements and monitoring of storm water and ground water. The result will be 60 percent/336± acres of open space of which 270± acres will be placed into a conservation easement including portions of Trout creek flow-way. The conservation easement will include 48± acres of wetlands and 180± acres of preserved or restored rare and unique upland habitat. This process represents sound planning for the subject site, its natural resources and existing surrounding uses.

The Armeda Property project represents compatible land uses with existing surrounding uses which include agricultural uses, preservation and single family uses. The project's residential uses will be

clustered inside the property with enhanced setbacks/buffers to adjacent uses and properties. The project's open spaces and preservation areas compliment and enhance adjacent existing and pending public and private preserve areas. The Armeda Property project residential uses are clustered and separated from the perimeter by a minimum perimeter setback of 50 feet adjacent to large lot residential, agricultural uses and North River Road and 30 feet for tracts/40 feet for principal structures abutting all other areas. The project's compatibility with nearby land uses represents sound planning for the region in which the property is located.

The Armeda Property project will be connected to and serviced by a centralized water and sewer system via privately funded extensions by others. Connecting this property to a centralized water and sewer system represents sound planning with the removal of potential for 53 septic systems and private wells.

The Armeda project represents a high quality clustered master planned project. The applicant respectively asks that the proposed plan amendment for the Armeda Project property to be approved to realize these regional benefits.

ADDITIONAL AGENTS

Company Name:	Atwell, LLC (Environmental)		
Contact Person:	Tyler King		
Address:	4470 Camino Real Way, Suite 101		
City, State, Zip:	Fort Myers, FL 33966		
Phone Number:	(239) 470-3485	Email:	tking@atwell.com

Company Name:	Atwell, LLC (Engineering)		
Contact Person:	TJ Speach P.E.		
Address:	28100 Bonita Grande Dr., Suite 305		
City, State, Zip:	Bonita Springs, FL 34135		
Phone Number:	(239) 398-6588	Email:	tspeach@atwell.com

Company Name:	Respec		
Contact Person:	David Brown P.G.		
Address:	1412 Jackson Street, Suite #1		
City, State, Zip:	Fort Myers, FL 33901		
Phone Number:	(941) 706-5130	Email:	dbrown@respec.com

Company Name:	TR Transportation Engineering, Inc.		
Contact Person:	Ted Treesh, P.E.		
Address:	2726 Oak Ridge Court, Suite 503		
City, State, Zip:	Fort Myers, FL, 33901		
Phone Number:	(239) 278-3090	Email:	tbt@trtrans.net

Company Name:	Atwell, LLC (Survey)		
Contact Person:	Allen Vose, PSM		
Address:	10511 6 Mile Cypress Pkwy		
City, State, Zip:	Fort Myers, FL 33966		
Phone Number:	(239) 939-5490	Email:	avose@atwell.com

ADDITIONAL AGENTS

Company Name:	Wicks Consulting Group		
Contact Person:	Amy Wicks, P.E.		
Address:	42881 Lake Babcock Drive, Suite 200		
City, State, Zip:	Babcock Ranch, Florida 33982		
Phone Number:	239.989.6165	Email:	awicks@wickscg.com

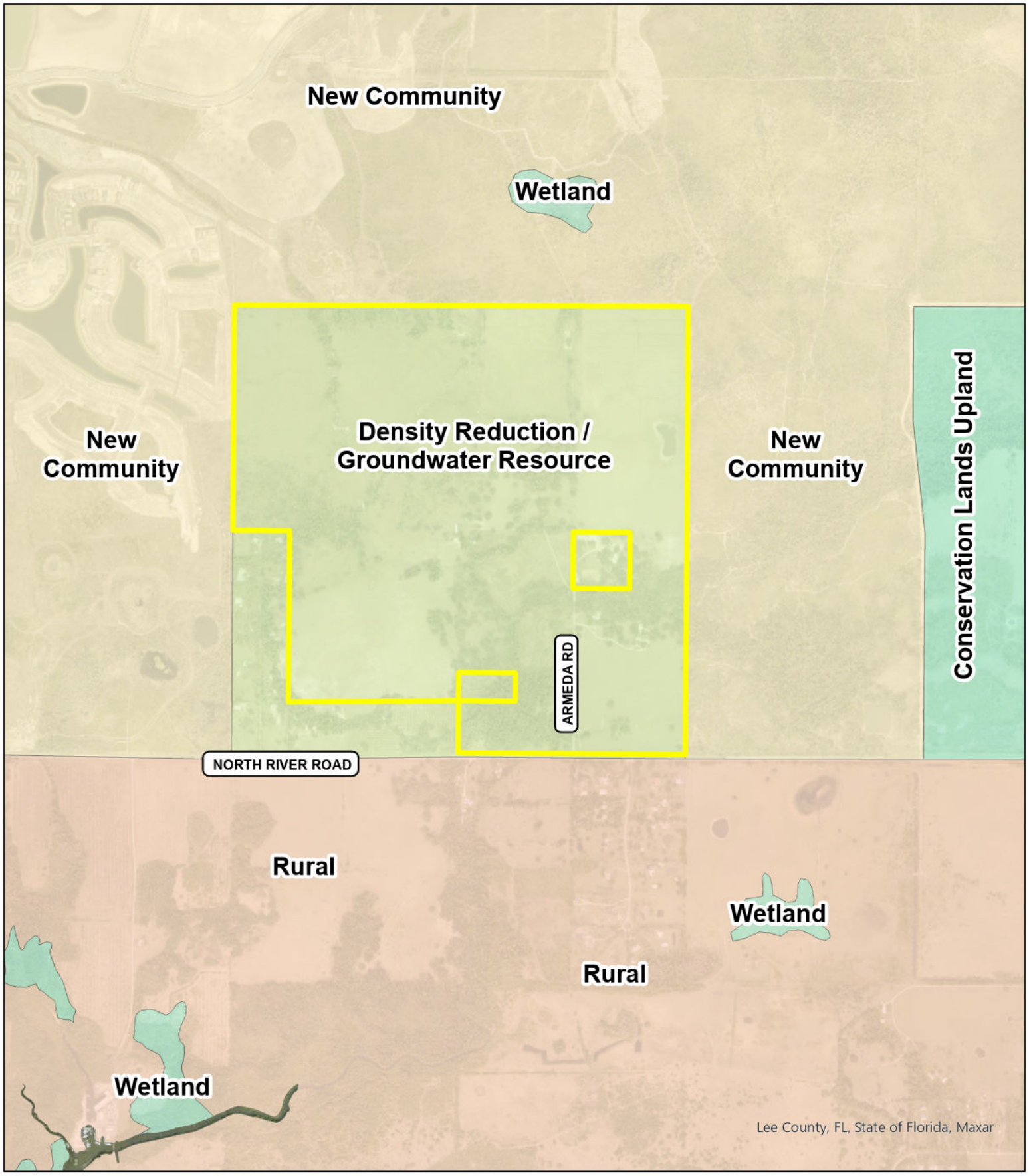
Company Name:	Henderson, Franklin, Starnes & Holt, P.A.		
Contact Person:	Richard Akin, Esq		
Address:	1715 Monroe Street		
City, State, Zip:	Fort Myers , FL 33901		
Phone Number:	(239) 344-1182	Email:	Richard.Akin@henlaw.com

Company Name:			
Contact Person:			
Address:			
City, State, Zip:			
Phone Number:		Email:	

Company Name:			
Contact Person:			
Address:			
City, State, Zip:			
Phone Number:		Email:	

Company Name:			
Contact Person:			
Address:			
City, State, Zip:			
Phone Number:		Email:	

Company Name:			
Contact Person:			
Address:			
City, State, Zip:			
Phone Number:		Email:	



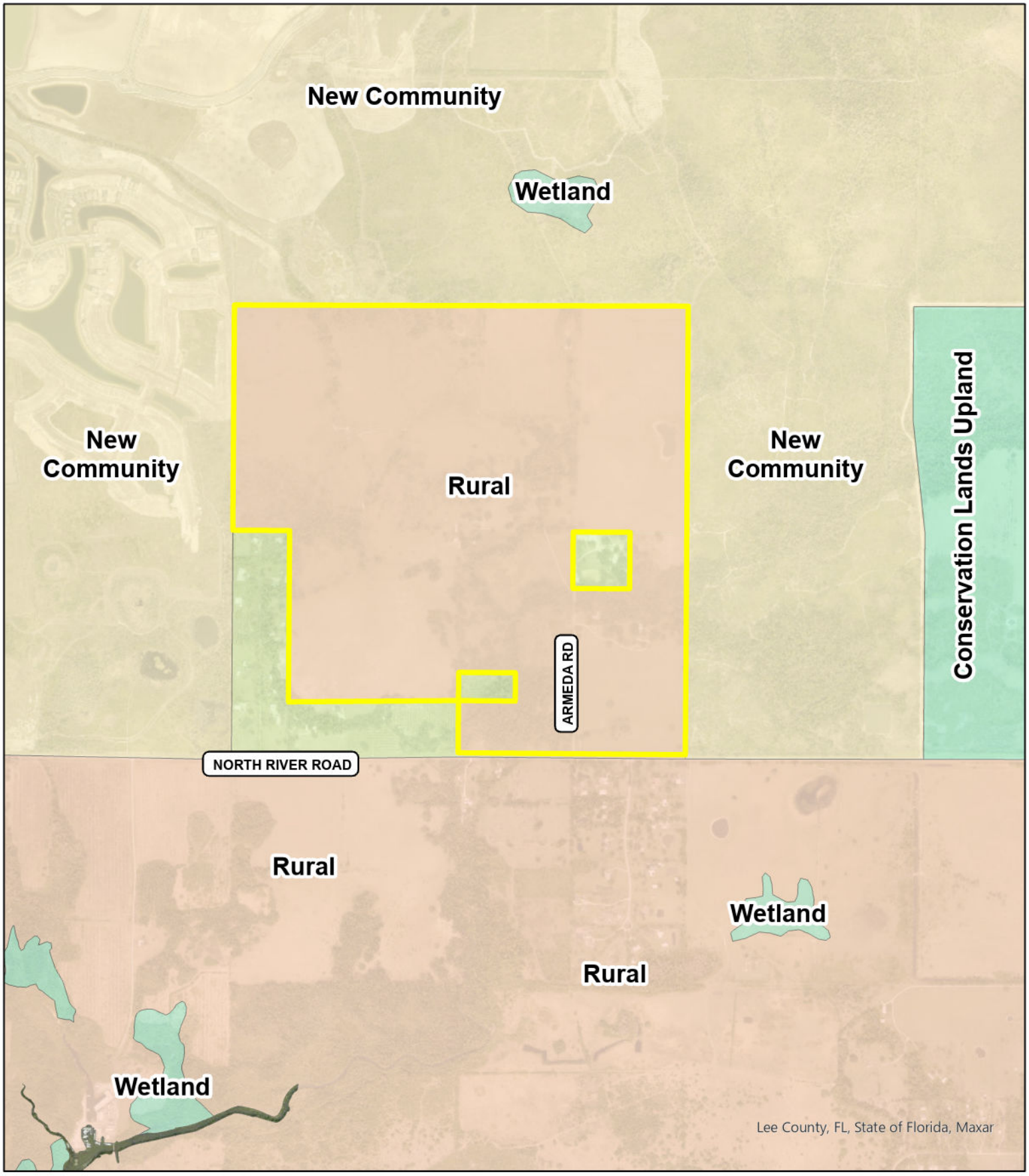
RVi
111 N. Magnolia Avenue
Suite 1350
Orlando, FL 32801
Tel: 407.680.0650
www.rviplanning.com

ARMEDA PROPERTY • Existing Future Land Use

Lee County, FL
Date: 9/11/2025
24006625
Forestar

Subject Boundary

N
0 112.5 225 450 675
Feet



RVi
111 N. Magnolia Avenue
Suite 1350
Orlando, FL 32801
Tel: 407.680.0650
www.rviplanning.com

ARMEDA PROPERTY • Proposed Future Land Use

Lee County, FL
Date: 9/11/2025
24006625
Forestar

Subject Boundary

N
0 112.5 225 450 675
Feet

Armeda Property Map Amendment

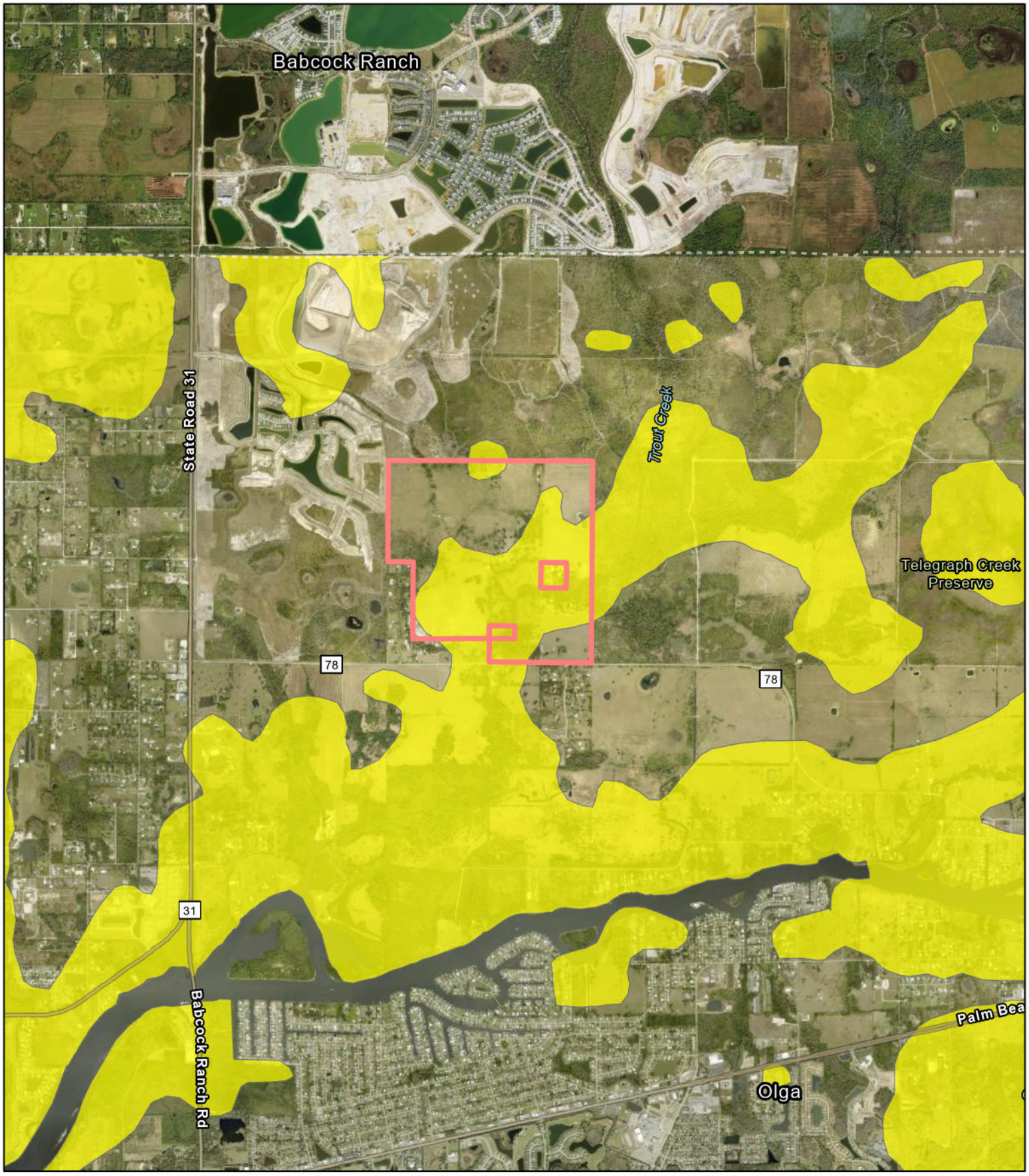
Proposed Amendment
Exhibit M11
CPA2025-00008 – Revised November 2025

The proposed request is to amend the Future Land Use Map (Map-1-A) to change the FLU category on 561.63+/- acres from DR/GR to Rural and Wetland. Additionally, this request includes an amendment to Lee County Future Water Service Areas (Map 4-A) and Lee County Future Sewer Service Areas (Map 4-B) to include the subject property. Lastly, this request includes an amendment to Table 1(b) 2045 Planning District Allocations, specifically District 1, Northeast Lee County. This request is associated with a concurrent RPD Rezoning to allow for 737 single-family dwelling units.

The project represents compatible land uses with existing surrounding uses, which include agricultural uses, preservation, and single family uses. The project's residential uses will be clustered inside the property with enhanced setbacks/buffers to adjacent uses and properties. The project's open spaces and preservation areas complement and enhance adjacent existing and pending public and private preserve areas. The residential uses are clustered and separated from the perimeter by a minimum perimeter setback of 50 feet adjacent to large lot residential, agricultural uses, and North River Road, and 30 feet for tracts/40 feet for principal structures abutting all other areas. Compatibility with nearby land uses represents sound planning for the region in which the property is located.

The proposal includes connection and service by a centralized water and sewer system via privately funded extensions by others. Connecting this property to a centralized water and sewer system represents sound planning with the removal of potential for 53 septic systems and private wells.

The applicant respectively asks that the proposed plan amendment for the Armeda Project property to be approved to realize these regional benefits.



ARMEDA PROPERTY • **Archaeological Sensitivity**

Lee County, FL
Date: 11/10/2025
24006625
Forestar

- Subject Boundary
- Sensitivity Level 1
- Sensitivity Level 2
- Previously Surveyed

N

0 112.5 225 450 675
Feet

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111 N. Magnolia Avenue
Suite 1350
Orlando, FL 32801
Tel: 407.680.0650
www.rviplanning.com

STOP **This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at CompliancePermits@dos.myFlorida.com for project review information.**

November 6, 2025

Florida Master Site File

Patrick Murray, AICP
Project Manager
RVi Planning + Landscape Architecture
111 N. Magnolia Avenue, Suite 1350 • Orlando, FL 32801
407.775.6523 Direct • 407.775.6500 Main

In response to your request of September 10, 2025, a search of the Florida Master Site File inventory shows one standing structure previously recorded for 70+/- acres designated project in Lee County, Fla.

STRAPs:
08-43-26-00-00006.0030
08-43-26-00-00006.0020
08-43-26-01-00006.0000
08-43-26-01-00001.0000
08-43-26-00-00006.0000
08-43-26-00-00002.0000
08-43-26-00-00001.0000

When interpreting the results of this search, please consider the following information:

- This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.

- Federal, state and local laws require formal environmental review for most projects. This search DOES NOT constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at CompliancePermits@dos.myFlorida.com

Please do not hesitate to contact us if you have any questions regarding the results of this search.

Sincerely,

Eman M. Vovsi, PhD.
Data Base Analyst/Records Specialist
Florida Master Site File
Eman.Vovsi@DOS.MyFlorida.com


LL00812
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

FLORIDA MASTER SITE FILE
SITE INVENTORY FORM

8LL0812

Site No. LEAV014

Site Name RT. 4 BOX 612 RIVER ROAD Survey Date 1286

Address of Site RT.4 BOX 612 RIVER ROAD, ALVA

Instructions for locating

Location
Subdivision name block no. lot no.

County LEE

District name if applicable

Owner of Site: Name

Address

Type of ownership private Recording date

Recorder: Name & Title Werndli, Phillip A.

Address Florida Preservation Services

PO Box 13892 Tallahassee, Fl 32317

Condition of Site:
Check One

| | |Excellent
|x|Good
| | |Fair
| | |Deteriorated

Integrity of Site:
Check One or More

|x|Altered
| | |Unaltered
|x|Original Use
| | |Restored/Date
| | |Moved/Date

Original Use RESIDENTIAL

Present Use RESIDENTIAL

Dates +

Cutural/Phase American

Period

NR Classification Category Building Date Listed on NR

Threats to Site:
Check one or more

| | |Zoning
|X|Development
| | |Deterioration
| | |Borrowing
| | |Other(See Remarks Below)
| | |Transportation
| | |Fill
| | |Dredge

Areas of Significance: Architecture

Significance:

The type II bungalow was one of the more common types of bungalow in Florida. This type is characterized by a front facing gable roof with a secondary roof projecting from the facade. The entrance is to the side with a living room and dining room divided by columns or bookcases.

SEE SITE FILE STAFF FOR ORIGINAL PHOTO(S) OR MAP(S)

LL812

Architect _____
Builder _____
Style and/or Period Bungalow, Type II
Plan Type RECTANGULAR;IRREGULAR
Exterior Fabric ASBESTOS SHINGLES
Structural System(s) WOOD FRAME
Porches N ENCLOSED

Orientation N
Foundation CONCRETE PIERS
Roof Type GABLE
Secondary Roof Structure(s) HIP
Roof Surfacing SHEET METAL
Window Type AWNING,ALUMINUM
Ornament Exterior _____
Chimney BRICK
Chimney Location E EXTERIOR
No. of Chimneys 1
No. of Dormers _____
No. of Stories 1
Outbuildings 1
Surroundings RURAL
Map Reference (inc. scale & date) _____

Latitude and Longitude:
° ' " ° ' "
Site Size (Approx. Acreage of Property) LT 1

Olga Quad.

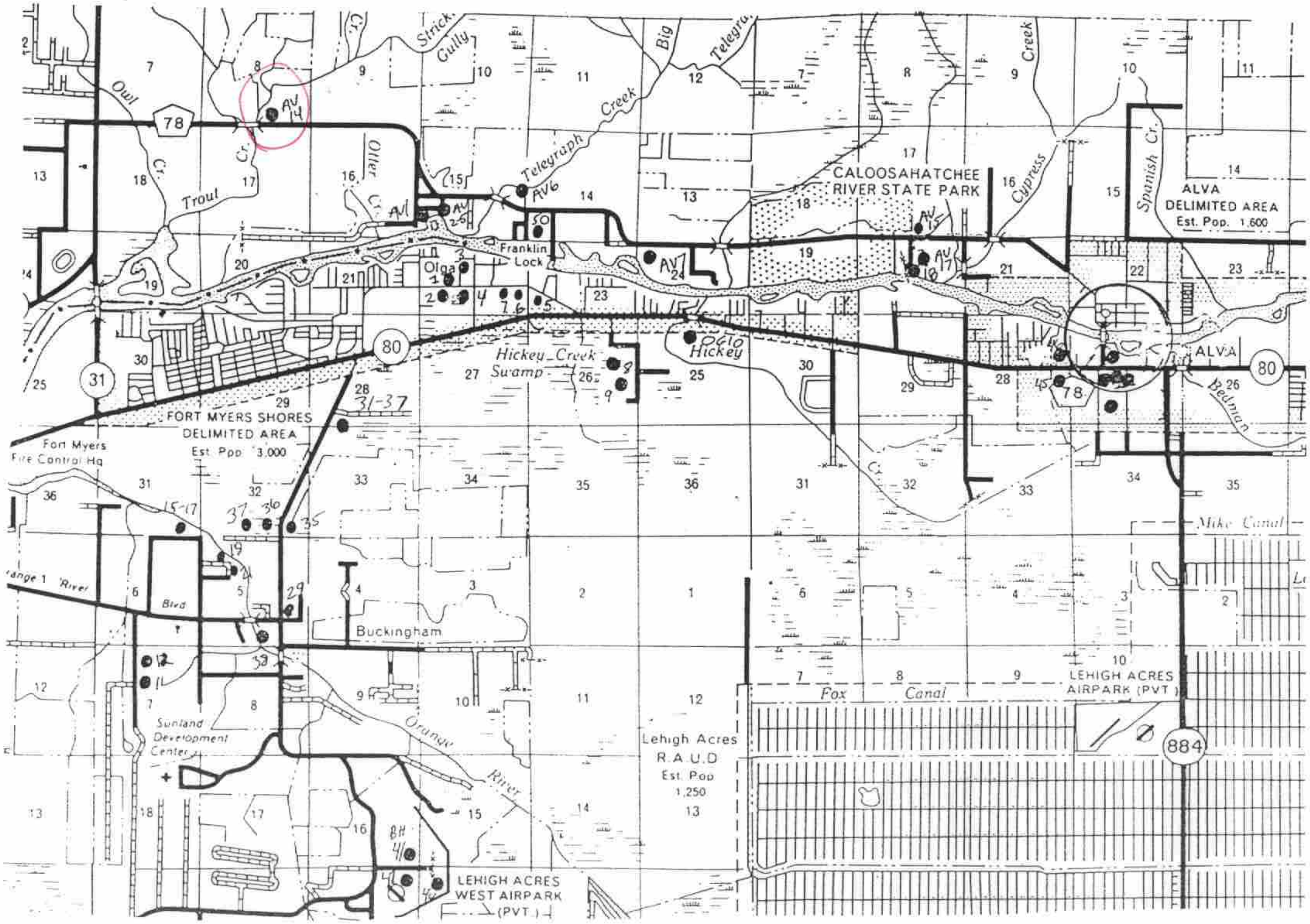
Township	Range	Section
43	26	~~24~~ 8

Location Sketch or Map

N

UTM Coordinates:

Photographic Records Number _____
Please attach Photographic Print


CALOOSAHATCHEE RIVER STATE PARK
ALVA DELIMITED AREA
Est. Pop. 1,600
FORT MYERS SHORES DELIMITED AREA
Est. Pop. 3,000
Fort Myers Fire Control Hq
Franklin Lock
Olga
Hickey Creek Swamp
Buckingham
Sunland Development Center
Lehigh Acres R.A.U.D.
Est. Pop. 1,250
LEHIGH ACRES AIRPARK (PVT)
LEHIGH ACRES WEST AIRPARK (PVT)
ALVA
Telegraph Creek
Orange River
Fox Canal
Mike Canal
78
80
31
884

N

0 200 400
SCALE FEET

SECTION: 8
TOWNSHIP: 43 S
RANGE: 26 E

FLUCCS	Description	Acreage
110	Residential	7.19
211	Improved Pastures	392.54
211H	Hydric Improved Pastures	26.73
213	Woodland Pasture	17.05
213H	Hydric Woodland Pasture	1.61
224	Abandoned Groves	29.40
427DE1	Disturbed Live Oak Invaded by Exotics (10 – 25%)	21.24
427DE2	Disturbed Live Oak Invaded by Exotics (26 – 50%)	14.16
427DE3	Disturbed Live Oak Invaded by Exotics (51 – 75%)	12.12
428DE1	Disturbed Cabbage Palm Invaded by Exotics (10 – 25%)	0.68

FLUCCS	Description	Acreage
510	Streams and Waterways	4.60
510D	Ditches	3.13
520	Lakes	2.62
617DE2	Disturbed Mixed Wetland Hardwoods Invaded by Exotics (26 – 50%)	14.70
617DE3	Disturbed Mixed Wetland Hardwoods Invaded by Exotics (51 – 75%)	3.89
641E	Freshwater Marshes Invaded by Exotics (5 – 9%)	5.80
641E4	Freshwater Marshes Invaded by Exotics (76 – 90%)	1.33
742	Borrow Areas	0.38
814	Roads and Highways	2.46
	Total	561.63

Notes:
1. Property boundary provided by Forestar Group, Inc.
2. Mapping based on photointerpretation of 2024 aerial photography, LIDAR, and ground truthing in December 2024. Map includes 2025 aerial photography.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

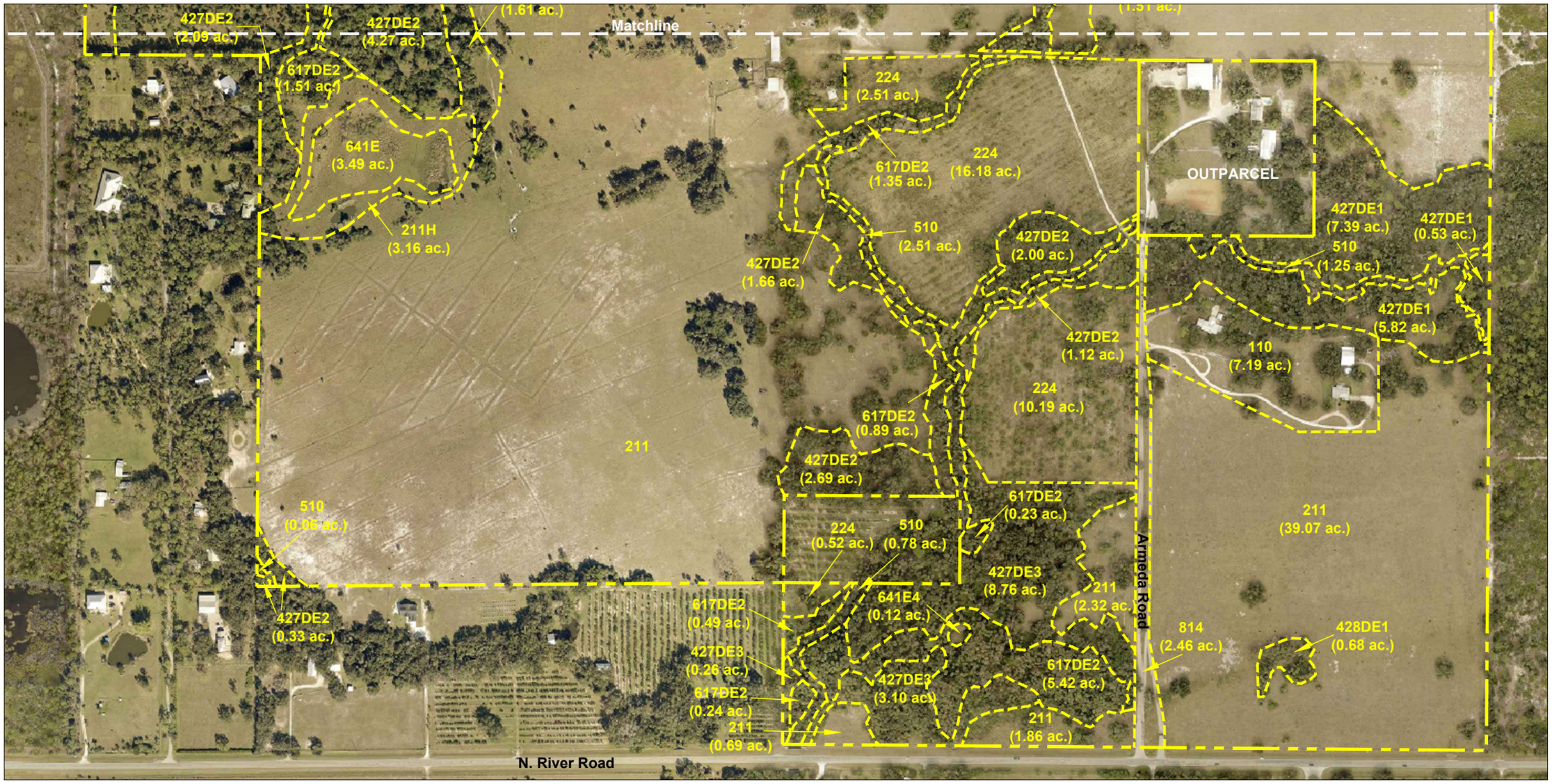
PERMIT USE ONLY, NOT FOR CONSTRUCTION

August 26, 2025 10:32:56 a.m.
Drawing: FORESTAR11APLAN.DWG

Vegetation Map - Sheet 1

Armeda Property

ATWELL
866.850.4200 www.atwell-group.com
4470 CAMINO REAL WAY, SUITE 101
FORT MYERS, FL 33908
239.334.3680



0 200 400
SCALE FEET

SECTION: 8
TOWNSHIP: 43 S
RANGE: 26 E

FLUCCS	Description	Acreage
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1. Property boundary provided by Forestar Group, Inc.
2. Mapping based on photointerpretation of 2024 aerial photography, LIDAR, and ground truthing in December 2024. Map includes 2025 aerial photography.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

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August 26, 2025 10:32:56 a.m.
Drawing: FORESTAR11APLAN.DWG

Vegetation Map - Sheet 2

Armeda Property

ATWELL
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4470 CAMINO REAL WAY, SUITE 101
FORT MYERS, FL 33908
239.334.3680

Armeda Property

Sections 8, Township 43 South, Range 26 East
Lee County, Florida

Indigenous Habitat Management Plan

December 2025

Prepared for:

Forestar Group, Inc.
4042 Park Oaks Boulevard
Tampa, FL 33610

Prepared by:

Atwell
4470 Camino Real Way, Suite 101
Fort Myers, FL 33966
(239) 334-3680

Introduction

The applicant proposes to construct a residential community at this location. This will include home sites, roads, a surface water management system, and 269.76± acres of upland, wetland, and surface water preserves.

The goal of the wetland mitigation plan is to enhance or restore and preserve 269.76± acres of wetlands, uplands, and surface waters to meet Lee County Land Development Code Chapter 10-415 and to mitigate for impacts to wetlands and wildlife habitat. Exotics (as defined by the Florida Exotic Pest Plant Council's List of Invasive Species, Categories 1 and 2), which are present within the proposed preserves, will be removed to re-establish functional wetland and upland ecosystems.

The Armeda Property has the potential to provide a significant corridor for wildlife as it is located along the northern extents of Trout Creek and is adjacent to the southern portions of the Babcock Ranch preserve areas. The preservation areas will become part of a contiguous wetland and upland corridor and flowway along Trout (Figure 1). The Trout Creek Wildlife Corridor connects the subject parcel to Babcock Ranch and Lee County (Telegraph Creek Preserve) Conservation Lands. Unfortunately, the current land use practices within the property and exotic vegetation infestation significantly diminish wildlife utilization. The indigenous habitat management plan (IHMP) provides an avenue for the enhancement and preservation of this important piece of land.

The wetland preservation and restoration areas consist of forested and herbaceous habitats that contain moderate densities of exotics. The site development plan was designed to preserve almost all of the wetlands throughout the site which are adjacent to Trout Creek. The proposed activities in the wetland mitigation area, which include the elimination of the exotic species seed source and supplemental planting as needed, will result in a net improvement for the wetland plant communities onsite.

The upland restoration, rare and unique upland preservation, and rare and unique upland restoration areas consist of pasture and forested habitats that contain moderate densities of exotics. The site development plan was designed to preserve almost all of the forested uplands throughout the site which are adjacent to Trout Creek. The proposed activities in the upland areas which include the elimination of the exotic species seed source and supplemental planting as appropriate will result in a net improvement for the upland plant communities onsite.

Rare and unique upland habitats are defined per the Lee Plan as follows:

RARE AND UNIQUE UPLAND HABITATS (RU) High-quality native upland habitats categorized as "mature" due to the absence of severe impacts caused by logging, drainage, and exotic infestation. These habitat types include those classified as sand

0 1000 2000
SCALE FEET

SECTION: 8
TOWNSHIP: 43 S
RANGE: 26 E

Proposed Onsite Wildlife Corridor (200.30 ac.)

Notes:
1. Property boundary provided by Forestar Group, Inc.
2. Mapping based on photointerpretation of 2024 aerial photography, LIDAR, and ground truthing in December 2024. Map includes 2025 aerial photography.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

PERMIT USE ONLY, NOT FOR CONSTRUCTION

November 21, 2025 9:46:30 a.m.
Drawing: FORESTAR11FLOODWAY.DWG

Figure 1. Trout Creek Wildlife Corridor Map

Armeda Property

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866.850.4200 www.atwell-group.com
4470 CAMINO REAL WAY, SUITE 101
FORT MYERS, FL 33908
239.334.3680

scrub (320); coastal scrub (322); those pine flatwoods (411) which can be categorized as "mature" due to the absence of severe impacts caused by logging, drainage, and exotic infestation; slash pine/midstory oak (412); tropical hardwood (426); live oak hammock (427); and, cabbage palm hammock (428). The numbered references are to the Florida Land Use Cover and Forms Classification System (FLUCFCS) Level III (Florida Department of Transportation, 1985).

The Lee County Coastal Study (1988) includes definitions of oak hammocks and cabbage palm hammocks as follows:

Oak hammocks occupy 86 acres or 0.4% of the study area's lands. Oak hammocks are usually small in size and were once scattered throughout the study area. Usually located on a topographic rise, they are often associated with archeological features as are tropical hardwoods. This community is usually dominated by large live oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), water oak (*Quercus nigra*), cabbage palm (*Sabal palmetto*), blue beech (*Carpinus caroliniana*), dahoon (Ilex cassine), myrsine (*Myrsine quianensis*), marlberry (*Ardisia escallonioides*), wild coffee (*Psychotria nervosa sulzneri*), and a number of ferns and epiphytes. Listed species found in these areas include the gopher tortoise (*Gopherus polyphemus* -SSC) and the eastern indigo snake (*Drymarchon corais couperi* -T). Listed flora found in oak hammocks include golden polypody fern (*Phlebodium aureum* - T), hand or adder's tongue fern (*Ophioglossum palmatum* - E), *Tillandsia valenzuela* (T), *setacea* (T), *paucifolia* (T), *flexuosa* (T), shoestring fern (*Vittaria lineata* - T), and butterfly orchid (*Encyclia tampensis*- T).

Cabbage palm hammocks occupy 1,000 acres or 5.1 % of the study area's lands. This upland to mesic habitat is often difficult to distinguish from the oak hammock where oaks are the dominant canopy. Cabbage palms, oaks (*Quercus* spp.) and slash pine are usually equally dominant in the well-developed canopy of the cabbage palm hammock. The hammock floor may be wet or dry but always open and vegetated by ferns and grasses. Listed fauna of this habitat include the eastern indigo snake (*Drymarchon corais couperi* - T). Listed flora include golden polypody fern *(Phlebodium aureum* - T) and hand or adder's fern (*Ophioglossum palmatum* - E). This habitat is found most extensively on Cayo Costa and North Captive Island, the Deep Lagoon watershed and the area between the Coconut and Imperial River watersheds.

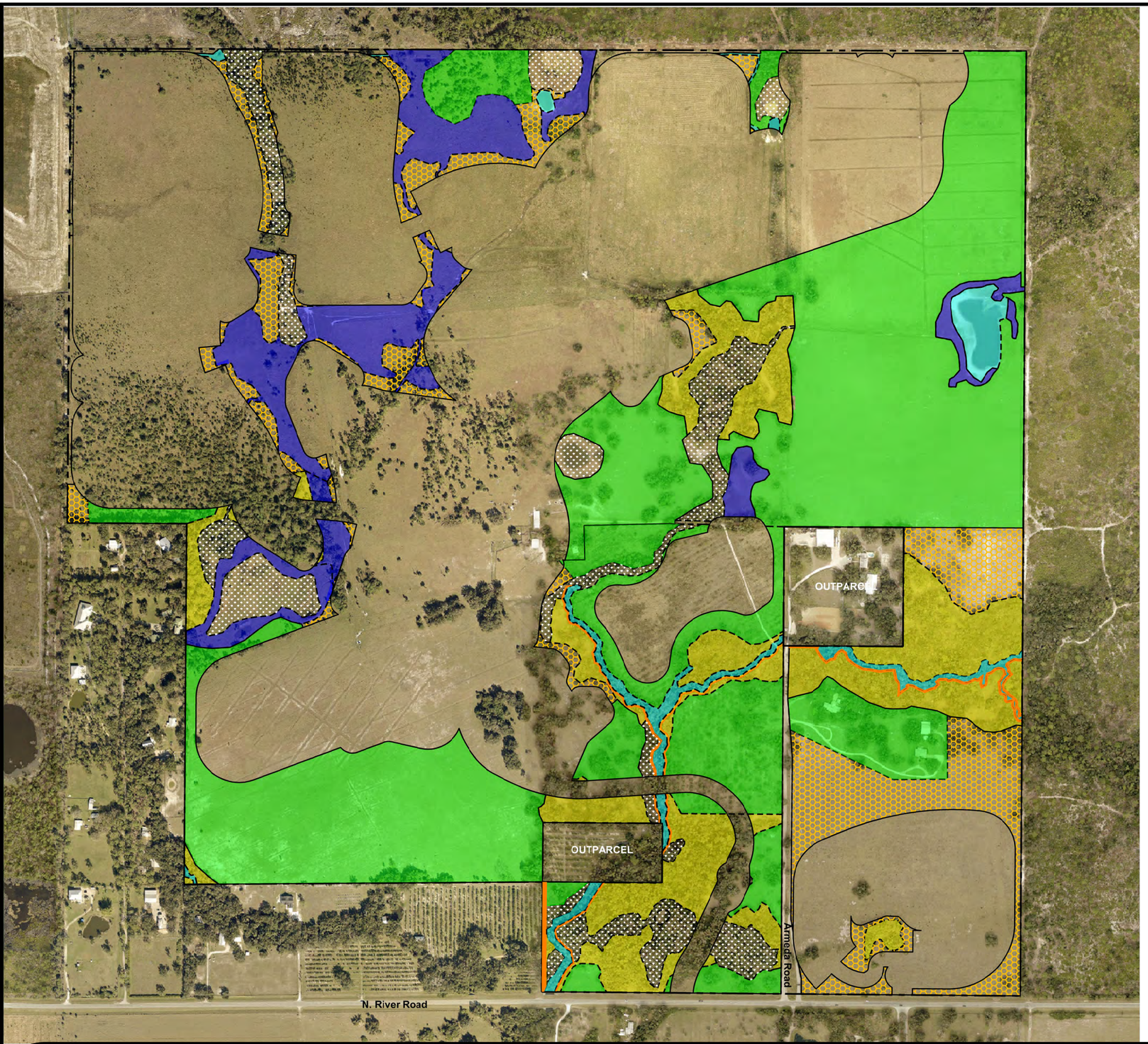
Preservation and Restoration Area Plans

Wetland Preservation

Approximately 24.20 acres of wetlands will be preserved as shown on the Enhancement and Preservation Map and Indigenous Habitat Management Monitoring Plan Map (Figures 2 and 3). Exotic vegetation will be treated and/or removed per the Initial Exotic Vegetation Treatment section below.

Wetland Restoration

A total of 24.45 acres of wetlands infested with exotic vegetation will be restored as shown on the Enhancement and Preservation Map, Indigenous Habitat Management Monitoring



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TOWNSHIP: 43 S
RANGE: 26 E

- Wetland Preservation (24.20 ac.)
- Wetland Restoration (24.45 ac.)
- Upland Restoration (33.55 ac.)
- Rare & Unique Upland Restoration (141.06 ac.)
- Rare & Unique Upland Preservation (38.93 ac.)
- Preserved Surface Waters (7.57 ac.)
- Lee County Access and Drainage Easement Outside of Preserves (1.80 ac.)

Notes:
1. Property boundary provided by Forestar Group, Inc.
2. Mapping based on photointerpretation of 2024 aerial photography, LIDAR, and ground truthing in December 2024. Map includes 2025 aerial photography.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

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December 01, 2025 2:05:41 p.m.
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Figure 2. Enhancement & Preservation Map

Armeda Property

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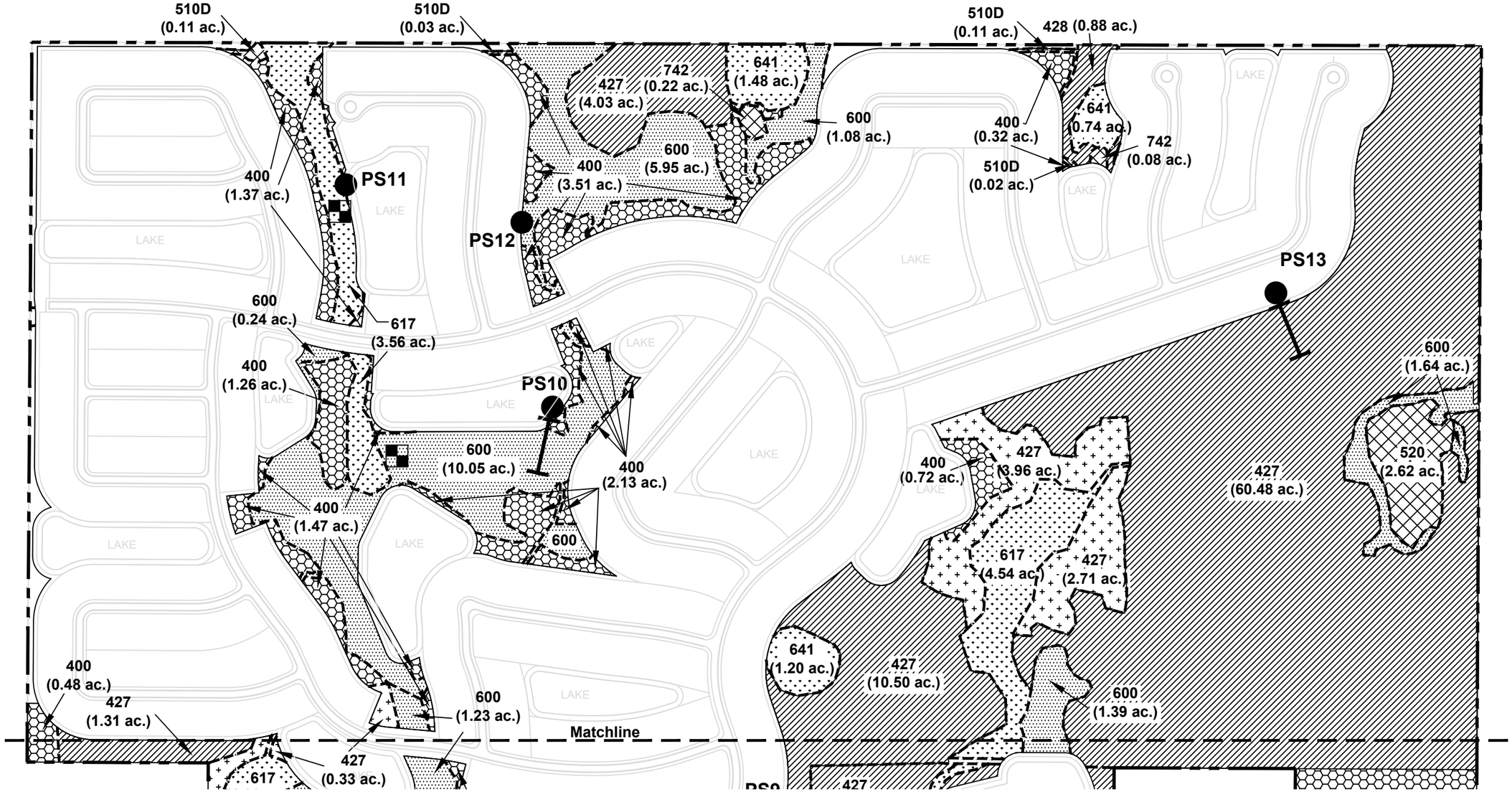

Wetland Preservation (24.20 ac.)

Upland Restoration (33.55 ac.)

Rare & Unique Upland Preservation (38.93 ac.)

Lee County Access and Drainage Easement Outside of Preserves (1.80 ac.)

Wetland Restoration (24.45 ac.)

Rare & Unique Upland Restoration (141.06 ac.)

Preserved Surface Waters (7.57 ac.)

FLUCCS	Description	Acreage
400	Uplands	33.55
427	Live Oak	178.43
428	Cabbage Palm	1.56
510	Streams and Waterways	4.49
510D	Ditches	0.27
520	Lakes	2.53
600	Wetlands	24.54
617	Mixed Wetland Hardwoods	17.08
641	Freshwater Marshes	7.03
742	Borrow Areas	0.28
	Total	**269.76**

Notes:
1. Property boundary provided by Forestar Group, Inc.
2. Mapping based on photointerpretation of 2024 aerial photography, LIDAR, and ground truthing in December 2024. Map includes 2025 aerial photography.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

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November 26, 2025 10:27:30 a.m.
Drawing: FORESTAR11INDIGENOUS.DWG

Figure 3. Indigenous Habitat Management Monitoring Plan Map - Sheet 1

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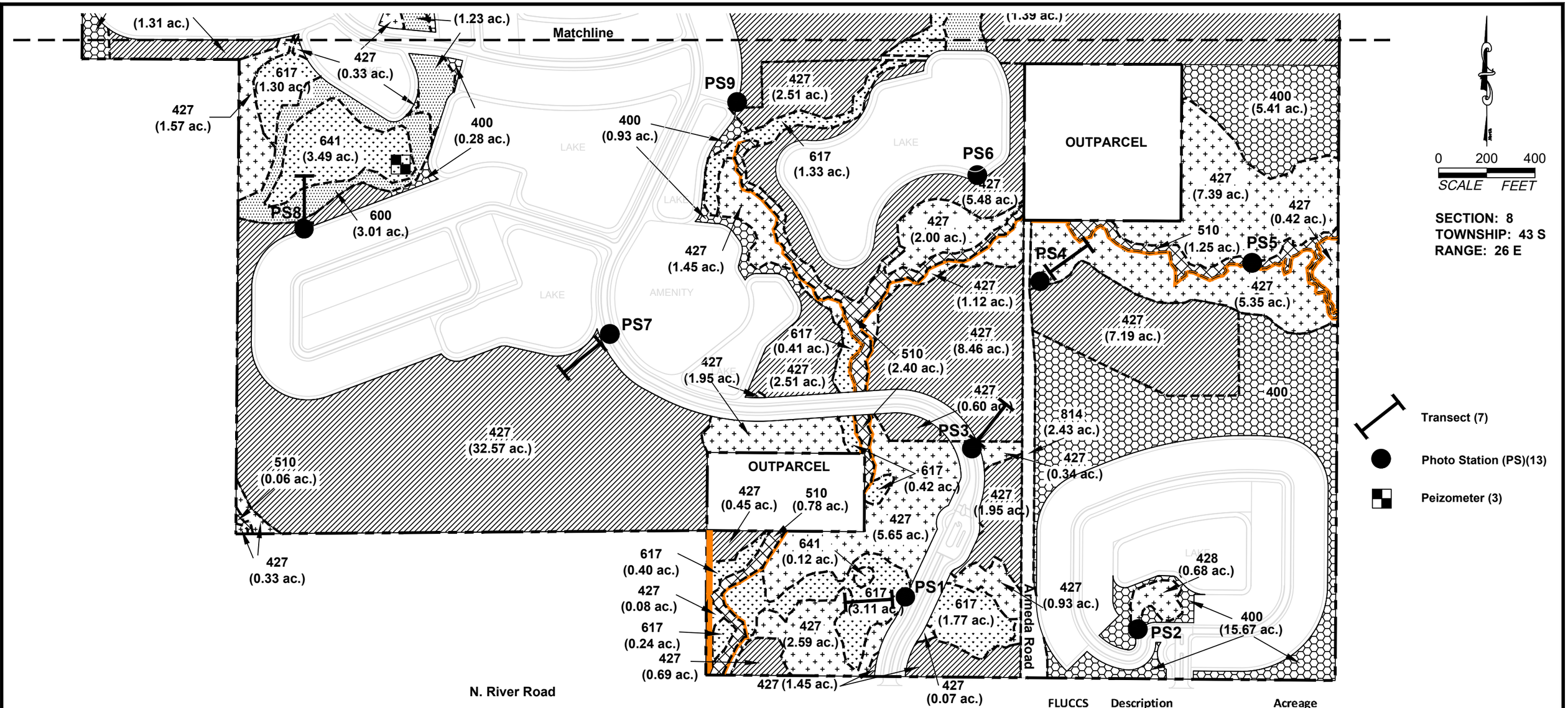

Wetland Preservation (24.20 ac.)

Wetland Restoration (24.45 ac.)

Upland Restoration (33.55 ac.)

Rare & Unique Upland Restoration (141.06 ac.)

Rare & Unique Upland Preservation (38.93 ac.)

Preserved Surface Waters (7.57 ac.)

Lee County Access and Drainage Easement Outside of Preserves (1.80 ac.)

FLUCCS	Description	Acreage
400	Uplands	33.55
427	Live Oak	178.43
428	Cabbage Palm	1.56
510	Streams and Waterways	4.49
510D	Ditches	0.27
520	Lakes	2.53
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742	Borrow Areas	0.28
	Total	269.76

Notes:
1. Property boundary provided by Forestar Group, Inc.
2. Mapping based on photointerpretation of 2024 aerial photography, LIDAR, and ground truthing in December 2024. Map includes 2025 aerial photography.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

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Figure 3. Indigenous Habitat Management Monitoring Plan Map - Sheet 2

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Plan Map, Exotic Treatment Map, and Restoration Area Planting Map (Figures 2 - 5). Exotic vegetation will be treated and/or removed per the Initial Exotic Vegetation Treatment section below. The restoration areas will then be planted with native ground cover as listed in the Wetland Restoration Planting Table (Table 1). The final species list will be based upon site specific conditions and on plant material availability at the time of planting. Herbaceous plants will be planted in the restoration area shown on the attached Restoration Planting Plan Map (Figure 4).

Table 1. *Wetland Restoration Planting Table

Botanical Name	Common Name	Minimum Size/Container	Maximum Spacing	Quantity
Spartina bakeri	Cordgrass	Liner	5 Feet Centers	5,569
Sagittaria sp.	Arrowhead	Liner	5 Feet Centers	5,569
Pontederia cordata	Pickerelweed	Liner	5 Feet Centers	5,569
Tripsacum dactyloides	Fakahatchee grass	Liner	5 Feet Centers	5,569
Eleocharis sp.	Spikerush	Liner	5 Feet Centers	5,569

*Additional plant species may be included in the planting table prior to development order approval

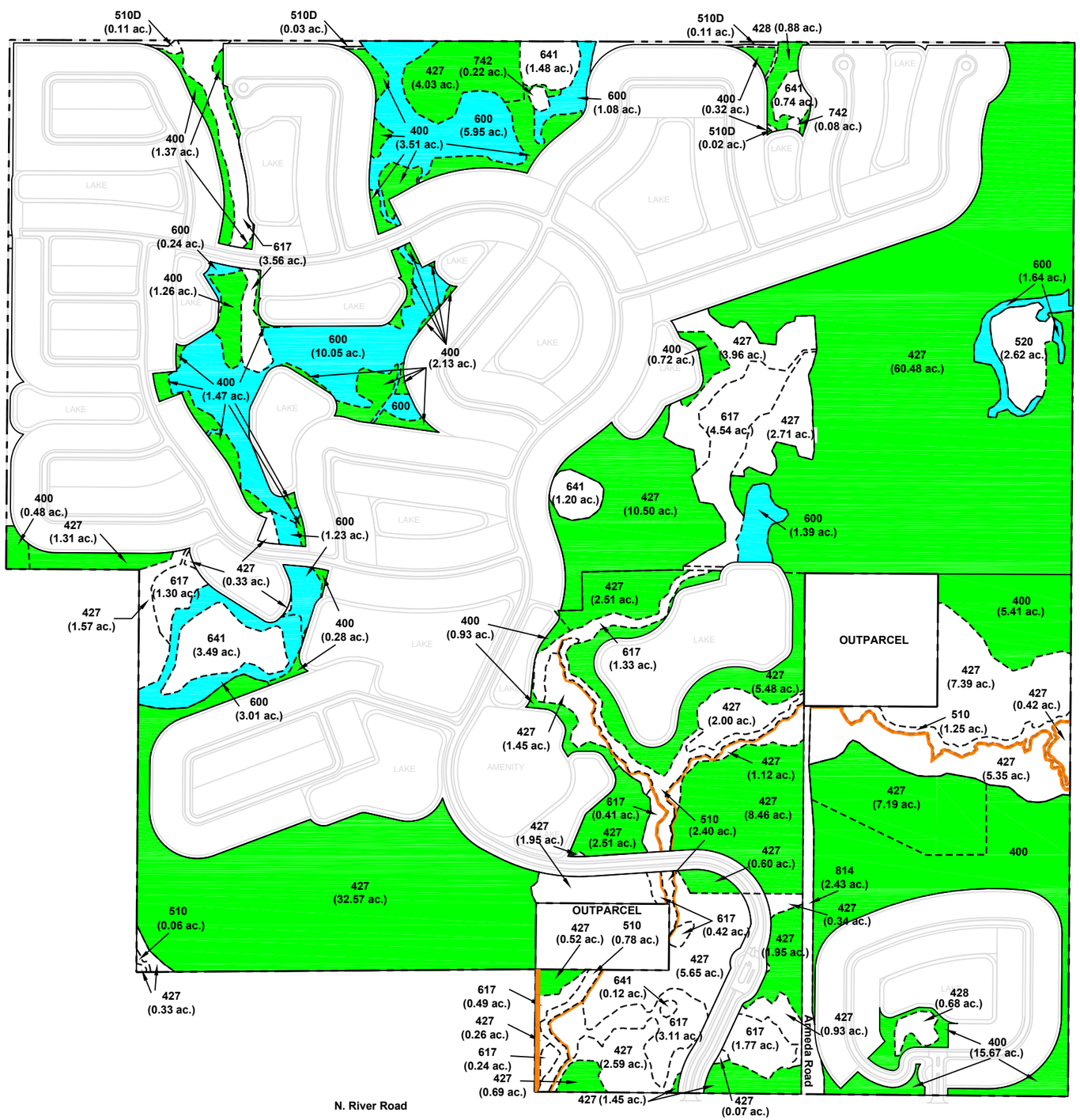
Upland Restoration

Approximately 33.55 acres of uplands will be restored as shown on the Enhancement and Preservation Map, Indigenous Habitat Management Monitoring Plan Map, Exotic Treatment Map, and Restoration Area Planting Map (Figures 2 - 5). Exotic vegetation will be treated and/or removed per the Initial Exotic Vegetation Treatment section below. The upland restoration area will then be planted with native ground cover species as listed in the Upland Restoration Planting Table (Table 2). The final species list will be based upon site specific conditions and on plant material availability at the time of planting.

Table 2. *Upland Restoration Planting Table

Botanical Name	Common Name	Minimum Size/Container	Maximum Spacing	Quantity
Serenoa repens	Saw Palmetto	Liner	5 Feet Centers	11,691
Muhlenbergia sp.	Muhley Grass	Liner	5 Feet Centers	11,691
Andropogon virginicus	Broom Sedge	Liner	5 Feet Centers	11,691
Aristida beyrichiana	Wiregrass	Liner	5 Feet Centers	11,691
Spartina bakeri	Cordgrass	Liner	5 Feet Centers	11,691

*Additional plant species may be included in the planting table prior to development order approval



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TOWNSHIP: 43 S
RANGE: 26 E

Upland Restoration Planting Areas (174.61 ac.)

Wetland Restoration Planting Areas (24.45 ac.)

Lee County Access and Drainage Easement Outside of Preserves (1.80 ac.)

Notes:
1. Property boundary provided by Forestar Group, Inc.
2. Mapping based on photointerpretation of 2024 aerial photography, LIDAR, and ground truthing in December 2024. Map includes 2025 aerial photography.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

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Figure 4. Restoration Areas Planting Plan Map

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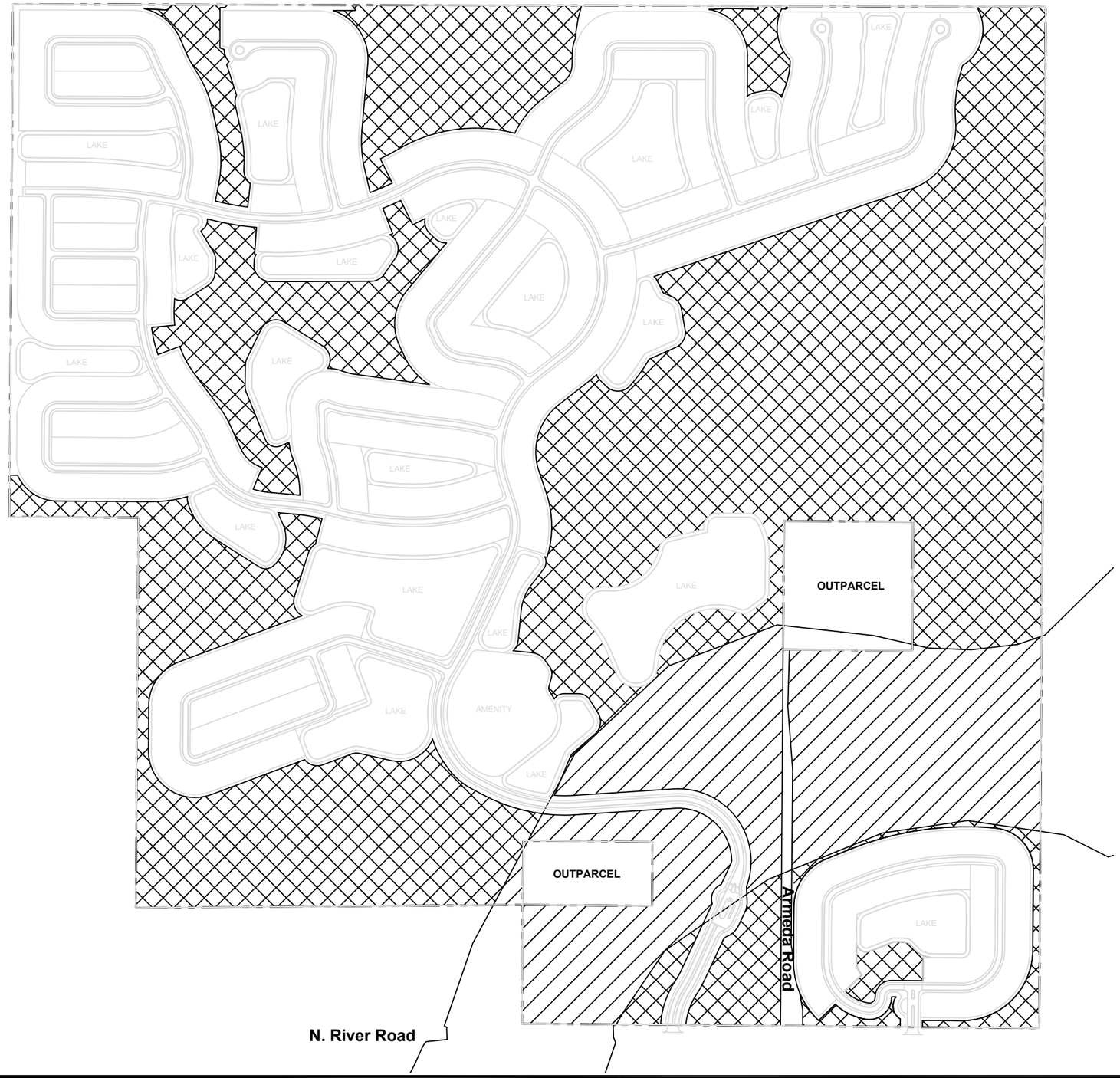

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TOWNSHIP: 43 S
RANGE: 26 E

Floodway - Treat-in-Place or Remove Exotic Vegetation

Non-Floodway - Treat-in-Place, Remove Exotic Vegetation, or Leave Debris (as described in Indigenous Habitat Managment Plan)

Notes:
1. Property boundary provided by Forestar Group, Inc.
2. Mapping based on photointerpretation of 2024 aerial photography, LIDAR, and ground truthing in December 2024. Map includes 2025 aerial photography.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

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Figure 5. Exotic Vegetation Treatment Map

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Rare and Unique Upland Preservation

Approximately 38.93 acres of rare and unique uplands will be preserved as shown on the Enhancement and Preservation Map and Indigenous Habitat Management Plan Map (Figures 2 and 3). Exotic vegetation will be treated and/or removed per the Initial Exotic Vegetation Treatment section below.

Rare and Unique Upland Restoration

Approximately 141.06 acres of existing upland pastures and disturbed exotic vegetation infested uplands will be restored to live oak and cabbage palm hammocks (FLUCCS Codes 427 and 428) which are Rare and Unique Uplands per the definition in the Lee Plan as shown on the Enhancement and Preservation Map, Indigenous Habitat Management Monitoring Plan Map, Exotic Treatment Map, and Restoration Area Planting Map (Figures 2 - 5).

The existing soils should support the restoration to live oak hammocks as these communities were present in these locations historically. If any of the planting areas have compacted soils, the soil area around each planting will be loosened. This may be accomplished by hand or mechanical means. Exotic vegetation will be treated and/or removed per the Initial Exotic Vegetation Treatment section below. The restoration area will then be planted with native ground cover and trees, as listed in the Rare and Unique Upland Restoration Planting Table (Table 3). The final species list will be based upon site specific conditions and on plant material availability at the time of planting. Cabbage palms from the development footprint may be relocated and used for the restoration planting plan below.

Table 3. *Rare and Unique Upland Restoration Planting Table

Botanical Name	Common Name	Minimum Size/Container	Maximum Spacing	Quantity
Trees				
Quercus virginiana	Live Oak	6’ tall/BR	18 Feet Centers	3,162
Quercus laurifolia	Laurel Oak	6’ tall/BR	18 Feet Centers	1,581
Sabal palmetto	Cabbage Palm	6’ tall/FG	18 Feet Centers	1,581
Shrubs				
Rapanea punctata	Myrsine	1 Gallon	18 Feet Centers	3,795
Myrica cerifera	Wax Myrtle	1 Gallon	18 Feet Centers	3,795
Psychotria nervosa	Wild Coffee	1 Gallon	18 Feet Centers	3,795
Eugenia foetida	Spanish Stopper	1 Gallon	18 Feet Centers	3,795
Callicarpa americana	Beauty Berry	1 Gallon	18 Feet Centers	3,795

Ground Cover				
Serenoa repens	Saw Palmetto	Liner	8 Feet Centers	19,211
Muhlenbergia sp.	Muhley Grass	Liner	8 Feet Centers	19,211
Andropogon virginicus	Broom Sedge	Liner	8 Feet Centers	19,211
Aristida beyrichiana	Wiregrass	Liner	8 Feet Centers	19,211
Spartina bakeri	Cordgrass	Liner	8 Feet Centers	19,211

*Additional plant species may be included in the planting table prior to development order approval

At the time of development order, areas within the provided 50' natural waterway buffer must meet the requirement of six native canopy trees and 50 native shrubs per 100 linear feet at a 1:1 credit ratio. If supplemental trees or shrubs are required to meet the required buffer plantings, trees must comply with LDC Section 10-420 and be a minimum 10' in height and shrubs must be a minimum 24" in height at time of planting.

At the time of development order, the area along North River Road must contain native canopy trees a minimum of 14' in height spaced approximately 25 feet on center per LDC Section 33-1673.

At the time of development order, the areas surrounding the outparcels that are not abutting natural waterway or natural waterway buffers must meet the Type F Buffer requirement of 10 trees per 100 linear feet and double staggered hedge row (calculated at 3' on center spacing) at a 1:1 credit ratio. If supplemental trees or shrubs are required to meet the required buffer plantings, trees must comply with LDC Section 10-420 and be a minimum of 10' in height and shrubs must be a minimum 48" in height at time of planting.

Surface Water Preservation

Approximately 7.57 acres of other surface waters will be preserved as shown on the Enhancement and Preservation Map and Indigenous Habitat Management Plan Map (Figures 2 and 3).

Initial Exotic Vegetation Treatment

All exotic and nuisance species (defined per LDC Sec. 10-420(f) and Category I and II species on the Florida Exotic Pest Plant Council's List of Invasive Species) within the upland and wetland preservation areas will be treated as shown on the Exotic Vegetation Treatment Map (Figure 5). A vegetation removal permit associated with the development order is required for the initial exotic vegetation treatment.

Exotic vegetation control will be accomplished by chain saw or machete. Woody exotic vegetation will be cut just above natural grade and the stump treated with an appropriate herbicide suitable for aquatic application. Treatment will occur immediately following

cutting to ensure maximal uptake of the herbicide. The woody exotic vegetation will be removed from the preserves unless the damage to native woody vegetation caused by the removal process is determined to be excessive.

In areas where physical removal is determined to be impracticable, the following methods will be implemented. Large trees (greater than four-inch diameter at breast height (DBH)) may be girdled and killed in place with a stump specific herbicide suitable for aquatic application. The four-inch DBH and smaller trees and shrubs will be cut just above natural grade and the stump treated with an appropriate herbicide suitable for aquatic application. The resulting vegetative material will be disposed of by one or more of the following methods: 1) cut into four to six feet sections and stacked on the ground with alternating layers of trees at right angles to each other (log cabin) with the stacks no higher than 5± feet and spaced a minimum of 100± feet apart, 2) cut and placed into piles (tee-pee) with piles spaced a minimum of 100± feet apart, 3) where exotic density is less than 25 percent the exotics may be cut into two to four foot sections and scattered on the ground, and 4) woody exotic vegetation may be removed from the preserves.

Existing fallen dead trees (native and exotic) will remain in place and allowed to decompose. If non-woody exotics, such as torpedo grass and paragrass, are present within the preserve they will be treated by a foliar application of an appropriate herbicide suitable for aquatic application.

Herbicides will be used in strict accordance with label directions by trained applicators. An appropriately licensed herbicide applicator will supervise the crew. A marker dye will be added to the spray solution to help visualize where the solution is being applied. Care will be taken to reduce damage to non-target native species to the maximum extent practical. Access for the initial exotic vegetation treatment will be via the existing farm fields.

No cut debris will be placed within the FEMA floodways of Trout Creek as shown on the Exotic Vegetation Treatment Map (Figure 5). Exotic vegetation in the floodways will either be cut and removed or treated in-place as described above.

Barricading

Prior to commencement of construction activities, the mitigation areas will be staked in the field and the required erosion control barriers installed. These barriers will be inspected by County staff prior to commencement of construction activities. The operation of construction equipment, storage of equipment, and stockpiling of fill and construction material will be prohibited within the preservation areas. The staking identifying the limits of the preservation area will be maintained for the duration of adjacent construction activities.

Schedule

The wetland preservation must be within a recorded conservation easement and the rare and unique upland preservation and restoration areas must be completed prior to

the Certificate of Compliance for the infrastructure.

Conservation Easement
A Conservation Easement will be recorded and placed over the upland, wetland, and surface waters preservation areas totaling 269.76. Signs demarking the preservation areas will be posted at 100 feet intervals along the outer edge of all preservation areas.

Access and Drainage Easement
Access and Drainage Easements will be recorded and placed over 1.80 acres along Trout Creek. These areas are not part of the indigenous preserves, but exotics will be treated in these areas as described above.

Ecological Performance Standards
To meet the objective of this plan, the following performance standards will apply to the onsite wetland and upland preservation and restoration areas:

1. At least 80 percent cover by appropriate wetland species (i.e. facultative wet or obligate) within the wetlands and the restored littoral marsh and 80 percent coverage by appropriate upland species in the upland preservation and restoration areas.
2. The conservation easement areas are free of exotics immediately following maintenance treatment events. All exotic and nuisance species (defined as Category I and II species on the Florida Exotic Pest Plant Council's List of Invasive Species) within these wetlands will be treated. The nuisance species dog fennel (*Eupatorium capillifolium*), Caesar weed (*Urena lobata*), primrose willow (*Ludwigia peruviana*), grape vine (*Vitis* sp.), and cattail (*Typha* spp.) as well as exotic species shall total less than five percent combined between maintenance events.
3. Monitoring of the preserve areas shall be conducted for a minimum of 5 years with annual reports submitted to the County. After the initial restoration plantings described above, if native wetland, transitional, and upland species (do not achieve 80% coverage within the initial two years of the monitoring program (obligate and facultative wet species exceed facultative species in wetland areas), native species shall be planted in accordance with the maintenance program. At the end of the monitoring program the entire mitigation area shall contain an 80% survival rate of planted vegetation and an 80% coverage of desirable obligate and facultative wetland species.
4. The preserve areas shall be maintained in perpetuity to ensure coverage by native desirable vegetation and the target habitat types and success criteria are maintained as specified in the permit.
5. The preserve areas shall be managed such that exotic/nuisance vegetation species do not dominate any one section of areas within the preserves.

These performance standards will be achieved by the end of the five-year monitoring period.

Long Term Management
The applicant and/or the homeowners association will be responsible for the long-term maintenance of the onsite preservation areas. Vegetation removal permits are required for ongoing management activities associated with this approved Indigenous Habitat Management Plan that is preserve area specific for the type of management that is being requested.

Adaptive Management
If during monitoring of the onsite preservation area, areas do not appear to be trending toward meeting the above ecological performance standards, the methods for treating exotic vegetation will be re-evaluated.

Maintenance

A routine maintenance program will be initiated upon the completion of the initial exotic treatment and native plant installation. A vegetation removal permit will be required for preserve maintenance. For the first two years following the initial treatment, the preservation areas will be inspected twice a year (late spring and fall) and all exotic and/or nuisance species will be treated. During these inspections the preservation areas will be qualitatively evaluated, potential problems (if any) identified, and corrective actions recommended. After the second year, inspections and treatments will be conducted annually during the dry season. The property owner will be responsible for long term management of the preserves.

Pruning and trimming activities will not be performed in the preserve however invasive exotic vegetation may have to be treated within planting areas. The frequency of maintenance will be based on how successful the new plantings are and the extent to which nuisance pest species enter into the newly planted area. Semi-annual monitoring will be conducted in each newly planted area for one year to carefully evaluate these parameters. Herbicide maintenance will be conducted semi-annually during the first year following implementation of the pest control program and at least annually thereafter, in accordance with LDC 10-420(h).

If monitoring events reveal severe deer grazing or disturbance from wild hogs, the affected planting area will be temporarily isolated with a fence to keep out larger animals until the plantings are well established. Once success criteria are achieved, all temporary fencing will be removed from the preserve.

Newly planted areas will be included in the invasive pest control program. The herbicide maintenance areas shall expand to control exotic and nuisance species as necessary where native vegetation is being established. Periodic management of the planting areas is required to ensure that the plants will survive and thrive. This will guarantee success and allow desirable indigenous species an opportunity to recruit into the planting areas. As part of ongoing management of the site, the owner or his designee shall treat and/or remove exotic species (per LDC Sec. 10-420(h) and nuisance species as necessary at least semiannually for one year and annually thereafter. Nuisance species shall mean

those species of flora whose noxious characteristics or presence in sufficient number, biomass, or areal extent may reasonably be expected to prevent, or unreasonably interfere with, the designated use of the waters under consideration, as defined in rules 62-312.310(8) and 62-302.200(14), F.A.C.. Invasive exotic species include at a minimum the species listed in LDC Sec. 10-420(h).

Protected Species

Gopher Tortoise
Twenty potentially occupied gopher tortoise burrows were found in the southern pastures. Based on 80 percent survey coverage, it is estimated that twenty-five potentially occupied gopher tortoise burrows occur within this general area. Using the FWC standard burrow occupancy correction factor of 0.5 gopher tortoises per burrow, it is estimated that thirteen gopher tortoises are present. No signs of gopher tortoises were observed elsewhere on-site.

American Alligator
An American alligator was observed in the north cattle pond. No evidence of nesting by alligators was observed.

Florida Bonneted Bat
The U.S. Fish and Wildlife Service (FWS) listed the Florida bonneted bat (*Eumops floridanus*) as endangered in November 2013. The project is located within the Florida Bonneted Bat Consultation and Assumed Presence areas but is not within a Critical Habitat area. Numerous dead trees containing potential cavities entrances were observed throughout the site. The vast majority of these trees consist of pine tree snags in advanced stages of decay. These potential cavity entrances are primarily less than approximately two inches in diameter. Many of the potential cavities are likely very shallow and do not penetrate the heartwood of the snag. No evidence of bat utilization (bat vocalization/chatter from within the potential cavities or guano on or around the snags) was observed. No live trees with cavities were observed on-site but several structures are present.

Sandhill Crane and Wading Birds
Two sandhill cranes were observed in the northwest pasture and two were observed in the southeast pasture. Little blue herons were observed in the north cattle pond and in the central freshwater marsh. A tricolored heron was observed in an agricultural ditch along the eastern property boundary. No nesting was observed.

Audubon's Crested Caracara
Two adult caracara were observed perching in a slash pine located near the southeast corner of the property. This tree is located on the adjacent property to the east. In addition, during the 2024 – 2025 Audubon's Crested Caracara Nesting Season, a confirmed nest tree was located within a cabbage palm (FLUCCS 428DE1) onsite.

Other Listed Species
No other species listed by either the FWS or the FWC were observed on the site during the protected species survey or during other site visits. There is the potential for periodic opportunistic foraging by other listed and non-listed species of wading birds within the ditches, cattle pond, and marshes. In addition to the site inspections, a search of the FWC species database revealed no additional known protected species within or immediately adjacent to the project limits.

The wood stork (*Mycteria americana*) is listed as threatened by the FWC and the FWS. Although no wood storks were observed they may forage in the wetlands and ditches. Nesting has not been documented onsite, nor do wood storks appear there in the most recent FWC listed species occurrence database. Wood stork colony locations provided by FWC show two colonies within a 25-mile radius of the property. The closest colony location is approximately 4.5 miles to the southwest of the subject parcel.

The property is not located within the primary and secondary zones of the 2007 Florida Panther Focus Area but is within the 2003 Panther Consultation Area identified by the FWS. The Florida panther (*Felis concolor coryi*) is listed as endangered by both the FWS and FWC. There is one FWC telemetry points located approximately 1.5 miles northeast of the subject property. This point was recorded in 2000 and is located within the Babcock Ranch development.

Protected Species Management Plans

Several measures have been taken to reduce potential impact to wildlife. Adverse impacts to wildlife including listed wildlife are not anticipated as a result of the proposed residential project. All agricultural activities will cease in the Preserve Areas once construction commences, with human disturbance in those areas limited to activities consistent with the conservation easement.

Gopher Tortoise Management Plan
Prior to the initiation of development activities, a gopher tortoise burrow survey of the development footprint will be conducted in accordance with current FWC guidelines. If the survey determines there are ten or fewer potentially occupied gopher tortoise burrows that will be impacted by development activities, the landowner will obtain a 10 or Fewer Burrows permit from the FWC and relocate the gopher tortoises to an upland preserve in the southwest portion of the site. In the event there are more than ten potentially occupied gopher tortoise burrows that will be impacted by development activities, the landowner will obtain a Conservation permit from the FWC and relocate the gopher tortoises to the FWC approved off-site recipient site as specified by the FWC permit. Lee County Environmental Sciences will be provided a copy of the FWC gopher tortoise permit prior to excavation of the burrows.

With the exception of potentially occupied gopher tortoise burrows located within 25 feet of the development footprint, all gopher tortoise burrows within the upland preserves will remain undisturbed. The management of the upland preserves are anticipated to improve

the quality of gopher tortoise habitat within those preserves.

Florida Bonneted Bat

Numerous snags with potential roost cavities were observed within the proposed development footprint of the site. No evidence of bat utilization was observed. The proposed project will result in the preservation and restoration of suitable FBB habitat. The vast majority of on-site wetlands will be restored and preserved. These areas could serve as foraging and roosting habitat to FBBs. The applicant also agrees to the following Best Management Practices outlined in the 2024 Florida Bonneted Bat Consultation Guidelines:

- **D1.** While substantial areas of pasture cannot be retained onsite, 24.20± acres of onsite preserves consisting primarily of herbaceous and forested wetlands will be enhanced via exotic vegetation removal and supplemental plantings. An additional 24.45 acres of wetland pasture and 33.55 acres of upland pasture will be restored to native herbaceous habitats.

- **D2.** Over 35 acres of lakes will be created onsite and will contain littoral shelves which are required by Lee County. These shelves will be planted with appropriate native herbaceous vegetation.

- **D3.** The applicant agrees to the lighting practices outlined in the 2024 Florida Bonneted Bat Consultation Guidelines.

- **D4.** Structures will be designed to avoid or minimize gaps both during and after construction.

- **D5.** The widespread use of insecticides and pesticides will be discouraged.

- **D7.** All snags located within the preserve areas will be retained unless they pose a risk to property or persons.

Wading Bird Management Plan

Wood storks were not found during wildlife surveys of the property and no nesting activities were observed. Suitable foraging habitat occurs throughout the property. Additionally, the property occurs within 18.6 miles of two known wood stork colonies. Based on the FWS “Effect Determination Key”, dated November 9, 2007 (Service Consultation Code 41420-2007-I-0964), the proposed project may affect the wood stork. Formal consultation for the wood stork is anticipated to be required by the FWS. On behalf of the applicant, at the appropriate time, we will be coordinating with FWS to develop a wood stork mitigation plan which will effectively offset any potential impacts to foraging habitat of this federally listed species. Additionally, it is expected that existing foraging habitat for the wood stork will be enhanced by the removal and maintenance of invasive exotic plants and protected by implementation of the wetland enhancement and preservation plan and the reclamation plan. The proposed littoral shelves will also benefit the wood stork by adding a significant amount of foraging area.

Existing wading bird foraging habitat will be enhanced through removal and maintenance of exotic invasive plants. The proposed site conditions will result in a total of over 48 acres of preserved and restored wetlands. Implementation of the proposed wetland preservation plan would assure that any potential temporary impacts to these species would be offset. This plan would meet applicable requirements of South Florida Water Management District and Lee County as well as the FWS and FWC.

The enhancement of the property will ultimately provide increased acreage of higher quality habitat for wading birds in the preservation areas and restoration areas. Additionally, protection provided by the wetland preservation plan will provide long-term viability for wading birds.

Florida Sandhill Crane Management Plan

Florida sandhill cranes have been observed onsite but no nesting has been observed onsite. A total of 7.03 acres of existing foraging habitat (FLUCCS 641) for the sandhill crane will be restored through removal and maintenance of invasive exotic plants. In addition, 24.45 acres of hydric pasture will be restored to herbaceous wetland. Implementation of the proposed Indigenous Habitat Management Plan would assure that any impacts to the foraging pattern of this species are offset.

American Alligator Management Plan

Several American alligators were observed in the north-central wetland. The property includes numerous open water features which provide refuge for this species. No alligator nests were found on the property during protected species survey or other site visits. If the proposed project is approved, the wetland enhancement and restoration in the Indigenous Habitat Management Plan will ultimately provide increased acreage of higher quality habitat for the alligator. The proposed site conditions will result in large areas of enhanced wetlands and open water features.

Alligators will commonly move from water body to water body in response to factors such as season, disturbances, food supply, etc. In the event that an alligator is present within the limits of construction at the time of site clearing, work within the immediate vicinity of the alligator will be halted and the animal will be allowed to move out of harm's way. Once the American alligator has moved work can be restarted. The protection provided by implementation of the Indigenous Habitat Management Plan will provide long-term viability for the American alligator onsite.

Audubon's Crested Caracara Management Plan

As noted above, and Audubon's crested caracara nest was identified during a 2024-2025 nesting survey. The nest was not observed during the listed species survey. To minimize the potential of impacts to nesting habitat, the cabbage palms located in the proposed development areas will be relocated to the rare and unique upland restoration area and appropriate preservation areas prior to construction activity initiation, if feasible. The proposed Indigenous Habitat Management Plan includes the preservation and restoration of over 200 acres of uplands. The implementation of this Indigenous Habitat Management

Plan will provide long-term viability for Audubon's crested caracara and will assure that any impacts to this species are offset.

Florida Panther and Florida Black Bear Management Plan

No Florida panthers or black bears or their signs were observed during the wildlife survey of the property or during numerous other site visits. The project is not in the FWS Florida panther Primary or Secondary Zones, and the nearest FWC telemetry point is 1.5 miles to the northeast, was recorded in 2000, and is within the Babcock Ranch development. It is expected that existing forage and prey habitat for the Florida panther and black bear will be enhanced through removal and maintenance of invasive exotic plants and protected by implementation of this IHMP.

The preservation and restoration of uplands, wetlands, and open water areas will link the surrounding conservation lands, restoring a link that has been disrupted by agricultural activities and exotic vegetation infestation. Please see the Armeda Property Wildlife Corridor Map (Figure 1).

Wildlife Habitat Area Corridors

A wildlife corridor totaling 200.30± acres will be established as part of the proposed Indigenous Habitat Management Plan. Please see Figures 1 and 2. The Trout Creek corridor currently consists of active pasture and exotic vegetation invaded uplands and wetlands. These areas will be enhanced and preserved as described above. The Rare and Unique Upland restoration areas will be planted as described above and shown in the Restoration Area Planting Plan Map (Figure 2).

Prior to the Certificate of Compliance for the infrastructure, the wetland and upland preserve areas, which include the onsite wildlife corridors, will be placed under a Conservation Easement.

Human Coexistence with Wildlife Plan

Homeowners will receive a brochure describing the purpose and function of the preserves (Exhibit A). Additionally, the following Human Coexistence with Wildlife Plan will be incorporated into the project's Homeowners Association documents.

American Alligator

Signs will be posted on the subject property adjacent to the water management lakes and bodies of water advising residents that feeding or harassing the American alligators is punishable by state law. An educational brochure, such as the attached "A Guide to Living with Alligators" prepared by the FWC (Exhibit A), will be provided to residents. Residents, commercial tenants, and property maintenance staff will be instructed to contact the FWC for assistance in the event a nuisance alligator is present within the lakes.

Florida Black Bear

An educational brochure, such as the attached "A Guide to Living in Bear County" (Exhibit

A) prepared by the FWC, will be provided to residents and commercial tenants. Residents will be instructed to contact the FWC for assistance in the event a nuisance black bear is present on-site.

Florida Panther
An educational brochure, such as the attached "A Guide to Living with Florida Panthers" (Exhibit A) prepared by the FWC, will be provided to residents and commercial tenants. This brochure provides advise for residents on how to keep their family and pets safe and suggestions on how to handle encounters with panthers.

Monitoring Plan

The proposed monitoring of the preserve areas will consist of baseline monitoring, time-zero monitoring, and annual monitoring of vegetation. The baseline monitoring documents the pre-exotic removal conditions within the preserve areas. The time-zero report will document the conditions immediately following exotic removal and planting. The annual reports will document the extent of success of the project and, if needed, identify specific actions to be taken to improve conditions within the preserve areas. Sampling stations and methodology of data collection will remain the same for all monitoring events.

The owner or his designee shall also monitor and record water elevations at monitoring wells within the undeveloped wetland areas to provide reasonable assurance to the agencies that no significant hydrologic impacts to wetlands occur as a result of the proposed activities. This information will be provided in the annual monitoring reports.

An important component of the monitoring reports will be the before and after pictures. All monitoring reports will include panoramic photographs from photo stations as shown on Figure 3.

The results of monitoring events within the preserve areas will be reported as stated in this plan. Specific maintenance requirements will be explained in the monitoring report(s). Monitoring reports will describe if/where herbicide treatment is necessary to control nuisance species. The report will also explain if/where plantings need to be replaced or if new plantings should be added to a specific area to improve diversity or percent coverage.

The time-zero monitoring report will be provided prior to certification of compliance. Vegetation removal permits are required for ongoing management activities associated with this approved Indigenous Habitat Management Plan that is preserve area specific for the type of management that is being requested. This report will include the date the planting activity was completed and color photographs to provide an accurate representation of the specific area. The photographs shall be taken from fixed reference points described in the baseline monitoring report and shown on a scaled plan view. A table depicting numbers, spacing, and sizes of each species planted will also be provided. Subsequent annual monitoring reports will be submitted to requesting agencies within

thirty (30) days after each monitoring event. The monitoring reports will include a general qualitative and quantitative characterization of the areas. Any pertinent climatological conditions preceding the monitoring event will be described. Qualitative parameters may include estimates of percent bare ground, percent desirable species, percent undesirable species (nuisance and exotic), notations regarding faunal presence and use, and an overall numerical ranking (1-lowest, 10-highest) of the conditions of the system. This numerical ranking is done annually, preferably by the same evaluators, and takes into consideration all parameters of the qualitative assessment. The monitoring will be completed by September of every year (toward the end of the growing season) and an annual report submitted to the reviewing agencies by the end of October. All data collected and analyzed will be included in the report.

Vegetation Monitoring

The vegetation within the uplands and wetlands will be monitored using seven (7) 100 feet long and 20 feet wide transects (Figure 3). The approximate percent cover of plants occurring in the ground cover, midstory, and canopy will be recorded along the transect. Ground cover species include woody vegetation less than three feet in height and all non-woody plants. Midstory vegetation consists of all woody plants greater than three feet in height and less than four inches DBH. Canopy species consist of woody vegetation greater than four inches DBH. Bare ground and open canopy will also be recorded in this manner. The resulting data will be used to calculate percent cover of the three strata.

Wildlife Monitoring

Regular observations of fish and wildlife will be made during all monitoring events by qualified ecologists. This will consist of recording evidence and signs of wildlife (i.e., direct sighting, vocalization, nests, tracks, droppings, etc.).

Photographic Documentation

Permanent fixed-point photograph stations will be established in each of the monitored areas thereby providing physical documentation of the condition and appearance of an area, as well as any changes taking place. Panoramic photographs will accompany vegetation data in each report. Locations of photo stations will remain the same throughout the duration of the monitoring program.

Report

The methodology and results of each monitoring event will be documented in an annual monitoring report. Data will typically be collected towards the end of the growing season (September - October) and submitted to the agencies with 90± days of data collection.

Method and Frequency of Pruning and Trimming

No pruning or thinning of native vegetation within the indigenous vegetation preserves is proposed at this time. In the event that trimming becomes necessary to meet the ecological goals of this management plan, the trimming will be accomplished by hand using chainsaws or machetes and will be restricted to no more than 25 percent of an area during any particular one-year interval. Cut vegetation will remain on-site.

The Lee County Division of Environmental Sciences will be notified prior to any preserve maintenance (other than routine annual exotic maintenance events).

Garbage Management

All garbage will be removed from the preserves prior to the issuance of the Certificate of Compliance for any part of the development. The preserves will be surveyed for garbage semi-annually.

Proposed Work Schedule

The invasive exotic and nuisance plant control program will commence after approval of this project's development order. The initial exotic treatment will be initiated during the first dry season following issuance of all required federal, state, and local authorizations. It is anticipated that the initial treatment will be completed in less than three months. The supplemental plantings will be initiated within approximately two months of the completion of the initial exotic removal, weather permitting.

The estimated work schedule provided below (Table 3) is based on the above considerations and the anticipated issuance of all authorization by December 2026.

Table 4. Estimated Work Schedule

Date	Activity
January 2027	Record Conservation Easements
January 2027	Baseline Monitoring
January - March 2027	Initial Exotic Treatment
April/May 2027	Install Supplemental Plantings
July 2027	Time Zero Monitoring
July 2028	First Annual Monitoring
July 2029	Second Annual Monitoring
July 2030	Third Annual Monitoring
July 2031	Fourth Annual Monitoring
July 2032	Fifth Annual Monitoring and Final Site Inspection

Exhibit A

Sample Brochure
A Guide to Living with Alligators
A Guide to Living in Bear County
A Guide to Living with Florida Panthers

Example Preserve Educational Brochure

Armeda Property

Indigenous Preserve Areas

In order to enhance and maintain indigenous habitats and associated native wildlife, preserve areas have been established within the Armeda Property. The goal of the indigenous vegetation preserves is to enhance the existing wetlands and uplands via exotic control. Preserve areas shall be maintained in a natural state through the treatment of exotic vegetation and periodic maintenance. These areas can be identified by signs which denote them as “Preserve Areas”. Please do not disturb these areas or plant any vegetation within their confines.

In order to improve the value of the uplands on-site, existing exotic dominated lands will be cleared of nonnative species and planted with a variety of native upland species including laurel oak (*Quercus laurifolia*), live oak (*Quercus viginiana*), cabbage palm (*Sabal palmetto*), saw palmetto (*Serenoa repens*), and wax mryrtle (*Myrica cerifera*). These uplands will provide habitat for a variety of bird species including the blue jay (*Cyanocitta cristata*), eastern phoebe (*Sayornis phoebe*), gray catbird (*Dumetella carolinensis*), white-eyed vireo (*Vireo griseus*), and various woodpeckers. Small mammals may also utilize these areas.

The forested wetland preserve areas consist primarily of mixed wetland hardwoods that have been invaded by exotics. Native species occurring in these areas includes laurel oak (*Quercus laurifolia*), slash pine (*Pinus elliottii*), cabbage palm, pond apple (*Annona glabra*), and pop ash (*Fraxinus caroliniana*). These areas provide a natural conveyance of surface waters and habitat to a variety of animals. Wildlife that may utilize these areas includes small animals such as the tree frog (*Hyla* spp.), pig frog (*Rana grylio*), and various snakes.

A variety of birds including the red-shouldered hawk (*Buteo lineatus*), northern mockingbird, northern cardinal (*Cardinalis cardinalis*), bluegray gnatcatcher (*Polioptila caerulea*), and various warblers commonly occur within the forested wetland at various times of the year. Mammals such as the raccoon (*Procyon lotor*) and rabbit (*Sylvilagus floridanus*) may also be present in the wetland.

Portions of Trout Creek are present within the preserve areas adjacent to the forested uplands and wetlands. These waterways are maintained to provide surface water flow through the property and wildlife habitat. The dumping of debris into these waterways is strictly forbidden.

The wetlands and uplands on-site have become invaded by problematic invasive exotic plants, primarily Brazilian pepper (*Schinus terebinthifolius*). When exotics dominate native habitats, the naturally occurring flora (plants) and fauna (animals) become displaced. Other functions, such as water filtration and conveyance, can also be altered. Therefore, in order to improve the native habitats being preserved and to comply with State and County requirements, the exotics will be treated. Regular maintenance events will be undertaken to prevent the re-colonization of the preserves by exotics.

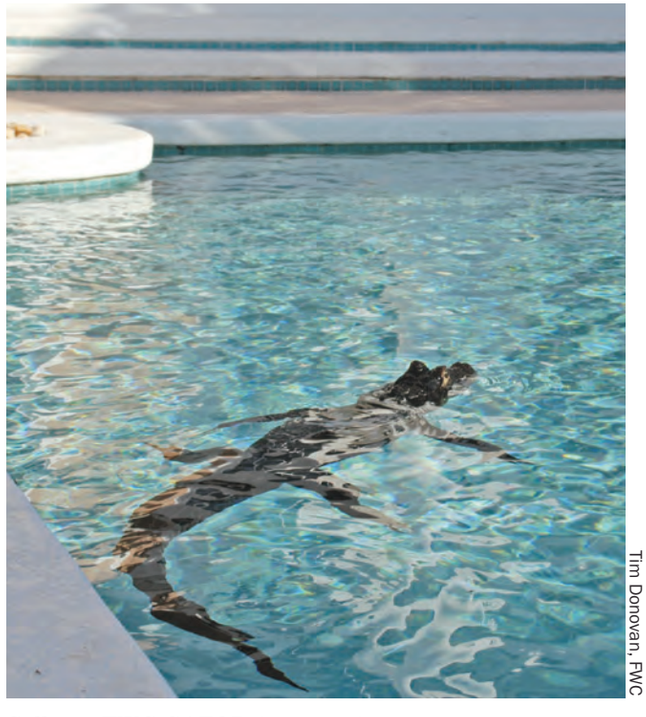
Once the exotics are treated in the wetlands, habitat will be present on-site for a variety of state and federally protected wading birds including the little blue heron (*Egretta caerulea*), roseate spoonbill (*Ajaia ajaja*), tricolored heron (*Egretta tricolor*), and wood stork (*Mycteria americana*). These birds typically forage in freshwater wetlands throughout southwest Florida. The others wading birds mentioned stalk their prey which are usually small fish, insects, and amphibians. Please do not feed, harm, or harass any wildlife.

- Never feed alligators – it's dangerous and illegal. When fed, alligators can overcome their natural wariness and learn to associate people with food. When this happens, some of these alligators have to be removed and killed.

- Dispose of fish scraps in garbage cans at boat ramps and fish camps. Do not throw them into the water. Although you are not intentionally feeding alligators when you do this, the result can be the same.

- Seek immediate medical attention if you are bitten by an alligator. Alligator bites can result in serious infections.

- Observe and photograph alligators only from a distance. Remember, they're an important part of Florida's natural history as well as an integral component of aquatic ecosystems.



Tim Donovan, FWC

Call 866-FWC-GATOR (392-4286) to report nuisance alligators.

Janice Plain

To report nuisance alligators call **866-FWC-GATOR (866-392-4286)**.

MyFWC.com/Alligator

REWARD
Report Fish & Wildlife Violations
1-888-404-3922

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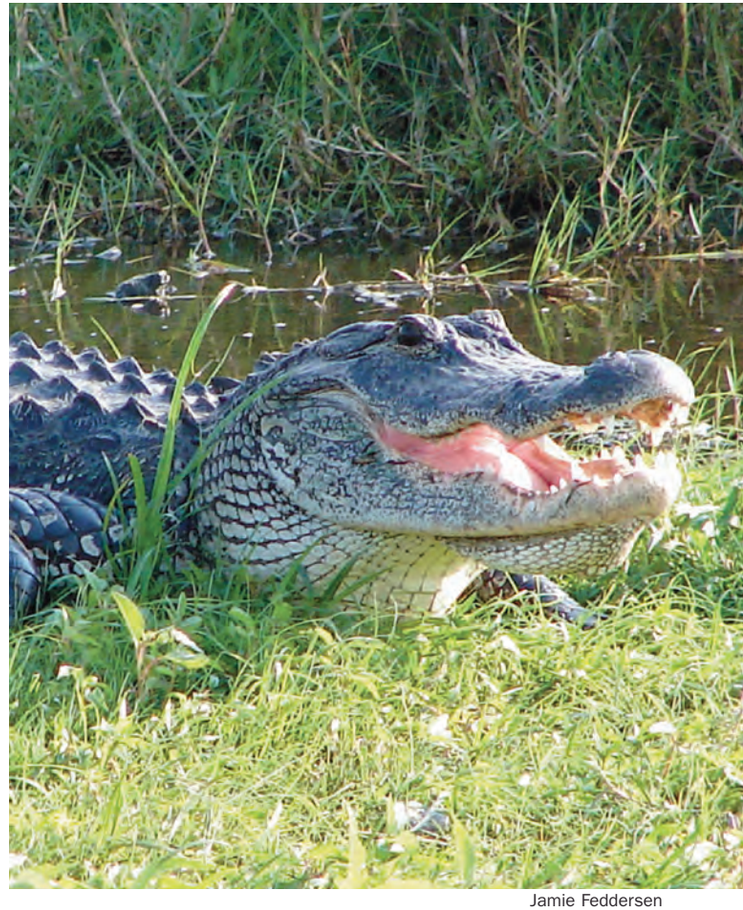
A Guide to Living with Alligators



Jamie Feddersen

Florida Fish and Wildlife Conservation Commission
MyFWC.com

Lizabeth West, FWC

Do not swim outside of posted swimming areas or in waters that may be inhabited by alligators.

Living with Alligators

In Florida, the growing number of people living and recreating near water has led to a steady rise in the number of alligator-related complaints. The majority of these complaints relate to alligators being where they simply aren't wanted. Because of these complaints, the Florida Fish and Wildlife Conservation Commission's Statewide Nuisance Alligator Program permits the killing of approximately 7,000 nuisance alligators each year. Using this approach, and through increased public awareness, the rate of alligator bites on people has remained constant despite the increased potential for alligator-human interactions as Florida's human population has grown.

Alligators are an important part of Florida's landscape and play a valuable role in the ecology of our state's wetlands. Alligators are predators and help keep other aquatic animal populations in balance. A better understanding of the facts and information presented in this brochure will help ensure that people and alligators can continue to coexist.

Visit MyFWC.com/Gators for more information about alligators and the latest nuisance alligator program statistics.

Tim Donovan, FWC

Alligators and People

Alligators are a fundamental part of Florida's wetlands, swamps, rivers and lakes, and they are found in all 67 counties. Florida continues to experience human population growth. Many new residents seek waterfront homes, resulting in increased interactions between people and alligators.

Although most Floridians understand that we have alligators living in our state, the potential for conflict exists. Because of their predatory nature, alligators may target pets and livestock as prey. Unfortunately, people also are occasionally bitten. Since 1948, Florida has averaged about five unprovoked bites per year. During that period, a little more than 300 unprovoked bites to people have been documented in Florida, with 22 resulting in deaths.

In the past 10 years, the Florida Fish and Wildlife Conservation Commission has received an average of nearly 16,000 alligator-related complaints per year. Most of these complaints deal with alligators occurring in places such as backyard ponds, canals, ditches and streams, but other conflicts occur when alligators wander into garages, swimming pools and golf course ponds. Sometimes, alligators come out of the water to bask in the sun or move between wetlands. In many cases, if left alone, these alligators will eventually move on to areas away from people.

Safety Tips

- Generally, alligators less than four feet in length are not large enough to be dangerous unless handled. However, if you encounter any alligator that you believe poses a threat to people, pets or property, call the Nuisance Alligator Hotline at 866-FWC-GATOR (866-392-4286). Please be aware, nuisance alligators are killed, not relocated.

- Be aware of the possibility of alligators when you are in or near fresh or brackish water. Bites may occur when people do not pay close enough attention to their surroundings when working or recreating near water.

- Do not swim outside of posted swimming areas or in waters that might be inhabited by large alligators.

- Alligators are most active between dusk and dawn. Therefore, avoid swimming at night.

- Dogs and cats are similar in size to the natural prey of alligators. Don't allow pets to swim, exercise or drink in or near waters that may contain alligators. Dogs often attract an alligator's interest, so do not swim with your dog.

- Leave alligators alone. State law prohibits killing, harassing or possessing alligators. Handling even small alligators can result in injury.

Tim Donovan, FWC

A young alligator wanders onto a porch in a residential neighborhood.

Milt Fox

Discouraging bears from visiting your home

Properly storing or securing residential garbage and other attractants is a proven method of discouraging bears and preventing bear conflicts around homes, farms and neighborhoods. The following items attract bears and should be protected by an electric fence, wildlife resistant container, or stored in a secure place, such as a garage or sturdy shed:

- Trash and recycling containers
- Bird and squirrel feeders
- Game feeders
- Pet foods and bowls
- Barbeque grills and smokers
- Pets and small livestock
- Livestock feed
- Compost piles
- Beehives
- Fruit and nut-bearing trees and shrubs

Funds from the "Conserve Wildlife" license plate help support efforts to reduce human-bear conflicts. Buy one today at your local tax collector's office or online at BuyAPlate.com.

Secure common bear attractants

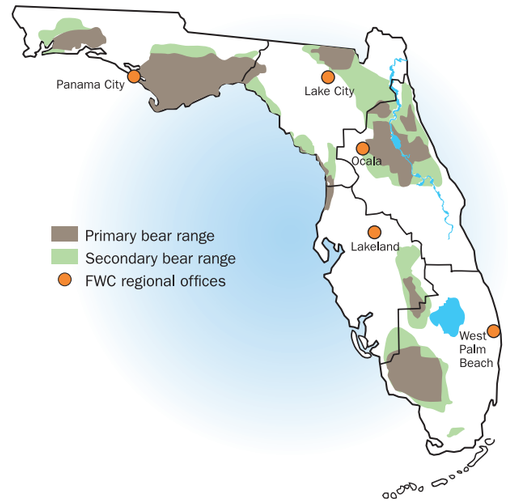
- Use electric fencing to protect gardens, compost piles, apiaries, fruit trees and livestock.
- Store garbage and recyclables in bear-resistant containers or in a secure area until the morning of pick up.
- Feed pets indoors or bring food dishes (even if empty) inside before dark.
- Store pet and livestock feed in bear-resistant containers or inside a secure area.
- Remove bird and wildlife feeders. Ensure the area is free of all seed, corn, or other wild animal feed.
- Keep gardens and fruiting trees and shrubs tidy. Remove rotten fruit and harvest ripe nuts, fruits and vegetables.
- Clean meat smokers and barbeque grills with a degreasing detergent. Properly dispose of food remnants after each use.

Learn more about black bears with the Florida Black Bear Curriculum Guide. The guide is designed to educate teachers and students in 3rd to 8th grade and offers a comprehensive series of lessons on Florida's black bear.

To get tips on how to secure bear attractants, watch videos about bears or how to install electric fencing, and learn more about bear-resistant containers, visit MyFWC.com/Bear.

Rick Sinnott

Bear range in Florida



If you are experiencing bear problems, please contact the nearest FWC regional office.

North Central, Lake City	**386-758-0525**
Northeast, Ocala	**352-732-1225**
Northwest, Panama City	**850-265-3676**
South, West Palm Beach	**561-625-5122**
Southwest, Lakeland	**863-648-3200**

If you suspect illegal activity, call FWC's Wildlife Alert Hotline at 1-888-404-3922.

Follow us on:

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MyFWC.com

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A guide to living in **bear country**

Florida Fish and Wildlife Conservation Commission
MyFWC.com

Ashley Hockenberry

If you live in Florida, you should know

Florida black bear populations have been recovering from historically low numbers in most areas of the state. At the same time, the human population is rapidly expanding in and around bear range. As a result, bears and humans are encountering each other more than ever.

Calls to the Florida Fish and Wildlife Conservation Commission (FWC) about human-bear encounters have increased from 1,000 in 2001 to over 4,000 in 2010. The most common calls refer to bears in yards and getting into garbage.

The mere presence of a black bear does not represent a problem. In fact, living in bear country can provide unique and rewarding experiences for residents.

While feeding bears is illegal in Florida, bears are still often fed by humans, either intentionally or unintentionally. When black bears have access to pet food, garbage, birdseed, livestock feed or other human-provided items, they quickly learn to associate people with food. Bears that have become too comfortable around people are more likely to be killed, either by vehicle collisions, illegal shooting, or as a result of bear management actions.

People ask why problem bears can't simply be relocated to a "wild area where they won't bother anyone." Unfortunately, areas large and remote enough for bears to avoid people are rare in Florida. Also, most relocated bears typically leave the new area, either to return to their original home or to leave an area already occupied by other bears. Some bears will wander through unfamiliar areas and cross busy roads, creating a danger to the bear and to motorists. In addition, bears remaining in the relocation area often exhibit the same, unwanted behavior, thus shifting the problem to a new location. As a result, relocation is not a desirable or effective solution to bear conflicts. Wildlife biologists can provide technical advice to residents who live in bear country to help them take actions to discourage bears from becoming a problem. The FWC is committed to addressing the safety concerns of residents and visitors while ensuring the long-term well-being of black bears.

If a bear comes into your yard

If you encounter a black bear at close range, remain standing upright, back up slowly and speak to the bear in a calm, assertive voice.

- Do not intentionally feed or attract bears. If a bear is eating something on your property, take note of what it is and secure it after the bear has left the area.

Charles Towne

Ashley Hockenberry

- Never approach or surprise a bear. Keep as much distance between you and the bear as possible.
- Make sure you are in a secure area and the bear has a clear escape route to leave the area - then yell, bang pots and pans, or use an air horn to scare the bear away.
- Do not turn your back, play dead or run from a black bear. Back away slowly into a house, car or building.
- Report any bear threatening the safety of humans, pets or livestock, or causing property damage to the FWC (see back panel).
- Warning! It is illegal to injure or kill black bears under Florida state law. If you are found guilty, you could face fines and/or jail time.

Climbing trees is a bear's natural escape route. If the bear climbs a tree, keep people and pets away. The bear will come down the tree and leave when it feels safe, usually after dark.

Did you know?

Black bears are shy animals and generally not aggressive towards people. When a bear stands on its hind legs, it is merely trying to get a better view, rather than acting in a threatening way. Black bears may huff, snap their jaws, swat the ground or "bluff charge" when cornered, threatened or caught stealing food. Stand your ground and then slowly back away. Always respect bears – they are large and powerful wild animals and can act unpredictably. Bears used to getting food from humans may lose their natural fear of people and are more likely to damage property or become a safety threat.

The bear facts

Black bears are the only species of bear in Florida and once roamed the entire state.

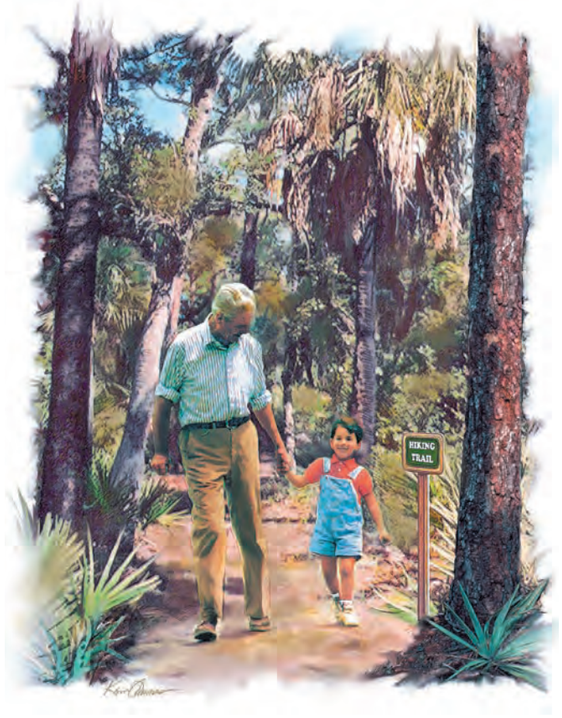
- FWC biologists estimate there are 2,500-3,000 black bears in Florida.
- Florida bears are generally black with a brown muzzle and may have a white chest marking called a blaze.
- Adult black bears typically weigh between 150 to 400 pounds; males are usually larger than females.
- Female bears have their first litter at about $3^1/_2$ years of age and generally have one to three cubs every other year.
- In Florida, the breeding season runs from June to August and cubs are born in late January or early February.
- Bears of all ages are excellent climbers and will climb trees when they are frightened or looking for food (e.g., acorns).
- About 80 percent of a black bear's diet comes from plants (e.g., fruits, nuts, berries), 15 percent from insects (e.g., termites, ants, yellow jackets) and 5 percent from meat (e.g., opossums, armadillos, carrion).

It is illegal to intentionally place food or garbage out that attracts bears and causes conflicts. Anything that attracts dogs, cats or raccoons also will attract bears!

You live in Florida panther country

Florida panthers are reclusive and rarely seen by people. They normally live in remote, undeveloped areas. However, as the number of people in southern Florida grows, there is an increased chance of an encounter with a Florida panther.

This brochure contains some guidelines to help you live safely in Florida panther country.



Keep children within sight and close to you, especially outdoors between dusk and dawn.

If you feel threatened by a panther, or have lost pets or livestock to a panther, please call the Florida Fish and Wildlife Conservation Commission's Wildlife Alert Hotline at 1-888-404-FWCC (3922).

If you see a Florida panther

The Florida panther moves primarily at night. The chances of seeing a panther are slim. But if you live in Florida panther country, you need to know what to do if you see one.

- **Keep children within sight and close to you.** Pick up any small children so they don't panic and run. Try to do this without bending over or turning away from the Florida panther.
- **Give them space.** Florida panthers typically will avoid a confrontation. Give them a way to escape.
- **Do not run.** Running may stimulate a panther's instinct to chase. Stand and face the animal. Make eye contact to let the panther know you are aware of its presence.
- **Avoid crouching or bending over.** Squatting or bending makes you look smaller, resembling a prey-sized animal.
- **Appear larger.** Make gestures that indicate you are not prey and that you may be a danger to the panther. Raise your arms. Open your jacket. Throw stones, branches or whatever you can reach without crouching or turning your back. Wave your arms slowly and speak firmly in a loud voice.
- **Fight back if attacked.** There has never been a reported panther attack in Florida. In western states, where attacks by cougars have occurred very rarely, potential victims have fought back successfully with rocks, sticks, caps, jackets, garden tools and their bare hands. Since large cats usually try to bite the head or neck, try to remain standing and face the animal.

Mark Lotz

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Florida Fish and Wildlife Conservation Commission
620 S. Meridian Street
Tallahassee, FL 32399-1600
MyFWC.com/Panther

A guide to living with

Florida Panthers

© Lynn Stone

MyFWC.com/Panther

7 ways to live safely in Florida panther country

While these guidelines are meant to help you live safely in Florida panther habitat, they also apply to living with more commonly encountered wildlife, including raccoons, snakes, bears and alligators.

1. **Be alert from dusk 'til dawn (and whenever deer are active)**
   Florida panthers primarily are active at night. Exercise more caution at dawn, dusk or dark.

2. **Keep panther prey away**
   Deer, raccoons, rabbits, armadillos and wild hogs are prey for the Florida panther. By feeding deer or other wildlife, people inadvertently may attract panthers. Do not leave potential wildlife food outside, such as unsecured garbage or pet food. Consider fencing vegetable gardens.

3. **Keep pets secure**
   Free-roaming pets, or pets that are tethered and unfenced, are easy prey for predators, including panthers. Bring pets inside or keep them in a secure and covered kennel at night. Feeding pets outside also may attract raccoons and other panther prey; do not leave uneaten pet food available to wildlife.

Keep your pets safe and secure. Bring pets inside or keep them in a secure and covered kennel at night.

Keep livestock safe and secure.

4. **Keep domestic livestock secure**
   Where practical, place chickens, goats, hogs or other livestock in enclosed structures at night. Electric fencing can be an effective predator deterrent.

5. **Landscape for safety**
   Remove dense or low-lying vegetation that would provide hiding places for panthers and other predatory animals near your house.
   - Remove plants that deer like to eat.
   - Choose plants that do not attract deer or other panther prey species. For information on plants that deer do not like to eat, visit edis.ifas.ufl.edu/UW137.
   - Appropriate fencing will make your yard or play area uninviting to prey animals such as deer.

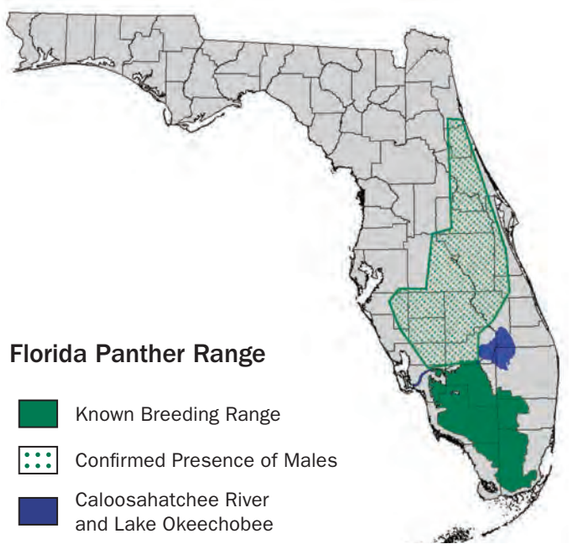
6. **Consider other deterrents**
   Outdoor lighting, motion sensors and electric fencing also may deter prey animals and panthers from entering your yard. Outdoor lighting also will make approaching prey and panthers more visible to you.

7. **Hike or bike with a friend**
   When recreating outdoors, it's a good practice to let friends or family know your whereabouts and when you expect to return. Better yet, take a friend with you!

Florida panther facts

- The Florida panther is a subspecies of puma, also known as a mountain lion or cougar. It is the last subspecies still surviving in the eastern United States.
- Biologists estimate roughly 100-160 adult and subadult Florida panthers remain in the wild. Most panthers live in southwest Florida, south of the Caloosahatchee River, although some panthers have been documented traveling as far north as central Georgia.
- The Florida panther's decline occurred prior to 1950, when it still was legal to hunt panthers. It was listed as endangered in 1967 and is protected under federal and state laws.
- Florida panther numbers declined to roughly 30 cats by the early 1980s. Severe inbreeding resulted in many health and physical problems. A genetic restoration project in 1995 was successful in improving the genetic health and vigor of the panther population.
- Florida panthers are found primarily in the Big Cypress/Everglades ecosystem in Collier, Lee, Hendry, Monroe and Miami-Dade counties.
- Florida panthers' home range sizes vary by sex and by individual. Female home ranges are typically 60-75 square miles whereas males' are typically 160-200 square miles.
- There is no record of a Florida panther attacking a person. Florida panthers are rarely seen.
- The biggest threat to the future of the Florida panther is habitat loss. A number of panthers also die each year due to vehicle strikes on roadways.
- The Florida panther was chosen as the State Animal of Florida in 1982 by a vote of elementary school students throughout the state.

FWC panther team



This brochure was produced through a partnership of the Audubon Society of Florida, Conservancy of Southwest Florida, Defenders of Wildlife, Florida Fish and Wildlife Conservation Commission, Florida Wildlife Federation, Friends of the Florida Panther Refuge, Mountain Lion Foundation, National Park Service, National Wildlife Federation, Seminole Tribe of Florida, University of Florida and the U.S. Fish and Wildlife Service.

Funding provided by the Florida Fish and Wildlife Conservation Commission, Friends of the Florida Panther Refuge and the National Fish and Wildlife Foundation.

Armeda Property

Section 8, Township 43 South, Range 26 East
Lee County, Florida

Protected Species Assessment

August 2025

Prepared for:

Forestar Group, Inc.
4042 Park Oaks Boulevard
Tampa, FL 33610

Prepared by:

Atwell, LLC
4470 Camino Real Way, Suite 101
Fort Myers, FL 33966
(239) 334-3680

INTRODUCTION

The 561.63± acre parcel is located within a portion of Section 8, Township 43 South, Range 26 East, Lee County, Florida. The site is bordered to the north, east and west by preserved lands associated with the Babcock development project. In addition, a portion of the western property boundary is bordered by existing development associated with the Babcock project. North River Road and scattered single-family homes are present to the south.

SITE CONDITIONS

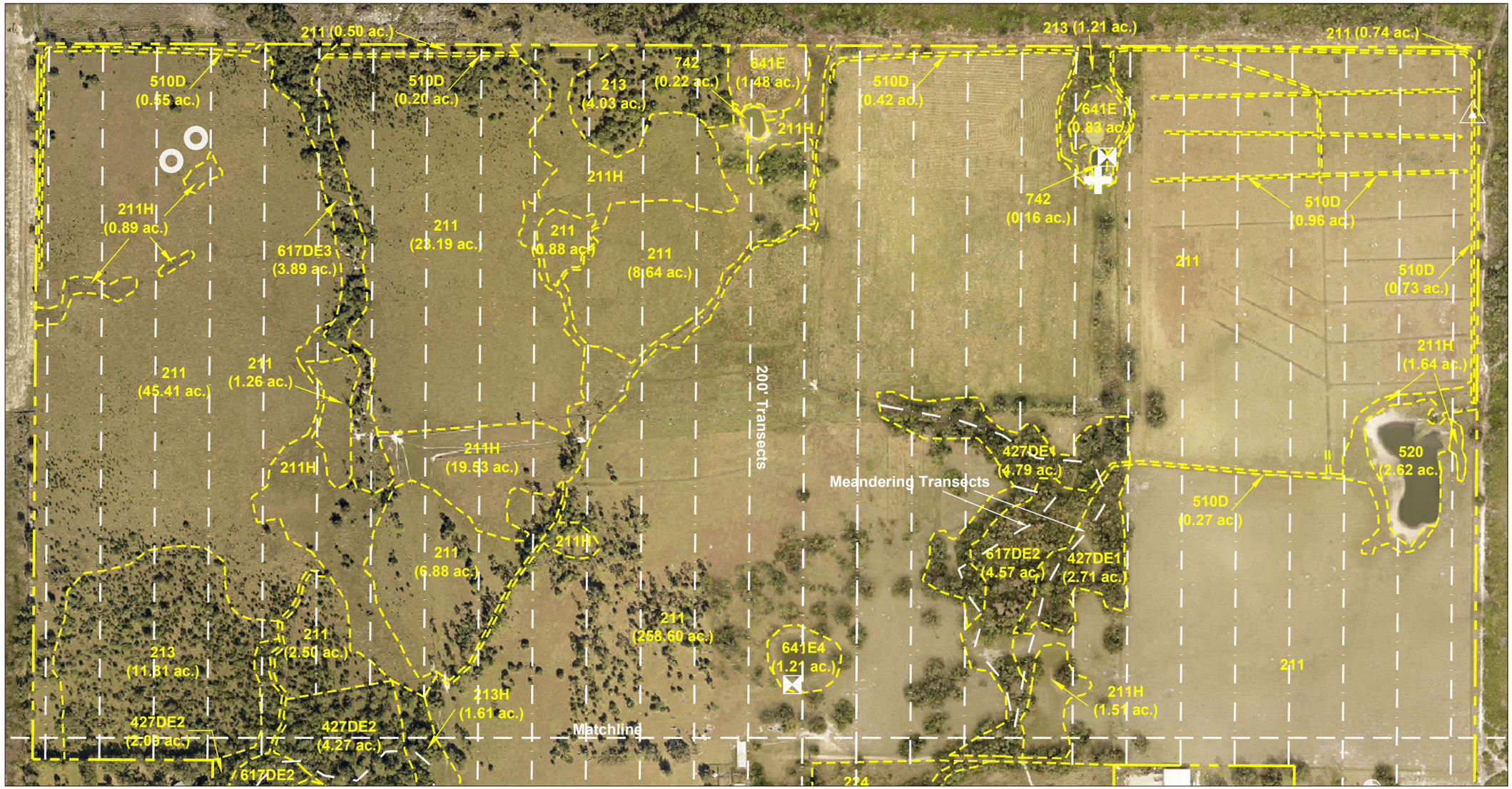
Based on a review of historic aerial photography, the majority of the parcel had been converted to agricultural uses prior to 1953. Additional clearing and conversion to pasture occurred between 1953 and 1979.

VEGETATIVE CLASSIFICATIONS

The predominant upland and wetland vegetation associations were mapped in the field on 2025 digital color 1" = 400' scale aerial photography. The property boundary was obtained from Forestar Group, Inc. The property boundary was not staked in the field at the time of our site inspection and was, therefore, estimated based on the overlay of the approximate boundary on the aerial photography. Nineteen vegetation associations were identified using the Florida Land Use, Cover and Forms Classification System (FLUCCS). Figure 1 depicts the approximate location and configuration of these vegetation associations and Table 1 summarizes the acreages by FLUCCS Code. A brief description of the FLUCCS Code is also provided below. In order to minimize redundancy only the base FLUCCS Codes are described (i.e. description provided for FLUCCS Code 641E but not for FLUCCS Code 641E4). Habitats containing more than 75 percent cover by exotics contain only scattered native plant species.

Table 1. Acreage Summary by FLUCCS Code

FLUCCS CODE	DESCRIPTION	ACREAGE
110	Residential	7.19
211	Improved Pastures	392.54
211H	Hydric Improved Pastures	26.73
213	Woodland Pasture	17.05
213H	Hydric Woodland Pasture	1.61
224	Abandoned Groves	29.40
427DE1	Disturbed Live Oak Invaded by Exotics (10 – 25%)	21.24
427DE2	Disturbed Live Oak Invaded by Exotics (26 – 50%)	14.16
427DE3	Disturbed Live Oak Invaded by Exotics (51 – 75%)	12.12
428DE1	Disturbed Cabbage Invaded by Exotics (10 – 25%)	0.68
510	Streams and Waterways	4.60
510D	Ditches	3.13
520	Lakes	2.62
617DE2	Disturbed Mixed Wetland Hardwoods Invaded by Exotics (26 – 50%)	14.70
617DE3	Disturbed Mixed Wetland Hardwoods Invaded by Exotics (51 – 75%)	3.89
641E	Freshwater Marshes Invaded by Exotics (5 – 9%)	5.80
641E4	Freshwater Marshes Invaded by Exotics (76 – 90%)	1.33
742	Borrow Areas	0.38
814	Roads and Highways	2.46
	Total	**561.63**



0 200 400
SCALE FEET

SECTION: 8
TOWNSHIP: 43 S
RANGE: 26 E

- Potentially Occupied Gopher Tortoise Burrow (20)
- Little Blue Heron (2)
- American Alligator (1)
- Tricolored Heron (1)
- Florida Sandhill Crane (4)

Notes:
1. Property boundary provided by Forestar Group, Inc.
2. Mapping based on photointerpretation of 2024 aerial photography, LIDAR, and ground truthing in December 2024. Map includes 2025 aerial photography.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

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	Total	561.63

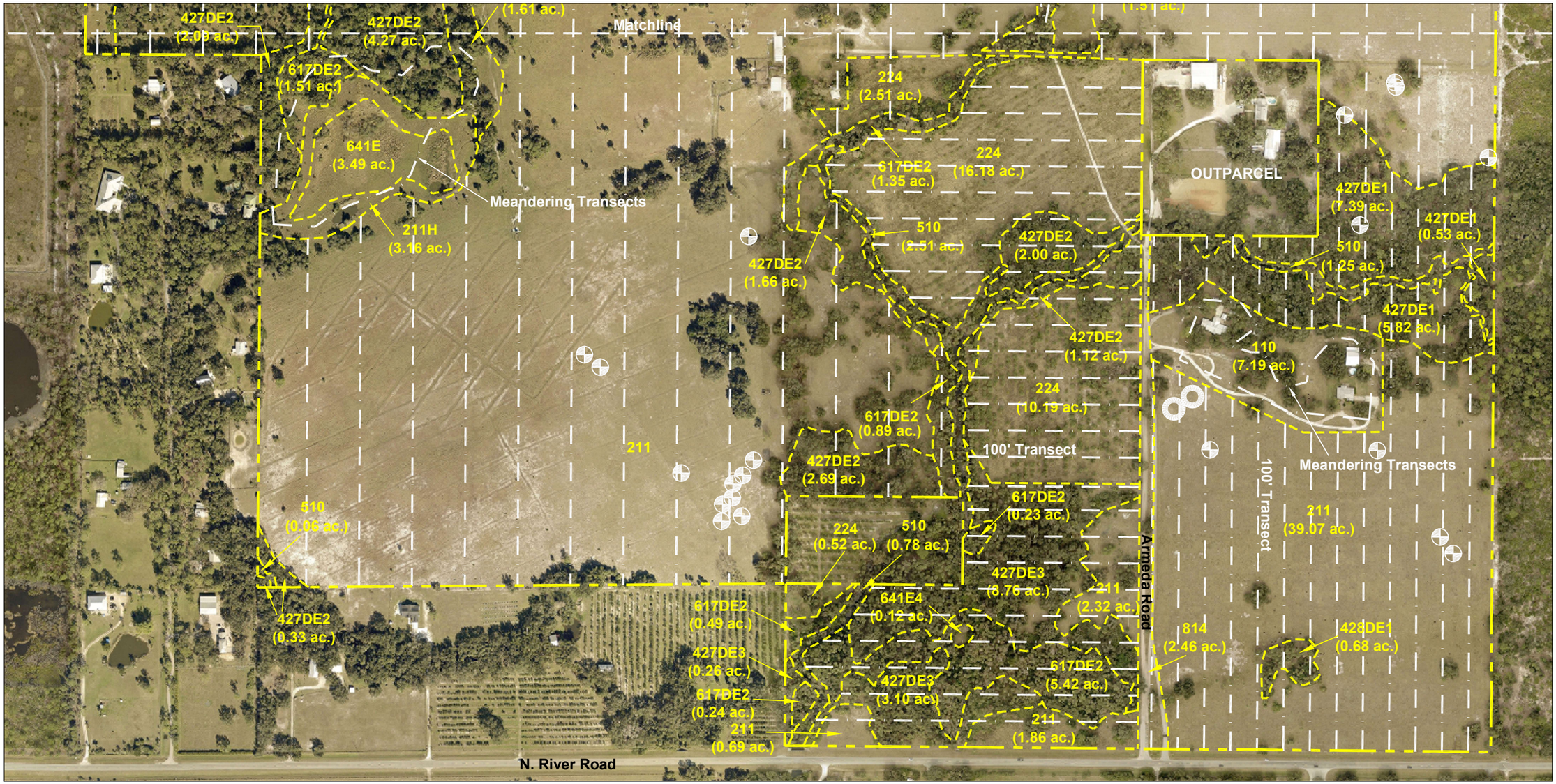
August 26, 2025 10:32:56 a.m.
Drawing: FORESTAR11APLAN.DWG

PERMIT USE ONLY, NOT FOR CONSTRUCTION

Figure 1. Protected Species Assessment Map - Sheet 1

Armeda Property

ATWELL
866.850.4200 www.atwell-group.com
4470 CAMINO REAL WAY, SUITE 101
FORT MYERS, FL 33908
239.334.3680



0 200 400
SCALE FEET

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PERMIT USE ONLY, NOT FOR CONSTRUCTION

August 26, 2025 10:32:56 a.m.
Drawing: FORESTAR11APLAN.DWG

Figure 1. Protected Species Assessment Map - Sheet 2

Armeda Property

ATWELL
866.850.4200 www.atwell-group.com
4470 CAMINO REAL WAY, SUITE 101
FORT MYERS, FL 33908
239.334.3680

FLUCCS Code 110, Residential

Two single family homes are located within the southeastern portion of the site. Vegetation in these areas consist of live oak (*Quercus virginiana*) and cabbage palm (*Sabal palmetto*) in the canopy with bahia grass (*Paspalum notatum*), pusley (*Richardia grandiflora*), and whitehead broom (*Spermacoce verticillata*) as the dominant ground cover.

FLUCCS Code 211, Improved Pastures

These upland areas are being actively maintained as cattle pasture. Bahia grass is the dominant groundcover vegetation. Additional herbaceous species include whitehead broom, carpet grass (*Axonopus* sp.), smutgrass (*Sporobolus indicus*), prickley pear cactus (*Opuntia* sp.), Caesar weed (*Urena lobata*), pusley, and paw paw (*Assimina* sp.). The majority of the midstory and canopy vegetation has been removed from these areas. However, scattered clumps of trees and shrubs remain and include live oak, laurel oak (*Quercus laurifolia*), cabbage palm, Brazilian pepper (*Schinus terebinthifolius*), and strangler fig (*Ficus aureus*).

FLUCCS Code 211H, Hydric Improved Pastures

The lower portions of the onsite improved pastures exhibit signs of wetland hydrology and are dominated by wetland vegetation such as torpedo grass (*Panicum repens*), water hyssop (*Bacopa* sp.), marsh pennywort (*Hydrocotyle umbellata*), and scattered pickerelweed (*Pontederia cordata*).

FLUCCS Code 213, Woodland Pastures

Areas of upland pasture which appear to have not been completely cleared in the past or have revegetated were assigned this FLUCCS Code. Groundcover species are similar to those described above for FLUCCS Code 211 but also include scattered saw palmetto (*Serenoa repens*), guinea grass (*Panicum maximum*), grapevine (*Vitis* sp.), and broomsedge (*Andropogon* spp.). Midstory and canopy vegetation is significantly denser in this association and includes live oak, laurel oak, Brazilian pepper, slash pine, cabbage palm, wax myrtle (*Myrica cerifera*), and citrus (*Citrus* sp.).

FLUCCS Code 213H, Hydric Woodland Pastures

The canopy and midstory of this wetland habitat include vegetative species such as laurel oak, cypress (*Taxodium distichum*), greenbrier (*Smilax* sp.), Brazilian pepper, cabbage palm, scattered live oak, wax myrtle, pond apple (*Annona glabra*), and slash pine. Groundcover includes various wetland grasses and sedges.

FLUCCS Code 224, Abandoned Groves

Guinea grass and Caesarweed are the dominant vegetative species in these abandoned citrus groves. Additional species present in these uplands include beggars' ticks (*Bidens alba*), widely scattered citrus, cabbage palm, and laurel oak.

FLUCCS Code 427DE1, Disturbed Live Oak Invaded by Exotics (10-25%)

These areas are accessible to cattle but do not appear to have had the canopy vegetation significantly impacted. Live oak and laurel oak dominate the canopy along with slash pine

and cabbage palm. Brazilian pepper is present in the midstory. Groundcover is sparse and includes Caesarweed, broomsedge, and saw palmetto.

FLUCCS Code 428DE1, Disturbed Cabbage Palm Invaded by Exotics (10-25%)
A cluster of cabbage palm is located within the southeastern improved pasture. Canopy vegetation includes Cabbage palm and live oak, with Brazilian pepper in the midstory and bahia grass, Caesar weed, whitehead broom, and pusley as ground cover.

FLUCCS Code 510, Streams and Waterways
Portions of Trout Creek are present on the subject parcel. While mostly unvegetated, widely scattered Brazilian pepper, laurel oak, and cabbage palm are present along the adjacent side slopes.

FLUCCS Code 510D, Ditches
This FLUCCS Code was used to denote onsite linear jurisdictional features which appear to have been created as part of the site's agricultural activities. Smartweed (*Pontederia cordata*), West Indian marsh grass, torpedo grass, water hyssop, pickerel weed, and marsh pennywort are present.

FLUCCS Code 520, Lakes
Based on a review of historic aerial photography, this mostly unvegetated open-water feature appears to be a natural waterbody and was present prior to the northeastern portion of the property being converted to agriculture.

FLLUCS Code 617DE2, Disturbed Mixed Wetland Hardwoods Invaded by Exotics (10-25%)
As with FLUCCS Code 427DE1 described above, these areas are accessible to cattle but do not appear to have had the canopy vegetation removed. The canopy and midstory of this wetland habitat include vegetative species such as laurel oak, cypress (*Taxodium distichum*), greenbrier (*Smilax* sp.), Brazilian pepper, cabbage palm, scattered live oak, wax myrtle, pond apple (*Annona glabra*), and slash pine. Reticulating flow channels of varying widths are present within these areas. These features are vegetated by herbaceous species such as red ludwigia (*Ludwigia repens*), pickerelweed, torpedo grass, chainfern (*Woodwardia virginica*), bishopwood (*Bischofia javanica*), and West Indian marsh grass (*Hymenachne amplexicaulis*).

FLUCCS Code 641E, Freshwater Marshes Invaded by Exotics (5-9%)
The deeper onsite wetlands are dominated by pickerelweed and flag (*Thalia geniculata*). Scattered willow (*Salix caroliniana*), cattail (*Typha* sp.), and smartweed are also present. Exotic vegetation, including West Indian marsh grass, water hyacinth (*Eichhornia crassipes*), and torpedo grass has invaded portions of the areas mapped as this association.

FLUCCS Code 742, Borrow Areas
Except for a small amount of water lettuce (*Pistia stratiotes*), these excavated open-water features are mostly unvegetated.

FLUCCS Code 814, Roads and Highways

Armeda Road is located within the southeastern portion of the site. This road leads to the two single family homes within the property, in addition to one offsite single family residence.

SURVEY METHOD

Lee County Protected Species Ordinance No. 89-34 lists several protected species of animals that could potentially occur on-site based on the general vegetative associations found on the subject parcel. Each habitat type was surveyed for the occurrence of these and any other listed species likely to occur in the specific habitat types. The survey was conducted using meandering linear pedestrian and vehicular transects. This survey methodology is based on the Lee County administratively approved Meandering Transect Methodology. In order to provide at least 80 percent visual coverage of habitat types listed in Ordinance No. 89-34, the transects were spaced approximately 200 feet apart within the areas of open pasture. Meandering transects spaced approximately 100 feet apart were completed through the areas of forested uplands and wetlands. The approximate locations of all direct sighting or signs (such as tracks, nests, and droppings) of a listed species were denoted on the aerial photography. The 1" = 400' scale aerial Protected Species Assessment map (Figure 1) depicts the approximate location of the survey transects and the results of the survey. The listed species survey was conducted during the morning and midday hours of July 17, July 31, August 11, and August 21, 2025. During the surveys, the weather was warm and sunny with a light breeze.

Species listed as endangered, threatened, or species of special concern by the Florida Fish and Wildlife Conservation Commission (FWC) or the United States Fish and Wildlife Service (FWS) that could potentially occur on the subject parcel according to the Lee County Protected Species Ordinance are shown in Table 2. This list from the Lee County Protected Species Ordinance is general in nature, contains species that were subsequently delisted by the state, does not necessarily reflect existing conditions within or adjacent to the 491.83± acre property, and is provided for general informational purposes only. The bald eagle (*Haliaeetus leucocephalus*) (which has been delisted by the FWC and FWS but is still protected by other regulations), the Florida black bear (*Ursus americanus floridanus*) (delisted in 2012 and still protected by the Florida Black Bear Management Plan), and the Florida bonneted bat (*Eumops floridanus*) (which was listed by the FWS after Ordinance No. 89-34 was adopted by Lee County) were also included in the survey.

Prior to conducting the protected species survey, a search of the FWC listed species database was conducted to determine the known occurrence of listed species in the project area. This search revealed no known protected species occurring on or immediately adjacent to the site.

Table 2. Listed Species That Could Potentially Occur On-site

FLUCCS CODE	Percent Survey Coverage	Species Name	Present	Absent
211 211H	80	Florida Sandhill Crane (*Grus canadensis pratensis*)	√	
		Florida Panther (*Felis concolor coryi*)		√
		Gopher Tortoise (*Gopherus polyphemus*)**	√	
213 213H	80	Florida Sandhill Crane (*Grus canadensis pratensis*)		√
		Florida Panther (*Felis concolor coryi*)		√
224	80	None		
427DE1 427DE2 427DE3	80	Eastern Indigo Snake (*Drymarchon corais couperi*)		√
		Gopher Tortoise (*Gopherus polyphemus*)		√
		Florida Black Bear (*Ursus americanus floridanus*)*		√
		Florida Panther (*Felis concolor coryi*)		√
		Hand Adder's Tongue Fern (*Ophioglossum palmatum*)		√
		Simpson's Stopper (*Myrcianthes frangrans* var. *simpsonii*)		√
		Twisted Air Plant (*Tillandsia flexuosa*)		√
510 510D	80	American Alligator (*Alligator mississippiensis*)		√
		Limpkin (*Aramus guarauna*)*		√
		Little Blue Heron (*Egretta caerulea*)		√
		Reddish Egret (*Egretta rufescens*)		√
		Roseate Spoonbill (*Ajaia ajaja*)		√
		Snowy Egret (*Egretta thula*)*		√
		Tricolored Heron (*Egretta tricolor*)	√	
		Everglades Mink (*Mustela vison evergladensis*)		√
617DE2 617DE3	80	Limpkin (*Aramus guarauna*)*		√
		Little Blue Heron (*Egretta caerulea*)		√
		Snowy Egret (*Egretta thula*)*		√
		Tricolored Heron (*Egretta tricolor*)		√
		Florida Black Bear (*Ursus americanus floridanus*)*		√
		Florida Panther (*Felis concolor coryi*)		√

FLUCCS CODE	Percent Survey Coverage	Species Name	Present	Absent
641E 641E4	80	American Alligator (*Alligator mississippiensis*)		√
		Florida Sandhill Crane (*Grus canadensis pratensis*)		√
		Limpkin (*Aramus guarauna*)*		√
		Little Blue Heron (*Egretta caerulea*)	√	
		Reddish Egret (*Egretta rufescens*)		√
		Snail Kite (*Rostrhamus sociabilis*)		√
		Snowy Egret (*Egretta thula*)*		√
		Tricolored Heron (*Egretta tricolor*)		√
		Wood Stork (*Mycteria americana*)		√
		Everglades Mink (*Mustela vison evergladensis*)		√
742	80	American Alligator (*Alligator mississippiensis*)	√	
		Little Blue Heron (*Egretta caerulea*)	√	

* Species delisted subsequent to adoption of Lee County Protected Species Ordinance No. 89-34.

** Lee County Protected Species Ordinance No. 89-34 does not list this species for this FLUCCS Code but it was observed on-site.

SURVEY RESULTS

Gopher Tortoise

Twenty potentially occupied gopher tortoise burrows were found in the southern pastures. Based on 80 percent survey coverage, it is estimated that twenty five potentially occupied gopher tortoise burrows occur within this general area. Using the FWC standard burrow occupancy correction factor of 0.5 gopher tortoises per burrow, it is estimated that thirteen gopher tortoises are present. No sign of gopher tortoises were observed elsewhere on-site.

American Alligator

An American alligator was observed in the north cattle pond. No evidence of nesting by alligators was observed.

Florida Bonneted Bat

The U.S. Fish and Wildlife Service (FWS) listed the Florida bonneted bat (*Eumops floridanus*) as endangered in November 2013. The project is located within the Florida Bonneted Bat Consultation Area. Numerous dead trees containing potential cavities entrances were observed throughout the site. The vast majority of these trees consist of pine tree snags in advanced stages of decay. These potential cavity entrances are primarily less than approximately two inches in diameter. Many of the potential cavities are likely very shallow and do not penetrate the heartwood of the snag. No evidence of

bat utilization (bat vocalization/chatter from within the potential cavities or guano on or around the snags) was observed. No live trees with cavities were observed on-site but several structures are present.

Sandhill Crane and Wading Birds
Two sandhill cranes were observed in the northwest pasture and two were observed in the southeast pasture. Little blue herons were observed in the north cattle pond and in the central freshwater marsh. A tricolored heron was observed in an agricultural ditch along the eastern property boundary.

Audubon's Crested Caracara
Two adult caracara were observed perching in a slash pine located near the southeast corner of the property. This tree is located on the adjacent property to the east. In addition, during the 2024 – 2025 Audubon's Crested Caracara Nesting Season, a confirmed nest tree was located within a cabbage palm (FLUCCS 428DE1).

Other Listed Species
No other species listed by either the FWS or the FWC were observed on the site during the protected species survey or during other site visits. There is the potential for periodic opportunistic foraging by other listed and non-listed species of wading birds within the ditches, cattle pond, and marshes. In addition to the site inspections, a search of the FWC species database revealed no additional known protected species within or immediately adjacent to the project limits.

Lee County
Southwest Florida

Board of County Commissioners

September 30, 2025

Patrick Murray, AICP
RVI Planning + Landscape Architecture
111 N. Magnolia Avenue, Suite 1350
Orlando, FL 32801

VIA ELECTRONIC MAIL

Re: Armeda Property RPD

Mr. Murray,

I am in receipt of your email requesting a Letter of Service Availability for a project to be located at 19551 Armeda Road in unincorporated Lee County.

Lee County Emergency Medical Services is the primary EMS transport agency responsible for coverage at the location you have provided. There is one ambulance located 5.3 miles from the proposed project location and a second 5.6 miles away.

It is our opinion that EMS service availability for the location provided is adequate at this time.

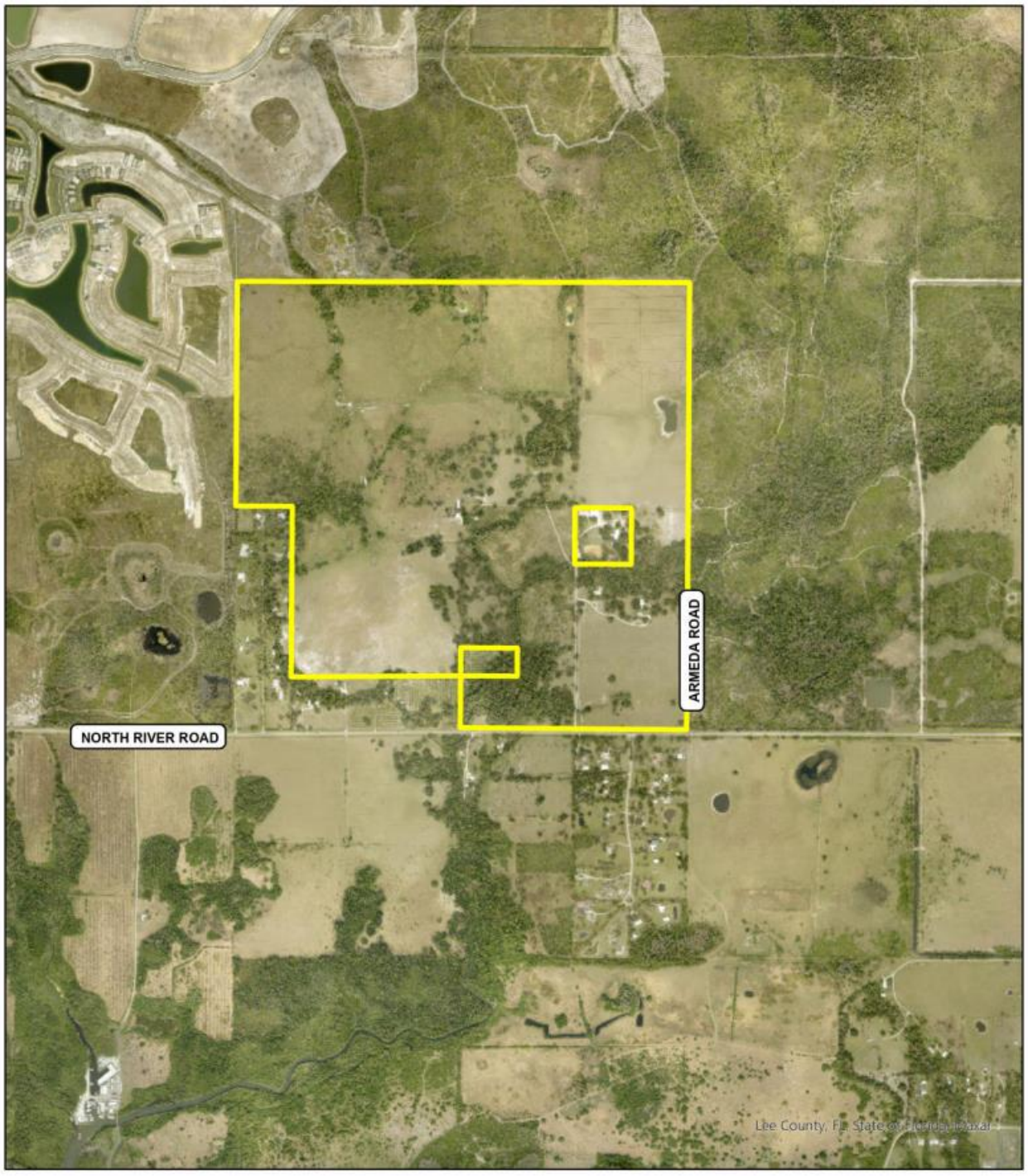
Sincerely,

Paul Di Cicco
Deputy Director – EMS Chief

Enclosure:
Copy of proposed project location map

Lee County
Southwest Florida

Board of County Commissioners



RVi
111 N. Magnolia Avenue
Suite 1350
Orlando, FL 32801
Tel: 407.680.0650
www.rviplanning.com

ARMEDA PROPERTY • **AERIAL**

Lee County, FL
Date: 9/10/2025
24006625
Forestar

Subject Boundary

N

0 112.5 225 450 675
Feet

Information furnished regarding this property is from sources deemed reliable. RVi has not made an independent investigation of these sources and no warranty is made as to their accuracy or completeness. This plan is conceptual, subject to change, and does not represent any regulatory approval.

From:	DeGuzman, Joel
To:	Patrick Murray; Heredia, Jacqueline
Cc:	Alexis Crespo
Subject:	RE: Service Availability Letter Request - Armeda Property
Date:	Tuesday, October 14, 2025 2:04:55 PM
Attachments:	image001.png image002.png image003.png image004.png image005.png image006.png image007.png

Patrick,

Based on the letter sent on 7/25/25, and your new dwelling count of 737; 90 additional residential units can be expected to generate approximately 14, 6, and 9 additional elementary, middle, and high school students, respectively.

This small of an increase will not have any negative impacts that would change the narrative of the previously provided letter.

Also, Jackie has left the District so you can remove her from your contact list for future concurrency requests. Have a great day.

Joel DeGuzman, CST III

District Planning Coordinator,
Capital Planning
2855 Colonial Blvd, Fort Myers, FL 33966
o: 239-337-8368
c: 239-822-8362
JoelSD@leeschools.net
www.leeschools.net
THE SCHOOL DISTRICT OF LEE COUNTY

From: Patrick Murray <pmurray@rviplanning.com>

Sent: Tuesday, October 14, 2025 1:40 PM
To: Heredia, Jacqueline <JacquelineHe@LeeSchools.net>; DeGuzman, Joel <joelsd@LeeSchools.net>
Cc: Alexis Crespo <acrespo@rviplanning.com>
Subject: RE: Service Availability Letter Request - Armeda Property

> **Caution:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Afternoon,

Following up on the service availability letter request below. This request was updated from the original request of 647 dwelling units and now includes 561+/- acres and 737 dwelling units.

Should you have any questions, please don't hesitate to reach out – Thank you,

Patrick Murray, AICP
Project Manager

RVi Planning + Landscape Architecture
111 N. Magnolia Avenue, Suite 1350 • Orlando, FL 32801
407.775.6523 Direct • 407.775.6500 Main
www.rviplanning.com

From: Patrick Murray
Sent: Thursday, September 11, 2025 10:48 AM
To: Heredia, Jacqueline <JacquelineHe@LeeSchools.net>
Cc: Alexis Crespo <acrespo@rviplanning.com>
Subject: RE: Service Availability Letter Request - Armeda Property

Good Morning,

Attached please find a request for a service availability letter from your agency stating whether existing facilities are capable of serving the proposed Armeda Property Residential Planned Development project. This request has been revised since the original requestion and now includes 561+/- acres and 737 dwelling units.

Thank you,

Patrick Murray, AICP
Project Manager

RVi Planning + Landscape Architecture
111 N. Magnolia Avenue, Suite 1350 • Orlando, FL 32801
407.775.6523 Direct • 407.775.6500 Main
www.rviplanning.com

From: Patrick Murray
Sent: Friday, July 18, 2025 3:55 PM
To: Heredia, Jacqueline <JacquelineHe@LeeSchools.net>
Cc: Alexis Crespo <acrespo@rviplanning.com>
Subject: Service Availability Letter Request - Armeda Property

Good Afternoon & Happy Friday,

Attached please find a request for a service availability letter from your agency stating whether existing facilities are capable of serving the proposed Armeda Property Residential Planned Development project.

Thank you,

Patrick Murray, AICP
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The School District of Lee County

Joel DeGuzman CST III, Coordinator - District Planning
2855 Colonial Boulevard, Fort Myers, FL 33966
O: 239.337.8368 | **C:** 239.822.8362

July 25, 2025

Patrick Murray, AICP
RVi Planning & Landscape Architecture
28100 Bonita Grande Drive, Suite 305
Bonita Springs, FL 34135

RE: Letter of Service Availability Request for Armeda Property RPD – Comprehensive Plan Amendment

Dear Mr. Murray:

This letter is in response to your request for concurrency review dated July 24, 2025, for the subject property identified as the Armeda Property RPD, in regard to educational impact. The project is located in Elementary Enrollment Zone “D”; Middle School Enrollment Zone “DD”; and High School Enrollment Zone E2.

For the purposes of tracking and projecting residential development in Lee County, the property in question is located in the “Northeast Lee County” Development area (this is a study area created based on residential density and availability for expansion; not a community or municipal boundary).

This development is a request for 647 residential single-family detached (SFD) and/or two-family attached (MFA) units. With regard to the inter-local agreement for school concurrency, the student generation rates are created based on the type of dwelling unit and further broken down by school level.

In the “Northeast Lee County” development area, for SFD and MFA units, the student generation rate is 0.335 and further broken down by school level into the following:

- 0.160 for elementary
- 0.072 for middle
- 0.102 for high

Based on these generation rates, a 647 unit SFD/MFA development would be projected to generate approximately:

- 104 elementary students
- 47 middle school students
- 66 high school students

The School District of Lee County

Joel DeGuzman CST III, Coordinator - District Planning
2855 Colonial Boulevard, Fort Myers, FL 33966
O: 239.337.8368 | **C:** 239.822.8362

Capacity impacts are as follows:

- Elementary Zone “D”:
  - Shows a surplus of approximately 676 seats for the upcoming 25-26 school year
  - This zone is projected to have a seat deficit beginning in the 32-33 school year
- Middle School Zone “DD”:
  - Shows a surplus of approximately 190 seats for the upcoming 25-26 school year
  - This zone shows no projected seat deficits in the next 10 years
- High School Zone “E2”:
  - Shows a surplus of approximately 931 seats for the upcoming 25-26 school year
  - This zone is projected to have a seat deficit beginning in the 31-32 school year

It is determined that the proposed residential development will not negatively impact school concurrency for the School District of Lee County at this time or in the near future.

Thank you and if I may be of further assistance, please contact me at JoelSD@leeschools.net

Respectfully,

Joel DeGuzman

Joel DeGuzman, CST III

District Planning Coordinator

Lee County
Southwest Florida

Board of County Commissioners

September 11, 2025

RVi Planning + Landscape Architecture
Attn: Patrick Murray, Project Manager
111 N. Magnolia Avenue, Suite 1350
Orlando, FL 32801

RE: Service Availability Letter Request - Armeda Property

Dear Mr. Murray:

The Lee County Solid Waste Department is capable of providing solid waste collection service for the planned Armeda Property development including 561+/- acres and 737 dwelling units on the subject property through our franchised hauling contractors. Disposal of the solid waste from this development will be accomplished at the Lee County Resource Recovery Facility and the Lee-Hendry Regional Landfill. Plans have been made, allowing for growth, to maintain long-term disposal capacity at these facilities.

Please review Lee County Land Development Code, Chapter 10, Section 261, with requirements for on-site space for placement and servicing of solid waste containers. Please note that the property owner will be responsible for all future applicable solid waste assessments and fees.

If you have any questions, please call me at (239) 533-8007.

Sincerely,

Justin Lighthall

Justin Lighthall
Manager, Public Utilities
Lee County Solid Waste Department

BAYSHORE FIRE PROTECTION AND RESCUE SERVICE DISTRICT

17350 Nalle Road, North Fort Myers, Florida 33917

Business: 239-543-3443 Fax: 239-543-7075

"Serving With Pride"

September 15, 2025

Patrick Murray, AICP
Project Manager
RVi Planning + Landscape Architecture
111 Magnolia Avenue, Suite 1350
Orlando, FL 32801

RE: Armeda Property RPD – Comprehensive Plan Amendment
Letter of Service Availability

Patrick,

With regards to your request for a letter of availability concerning the above referenced project, Bayshore Fire Protection & Rescue District is aware that the project is proposing 737 single-family and/or two-family units along North River rd. The District does provide fire and rescue services to the subject property, and can provide services to the proposed development. Based upon the location of the subject property, it will be outside of 5 road miles from the fire station as required for ISO. However, the District and Lee County EMS are in the early phases of planning a second station along SR 31, closer to the subject property. The District may have some additional needs to provide adequate services in the future. We are committed to working with the developer to ensure that adequate fire and rescue services are provided to this project, and maintaining an ISO class 2 rating for the area. Please feel free to contact me should you have any further questions or concerns.

Sincerely,

William Underwood
Fire Chief
Bayshore Fire Rescue

Carmine Marceno
Sheriff

"Proud to Serve"

State of Florida
County of Lee

September 11, 2025

Patrick Murray, AICP
Project Manager, RVI Planning & Landscape Architecture
111 N Magnolia Ave, Suite 1350
Orlando, FL 32801

Mr. Murray,

The Lee County Sheriff's Office has reviewed your letter of service availability request for a Comprehensive Plan Amendment and Planned Development rezone that proposes a Large-Scale Comprehensive Plan Map Amendment for 561 +/- acres, located at 19551 Armeda Road – one mile east of the State Road 31 and N River Road intersection in North Olga. This amendment would change the future land use category from Density Reduction Groundwater Resource (DR/GR) to Rural and a PD Rezone request to rezone the entire 561 +/- acres from AG-2 to Residential Planned Development (RPD). The would result in a proposed development of a maximum 737 dwelling units on the property.

Based on the information provided in your request, the Lee County Sheriff's Office has no objections to this request. This Agency will provide law enforcement services from our 1st Precinct offices in North Fort Myers.

Respectfully,

Col. R C 09/09/25
Robert Casale
Colonel, Patrol Bureau

September 11, 2025

Chris Reeves
Major, Patrol Bureau
14750 Six Mile Cypress Parkway
Fourt Myers, FL 33912

RE: Armeda Property RPD – Comprehensive Plan Amendment
Letter of Service Availability

Dear Major Reeves,

RVi Planning + Landscape Architecture is preparing a Comprehensive Plan Amendment & Planned Development Rezone application for the above referenced project. The property consists of 561 +/- acres and is located at 19551 Armeda Road in unincorporated Lee County, Florida, generally one mile east of the State Road 31 and N. River Road intersection in the area known as North Olga. An aerial location map depicting the subject property has been attached for your reference.

The Applicant is proposing a Large-Scale Comprehensive Plan Map Amendment to change the future land use category from Density Reduction Groundwater Resource (DR/GR) to Rural and a PD Rezone request to rezone the entire 561 +/- acres from AG-2 to Residential Planned Development (RPD). The proposed development is a maximum of 737 single-family detached and/or two-family attached units on the subject property.

To complete the application process, we are required to secure a service availability letter from your agency stating whether existing facilities are capable of serving this future project. I greatly appreciate your time and consideration of this matter. If you have and further questions, please feel free to contact me directly at (407) 775-6523 or pmurray@rviplanning.com.

Sincerely,

RVi Planning + Landscape Architecture

Patrick Murray, AICP
Project Manager

Attached please find a request for a service availability letter from your agency stating whether existing facilities are capable of serving the proposed Armeda Property Residential Planned Development project.

Thank you,

Patrick Murray, AICP
Project Manager

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111 N. Magnolia Avenue, Suite 1350 • Orlando, FL 32801
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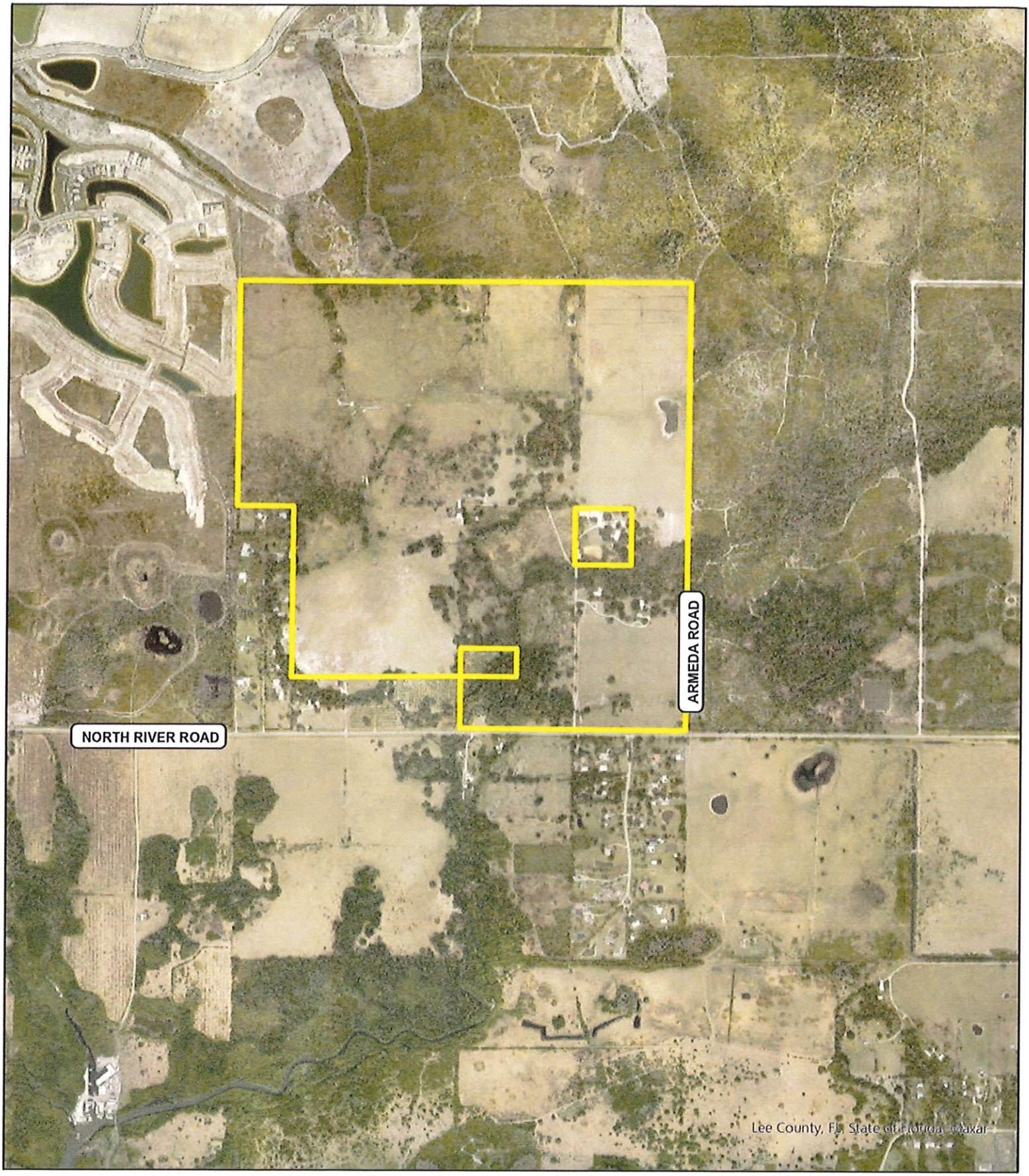

ARMEDA PROPERTY • **AERIAL**

- Lee County, FL
- Date: 9/10/2025
- # 24006625
- Forestar

Subject Boundary

N

0 112.5 225 450 675

Feet

RVi
111 N. Magnolia Avenue
Suite 1350
Orlando, FL 32801
Tel: 407.680.0650
www.rviplanning.com

Outlook

RE: Service Availability Letter Request - Armeda Property

From Patrick Murray <pmurray@rviplanning.com>
Date Thu 9/11/2025 10:47 AM
To Michael Koffenberger <MBKoffenberger@sheriffleefl.org>
Cc Alexis Crespo <acrespo@rviplanning.com>

1 attachment (527 KB)
Armeda Property RPD - LCSO.pdf;

Good Afternoon,

Attached please find a request for a service availability letter from your agency stating whether existing facilities are capable of serving the proposed Armeda Property Residential Planned Development project. This request has been revised since the original requestion and now includes 561+/- acres and 737 dwelling units.

Thank you,

Patrick Murray, AICP
Project Manager

RVi Planning + Landscape Architecture
111 N. Magnolia Avenue, Suite 1350 • Orlando, FL 32801
407.775.6523 Direct • 407.775.6500 Main
www.rviplanning.com

From: Patrick Murray
Sent: Friday, July 18, 2025 3:56 PM
To: MBKoffenberger@sheriffleefl.org
Cc: Alexis Crespo <acrespo@rviplanning.com>
Subject: Service Availability Letter Request - Armeda Property

Good Afternoon & Happy Friday,

Lee County
Southwest Florida

BOARD OF COUNTY COMMISSIONERS

September 23, 2025 Via E-Mail

Patrick Murray, AICP
RVI Planning and Landscape Architecture
28100 Bonita Grande Dr.
Bonita Springs, FL 34135

RE: **Potable Water and Wastewater Availability**

Armeda – 19551 Armeda Rd, Alva FL 33920
STRAP # 08-43-26-00-00001.0000, 08-43-26-00-00002.0000, 08-43-26-00-00006.0000, 08-43-26-01-00001.0000, 08-43-26-01-00006.0000, 08-43-26-00-00006.0020, 08-43-26-00-00006.0030

To whom this may concern:

The subject properties are not located within Lee County Utilities Future Service Area as depicted on Maps 4A and 4B of the Lee County Comprehensive Land Use Plan. Potable water and sanitary sewer lines are not in operation adjacent to the property mentioned above. However, to provide service to the subject parcels, developer-funded system enhancements such as line extensions may be required.

Your firm has indicated that this project will consist of 737 Single Family Units with an estimated flow demand of approximately 184,250 gallons per day. Lee County Utilities presently has sufficient capacity to provide potable water and sanitary sewer service as estimated above.

Availability of potable water and sanitary sewer service is contingent upon final acceptance of the infrastructure to be constructed by the developer. Upon completion and final acceptance of this project, potable water service would be provided through our Olga and North Lee County Water Treatment Plants, if the parcel was within the LCU service area. Sanitary sewer service would be provided by the City of Fort Myers Central Water Reclamation Facility, if the parcel was within the LCU service area. The Lee County Utilities' Design Manual requires the project engineer to perform hydraulic computations to determine what impact this project will have on our existing system.

Prior to beginning design work on this project, please meet with LCU Staff to determine the best point of connection and discuss requirements for construction.

This letter should not be construed as a commitment to serve, but only as to the availability of service. Lee County Utilities will commit to serve only upon receipt of all appropriate connection fees, a signed request for service and/or an executed service agreement, and the approval of all State and local regulatory agencies. Further, this letter of availability of potable water and sanitary sewer service is to be utilized for Zoning, Comprehensive Plan Amendment, and Planned Development Application only. Individual letters of availability will be required for the purpose of obtaining building permits.

Sincerely,

Amanda Peterson

LEE COUNTY UTILITIES
Project Manager

ARMEDA PROPERTY - PUBLIC FACILITIES IMPACT ANALYSIS

EXISTING & PROPOSED

CPA2025-00008 – Revised November 2025

A. POTABLE WATER

Existing DR/GR & AG-2 Potential

Single Family Dwelling Unit	53 Units @ 250 GPD /unit = 13,250 GPD
Total:	13,250 Gallons Per Day

Proposed Rural & Planned Residential Development

Single Family Dwelling Unit	737 Units @ 250 GPD /unit = 184,250 GPD
Total:	184,250 Gallons Per Day

TOTAL PROPOSED INCREASED DEMAND: 171,000 GPD

The proposed development results in total potable water demand of 184,250 GPD. In accordance with Lee County's Lee Plan, the proposed project must connect to centralized potable water supply, which is provided by Olga and North Lee County Water Treatment Plant. A letter of availability is attached demonstrating sufficient capacity to serve the project.

B. SANITARY SEWER

Existing DR/GR & AG-2 Potential

Single Family Dwelling Unit	53 Units @ 200 GPD /unit = 10,600 GPD
Total:	10,600 Gallons Per Day

Proposed Rural & Planned Residential Development

Single Family Dwelling Unit	737 Unit @ 200 GPD/unit = 147,400 GPD
Total:	147,400 Gallons Per Day

TOTAL PROPOSED INCREASED DEMAND: 136,800 GPD

The proposed development results in total sanitary sewer demand of 147,400 GPD. In accordance with Lee County's Lee Plan, the proposed project must connect to centralized sanitary sewer supply, which is provided by City of Fort Myers North Water Reclamation Facility. A letter of availability is attached demonstrating sufficient capacity to serve the project.

C. ARTERIAL AND COLLECTOR ROADS

Impacts to the surrounding roadway network are addresses in the Traffic Impact Statement provided as part of this Comprehensive Plan Amendment application. According to the Traffic Impact Statement provided by TR Transportation Consultants, Inc., the Level of Service analysis conducted that the proposed development will not cause any roadway links to fall below the

minimum adopted Level of Service standards. The Applicant will be responsible for improvements to the roadway to meet County standards.

D. DRAINAGE

The current Flood Insurance Rate Maps indicate that the majority of the 561± acres is located in Flood Zone AE. Small pockets throughout the site are categorized as Flood Zone X. The proposed Project will be designed to meet local, State, and federal permit requirements which will require modification of the site's Environmental Resource Permits and any other related water management permits, as applicable. LOS standards for surface water management are contained in Lee Plan Policy 95.1.3 which provides a system requirement to prevent the flooding of designated evacuation routes on Lee Plan Map 3-F from the 25-year, 3-day storm event (rainfall) for more than 24 hours. Runoff from the developed site will continue to discharge to tidal creeks or rivers and will not cross any public road or evacuation route. The developed site will contain increased site storage and decreased discharge compared to the current site conditions.

E. SOLID WASTE

Existing DR/GR & AG-2 Potential

Single Family Dwelling Unit: 53 Units @ 2.75 pph @ 81% occupancy @ 7lbs pp/day =	826.4 lbs/day
Total:	826.4 lbs/day

Proposed Rural & Planned Residential Development

Single Family Dwelling Unit: 737 Units @ 2.75 pph @ 81% occupance @ 7lbs pp/day =	11,491.67 lbs/day
Total:	11,491.67 lbs/day

TOTAL PROPOSED INCREASED DEMAND: 10,665.27 lbs./day

The proposed development results in an increased solid waste demand of 10,665.27 lbs. per day. Where applicable, the proposed development will adhere to the Land Development Code requirements in Chapter 10, Section 261. The impact of solid waste generated by the project shall not exceed Lee County's solid waste level of service capacity. Disposal of the solid waste from this development will be accomplished at the Lee County Resource Recovery Facility and the Lee-Hendry Regional Landfill.

F. PARKS, RECREATION & OPEN SPACE

Regional Parks LOS Standard = 6 acres of Regional Parks per 1,000 residents
Community Parks LOS Standard = 0.8 acres per 1,000 permanent residents

Existing DR/GR & AG-2 Potential

53 DU @ 2.75 people per household @ 81% occupancy = 118 People

Regional Parks @ 6 acres/1,000 =	0.71 acres required
Community Parks @ 0.8 acres/1,000 =	0.09 acres required

Proposed Rural & Planned Residential Development
737 DU @ 2.75 people per household @ 81% occupancy =1,642 people

Regional Parks @ 6 acres/1,000 =	9.85 acres required
Community Parks @ 0.8 acres/1,000 =	1.31 acres required

TOTAL INCREASED DEMAND OF ACRES REQUIRED: 9.14 acres of Regional Parks and 1.22 acres of Community Parks.

Parks and Recreation are a non-regulatory standard. According to the 2024 Concurrency Report, the available capacity for both Regional and Community Parks exceeds the non-regulatory required capacity and available capacity meets the adopted level-of-service standard.

G. SCHOOLS

The School District of Lee County uses a generation rate of .335 students per each single-family dwelling unit. This rate is further broken down by school type, with a rate of .149 for elementary, .071 for middle school, and .077 for high school.

Existing DR/GR & AG-2 Potential

53 DU @ 0.160 elementary school =	8.5 students
53 DU @ 0.072 middle school =	3.8 students
53 DU @ 0.102 high school =	5.4 students

Total = 18 students generated by 53 single-family units

TOTAL EXISTING DEMAND = 18 students

Proposed Rural & Residential Planned Development

737 DU @ 0.160 elementary school =	117.9 students
737 DU @ 0.072 middle school =	53.1 students
737 DU @ 0.102 high school =	75.2 students

Total = 246 students generated by 737 single-family units

TOTAL PROPOSED DEMAND = 246 students

The development results in the addition of 228 students. The provided correspondence from The School District of Lee County demonstrates that the proposed residential development will not negatively impact school concurrency for the School District of Lee County at this time or in the near future.

H. FIRE PROTECTION/LAW ENFORCEMENT/EMS

Please see attached letter from Lee County Fire District demonstrating the ability to serve.