



CHARLOTTE COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT

LARGE SCALE* PLAN AMENDMENT (MAP)
Application Information

*Large Scale means any petition that involves a site with greater than 10 acres.

Application Submittal Requirements

- **Supply one unbound copy of the Application Materials (see checklist below).** Staff will have up to 5 working days following the application deadline day to review the application for completeness. If incomplete, the application will be returned with a description of the reasons why the application is incomplete. The applicant may resubmit the application any time prior to the next application deadline day.
- **Once deemed complete, the applicant will be notified that the application has been logged-in. The applicant is then required to supply one electronic copy, in PDF format, of all documents.** Additional copies of certain items will be required prior to the public hearing dates. *Do not* submit the additional copies to the Building and Growth Management Department until requested by a staff member of the department.
- **If deemed complete, the application will be logged in and assigned to a P&Z and BCC hearing cycle (see attached Application Schedule).** Staff will commence review.
 - The applicant is responsible for promptly providing any information that needs to be updated, modified, or newly submitted as part of the review; otherwise the petition may be continued to a later cycle or a recommendation of denial will be necessary.
- **No additional changes may be made to any information in an application subsequent to one week before the hearing packet is due to be compiled for the Planning and Zoning Board members or the NOVUS Agenda item deadline for the Board of County Commissioners.** The planner in charge of the petition will be able to inform the applicant of the final date.

Consistency with the Comprehensive Plan

The changes proposed by this application will be reviewed with regard to consistency with the Goals, Objectives, and Policies (GOPs) of the Smart Charlotte 2050 comprehensive plan. Inconsistency with Smart Charlotte will be a basis for a recommendation of denial by Staff.

The review will also be concerned with impacts to infrastructure (i.e. roads, water and sewer facilities, libraries, public buildings, parks, and schools), services (i.e. garbage collection, police protection, and fire/EMS service), the environment (i.e. impact to listed plant and animals species, soil content, erosion, generation of hazardous waste, water quality), and the potential for natural disasters (i.e. hurricanes and flooding).

Application Materials

- ☒ Completed Application Form
- ☒ Survey and accurate legal description (including acreage), signed and sealed by a registered land surveyor
 - For unplatted property, one original boundary survey - *one hard copy and one copy in AutoCAD format*
 - For platted land, one original surveyor's sketch
- ☒ Most current *Title Insurance Policy* or an *Ownership and Encumbrance Report* for subject property
- ☒ Notarized authorization from each owner, as applicable (Form A)
- ☒ Notarized authorization for agent to submit petition, as applicable (Form B)
- N/A ☐ A copy of any covenants, easements or restrictions that have been recorded for the subject site
- ☒ *Environmental Assessment Report*
- ☒ *Traffic Impact Analysis*
 - *Hurricane Evacuation Study*, as applicable
- N/A ☐ Letters of availability of utility service from sanitary sewer and potable water utilities that would provide service to the site and *Estimated Potable Water and Sanitary Sewer Usage Report*
- ☒ *Archeological/Historical Memo* indicating whether or not listed objects are located on the subject site
 - *Archeological/Historical Survey*, as applicable
- N/A ☐ Adjacent property owners map and an electronic copy of the adjacent property owners list in text format (txt file) provided on disc
- ☒ Affidavits A & B, signed and notarized
- ☒ Filing fee of **\$2,640.00**, with check made payable to the Charlotte County Board of County Commissioners or CCBCC

Additional Copies for Hearing Packet

10 copies each of the following when requested by department staff:

- any bound items
- any maps or other graphics sized larger than 11 X 17 (except surveys)
- any items in color

ATTENTION

If you are submitting an application that, if approved, will increase the amount of density allowed to be developed on your property, read this notice.

FLU Policy 1.2.7 of Smart Charlotte County outlines those situations wherein the Transfer of Density Units program is applicable.

“The TDU program shall be used during the review and approval process for all plan amendments and rezonings that propose to increase the base density on land and street vacations that would result in an accumulation of acreage allowing development of new units of density; this requirement shall continue to apply to lands that have been annexed by the City of Punta Gorda.”

Property may be exempted from the TDU program if located within a Revitalizing Neighborhood with an adopted Revitalization Plan. The exemption would need to be consistent with policies adopted into Smart Charlotte.

If not exempted, property must meet one of these requirements in order to be an acceptable Receiving Zone:

FLU Policy 1.2.10 TDU Receiving Zones

Receiving zones inside the Urban Service Area include lands within the following designations of FLUM Series Map #2: 2050 Framework:

1. Emerging Neighborhoods.
2. Maturing Neighborhoods.
3. Economic Corridors and Centers.
4. CRAs
5. Revitalizing Neighborhoods prior to adoption of a Revitalization Plan and also what may be required in accordance with a Revitalization Plan.

Receiving Zones within the Rural Service Area include lands within:

1. Rural Community Mixed Use areas.
2. The Rural Settlement Area Overlay District.

AND

Must not be in a prohibited Receiving Zone:

FLU Policy 1.2.11 Prohibited Receiving Zones

Density shall not be transferred into:

1. Lands within Managed Neighborhoods (FLUM Series Map #2).
2. Lands within the Resource Conservation and Preservation FLUM categories.
3. Land containing historical or archeological resources, or land deemed to contain environmentally sensitive resources; when a portion of a property contains resources, that area deemed not to contain resources may receive density if it meets one of the criteria of a receiving zone, a conservation easement will be required over the resource along with an undeveloped buffer of at least 100 feet. An historical structure that is to be integrated into a development will not need to be buffered.
4. Lands within the Prime Aquifer Recharge Area (FLUM Series Map #6).
5. Lands within the one-half mile setback of the Watershed Overlay District and Tippen Bay and Long Island Marsh (FLUM Series Map #4).
6. Land within a Public Water System Wellhead Protection Area (FLUM Series Map #7).
7. Land on a barrier island.



CHARLOTTE COUNTY
 COMMUNITY DEVELOPMENT DEPARTMENT

APPLICATION for
 LARGE SCALE PLAN AMENDMENT (MAP)

| | |
|-----------------|---------------------------------|
| Date Received: | Time Received: Revised 8/7/2023 |
| Date of Log-in: | Petition #: Accela #: |
| Receipt #: | Amount Paid: |

1. PARTIES TO THE APPLICATION

Name of Applicant: JDI Farms Inc.

Mailing Address: 1300 State Road 31

| | | |
|--|-------------|-----------------|
| City: Punta Gorda | State: FL | Zip Code: 33982 |
| Phone Number: 239-633-5227 | Fax Number: | |
| Email Address: ralphchastain@yahoo.com | | |

Name of Agent: Robert H. Berntsson

Mailing Address: 3195 S. Access Road

| | | |
|---------------------------------------|-------------|-----------------|
| City: Englewood | State: FL | Zip Code: 34224 |
| Phone Number: 941-627-1000 x5 | Fax Number: | |
| Email Address: rberntsson@bigwlaw.com | | |

Name of Engineer/Surveyor: Southwest Engineering & Design

Mailing Address: 252450 Airport Road, Suite 8

| | | |
|---------------------------------|-------------|-----------------|
| City: Punta Gorda | State: FL | Zip Code: 33980 |
| Phone Number: 941-637-9655 | Fax Number: | |
| Email Address: gbayne@sedfl.com | | |

Name of Property Owner (if more than one property owner, attach a separate sheet with a list of all owners):
 Same as applicant

Mailing Address:

| | | |
|----------------|-------------|-----------|
| City: | State: | Zip Code: |
| Phone Number: | Fax Number: | |
| Email Address: | | |

2. PROPERTY INFORMATION

If more than one account number exists, attach a separate sheet listing all information required by this section

| | | |
|--|--------------|--------------|
| Property Account #: 402523200001 | | |
| Section: 23 | Township: 40 | Range: 25 |
| Parcel/Lot #: | Block #: | Subdivision: |
| Total acreage or square feet of the property: 646.85 +/- acres The site subject to this application contains approximately 536.22 acres. | | |

3. SURVEY:

- For unplatted property, provide one original boundary survey that is **signed and sealed** by a registered land surveyor and an accurate legal description (including acreage) of the property.
- For platted land, provide one original surveyor's sketch that is **signed and sealed** by a registered land surveyor and an accurate legal description (including acreage) of the property.

4. PROOF OF LAND OWNERSHIP: Provide a recent *Ownership and Encumbrance Report* or *Title Insurance Policy* on the subject property.

5. NOTARIZED AUTHORIZATION:

- If the applicant is not the owner of the property, a written, notarized authorization from each owner must be provided with this application – use Form A, attached. Property owner authorization is required. If the property owner withdraws permission at any point during the review and approval process, the application is considered null and void.
- If an agent is submitting the application for the applicant – authorization from the applicant is required – use Form B, attached.

6. RESTRICTIONS: Provide a copy of any covenants, easements or restrictions that have been recorded for the subject site.

7. EXISTING LAND USE DESIGNATIONS

| Future Land Use Map (FLUM) designation(s) | Acreage | |
|---|------------------|---|
| Agriculture | 646.85 +/- acres | Approximately 536.22 acres - revised 8/7/2023 |
| | | |
| | | |
| Zoning District(s) | Acreage | |
| Agriculture (AG) | 646.85 +/- acres | Approximately 536.22 acres - revised 8/7/2023 |
| | | |
| | | |

8. APPLICANT'S PROPOSED CHANGE(S):

Amend the future land use and zoning to Mineral Resource Extraction and Excavation and Mining to allow for excavation on site.

If the proposed change involves an increase in density, which of the Receiving Zone criteria does the property meet, or would this be an exemption consistent with a Revitalization Plan?

N/A

9. REASON FOR PROPOSED CHANGE(S) (attach additional sheets if necessary):

To allow for mining operations on site.

10. CURRENT LAND USE OF SUBJECT PROPERTY (example: house, vacant land, barn, etc.):

Cropland

11. SURROUNDING LAND USES:

North: Vacant Grazeland

Vacant Grazeland

South:

East: Vacant Grazeland

West: Vacant Grazeland

12. ENVIRONMENTAL ASSESSMENT:

- Provide an *Environmental Assessment Report*, conducted within one year or less from the date of submittal, that includes:
 - Maps and surveys of the subject site illustrating the existing land cover according to Level 3 of the FLUCCS
 - Locations of listed flora and fauna species, if present.
 - If any wetlands are identified on site, provide a survey showing delineations of any wetlands, acreages, and the wetland Category (ENV Policy 3.1.3) under which they fall.
 - If the property is adjacent to any Federal, State, or County wildlife management areas, parks, preserves or reserves, supply a science-based analysis of possible impacts to the environmental resources of these lands and the manner in which these impacts can be eliminated. Where elimination is not possible, the analysis shall detail how these impacts can be reduced and mitigated.

13. INFRASTRUCTURE:

A. Roadway

- i. List the roads or streets upon which vehicles may travel to gain access to the site (generally within ¼ mile radius):

SR 31

- ii. *Traffic Impact Analysis*: This study must be authored by a registered professional engineer in the State of Florida. Provide a study showing the impacts development of the subject site, at

the maximum buildout allowed, under the proposed FLUM designation(s) would have on the surrounding roadway network. Where traffic impacts reduce LOS below 'D', provide a proportionate fair share assessment for those impacted roadways. If buildout is voluntarily restricted by the applicant, the report may utilize the restricted buildout numbers.

- *Hurricane Evacuation Study*: For any property that is even partially located in a Coastal High Hazard Area, or which generates trips wherein the majority of those trips would utilize a roadway that runs through a Coastal High Hazard Area, a *Hurricane Evacuation Study* must accompany any *Traffic Impact Analysis*.

B. Potable Water and Sanitary Sewer and other Utility Services

- i. Submit a letter from any water or sewer utilities that will be serving the subject site stating availability of utility service to the property.
- ii. Attach an *Estimated Potable Water and Sanitary Sewer Usage Report*: provide a report showing the gallons per day that may be generated by development of the subject site at the maximum buildout allowed under the proposed FLUM designation(s). If buildout is voluntarily restricted by the applicant, the report may utilize the restricted buildout numbers.

14. HISTORICAL OR ARCHEOLOGICAL SITES: The applicant must submit an *Archeological/Historical Memo* indicating that a review of the National Register of Historic Places, the Florida Master Site File and the Local Historic Register (when available) has been performed and the results of that review. If the subject site contains any object listed in these resources, the applicant must provide an *Archeological/Historical Survey* performed by a professional archeologist licensed in the State of Florida.

15. ADJACENT PROPERTY OWNERS INFORMATION:

Provide an *electronic text file (.txt)* that includes the names and addresses of all property owners within 200 feet of the subject property (excluding street right-of-ways), and a map indicating which properties are included in the address list. The Adjacent Property Owner List must be based upon the latest available property records of the Property Appraiser's Office. The list shall include property owner's name, mailing address, and parcel(s) or lot(s) description or account number so each parcel can be referenced on the Adjacent Property Owner Map. Refer to the Geographic Information System Internet site for mapping and owner information at <http://www.ccgis.com/>. (Use a buffer of 250 feet or larger in order to account for right-of-ways, canals, etc.) Every property owner within 200 feet of every parcel of land involved will be notified of the schedule of public hearings

AFFIDAVIT

I, the undersigned, being first duly sworn, depose and say that I am the owner or agent of the property described and which is the subject matter of the proposed hearing; that all answers to the questions in this application, and all sketches, data and other supplementary matter attached to and made a part of the application are honest and true to the best of my knowledge and belief. I understand this application must be complete and accurate before the hearing can be advertised, and that if I am not the owner of the property I have attached a notarized authorization from the owner(s) to submit this application. I acknowledge that all items listed in the application must be submitted concurrent at the time the County accepts the application. I swear that the attached list of adjacent property owners is complete, including all property owners within 200 feet of the subject properties (excluding right-of-ways), that it is correct, providing addresses as listed in the County Tax Roll.

STATE OF Florida, COUNTY OF Charlotte

The foregoing instrument was acknowledged before me this 9th day of October, 2023, by

Robert H. Berntsson who is personally known to me or has/have produced

as identification and who did/did not take an oath.

Heather M. Bennett
Notary Public Signature

[Signature]
Signature of Applicant or Agent

Heather Bennett
Notary Printed Signature

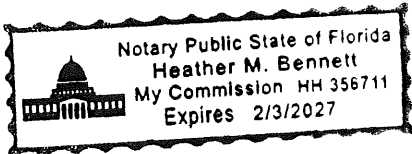
Robert H. Berntsson
Printed Signature of Applicant or Agent

Title

3195 S. Access Road
Address

Commission Code

Englewood, FL 34224
City, State, Zip



941-627-1000 x5
Telephone Number



Professional Engineers, Planners & Land Surveyors

DESCRIPTION OF A PARCEL OF LAND
LYING IN SECTION 17, T-42-S, R-23-E,
CHARLOTTE COUNTY, FLORIDA.

MRE AREA

A TRACT OR PARCEL OF LAND SITUATED IN THE STATE OF FLORIDA, COUNTY OF CHARLOTTE, LYING IN SECTION 23, TOWNSHIP 40 SOUTH, RANGE 25 EAST, BEING A PART OF THE PROPERTY DESCRIBED IN OFFICIAL RECORD BOOK 4692, PAGE 1960, PUBLIC RECORDS OF CHARLOTTE COUNTY, FLORIDA, LESS AND EXCEPT THE FOLLOWING:

COMMENCING AT THE SOUTHEAST CORNER OF SAID SECTION 23; THENCE N.89°40'42"W., ALONG THE SOUTH LINE OF SAID SECTION 23, FOR 5282.74 FEET TO THE SOUTHWEST CORNER OF SAID SECTION 23; THENCE N.00°00'43"E., ALONG THE WEST LINE OF SAID PROPERTY DESCRIBED IN OFFICIAL RECORD BOOK 4692, PAGE 1960, FOR 1535.23 FEET; THENCE S.88°26'01"E. FOR 51.84 FEET; THENCE S.87°26'48"E. FOR 1.72 FEET; THENCE S.86°53'03"E. FOR 52.16 FEET; THENCE S.85°54'01"E. FOR 38.47 FEET; THENCE S.85°28'59"E. FOR 58.82 FEET; THENCE S.84°45'43"E. FOR 66.45 FEET; THENCE S.84°02'17"E. FOR 1.26 FEET; THENCE S.83°18'15"E. FOR 67.86 FEET; THENCE S.81°38'44"E. FOR 84.98 FEET; THENCE S.80°43'38"E. FOR 1.64 FEET; THENCE S.79°46'14"E. FOR 87.79 FEET; THENCE S.77°35'23"E. FOR 113.17 FEET; THENCE S.76°21'42"E. FOR 247.53 FEET; THENCE S.75°42'53"E. FOR 59.60 FEET; THENCE S.75°01'40"E. FOR 3.79 FEET; THENCE S.74°58'53"E. FOR 1.20 FEET; THENCE S.74°18'02"E. FOR 63.14 FEET; THENCE S.73°36'55"E. FOR 779.28 FEET; THENCE S.75°15'39"E. FOR 871.86 FEET; THENCE S.75°09'49"E. FOR 8.89 FEET; THENCE S.74°36'46"E. FOR 41.94 FEET; THENCE S.74°09'28"E. FOR 450.32 FEET; THENCE S.74°33'44"E. FOR 905.02 FEET; THENCE S.74°52'06"E. FOR 771.77 FEET; THENCE S.74°59'38"E. FOR 598.46 FEET; THENCE S.74°46'47"E. FOR 19.73 FEET; THENCE S.74°33'57"E. FOR 11.21 FEET TO THE EAST LINE OF SAID PROPERTY DESCRIBED IN OFFICIAL RECORD BOOK 4692, PAGE 1960, THENCE S.00°00'57"E., ALONG SAID EAST LINE, FOR 211.62 FEET TO THE POINT OF BEGINNING.

CONTAINING 536.22 ARES, MORE OR LESS.

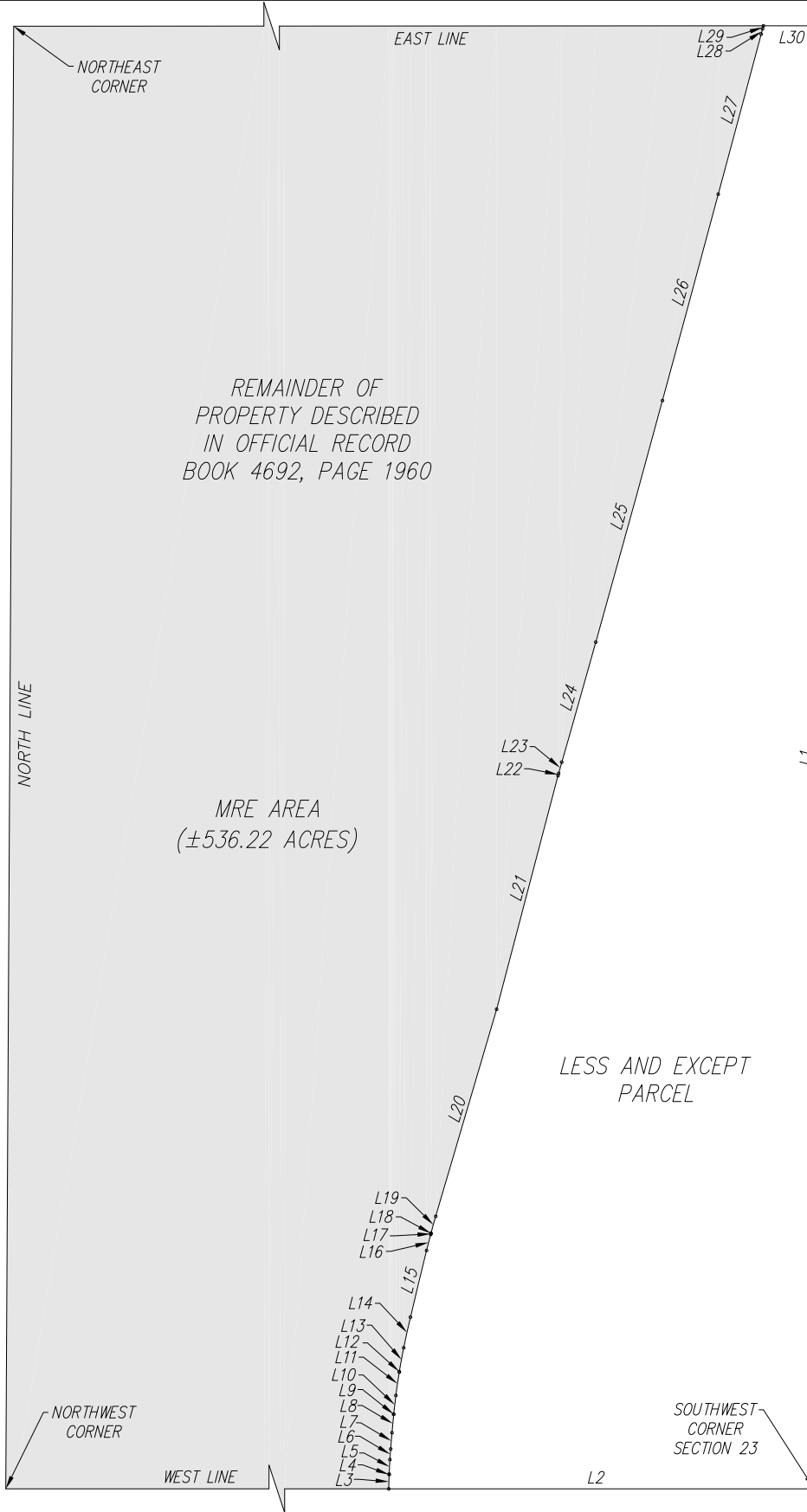
BEARINGS ARE BASED ON "THE STATE PLANE COORDINATE SYSTEM" FLORIDA ZONE WEST, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT - EPOCH 2010) AND WERE DERIVED FROM THE FLORIDA PERMANENT REFERENCE NETWORK SITE CODE "PNTA", IN U.S. FEET WHEREIN THE SOUTH LINE OF SECTION 23, TOWNSHIP 40 SOUTH, RANGE 25 EAST (PER CERTIFIED CORNER DOCUMENTS AND EXISTING MONUMENTATION) BEARS S.89°40'42"E.

BANKS ENGINEERING
FLORIDA LICENSED BUSINESS NO. LB6690

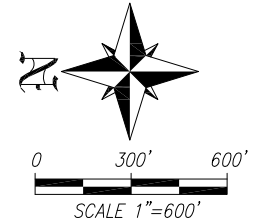
AUGUST 07, 2023

C. DREW BRANCH, P.S.M.
PROFESSIONAL SURVEYOR & MAPPER
FLORIDA CERTIFICATION NO. 5542

SHEET 1 OF 2
SERVING THE STATE OF FLORIDA



POINT OF BEGINNING
LESS AND EXCEPT
SOUTHEAST CORNER
SECTION 23-42S-R23E



LINE TABLE

| LINE | BEARING | DISTANCE |
|------|---------------|----------|
| L1 | N 89°40'42" W | 5282.74' |
| L2 | N 00°00'43" E | 1535.23' |
| L3 | S 88°26'01" E | 51.84' |
| L4 | S 87°26'48" E | 1.72' |
| L5 | S 86°53'03" E | 52.16' |
| L6 | S 85°54'01" E | 38.47' |
| L7 | S 85°28'59" E | 58.82' |
| L8 | S 84°45'43" E | 66.45' |
| L9 | S 84°02'17" E | 1.26' |
| L10 | S 83°18'15" E | 67.86' |
| L11 | S 81°38'44" E | 84.98' |
| L12 | S 80°43'38" E | 1.64' |
| L13 | S 79°46'14" E | 87.79' |
| L14 | S 77°35'23" E | 113.17' |
| L15 | S 76°21'42" E | 247.53' |
| L16 | S 75°42'53" E | 59.60' |
| L17 | S 75°01'40" E | 3.79' |
| L18 | S 74°58'53" E | 1.20' |
| L19 | S 74°18'02" E | 63.14' |
| L20 | S 73°36'55" E | 779.28' |
| L21 | S 75°15'39" E | 871.86' |
| L22 | S 75°09'49" E | 8.89' |
| L23 | S 74°36'46" E | 41.94' |
| L24 | S 74°09'28" E | 450.32' |
| L25 | S 74°33'44" E | 905.02' |
| L26 | S 74°52'06" E | 771.77' |
| L27 | S 74°59'38" E | 598.46' |
| L28 | S 74°46'47" E | 19.73' |
| L29 | S 74°33'57" E | 11.21' |
| L30 | S 00°00'57" E | 211.62' |

LEGEND:
LB LICENSED BUSINESS
EB ENGINEERING BUSINESS
L1 LINE ONE IN TABLE

THIS IS NOT A BOUNDARY SURVEY

BANKS
ENGINEERING

4161 TAMiami TRAIL - BLDG 5 UNIT 501
PORT CHARLOTTE, FLORIDA 33952
PHONE: (941) 625-1165 FAX: (941) 625-1149
ENGINEERING LICENSE # EB 6469
SURVEY LICENSE # LB 6690
WWW.BANKSENG.COM

Professional Engineers, Planners, & Land Surveyors
Serving The State Of Florida

DESCRIPTION AND SKETCH

MRE AREA

CHARLOTTE COUNTY, FLORIDA

| DATE | PROJECT | DRAWING | DESIGN | DRAWN | CHECKED | SCALE | SHEET |
|------------|---------|---------|--------|-------|---------|---------|--------|
| 08-07-2023 | 4644 | MRE-SK | N/A | DDB | CDB | 1"=600' | 2 of 2 |

NARRATIVE FOR LARGE SCALE PLAN AMENDMENT AND REZONING

FOR JDI FARMS INC.

This is a request for a large-scale plan amendment and rezoning to allow for a commercial excavation on a 646.85 +/- acre parcel of land in east County, west of SR 31 and north of Bermont Road. The amendments will be for only 536.22 acres of the overall site, the remaining area of 110.63 +/- acres will remain AG. The property currently has an Agriculture Future Land Use designation and Agricultural zoning. Once the land use and zoning are in place, a separate application for a mining permit will be processed.

This request meets the zoning standards of approval as follows:

1. The proposed change is consistent with the comprehensive plan. In order to undertake commercial mining on a parcel the Mineral Resource Extraction Future Land Use and Excavation and Mining zoning must be in place.
2. The proposal is consistent with the existing land use pattern in adjacent areas. Surrounding uses are primarily vacant grazing lands.
3. There is sufficient capacity in all of the public infrastructure facilities and services to serve the project. There are limited public facilities needed for the mining operations.
4. The proposed change will not adversely affect living conditions or property values in the adjacent areas. As construction activities continue in the County and surrounding area, there is a continuing need for fill for infrastructure and building sites.
5. The proposed land use and zoning will have no negative effect on public safety.

To address language within the Comprehensive Plan, a *discussion of quality of life issues, in particular, the effect of a proposed excavation upon the health, safety and welfare of residents within one-half mile of the site*, the site already has an Agricultural Land Use and zoning, which allows for extractive and heavy agricultural uses. There are no homes within one half mile of the proposed excavation site. The site was an active agricultural use, and the mining operations will be permitted through State and County permitting processes that will insure protection of natural resources in the vicinity. The haul route to SR 31 does not pass by any residences, and provides direct access to SR 31 through agricultural lands. No adverse impacts upon health, safety and welfare are anticipated, while ultimately the excavation can provide needed fill for residential, commercial and public works projects, that can enhance quality of life for Charlotte County residents.

Based on the foregoing, it is respectfully requested the plan amendment and rezoning be approved.

Revised: September 17, 2023

/s/ Robert H. Berntsson

Robert H. Berntsson

Traffic Impact Statement for Chastain Excavation, 646 Acre (PID: 402523200001)

Prepared For:
Southwest Engineering and Design
25450 Airport Road, Suite 8
Punta Gorda, Florida 33950
941-637-9655 Ph
941-637-1149 Fx

Prepared By:
Protean Design Group, Inc.
201 West Marion Avenue, Suite 1201
Punta Gorda, FL 33950
o: 941.676.8448

February 2023

This item has been digitally signed and sealed by:



On the date adjacent to the seal
Printed copies of this document are not considered
signed and sealed and the signature must be verified
on any electronic copies.

Protean Design Group, Inc.
201 West Marion Avenue, Suite 1201
Punta Gorda, FL 33950
Laura A. Rossi, P.E. NO. 82403

Table of Contents

| | |
|---|----|
| Overview | 3 |
| Existing Condition | 4 |
| Proposed Condition and Trip Generation..... | 5 |
| Trip Distribution | 7 |
| Adjacent Roadway Level of Service (LOS) | 7 |
| Turn Lane Warrant Analysis | 8 |
| Right Turn Lane: | 8 |
| Left Turn Lane:..... | 9 |
| Conclusion | 10 |

List of Figures

| | |
|---|-----------|
| <i>Figure 1: Development Location</i> | <i>3</i> |
| <i>Figure 2: Existing Property.....</i> | <i>4</i> |
| <i>Figure 3: Proposed Excavation</i> | <i>5</i> |
| <i>Figure 4: Peak Hour Trip Distribution at Driveway.....</i> | <i>7</i> |
| <i>Figure 5: Volume Warrants for Left-Turn Storage Lanes At Unsignalized Grade Intersections ..</i> | <i>10</i> |

List of Tables

| | |
|---------------------------------------|----------|
| <i>Table 1: Trip Generation</i> | <i>6</i> |
|---------------------------------------|----------|

List of Appendices

| | |
|---|-----------|
| <i>Appendix A- Proposed Excavation.....</i> | <i>11</i> |
| <i>Appendix B – Roadway Level of Service (LOS) Data</i> | <i>13</i> |

Overview

This is a traffic impact statement for a proposed excavation on PID # 402523200001. This excavation is proposed on 646-acres of property located within Charlotte County, FL just 1 mile west of SR-31. See Figure 1 below.

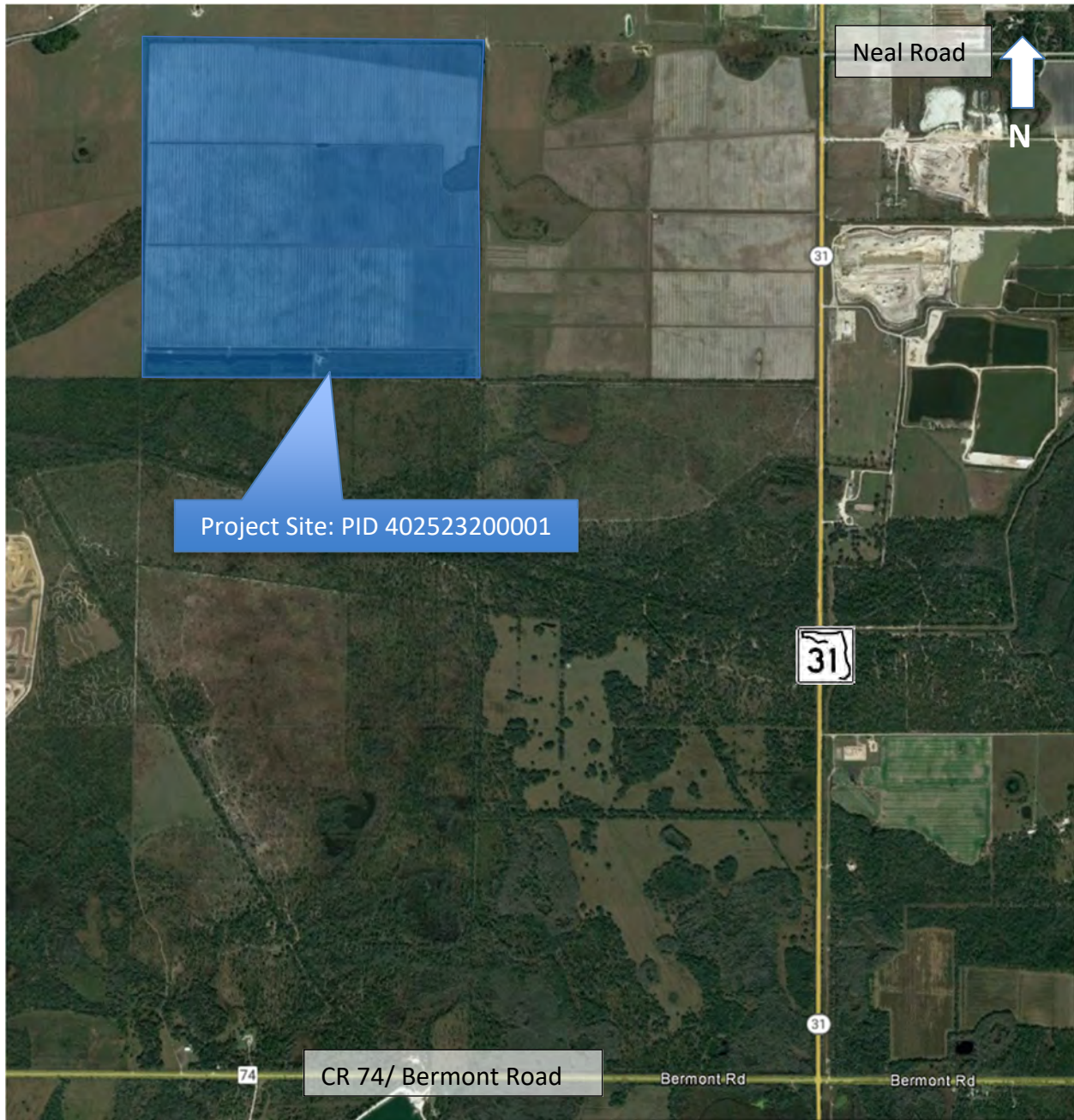
Figure 1: Development Location



Existing Condition

The 646-acre existing property is farmland, shown below in Figure 2. The property is located 2 miles north of the SR-31 and Bermont Road intersection and then 1 mile west of SR-31. The speed limit on SR-31 is posted 60 mph.

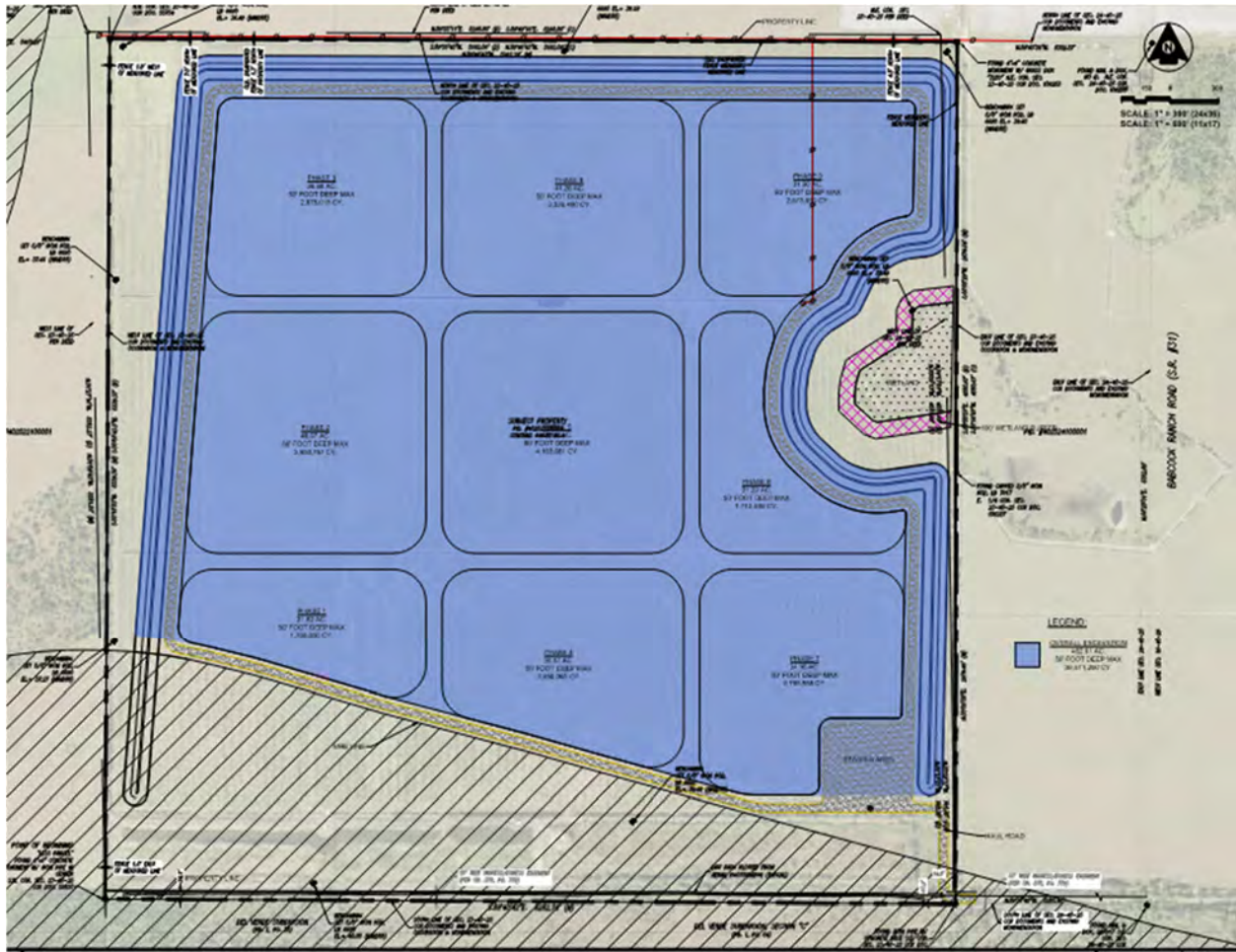
Figure 2: Existing Property



Proposed Condition and Trip Generation

The proposed excavation within the 646-acre property is 452.6 acres and will be dug to remove 36,511,250 cubic yards (C.Y.) of fill dirt, topsoil, and shell to form a reservoir. The proposed excavation is shown in Figure 3 and in Appendix A.

Figure 3: Proposed Excavation (Appendix A)



Due to the nature of the site, trips generated are directly related to the estimated volume of material being created by the excavation. The formula on the next page estimates the average trips per day and per hour that will be leaving the sites over a 20-year period. A 20-year duration was used to calculate the average trips per day and per hour. This duration was used to calculate the daily trips, since it resulted in the maximum trucks the facility can load a day (per coordination with Southwest Engineering and Design).

Calculation 1: Excavation Volume vs. Trucks Leaving

Volume of Material to be removed: 36,511,250 cubic yards
 Estimated Life Span of Excavation: 20 years

Average Trips per work day Leaving (Monday through Friday):

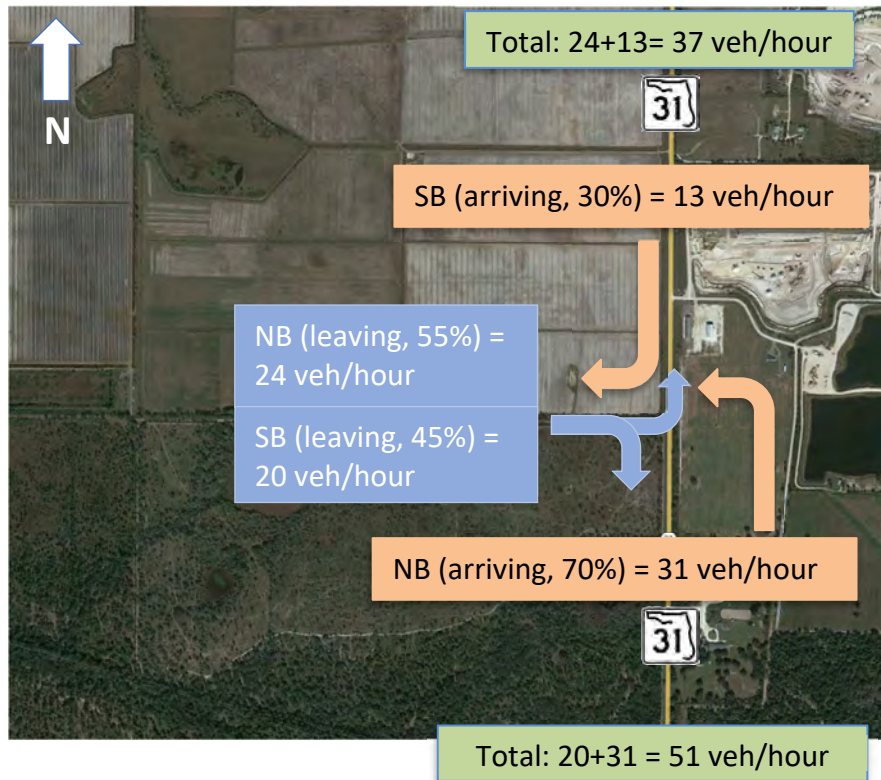
$$438 \text{ Trucks/ work day} = \frac{36,511,250 \text{ CY}}{20 \text{ YR}} * \frac{1 \text{ Truck}}{16 \text{ CY}} * \frac{1 \text{ YR}}{52.18 \text{ weeks}} * \frac{1 \text{ week}}{5 \text{ work days}}$$

$$\text{Weekday Trips per hour leaving} = \frac{438 \text{ Trucks}}{\text{work day}} * \frac{1 \text{ work day}}{10 \text{ hours}} = 44 \text{ trucks leaving/ hour}$$

It is important to note that trucks are not stored on site and arrive (enter) at the same rate they leave over the permitted hours of operation between 7 AM to 5 PM Monday through Friday. Since many variables can affect the rate of trucks entering and leaving the site, a maximum rate of 438 trucks leaving per day (44 trucks leaving per hour) will be considered since that is the maximum trucks the facility can load a day per coordination with Southwest Engineering and Design.

Table 1: Trip Generation

| | Daily (trucks/ day) | | Hourly (trucks/ hour) | |
|---------|---------------------|---------|-----------------------|---------|
| | Entering | Leaving | Entering | Leaving |
| Maximum | 438 | 438 | 44 | 44 |



Trip Distribution

According to turning movement counts taken at an active excavation with its entrance on SR-31 (1,200 feet north of the proposed excavation) 70% of trucks arrive from the south going northbound (NB) and 30% from the north going southbound (SB). Trucks leaving the facility follow a 55% NB: 45% SB split.

Figure 4: Peak Hour Trip Distribution at Driveway

Trips entering and leaving the proposed excavation are expected to follow the same distributions as the similar facility. See the 88 trips per hour (44 vph entering and 44 vph leaving) distributed accordingly in Figure 4.

This traffic distribution results in a maximum of 51 trucks/ hour being added to the existing traffic along SR-31 during the peak hour.

Adjacent Roadway Level of Service (LOS)

Traffic counts on SR-31 were performed 2,200 feet north of Neal Road, from 7/5/2022 to 7/7/2022 (see Appendix B). The peak hours of SR-31, for the two-way volume, were found to be from 7 AM to 8 AM and from 1 PM to 2 PM with an adjusted peak hour volume of 620 vehicles per hour (vph). If 88 vph is added to the existing traffic along SR-31 during the peak hour due to the development of the property, the resultant peak hour volume would be 708 vph.

The existing level of service (LOS) of SR-31 was calculated using NCHRP Report 825 Section H and the Highway Capacity Manual (HCM) 2016. The existing LOS was then compared to the new LOS of SR-31 due to the development of the properties. See Appendix B for the calculations.

Based on the NCHRP and HCM capacity limits, SR-31 is at an existing LOS B. With the addition of the proposed excavation the LOS of SR-31 would remain at LOS B. This is unchanging from the existing condition; showing the site transitioning from an undeveloped farmland to an excavation site would not affect SR-31's LOS.

Turn Lane Warrant Analysis

A left and right turn lane warrant analysis were conducted at the proposed entrance of the excavation per the FDOT Access Management Guidebook (November 2019), AASHTO Greenbook (2018), and National Cooperative Highway Research Program (NCHRP) Report 745, Left-Turn Accommodations at Unsignalized Intersections. No turn lanes currently exist at the proposed entrance location on SR-31.

Right Turn Lane:

When referencing FDOT Access Management Guidebook (November 2019) Section 6.2.1 "When to Consider Exclusive Right-Turn Lanes", two bullet points directly apply to this proposed entrance.

- "Facilities having a high volume of buses, trucks or trailers (2 or 3 per hour)"
- "Very high operating speeds (such as 55 mph or above) and in rural locations where turns are not expected by through drivers"

In addition, Table 27 recommends exclusive right turns at unsignalized driveways when the number of right turns per hour approach 35 vph with a roadway posted speed limit over 45 mph. Even though it is forecasted that only 13 vph will turn right into the property during the peak hour, considering the nature of the vehicles turning (100% trucks) and the rural, 2-lane SR-31 free flow speed (65 mph), it is recommended a

Table 27 – Recommended Guidelines for Exclusive Right-Turn Lanes to Unsignalized Driveway¹⁰

| Roadway Posted Speed Limit | Number of Right Turns Per Hour |
|--|--------------------------------|
| 45 mph or less | 80 – 125¹ |
| Over 45 mph | 35 – 55² |
| <small>Note: A posted speed limit of 45 mph may be used with these thresholds if the operating speeds are known to be over 45 mph during the time of peak right turn demand.</small> | |
| <small>Note on traffic projections: Projecting turning volumes is, at best, a knowledgeable estimate. Keep this in mind especially if the projections of right turns are close to meeting the guidelines. In that case, consider requiring the turn lane.</small> | |
| <small>¹ The lower threshold of 80 right-turn vehicles per hour would be most used for higher volume (greater than 600 vehicles per hour, per lane in one direction on the major roadway) or two-lane roads where lateral movement is restricted. The 125 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with a large entry radius (50 feet or greater).</small> | |
| <small>² The lower threshold of 35 right-turn vehicles per hour would be most appropriately used on higher volume two-lane roadways where lateral movement is restricted. The 55 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with large entry radius (50 feet or greater).</small> | |

Source: [NCHRP Report 420 \(Impacts of Access Management Techniques\)](#)

These recommendations are primarily based on the research done in NCHRP Report 420, Impacts of Access Management Techniques, Chapter 4 – Unsignalized Access Spacing (Technique 1B), and Use of Speed Differential as a Measure to Evaluate the Need for Right-Turn Deceleration Lane at Unsignalized Intersections.

right turn lane be provided at a length detailed within FDOT FDM Exhibit 212-1 and the FDOT Access Management Guidebook Table 12. Storage length, in addition to the length given within FDOT FDM Exhibit 212-1, is unnecessary since it is a free flow right turn lane.

Left Turn Lane:

According to AASHTO Greenbook (2018) Table 9-25 and NCHRP 745 Table 1, referenced within the FDOT Access Management Guidebook and seen below, a left turn lane on a two- lane highway in a rural area “may be desirable” at a three-leg intersection when the major road peak hour volume exceeds 50 (veh/hr/ln) while a left-turn lane peak-hour volume exceeds 20 vph.

Table 9-25. Suggested Left-Turn Treatment Guidelines Based on Results from Benefit–Cost Evaluations for Intersections on Two-Lane Highways in Rural Areas (16)

| Left-Turn Lane Peak-Hour Volume (veh/h) | Three-Leg Intersection, Major-Road Two-Lane Highway Peak-Hour Volume (veh/h/ln) that Warrants a Bypass Lane | Three-Leg Intersection, Major-Road Two-Lane Highway Peak-Hour Volume (veh/h/ln) that Warrants a Left-Turn Lane | Four-Leg Intersection, Major-Road Two-Lane Highway Peak-Hour Volume (veh/h/ln) that Warrants a Left-Turn Lane |
|--|--|---|--|
| 5 | 50 | 200 | 150 |
| 10 | 50 | 100 | 50 |
| 15 | < 50 | 100 | 50 |
| 20 | < 50 | 50 | < 50 |
| 25 | < 50 | 50 | < 50 |
| 30 | < 50 | 50 | < 50 |
| 35 | < 50 | 50 | < 50 |
| 40 | < 50 | 50 | < 50 |
| 45 | < 50 | 50 | < 50 |
| 50 or More | < 50 | 50 | < 50 |

Note: These guidelines apply where the major road is uncontrolled and the minor-road approaches are stop- or yield-controlled. Both the left-turn peak-hour volume and the major-rad volume warrants should be met as shown in Figure 9-36.

This guidance includes many variables since it is a based-on benefit-cost evaluations, so the left turn lane was also analyzed with AASHTO Greenbook (2011)/ National Cooperative Highway Research Program (NCHRP) Report 745. When presenting the guidelines for left-turn lanes, the AASHTO Greenbook (2011) references the “Volume Warrants for Left-Turn Storage Lanes At Unsignalized Grade Intersections” which warrants left turn lanes and storage length based on 1) number of travel lanes 2) left turning volume, and 3) opposing volume. Figure 5 on the next page was used for an unsignalized intersection on a two-lane

rural highway at 60 mph. This resulted in a left turn lane being warranted when the left-turn volume exceeds 5% of the advancing volume ($5\% \times 347$ advancing veh/hr/ln = 17 vph). When considering the calculated 31 vph turning left (NB) into the proposed entrance, the vehicles being large trucks, and also an opposing NB peak hour volume per lane of SR-31 of 340 veh/hr/ln, a left turn lane is warranted and is also desirable according to the AASHTO Greenbook's 2011 and 2018. A minimum of 75 feet of storage (in addition to the length detailed within FDOT FDM Exhibit 212-1 and the FDOT Access Management Guidebook Table 12) should be provided.

Figure 5: Volume Warrants for Left-Turn Storage Lanes At Unsignalized Grade Intersections

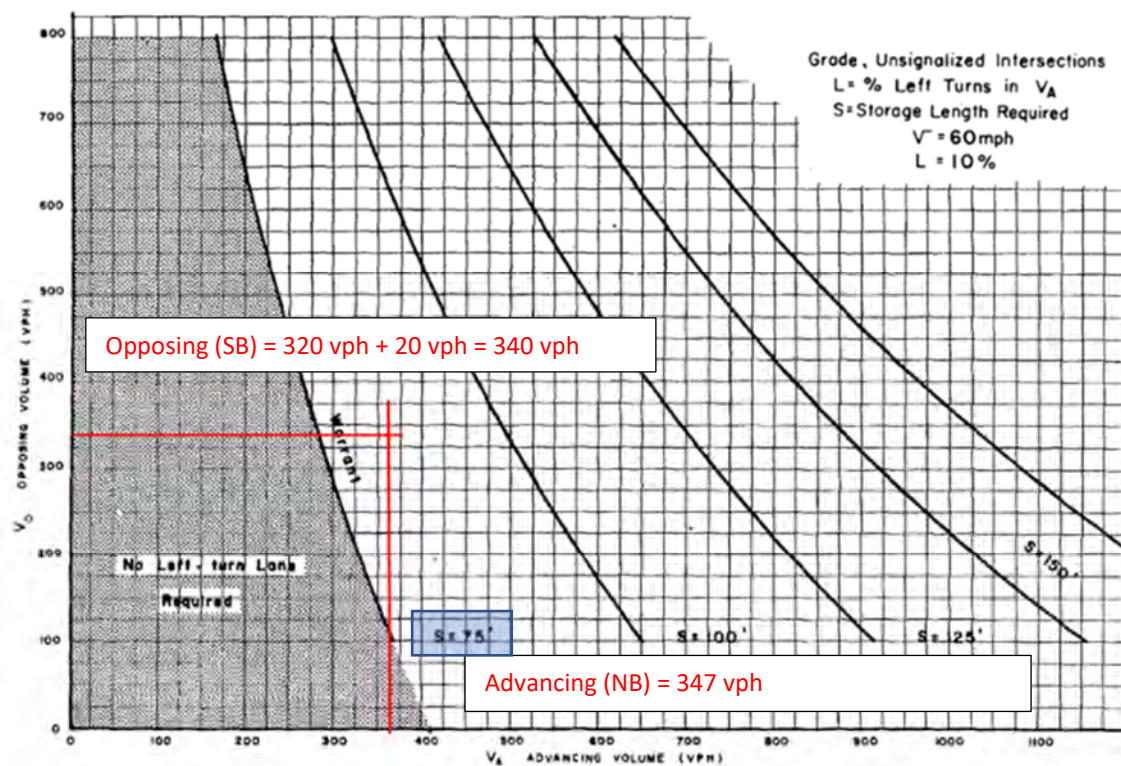


Figure 15. Warrant for left-turn storage lanes on two-lane highways.

Conclusion

It has been concluded that the additional trips generated by the proposed excavation will not be significant enough to affect the LOS of SR-31.

In addition, both a right and left turn lane are recommended at the proposed excavation's entrance on SR-31.

Appendix A- Proposed Excavation

1/23/2023 1:45:26 PM P:\22-0593 - CHASTAIN 640 ACRE EXCAVATION (RALPH)DESIGN\CADD\BASE FILES\BASE_EXCAVATION_FON.DWG - REED MCKOWN



Appendix B – Roadway Level of Service (LOS) Data

Daily Vehicle Volume Report

Study Date: Tuesday, 07/05/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|---------------|----------------------|----------------------|-----------------|
| 00:00 - 00:14 | 0 | 0 | 0 |
| 00:15 - 00:29 | 0 | 0 | 0 |
| 00:30 - 00:44 | 0 | 0 | 0 |
| 00:45 - 00:59 | 0 | 0 | 0 |
| 01:00 - 01:14 | 0 | 0 | 0 |
| 01:15 - 01:29 | 0 | 0 | 0 |
| 01:30 - 01:44 | 0 | 0 | 0 |
| 01:45 - 01:59 | 0 | 0 | 0 |
| 02:00 - 02:14 | 0 | 0 | 0 |
| 02:15 - 02:29 | 0 | 0 | 0 |
| 02:30 - 02:44 | 0 | 0 | 0 |
| 02:45 - 02:59 | 0 | 0 | 0 |
| 03:00 - 03:14 | 0 | 0 | 0 |
| 03:15 - 03:29 | 0 | 0 | 0 |
| 03:30 - 03:44 | 0 | 0 | 0 |
| 03:45 - 03:59 | 0 | 0 | 0 |
| 04:00 - 04:14 | 0 | 0 | 0 |
| 04:15 - 04:29 | 0 | 0 | 0 |
| 04:30 - 04:44 | 0 | 0 | 0 |
| 04:45 - 04:59 | 0 | 0 | 0 |
| 05:00 - 05:14 | 0 | 0 | 0 |
| 05:15 - 05:29 | 0 | 0 | 0 |
| 05:30 - 05:44 | 0 | 0 | 0 |
| 05:45 - 05:59 | 0 | 0 | 0 |
| 06:00 - 06:14 | 0 | 0 | 0 |
| 06:15 - 06:29 | 0 | 0 | 0 |
| 06:30 - 06:44 | 0 | 0 | 0 |
| 06:45 - 06:59 | 0 | 0 | 0 |
| 07:00 - 07:14 | 0 | 0 | 0 |
| 07:15 - 07:29 | 0 | 0 | 0 |
| 07:30 - 07:44 | 0 | 0 | 0 |
| 07:45 - 07:59 | 3 | 3 | 6 |
| 08:00 - 08:14 | 0 | 0 | 0 |
| 08:15 - 08:29 | 0 | 0 | 0 |
| 08:30 - 08:44 | 0 | 0 | 0 |
| 08:45 - 08:59 | 0 | 0 | 0 |
| 09:00 - 09:14 | 0 | 0 | 0 |
| 09:15 - 09:29 | 34 | 41 | 75 |
| 09:30 - 09:44 | 61 | 50 | 111 |
| 09:45 - 09:59 | 48 | 65 | 113 |
| 10:00 - 10:14 | 65 | 62 | 127 |
| 10:15 - 10:29 | 57 | 64 | 121 |
| 10:30 - 10:44 | 69 | 86 | 155 |
| 10:45 - 10:59 | 78 | 57 | 135 |
| 11:00 - 11:14 | 51 | 42 | 93 |
| 11:15 - 11:29 | 61 | 65 | 126 |
| 11:30 - 11:44 | 68 | 77 | 145 |
| 11:45 - 11:59 | 51 | 53 | 104 |
| 12:00 - 12:14 | 60 | 55 | 115 |
| 12:15 - 12:29 | 62 | 52 | 114 |
| 12:30 - 12:44 | 70 | 55 | 125 |
| 12:45 - 12:59 | 62 | 58 | 120 |

add 3 hours = 12:30 pm

SB max = 277 vph

Two-way max = 538 vph

Daily Vehicle Volume Report

Study Date: Tuesday, 07/05/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|----------------|----------------------|----------------------|-----------------|
| 13:00 - 13:14 | 60 | 40 | 100 |
| 13:15 - 13:29 | 63 | 51 | 114 |
| 13:30 - 13:44 | 36 | 41 | 77 |
| 13:45 - 13:59 | 51 | 33 | 84 |
| 14:00 - 14:14 | 48 | 45 | 93 |
| 14:15 - 14:29 | 71 | 39 | 110 |
| 14:30 - 14:44 | 51 | 46 | 97 |
| 14:45 - 14:59 | 43 | 28 | 71 |
| 15:00 - 15:14 | 46 | 23 | 69 |
| 15:15 - 15:29 | 45 | 23 | 68 |
| 15:30 - 15:44 | 42 | 15 | 57 |
| 15:45 - 15:59 | 25 | 18 | 43 |
| 16:00 - 16:14 | 24 | 13 | 37 |
| 16:15 - 16:29 | 31 | 26 | 57 |
| 16:30 - 16:44 | 22 | 19 | 41 |
| 16:45 - 16:59 | 29 | 37 | 66 |
| 17:00 - 17:14 | 22 | 15 | 37 |
| 17:15 - 17:29 | 24 | 19 | 43 |
| 17:30 - 17:44 | 21 | 19 | 40 |
| 17:45 - 17:59 | 6 | 21 | 27 |
| 18:00 - 18:14 | 25 | 21 | 46 |
| 18:15 - 18:29 | 5 | 14 | 19 |
| 18:30 - 18:44 | 23 | 12 | 35 |
| 18:45 - 18:59 | 12 | 10 | 22 |
| 19:00 - 19:14 | 6 | 19 | 25 |
| 19:15 - 19:29 | 12 | 13 | 25 |
| 19:30 - 19:44 | 9 | 18 | 27 |
| 19:45 - 19:59 | 7 | 12 | 19 |
| 20:00 - 20:14 | 9 | 10 | 19 |
| 20:15 - 20:29 | 10 | 11 | 21 |
| 20:30 - 20:44 | 10 | 6 | 16 |
| 20:45 - 20:59 | 7 | 8 | 15 |
| 21:00 - 21:14 | 7 | 6 | 13 |
| 21:15 - 21:29 | 8 | 8 | 16 |
| 21:30 - 21:44 | 6 | 10 | 16 |
| 21:45 - 21:59 | 7 | 6 | 13 |
| 22:00 - 22:14 | 1 | 9 | 10 |
| 22:15 - 22:29 | 2 | 1 | 3 |
| 22:30 - 22:44 | 3 | 3 | 6 |
| 22:45 - 22:59 | 2 | 14 | 16 |
| 23:00 - 23:14 | 2 | 3 | 5 |
| 23:15 - 23:29 | 4 | 5 | 9 |
| 23:30 - 23:44 | 5 | 10 | 15 |
| 23:45 - 23:59 | 4 | 8 | 12 |
| Totals | 1846 | 1693 | 3539 |
| AM Peak Time | 10:00 - 10:59 | 09:55 - 10:54 | 10:00 - 10:59 |
| AM Peak Volume | 269 | 281 | 538 |
| PM Peak Time | 12:10 - 13:09 | 12:00 - 12:59 | 12:00 - 12:59 |
| PM Peak Volume | 264 | 220 | 474 |

Daily Vehicle Volume Report

Study Date: Wednesday, 07/06/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|---------------|----------------------|----------------------|-----------------|
| 00:00 - 00:14 | 3 | 15 | 18 |
| 00:15 - 00:29 | 8 | 12 | 20 |
| 00:30 - 00:44 | 5 | 3 | 8 |
| 00:45 - 00:59 | 11 | 12 | 23 |
| 01:00 - 01:14 | 1 | 8 | 9 |
| 01:15 - 01:29 | 4 | 19 | 23 |
| 01:30 - 01:44 | 9 | 9 | 18 |
| 01:45 - 01:59 | 14 | 22 | 36 |
| 02:00 - 02:14 | 12 | 28 | 40 |
| 02:15 - 02:29 | 16 | 32 | 48 |
| 02:30 - 02:44 | 18 | 27 | 45 |
| 02:45 - 02:59 | 32 | 34 | 66 |
| 03:00 - 03:14 | 28 | 51 | 79 |
| 03:15 - 03:29 | 32 | 78 | 110 |
| 03:30 - 03:44 | 41 | 59 | 100 |
| 03:45 - 03:59 | 41 | 50 | 91 |
| 04:00 - 04:14 | 77 | 54 | 131 |
| 04:15 - 04:29 | 51 | 71 | 122 |
| 04:30 - 04:44 | 64 | 57 | 121 |
| 04:45 - 04:59 | 47 | 65 | 112 |
| 05:00 - 05:14 | 45 | 46 | 91 |
| 05:15 - 05:29 | 54 | 43 | 97 |
| 05:30 - 05:44 | 58 | 36 | 94 |
| 05:45 - 05:59 | 47 | 49 | 96 |
| 06:00 - 06:14 | 67 | 51 | 118 |
| 06:15 - 06:29 | 48 | 47 | 95 |
| 06:30 - 06:44 | 49 | 43 | 92 |
| 06:45 - 06:59 | 73 | 60 | 133 |
| 07:00 - 07:14 | 73 | 44 | 117 |
| 07:15 - 07:29 | 66 | 50 | 116 |
| 07:30 - 07:44 | 46 | 47 | 93 |
| 07:45 - 07:59 | 53 | 65 | 118 |
| 08:00 - 08:14 | 66 | 45 | 111 |
| 08:15 - 08:29 | 65 | 62 | 127 |
| 08:30 - 08:44 | 53 | 45 | 98 |
| 08:45 - 08:59 | 58 | 29 | 87 |
| 09:00 - 09:14 | 59 | 66 | 125 |
| 09:15 - 09:29 | 59 | 39 | 98 |
| 09:30 - 09:44 | 69 | 46 | 115 |
| 09:45 - 09:59 | 36 | 62 | 98 |
| 10:00 - 10:14 | 47 | 64 | 111 |
| 10:15 - 10:29 | 58 | 54 | 112 |
| 10:30 - 10:44 | 52 | 59 | 111 |
| 10:45 - 10:59 | 52 | 59 | 111 |
| 11:00 - 11:14 | 53 | 40 | 93 |
| 11:15 - 11:29 | 50 | 54 | 104 |
| 11:30 - 11:44 | 59 | 45 | 104 |
| 11:45 - 11:59 | 51 | 36 | 87 |
| 12:00 - 12:14 | 54 | 47 | 101 |
| 12:15 - 12:29 | 64 | 51 | 115 |
| 12:30 - 12:44 | 60 | 30 | 90 |
| 12:45 - 12:59 | 46 | 41 | 87 |

Daily Vehicle Volume Report

Study Date: Wednesday, 07/06/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|----------------|----------------------|----------------------|-----------------|
| 13:00 - 13:14 | 61 | 39 | 100 |
| 13:15 - 13:29 | 53 | 38 | 91 |
| 13:30 - 13:44 | 55 | 37 | 92 |
| 13:45 - 13:59 | 45 | 31 | 76 |
| 14:00 - 14:14 | 53 | 40 | 93 |
| 14:15 - 14:29 | 39 | 37 | 76 |
| 14:30 - 14:44 | 46 | 22 | 68 |
| 14:45 - 14:59 | 34 | 28 | 62 |
| 15:00 - 15:14 | 28 | 23 | 51 |
| 15:15 - 15:29 | 26 | 24 | 50 |
| 15:30 - 15:44 | 31 | 19 | 50 |
| 15:45 - 15:59 | 31 | 23 | 54 |
| 16:00 - 16:14 | 13 | 24 | 37 |
| 16:15 - 16:29 | 17 | 28 | 45 |
| 16:30 - 16:44 | 17 | 25 | 42 |
| 16:45 - 16:59 | 25 | 24 | 49 |
| 17:00 - 17:14 | 15 | 10 | 25 |
| 17:15 - 17:29 | 17 | 12 | 29 |
| 17:30 - 17:44 | 15 | 17 | 32 |
| 17:45 - 17:59 | 18 | 16 | 34 |
| 18:00 - 18:14 | 13 | 10 | 23 |
| 18:15 - 18:29 | 18 | 9 | 27 |
| 18:30 - 18:44 | 16 | 15 | 31 |
| 18:45 - 18:59 | 15 | 15 | 30 |
| 19:00 - 19:14 | 14 | 9 | 23 |
| 19:15 - 19:29 | 12 | 13 | 25 |
| 19:30 - 19:44 | 14 | 7 | 21 |
| 19:45 - 19:59 | 9 | 10 | 19 |
| 20:00 - 20:14 | 6 | 12 | 18 |
| 20:15 - 20:29 | 6 | 7 | 13 |
| 20:30 - 20:44 | 7 | 8 | 15 |
| 20:45 - 20:59 | 4 | 9 | 13 |
| 21:00 - 21:14 | 9 | 9 | 18 |
| 21:15 - 21:29 | 4 | 8 | 12 |
| 21:30 - 21:44 | 2 | 16 | 18 |
| 21:45 - 21:59 | 1 | 14 | 15 |
| 22:00 - 22:14 | 2 | 7 | 9 |
| 22:15 - 22:29 | 8 | 8 | 16 |
| 22:30 - 22:44 | 6 | 7 | 13 |
| 22:45 - 22:59 | 3 | 7 | 10 |
| 23:00 - 23:14 | 3 | 3 | 6 |
| 23:15 - 23:29 | 6 | 8 | 14 |
| 23:30 - 23:44 | 1 | 4 | 5 |
| 23:45 - 23:59 | 4 | 12 | 16 |
| Totals | 3126 | 3005 | 6131 |
| AM Peak Time | 06:25 - 07:24 | 04:08 - 05:07 | 04:01 - 05:00 |
| AM Peak Volume | 267 | 252 | 489 |
| PM Peak Time | 12:55 - 13:54 | 12:02 - 13:01 | 12:01 - 13:00 |
| PM Peak Volume | 233 | 170 | 394 |

Daily Vehicle Volume Report

Study Date: Thursday, 07/07/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|---------------|----------------------|----------------------|-----------------|
| 00:00 - 00:14 | 5 | 4 | 9 |
| 00:15 - 00:29 | 9 | 5 | 14 |
| 00:30 - 00:44 | 6 | 5 | 11 |
| 00:45 - 00:59 | 4 | 8 | 12 |
| 01:00 - 01:14 | 7 | 8 | 15 |
| 01:15 - 01:29 | 10 | 16 | 26 |
| 01:30 - 01:44 | 12 | 9 | 21 |
| 01:45 - 01:59 | 13 | 24 | 37 |
| 02:00 - 02:14 | 22 | 31 | 53 |
| 02:15 - 02:29 | 20 | 37 | 57 |
| 02:30 - 02:44 | 27 | 30 | 57 |
| 02:45 - 02:59 | 21 | 55 | 76 |
| 03:00 - 03:14 | 30 | 61 | 91 |
| 03:15 - 03:29 | 30 | 49 | 79 |
| 03:30 - 03:44 | 30 | 63 | 93 |
| 03:45 - 03:59 | 44 | 51 | 95 |
| 04:00 - 04:14 | 63 | 81 | 144 |
| 04:15 - 04:29 | 66 | 47 | 113 |
| 04:30 - 04:44 | 61 | 73 | 134 |
| 04:45 - 04:59 | 71 | 58 | 129 |
| 05:00 - 05:14 | 61 | 48 | 109 |
| 05:15 - 05:29 | 48 | 40 | 88 |
| 05:30 - 05:44 | 48 | 47 | 95 |
| 05:45 - 05:59 | 55 | 38 | 93 |
| 06:00 - 06:14 | 43 | 40 | 83 |
| 06:15 - 06:29 | 64 | 36 | 100 |
| 06:30 - 06:44 | 56 | 63 | 119 |
| 06:45 - 06:59 | 58 | 34 | 92 |
| 07:00 - 07:14 | 81 | 57 | 138 |
| 07:15 - 07:29 | 53 | 43 | 96 |
| 07:30 - 07:44 | 61 | 62 | 123 |
| 07:45 - 07:59 | 79 | 41 | 120 |
| 08:00 - 08:14 | 75 | 54 | 129 |
| 08:15 - 08:29 | 53 | 57 | 110 |
| 08:30 - 08:44 | 54 | 43 | 97 |
| 08:45 - 08:59 | 64 | 40 | 104 |
| 09:00 - 09:14 | 1 | 2 | 3 |
| 09:15 - 09:29 | - | - | - |
| 09:30 - 09:44 | - | - | - |
| 09:45 - 09:59 | - | - | - |
| 10:00 - 10:14 | - | - | - |
| 10:15 - 10:29 | - | - | - |
| 10:30 - 10:44 | - | - | - |
| 10:45 - 10:59 | - | - | - |
| 11:00 - 11:14 | - | - | - |
| 11:15 - 11:29 | - | - | - |
| 11:30 - 11:44 | - | - | - |
| 11:45 - 11:59 | - | - | - |
| 12:00 - 12:14 | - | - | - |
| 12:15 - 12:29 | - | - | - |
| 12:30 - 12:44 | - | - | - |
| 12:45 - 12:59 | - | - | - |

NB max = 274 vph

add 3 hours = 11:45 am

Daily Vehicle Volume Report

Study Date: Thursday, 07/07/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|----------------|----------------------|----------------------|-----------------|
| 13:00 - 13:14 | - | - | - |
| 13:15 - 13:29 | - | - | - |
| 13:30 - 13:44 | - | - | - |
| 13:45 - 13:59 | - | - | - |
| 14:00 - 14:14 | - | - | - |
| 14:15 - 14:29 | - | - | - |
| 14:30 - 14:44 | - | - | - |
| 14:45 - 14:59 | - | - | - |
| 15:00 - 15:14 | - | - | - |
| 15:15 - 15:29 | - | - | - |
| 15:30 - 15:44 | - | - | - |
| 15:45 - 15:59 | - | - | - |
| 16:00 - 16:14 | - | - | - |
| 16:15 - 16:29 | - | - | - |
| 16:30 - 16:44 | - | - | - |
| 16:45 - 16:59 | - | - | - |
| 17:00 - 17:14 | - | - | - |
| 17:15 - 17:29 | - | - | - |
| 17:30 - 17:44 | - | - | - |
| 17:45 - 17:59 | - | - | - |
| 18:00 - 18:14 | - | - | - |
| 18:15 - 18:29 | - | - | - |
| 18:30 - 18:44 | - | - | - |
| 18:45 - 18:59 | - | - | - |
| 19:00 - 19:14 | - | - | - |
| 19:15 - 19:29 | - | - | - |
| 19:30 - 19:44 | - | - | - |
| 19:45 - 19:59 | - | - | - |
| 20:00 - 20:14 | - | - | - |
| 20:15 - 20:29 | - | - | - |
| 20:30 - 20:44 | - | - | - |
| 20:45 - 20:59 | - | - | - |
| 21:00 - 21:14 | - | - | - |
| 21:15 - 21:29 | - | - | - |
| 21:30 - 21:44 | - | - | - |
| 21:45 - 21:59 | - | - | - |
| 22:00 - 22:14 | - | - | - |
| 22:15 - 22:29 | - | - | - |
| 22:30 - 22:44 | - | - | - |
| 22:45 - 22:59 | - | - | - |
| 23:00 - 23:14 | - | - | - |
| 23:15 - 23:29 | - | - | - |
| 23:30 - 23:44 | - | - | - |
| 23:45 - 23:59 | - | - | - |
| Totals | 1505 | 1460 | 2965 |
| AM Peak Time | 06:58 - 07:57 | 04:00 - 04:59 | 04:00 - 04:59 |
| AM Peak Volume | 279 | 259 | 520 |
| PM Peak Time | N/A | N/A | N/A |
| PM Peak Volume | 0 | 0 | 0 |

Daily Vehicle Volume Report

**Multiple by Peak Season Conversion Factor (PSCF)
for SR-31 (1.13) and 2% growth rate. Counts taken on
7/5 to 7/7/2022**

$$538 * 1.13 * 1.02 = 620 \text{ vph}$$

Existing Level of Service Calculation:

$$PHF = 538 / (155 * 4) = 86.8\%$$

Posted Speed limit = 60 mph

One direction (SB) peak hourly flow (adjusted by PSCF and 2% growth rate) =
 $277 * (1.13) * (1.02) = 320 \text{ vph}$

Trucks = 41.3% (From FDOT Online Site 010041, see below)

Free Flow Speed = assume 5 mph greater than posted = 65 mph

$$fhv = 1 / (1 + 41.3\% (1.5 - 1)) = 0.829 \text{ HCM Eq 11-2}$$

Passenger Car Equivalent flow rate = $320 / (86.8\% * 1 * 0.829 * 1)$ **HCM Eq 11-3**
= 445 pcphpl

$$\text{Density} = 445 \text{ pcphpl} / 65 \text{ mph} = 6.85 \text{ pcpmpl}$$

PER HCM Exhibit 10-6 and NCHRP 825 Exhibit 26 = **LOS B**

Note: Density range for LOS B is 6 to 14 pcpmpl

Exhibit 26. Level of service criteria for freeway facilities.

| Level of Service | Urban/Suburban Freeway Average Facility or Section Density (pc/mi/ln) | Rural Freeway Average Facility or Section Density (pc/mi/ln) |
|------------------|---|--|
| A | ≤ 11 | ≤ 6 |
| B | >11–18 | >6–14 |
| C | >18–26 | >14–22 |
| D | >26–35 | >22–29 |
| E | >35–45 | >29–39 |
| F | >45 or any section has $d/c > 1.00$ | >39 or any section has $d/c > 1.00$ |

Source: Adapted from HCM Exhibit 10-6.
Note: d/c = demand-to-capacity ratio.

Proposed Level of Service Calculation:

$$PHF = 538 / (155 * 4) = 86.8\%$$

Posted Speed limit = 60 mph

One direction (NB) peak hourly flow including the volume generated by the project (assumes the worse case with 31 vph added per lane)
= $320 \text{ vph} + 31 \text{ vph} = 351 \text{ vph}$

$$\text{Trucks} = 46.5\% = ((41.3\% * 320 + 31) / 351)$$

Free Flow Speed = assume 5 mph greater than posted = 65 mph

$$fhv = 1 / (1 + 46.5\% (1.5 - 1)) = 0.811 \text{ HCM Eq 11-2}$$

Passenger Car Equivalent flow rate = $351 / (86.8\% * 1 * 0.807 * 1)$ **HCM Eq 11-3**
= 499 pcphpl

$$\text{Density} = 499 \text{ pcphpl} / 65 \text{ mph} = 7.68 \text{ pcpmpl}$$

PER HCM Exhibit 10-6 and NCHRP 825 Exhibit 26 = **LOS B**

Note: Density range for LOS B is 6 to 14 pcpmpl

COUNTY: 01
STATION: 0041
DESCRIPTION: SR 31, NORTH OF CR 74
START DATE: 02/09/2021
START TIME: 1300

| TIME | DIRECTION: N | | | | | DIRECTION: S | | | | | COMBINED TOTAL | |
|-----------------|--------------|-----|-----|-----|-------|--------------|-----|-----|-----|-------|-------------------|------|
| | 1ST | 2ND | 3RD | 4TH | TOTAL | 1ST | 2ND | 3RD | 4TH | TOTAL | | |
| 0000 | 8 | 4 | 2 | 3 | 17 | 2 | 1 | 1 | 1 | 5 | 22 | |
| 0100 | 0 | 2 | 1 | 0 | 3 | 3 | 1 | 3 | 2 | 9 | 12 | |
| 0200 | 2 | 1 | 2 | 3 | 8 | 2 | 5 | 6 | 8 | 21 | 29 | |
| 0300 | 3 | 6 | 4 | 5 | 18 | 6 | 7 | 9 | 4 | 26 | 44 | |
| 0400 | 7 | 7 | 15 | 11 | 40 | 10 | 12 | 16 | 12 | 50 | 90 | |
| 0500 | 11 | 24 | 40 | 37 | 112 | 17 | 21 | 30 | 40 | 108 | 220 | |
| 0600 | 26 | 41 | 44 | 36 | 147 | 51 | 50 | 43 | 47 | 191 | 338 | |
| 0700 | 34 | 31 | 28 | 31 | 124 | 33 | 48 | 38 | 37 | 156 | 280 | |
| 0800 | 35 | 29 | 32 | 36 | 132 | 26 | 47 | 34 | 44 | 151 | 283 | |
| 0900 | 42 | 30 | 26 | 31 | 129 | 20 | 33 | 47 | 35 | 135 | 264 | |
| 1000 | 35 | 34 | 39 | 33 | 141 | 28 | 40 | 38 | 27 | 133 | 274 | |
| 1100 | 49 | 35 | 34 | 28 | 146 | 31 | 28 | 43 | 35 | 137 | 283 | |
| 1200 | 27 | 29 | 31 | 27 | 114 | 23 | 46 | 21 | 32 | 122 | 236 | |
| 1300 | 52 | 50 | 39 | 35 | 176 | 44 | 35 | 49 | 37 | 165 | 341 | |
| 1400 | 41 | 32 | 50 | 26 | 149 | 37 | 39 | 49 | 38 | 163 | 312 | |
| 1500 | 41 | 39 | 41 | 40 | 161 | 43 | 32 | 33 | 42 | 150 | 311 | |
| 1600 | 33 | 32 | 37 | 40 | 142 | 43 | 43 | 45 | 39 | 170 | 312 | |
| 1700 | 42 | 28 | 41 | 35 | 146 | 42 | 43 | 40 | 29 | 154 | 300 | |
| 1800 | 29 | 27 | 30 | 31 | 117 | 38 | 30 | 24 | 22 | 114 | 231 | |
| 1900 | 30 | 24 | 25 | 19 | 98 | 24 | 20 | 14 | 12 | 70 | 168 | |
| 2000 | 12 | 11 | 12 | 7 | 42 | 17 | 17 | 11 | 13 | 58 | 100 | |
| 2100 | 5 | 15 | 7 | 10 | 37 | 13 | 10 | 9 | 12 | 44 | 81 | |
| 2200 | 2 | 5 | 7 | 6 | 20 | 11 | 5 | 6 | 0 | 22 | 42 | |
| 2300 | 10 | 7 | 3 | 6 | 26 | 5 | 14 | 5 | 2 | 26 | 52 | |
| 24-HOUR TOTALS: | | | | | 2245 | | | | | | 2380 | 4625 |

| PEAK VOLUME INFORMATION | | | | | | |
|-------------------------|------|--------|--------------|--------|---------------------|--------|
| DIRECTION: N | | | DIRECTION: S | | COMBINED DIRECTIONS | |
| A.M. | HOUR | VOLUME | HOUR | VOLUME | HOUR | VOLUME |
| | 830 | 140 | 645 | 166 | 645 | 295 |
| P.M. | 1300 | 176 | 1545 | 173 | 1300 | 341 |
| DAILY | 1300 | 176 | 600 | 191 | 1300 | 341 |

| | | | |
|------------------|-------|-------|-------|
| TRUCK PERCENTAGE | 41.16 | 41.43 | 41.30 |
|------------------|-------|-------|-------|

| CLASSIFICATION SUMMARY DATABASE | | | | | | | | | | | | | | | | |
|---------------------------------|----|-----|-----|---|-----|-----|-----|-----|-----|----|----|----|----|----|----|---------------|
| DIR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | TOTTRK TOTVOL |
| N | 45 | 720 | 556 | 5 | 203 | 182 | 24 | 126 | 332 | 32 | 15 | 2 | 3 | 0 | 0 | 924 2245 |
| S | 26 | 770 | 598 | 7 | 215 | 100 | 111 | 137 | 374 | 18 | 17 | 4 | 3 | 0 | 0 | 986 2380 |

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 0104 SR 31

| WEEK | DATES | SF | MOCF: 0.96 PSCF |
|------|-------------------------|------|--------------------|
| 1 | 01/01/2021 - 01/02/2021 | 0.94 | 0.98 |
| 2 | 01/03/2021 - 01/09/2021 | 1.00 | 1.04 |
| 3 | 01/10/2021 - 01/16/2021 | 1.07 | 1.11 |
| 4 | 01/17/2021 - 01/23/2021 | 1.05 | 1.09 |
| 5 | 01/24/2021 - 01/30/2021 | 1.04 | 1.08 |
| 6 | 01/31/2021 - 02/06/2021 | 1.02 | 1.06 |
| 7 | 02/07/2021 - 02/13/2021 | 1.01 | 1.05 |
| 8 | 02/14/2021 - 02/20/2021 | 0.99 | 1.03 |
| 9 | 02/21/2021 - 02/27/2021 | 0.98 | 1.02 |
| 10 | 02/28/2021 - 03/06/2021 | 0.97 | 1.01 |
| 11 | 03/07/2021 - 03/13/2021 | 0.96 | 1.00 |
| 12 | 03/14/2021 - 03/20/2021 | 0.95 | 0.99 |
| 13 | 03/21/2021 - 03/27/2021 | 0.96 | 1.00 |
| 14 | 03/28/2021 - 04/03/2021 | 0.97 | 1.01 |
| 15 | 04/04/2021 - 04/10/2021 | 0.98 | 1.02 |
| 16 | 04/11/2021 - 04/17/2021 | 0.99 | 1.03 |
| 17 | 04/18/2021 - 04/24/2021 | 0.99 | 1.03 |
| 18 | 04/25/2021 - 05/01/2021 | 0.99 | 1.03 |
| 19 | 05/02/2021 - 05/08/2021 | 1.00 | 1.04 |
| 20 | 05/09/2021 - 05/15/2021 | 1.00 | 1.04 |
| 21 | 05/16/2021 - 05/22/2021 | 1.01 | 1.05 |
| 22 | 05/23/2021 - 05/29/2021 | 1.01 | 1.05 |
| 23 | 05/30/2021 - 06/05/2021 | 1.02 | 1.06 |
| 24 | 06/06/2021 - 06/12/2021 | 1.03 | 1.07 |
| 25 | 06/13/2021 - 06/19/2021 | 1.04 | 1.08 |
| 26 | 06/20/2021 - 06/26/2021 | 1.05 | 1.09 |
| 27 | 06/27/2021 - 07/03/2021 | 1.07 | 1.11 |
| 28 | 07/04/2021 - 07/10/2021 | 1.08 | 1.13 |
| 29 | 07/11/2021 - 07/17/2021 | 1.10 | 1.15 |
| 30 | 07/18/2021 - 07/24/2021 | 1.09 | 1.14 |
| 31 | 07/25/2021 - 07/31/2021 | 1.09 | 1.14 |
| 32 | 08/01/2021 - 08/07/2021 | 1.08 | 1.13 |
| 33 | 08/08/2021 - 08/14/2021 | 1.08 | 1.13 |
| 34 | 08/15/2021 - 08/21/2021 | 1.07 | 1.11 |
| 35 | 08/22/2021 - 08/28/2021 | 1.06 | 1.10 |
| 36 | 08/29/2021 - 09/04/2021 | 1.06 | 1.10 |
| 37 | 09/05/2021 - 09/11/2021 | 1.05 | 1.09 |
| 38 | 09/12/2021 - 09/18/2021 | 1.04 | 1.08 |
| 39 | 09/19/2021 - 09/25/2021 | 1.02 | 1.06 |
| *40 | 09/26/2021 - 10/02/2021 | 1.01 | 1.05 |
| *41 | 10/03/2021 - 10/09/2021 | 0.99 | 1.03 |
| *42 | 10/10/2021 - 10/16/2021 | 0.97 | 1.01 |
| *43 | 10/17/2021 - 10/23/2021 | 0.96 | 1.00 |
| *44 | 10/24/2021 - 10/30/2021 | 0.96 | 1.00 |
| *45 | 10/31/2021 - 11/06/2021 | 0.95 | 0.99 |
| *46 | 11/07/2021 - 11/13/2021 | 0.94 | 0.98 |
| *47 | 11/14/2021 - 11/20/2021 | 0.94 | 0.98 |
| *48 | 11/21/2021 - 11/27/2021 | 0.94 | 0.98 |
| *49 | 11/28/2021 - 12/04/2021 | 0.94 | 0.98 |
| *50 | 12/05/2021 - 12/11/2021 | 0.94 | 0.98 |
| *51 | 12/12/2021 - 12/18/2021 | 0.94 | 0.98 |
| *52 | 12/19/2021 - 12/25/2021 | 1.00 | 1.04 |
| 53 | 12/26/2021 - 12/31/2021 | 1.07 | 1.11 |

* PEAK SEASON

08-MAR-2022 12:36:21

830UPD

1_0104_PKSEASON.TXT

SOUTHWEST ENGINEERING AND DESIGN
PROTECTED SPECIES ASSESSMENT

Section 23, Township 40S, Range 25E

Chastain 640-Acre Excavation
Charlotte County, Florida



December 2022

Prepared for:
Southwest Engineering and Design
25450 Airport Road, Suite B
Punta Gorda, FL 33950

Prepared by:
Alexander Guzman
25450 Airport Road, Suite B
Punta Gorda, FL 33950
(941) 812-3610

Introduction

The following assessment has been prepared to identify onsite vegetative communities and address wildlife species listed by the Florida Fish and Wildlife Conservation Commission (FWC) and the U.S. Fish and Wildlife Service (FWS) as endangered or threatened, which may be utilizing the subject property.

The subject property is located in Section 23, Township 40S, Range 25E within Charlotte County, Florida. More specifically, the project is located north of Bermont Road, west of SR-31, east of Wild Pepper Court, and south of Ryals Ranch Road in northeastern Charlotte County, Florida. Please refer to the attached PROJECT LOCATION MAP.

Site Conditions

A site inspection was conducted by a qualified staff environmentalist in December 2022. During the pedestrian transect survey, temperatures ranged from 85- 90 °F, winds were 5- 10 mph, and skies were clear.

Vegetative Classifications

Field Observations, along with utilizing the Charlotte County Soil Survey and aerial photographs, were used to develop a map of the on-site vegetative communities. The following table conveys the vegetative association found on the subject property. These vegetative communities were identified and classified using the Florida Land Use Cover and Forms Classification System (FLUCCS). A description for each of the on-site vegetative communities is included. Please refer to the Protected Species Assessment Map.

| FLUCCS ID | FLUCCS DESCRIPTION | ACREAGE |
|--------------|---------------------|-----------------|
| 150 | Industrial | 1.60 ± |
| 211 | Improved Pastures | 187.26 ± |
| 223 | Other Groves | 359.83 ± |
| 320 | Shrub and Brushland | 22.91 ± |
| 510D | Ditch | 63.12 ± |
| 641 | Freshwater Marsh | 6.12 ± |
| 8145 | Roads and Highways | 5.20 ± |
| Total | | 646.04 ± |

FLUCCS 150 – Industrial

This upland habitat lacks a significant canopy and/or midstory. Groundcover present includes common lawn ornamentals and some invasive weeds, such as broadleaf carpetgrass (*Axonopus compressus*), torpedo grass (*Panicum repens*), tall flatsedge (*Cyperus eragrostis*), Bahia grass (*Paspalum notatum*), and St. Augustine's grass (*Stenotaphrum secundatum*). This area is being used as a staging area for the existing farmland.

FLUCCS 211 – Improved Pastures

This upland habitat lacks a significant canopy and/or midstory. Groundcover species present include: tall flatsedge (*Cyperus eragrostis*), hairy beggarticks (*Bidens pilosa*), Bahia grass (*Paspalum notatum*), torpedo grass (*Panicum repens*), straw-colored flatsedge (*Cyperus strigosus*), and annual ragweed (*Ambrosia artemisiifolia*). This area was used as cropland, and has been cleared and tilled.

FLUCCS 223 – Other Groves

This upland habitat lacks a significant canopy and/or midstory. Groundcover is dominated by tomato (*Solanum lycopersicum* L.), however, also contains scattered hairy beggarticks (*Bidens pilosa*), torpedo grass (*Panicum repens*), annual ragweed (*Ambrosia artemisiifolia*), and tall flatsedge (*Cyperus eragrostis*).

FLUCCS 320 – Shrub and Brushland

This upland habitat lacks a significant canopy, however, contains scattered cabbage palmetto (*Sabal palmetto*), slash pine (*Pinus elliottii*), and longleaf pine (*Pinus palustris*). Midstory and groundcover species present include: saw palmetto (*Serenoa repens*), rose myrtle (*Rhodomyrtus tomentosa*), muscadine (*Vitis rotundifolia*), sawtooth blackberry (*Rubus argutus*), laurel greenbrier (*Smilax laurifolia*), wax myrtle (*Myrica cerifera*), gallberry (*Ilex glabra*), and tall flatsedge (*Cyperus eragrostis*).

FLUCCS 510D – Ditch

This man-made surface water habitat lacks a significant canopy and/or midstory. Aquatic plant species present include: yellow water-lily (*Nuphar lutea*), marsh seedbox (*Ludwigia palustris*), southern cattail (*Typha domingensis*), Mexican primrose-willow (*Ludwigia octovalvis*), Virginia pepperweed (*Lepidium virginicum*), and broadleaf cattail (*Typha latifolia*).

FLUCCS 641 – Freshwater Marsh

This wetland habitat contains a canopy dominated by Carolina plain willow (*Salix caroliniana*). Midstory and groundcover/aquatic species present include: southern cattail (*Typha domingensis*), common spikerush (*Eleocharis palustris*), reed-canary grass (*Phalaris arundinacea*), broadleaf cattail (*Typha latifolia*), marsh seedbox (*Ludwigia palustris*), pickerelweed (*Pontederia cordata*), Mexican primrose-willow (*Ludwigia octovalvis*), bull-tongue arrowhead (*Sagittaria lancifolia*), and torpedo grass (*Panicum repens*).

FLUCCS 8145 – Roads and Highways

This upland habitat lacks any significant vegetation, and is used for transportation between pastures.

Survey Method

To provide 80 percent coverage of the site, a linear and non-linear overlapping transects were completed along the subject property, per FWC guidelines. Evidence of protected species was gathered through, not only direct observation, but also through observation of signs such as fecal matter, tracks, nests, and burrows. If evidence of utilization by a protected species, an aerial photograph was marked depicting the approximate location. In addition, a search through the available online resources was conducted to reveal the previously documented protected species which may be utilizing the subject property. These resources included: FWC Historical Bald Eagle Nesting Areas, Charlotte County Scrub Jay Permit Boundary, FWS Panther Consultation Area Map, FWS Wood Stork Colony Map, FWS Red-cockaded Woodpecker Consultation Area Map, FWS Crested Caracara Consultation Area Map, FWS Florida bonneted bat Consultation Area Map and the FWS Piping Plover Consultation Area Map. In the event that the parcel contained suitable habitat for listed protected species, or if the site was in close proximity to the consultation areas, additional consultation was providing during the site assessment.

Survey Results

Search of available online resources revealed that the subject property and proposed project area is located within an 18.6-mile radius of multiple core foraging areas for wood stork (*Mycteria americana*) nesting colonies. The closest of the documented wood stork colonies is within 11 ± miles west of the proposed project area. Relative to the subject parcel, the proximity of the off-site nesting colonies will not likely affect the future development of the property.

Search of available online resources revealed that the proposed project area is not located within the Consultation Area of the Florida Scrub-Jay (*Aphelocoma coerulescens*). Further review of the Charlotte County and Lee County Scrub Jay Permit Boundaries revealed the subject property is not a Florida Scrub-Jay review area, therefore, will not require additional review or permitting relative to the species. Therefore, the Florida Scrub-jay will not likely affect future development of the subject property.

Search of available online resources revealed that the proposed project area is located within the FWS Crested Caracara (*Caracara cheriway*) Consultation Area. During the on-site pedestrian transect survey, no evidence of nesting activity or utilization by the crested caracara was observed. The crested caracara is not anticipated to be utilizing the subject property; therefore, the crested caracara will not likely affect future development. However, applicable regulatory agencies may require a species-specific survey prior to development on the subject property.

Search of available online resources revealed the subject property is located within the Florida bonneted bat (*Eumops floridanus*) FWS Consultation Area. No evidence of utilization by the Florida bonneted bat was observed on-site during the pedestrian transect survey. However, if future development of the subject parcel requires federal authorizations or permitting,

consultation with the FWS might be mandatory, requiring project review and approval prior to development.

Search of the Audubon Society Eagle Watch Nest Map website revealed the presence of bald eagle nest CH039, approximately $0.77 \pm$ miles north of the subject parcel. The approximate location of the nest is provided on the attached Protected Species Assessment Map. Nest CH039 was not monitored during the 2021-2022 nesting season, and the nest status was unknown for the 2022 season. Due to the secluded status of the proximal eagles' nests ($>660'$), relative to the proposed project area, coordination with the FWS will not likely be required prior to development of the subject parcel. If future development of the subject parcel requires federal authorizations, consultation with the FWS will be required and will likely entail additional permitting and protection measures relative to the bald eagle.

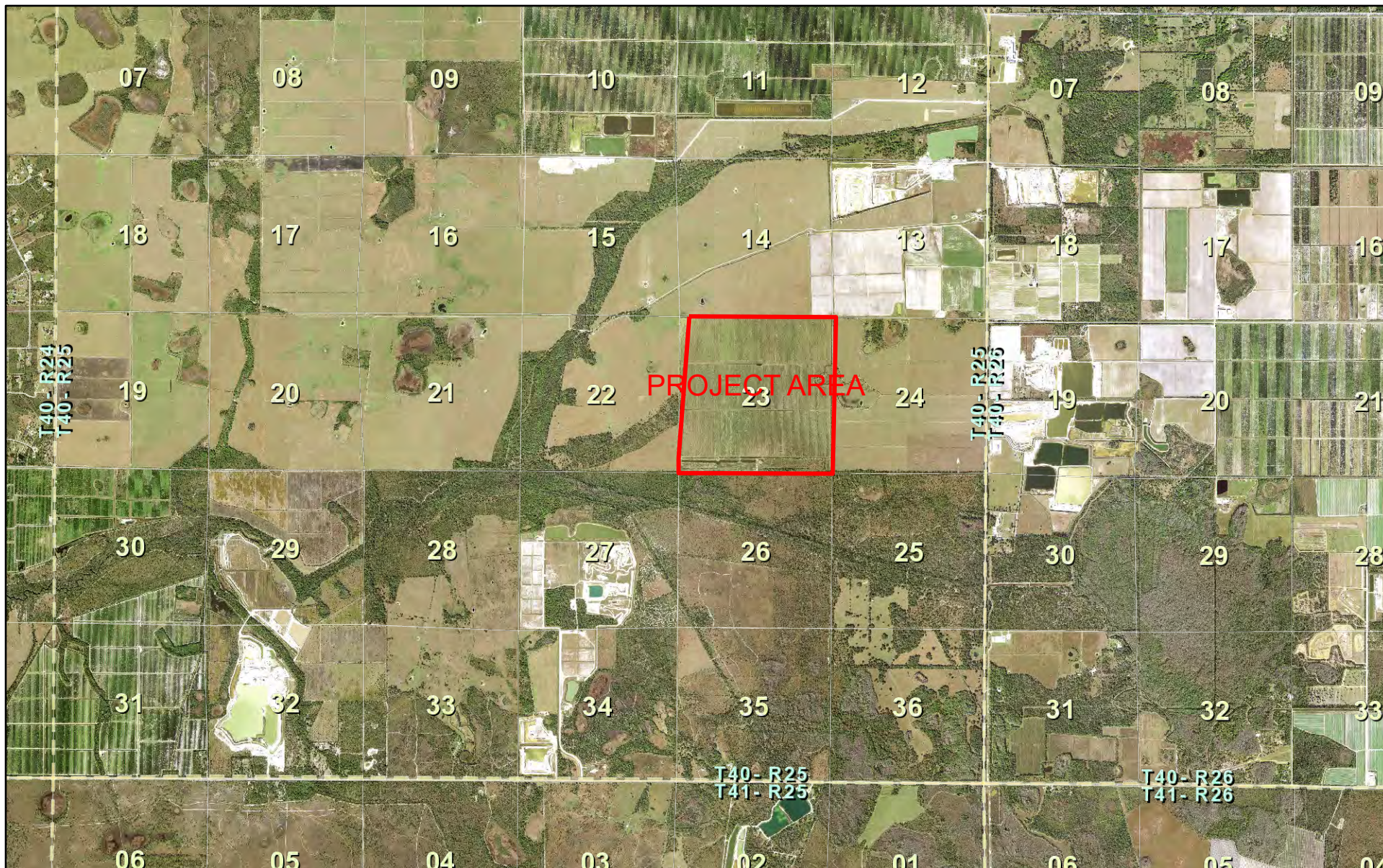
The site contains upland habitats which could potentially be utilized by the gopher tortoise (*Gopherus polyphemus*). No potentially occupied gopher tortoise burrows were observed during the pedestrian transect survey, however, if gopher tortoise (*Gopherus polyphemus*) burrows are found on-site prior to development, a 100% gopher tortoise survey and relocation permit from the Florida Fish and Wildlife Conservation Commission will be required prior to development of the site if gopher tortoise burrows cannot be avoided during construction.

Other Listed Species



A review of the FWC listed species occurrence database (July 2020) indicates that some state or federally listed species occur on-site or adjacent to the subject property. Protected species or evidence of protected species utilization which would require permits from the FWC or FWS were directly observed on-site during December 8, 2022 pedestrian transect survey.

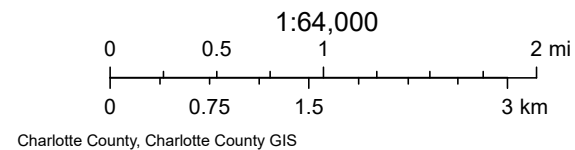
Wetland habitats were identified during the pedestrian transect survey. Coordination with the Florida Department of Environmental Protection (FDEP) and the Southwest Florida Water Management District (SWFWMD), relative to on-site wetlands or surface water habitats, will likely be required prior to site development. Each acre of impact, for this typical wetland, will require one acre of wetland enhancement. The on-site wetland is considered a Freshwater Marsh dominated by Carolina plain willow () and southern cattail () and, if impacted, will require the purchase of mitigation credits. However, the on-site wetland already contains a buffer area with ditching, to avoid any potential impacts to the native vegetation and water table.

Project Location Map - Chastain 640-Acre Excavation

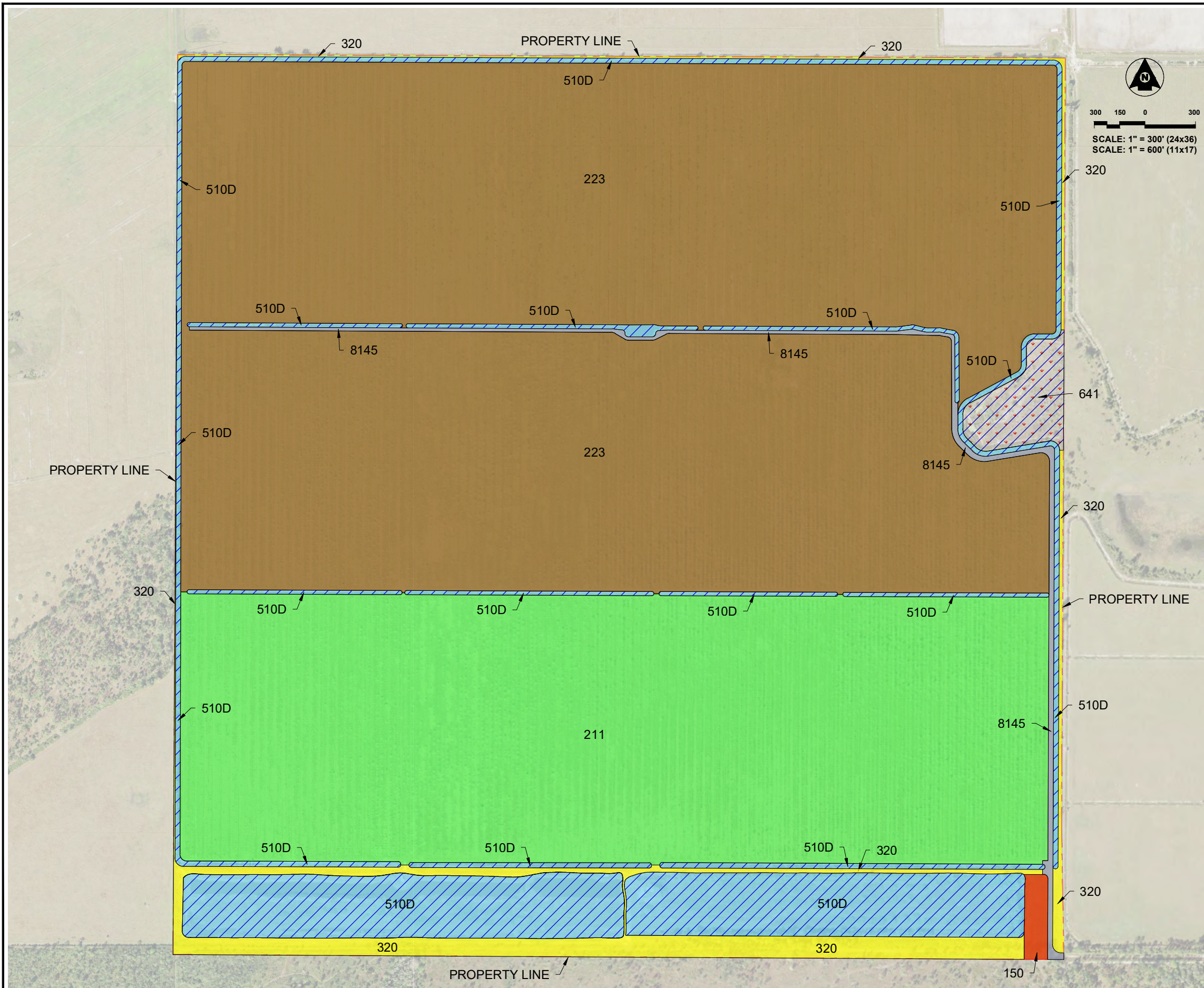


January 13, 2023

-  Override 1
-  City of Punta Gorda Boundary




1/6/2023 11:26:46 AM - P:22-0593 - CHASTAIN 640 ACRE EXCAVATION (RALPH)DESIGN/CADD/SPECIAL DRAWINGS/FLUCCS MAP.DWG - RONALD GARABRANDT



LEGEND

| FLUCCS DISCRIPTION | ACREAGE |
|---------------------------|----------|
| • 150 - INDUSTRIAL | 1.60 ± |
| • 211 - IMPROVED PASTURES | 187.26 ± |
| • 223 - OTHER GROVES | 359.83 ± |
| • 320 - SHRUB & BRUSHLAND | 22.91 ± |
| • 510D - DITCH | 63.12 ± |
| • 641 - FRESHWATER MARSH | 6.12 ± |
| • 8145 - ROADS & HIGHWAYS | 5.20 ± |
| TOTAL = 646.04 ± | |

 WETLAND / OTHER SURFACE WATER 69.24 ±

NOTES

- FOR PERMIT USE ONLY, NOT FOR CONSTRUCTION.
- PROJECT BOUNDARY IS APPROXIMATE AND OBTAINED FROM CHARLOTTE COUNTY GIS.
- MAPPING APPROXIMATE AND BASED ON INTERPETATION OF 2017 AERIAL PHOTOGRAPHY AT 1" = 20' SCALE.
- THE DELINEATION OF ANY ON-SITE WETLANDS, SURFACE WATERS AND/OR OTHER SURFACE WATERS (IF APPLICABLE) IS PRELIMINARY AND SUBJECT TO REVIEW BY APPLICABLE REGULATORY AGENCIES.



25450 Airport Road, Suite B
Punta Gorda, Florida 33950
Tel. (941) 637-9655 | Fax (941) 637-1149
www.sedfl.com
Certificate of Authorization No. 26551

| | |
|-------------------|---------|
| Project No.: | 22-0593 |
| Project Manager: | G W B |
| Project Engineer: | G W B |
| Project Designer: | - |
| Checked By: | - |
| Approved By: | G W B |

| REV. | DATE | BY | CK'D | DESCRIPTION |
|------|------|----|------|-------------|
| | | | | |
| | | | | |
| | | | | |

CHASTAIN AG EXCAVATION FLUCCS MAP

PUNTA GORDA

SECTIONS 23, TOWNSHIP 40 SOUTH, RANGE 25 EAST

FLORIDA

GARY W. BAYNE, P.E.
FLORIDA REG No. 62474

| | | | |
|--------------|-----------|--------|----------|
| DATE: | DEC, 2022 | SCALE: | AS NOTED |
| PROJECT No.: | 22-0593 | | |
| | SHEET: | 1 | |


Depth to Water Table—Charlotte County, Florida (Soils - Chastain 640-Acre Excavation)



Depth to Water Table—Charlotte County, Florida
(Soils - Chastain 640-Acre Excavation)








MAP LEGEND

Area of Interest (AOI)



 Area of Interest (AOI)

Soils







Soil Rating Polygons


-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Lines


-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

Soil Rating Points






-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200

 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: Charlotte County, Florida

Survey Area Data: Version 21, Sep 1, 2022

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

Date(s) aerial images were photographed: Feb 4, 2021—Mar 2, 2022

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.

Depth to Water Table

| Map unit symbol | Map unit name | Rating (centimeters) | Acres in AOI | Percent of AOI |
|------------------------------------|--|----------------------|--------------|----------------|
| 9 | EauGallie sand, 0 to 2 percent slopes | 31 | 350.4 | 56.0% |
| 26 | Pineda-Pineda, wet, fine sand, 0 to 2 percent slopes | 30 | 46.4 | 7.4% |
| 33 | Oldsmar sand, 0 to 2 percent slopes | 30 | 188.7 | 30.2% |
| 34 | Malabar fine sand, 0 to 2 percent slopes | 15 | 9.9 | 1.6% |
| 35 | Wabasso sand, 0 to 2 percent slopes | 31 | 24.6 | 3.9% |
| 73 | Pineda fine sand, frequently ponded, 0 to 1 percent slopes | 0 | 5.4 | 0.9% |
| Totals for Area of Interest | | | 625.6 | 100.0% |

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Traffic Impact Statement for Chastain Excavation, 646 Acre (PID: 402523200001)

Prepared For:
Southwest Engineering and Design
25450 Airport Road, Suite 8
Punta Gorda, Florida 33950
941-637-9655 Ph
941-637-1149 Fx

Prepared By:
Protean Design Group, Inc.
201 West Marion Avenue, Suite 1201
Punta Gorda, FL 33950
o: 941.676.8448

October 2023

This item has been digitally signed and sealed by:



On the date adjacent to the seal
Printed copies of this document are not considered
signed and sealed and the signature must be verified
on any electronic copies.

Protean Design Group, Inc.
201 West Marion Avenue, Suite 1201
Punta Gorda, FL 33950
Laura A. Rossi, P.E. NO. 82403, P.T.O.E.

Table of Contents

| | |
|--|----|
| Overview..... | 3 |
| Figure 1: Development Location | 3 |
| Existing Condition | 4 |
| Figure 2: Existing Property | 4 |
| Proposed Condition and Trip Generation..... | 5 |
| Figure 3: Proposed Excavation (Appendix A)..... | 5 |
| Calculation 1: Excavation Volume vs. Trucks Leaving | 6 |
| Table 1: Trip Generation | 6 |
| Trip Distribution on SR 31..... | 6 |
| Figure 4: Peak Hour Trip Distribution at Driveway | 7 |
| Trip Distribution on Bermont Road/ CR-74 | 7 |
| Adjacent Roadway Level of Service (LOS) | 7 |
| Table 2: No-Build vs. Build LOS Bermont Road/ CR-74 Analysis | 9 |
| Turn Lane Warrant Analysis | 10 |
| Right Turn Lane: | 10 |
| Left Turn Lane: | 10 |
| Figure 5: Volume Warrants for Left-Turn Storage Lanes At Unsignalized Grade Intersections..... | 12 |
| Conclusion | 12 |

List of Appendices

| | |
|---|-----------|
| <i>Appendix A- Proposed Excavation.....</i> | <i>13</i> |
| <i>Appendix B – Roadway Level of Service (LOS) Data</i> | <i>15</i> |

Overview

This is a traffic impact statement for a proposed excavation on PID # 402523200001. This excavation is proposed on 646-acres of property located within Charlotte County, FL just 1 mile west of SR-31. See Figure 1 below.

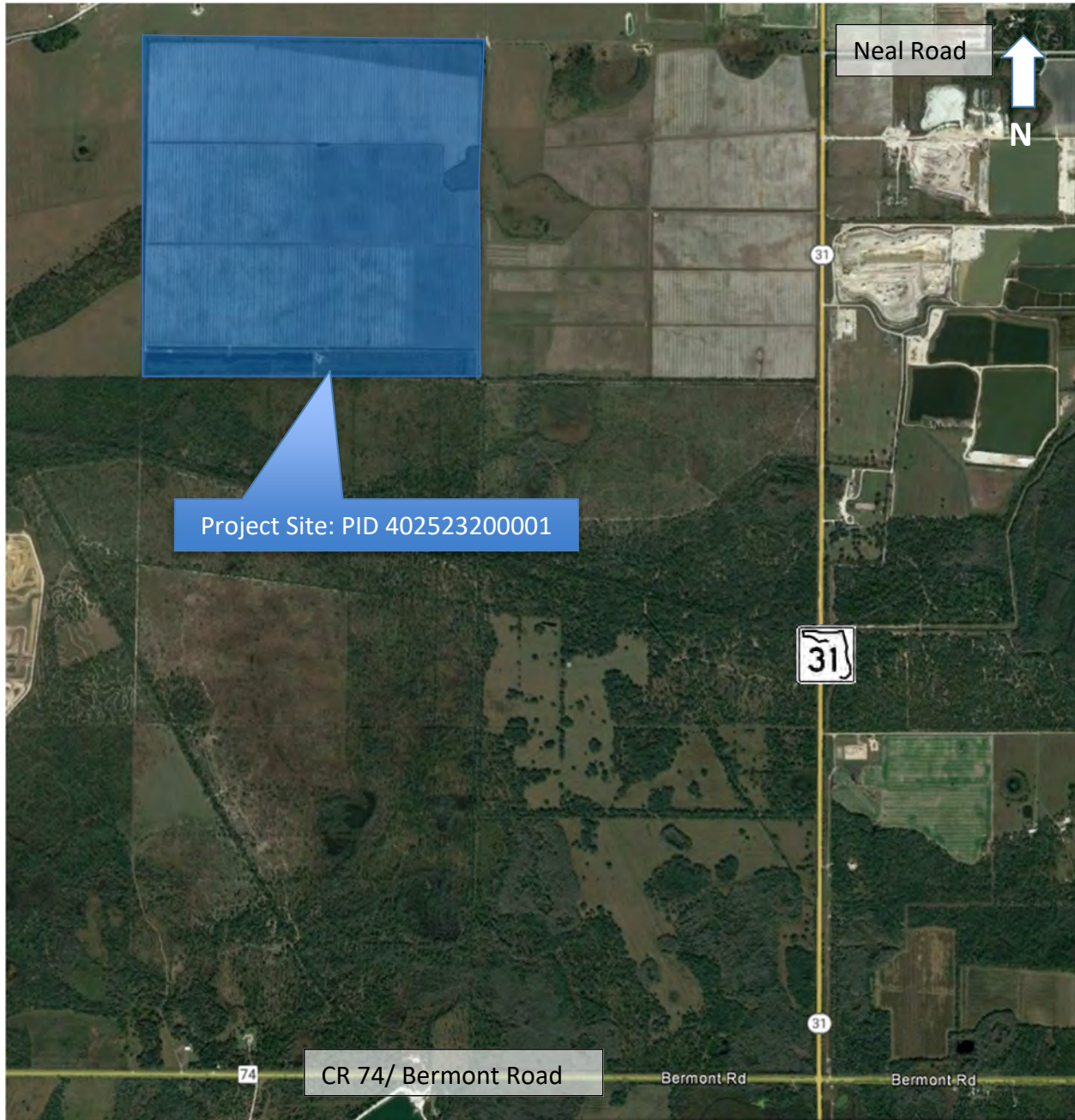
Figure 1: Development Location



Existing Condition

The 646-acre existing property is farmland, shown below in Figure 2. The property is located 2 miles north of the SR-31 and Bermont Road intersection and then 1 mile west of SR-31. The speed limit on SR-31 is posted 60 mph.

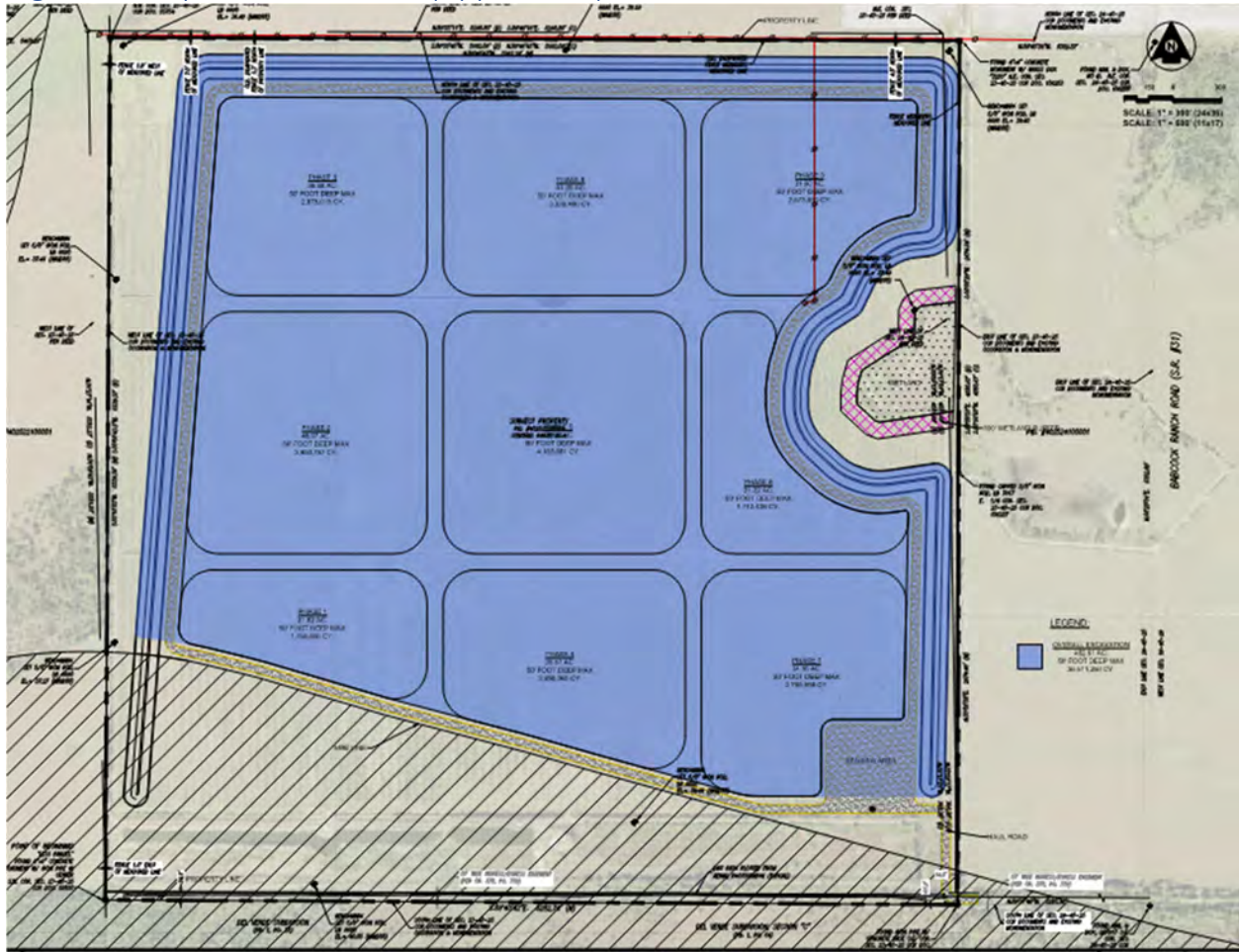
Figure 2: Existing Property



Proposed Condition and Trip Generation

The proposed excavation within the 646-acre property is 452.6 acres and will be dug to remove 36,511,250 cubic yards (C.Y.) of fill dirt, topsoil, and shell to form a reservoir. The proposed excavation is shown in Figure 3 and in Appendix A.

Figure 3: Proposed Excavation (Appendix A)



Due to the nature of the site, trips generated are directly related to the estimated volume of material being created by the excavation. The formula on the next page estimates the average trips per day and per hour that will be leaving the sites over a 20-year period. A 20-year duration was used to calculate the average trips per day and per hour. This duration was used to calculate the daily trips, since it resulted in the maximum trucks the facility can load a day (per coordination with Southwest Engineering and Design).

Calculation 1: Excavation Volume vs. Trucks Leaving

Volume of Material to be removed: 36,511,250 cubic yards
 Estimated Life Span of Excavation: 20 years

Average Trips per work day Leaving (Monday through Friday):

$$438 \text{ Trucks/ work day} = \frac{36,511,250 \text{ CY}}{20 \text{ YR}} * \frac{1 \text{ Truck}}{16 \text{ CY}} * \frac{1 \text{ YR}}{52.18 \text{ weeks}} * \frac{1 \text{ week}}{5 \text{ work days}}$$

$$\text{Weekday Trips per hour leaving} = \frac{438 \text{ Trucks}}{\text{work day}} * \frac{1 \text{ work day}}{10 \text{ hours}} = 44 \text{ trucks leaving/ hour}$$

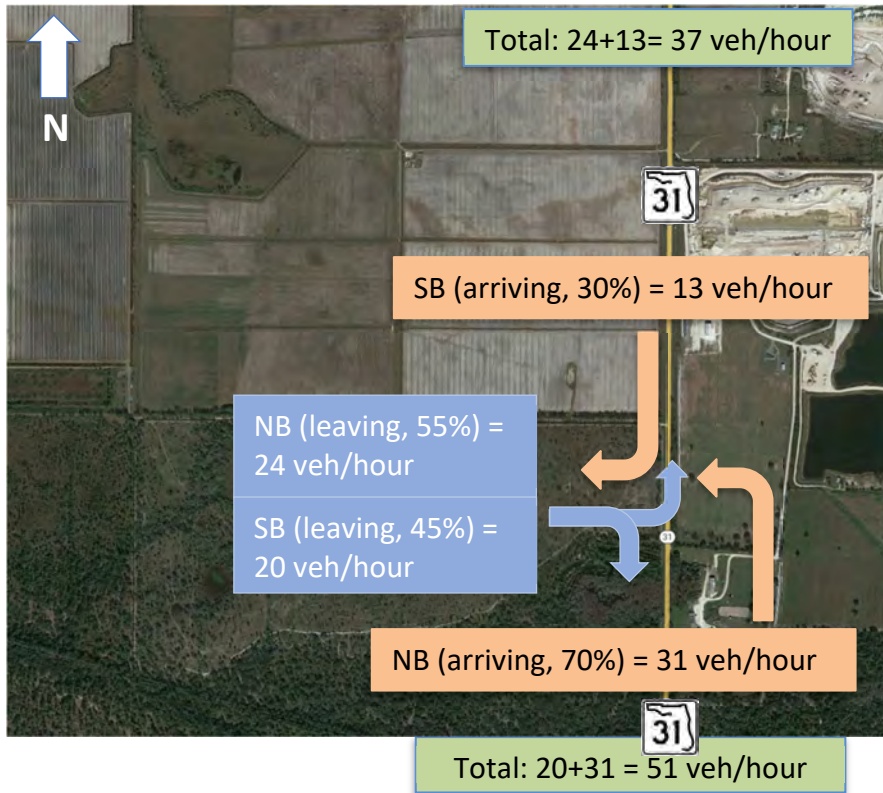
It is important to note that trucks are not stored on site and arrive (enter) at the same rate they leave over the permitted hours of operation between 7 AM to 5 PM Monday through Friday. Since many variables can affect the rate of trucks entering and leaving the site, a maximum rate of 438 trucks leaving per day (44 trucks leaving per hour) will be considered since that is the maximum trucks the facility can load a day per coordination with Southwest Engineering and Design.

Table 1: Trip Generation

| | Daily (trucks/ day) | | Hourly (trucks/ hour) | |
|---------|---------------------|---------|-----------------------|---------|
| | Entering | Leaving | Entering | Leaving |
| Maximum | 438 | 438 | 44 | 44 |

Trip Distribution on SR 31

According to turning movement counts taken at an active excavation with its entrance on SR-31 (1,200 feet north of the proposed excavation) 70% of trucks arrive from the south going northbound (NB) and 30% from the north going southbound (SB). Trucks leaving the facility follow a 55% NB: 45% SB split.



Trips entering and leaving the proposed excavation are expected to follow the same distributions as the similar facility. See the 88 trips per hour (44 vph entering and 44 vph leaving) distributed accordingly in Figure 4.

This traffic distribution results in a maximum of 51 trucks/hour being added to the existing traffic along SR-31 during the peak hour.

Figure 4: Peak Hour Trip Distribution at Driveway

Trip Distribution on Bermont Road/ CR-74

Charlotte County requested the worst-case scenario be evaluated when analyzing the affect the excavations would have on Bermont Road/ CR-74's LOS. If all the assumed truck traffic used Bermont Road/ CR-74, this traffic distribution results in 88 vehicles per hour being added to the existing traffic along Bermont Road/ CR-74 during the peak hour.

Adjacent Roadway Level of Service (LOS)

The following adjacent roadway's level of services were analyzed at a 10 year build out of 2033, against the existing LOS in 2023.

SR-31: Traffic counts on SR-31 were performed 2,200 feet north of Neal Road, from 7/5/2022 to 7/7/2022 (see Appendix B). The peak hours of SR-31, for the two-way volume, were found to be from 7 AM to 8 AM and from 1 PM to 2 PM with an adjusted peak season peak hour volume of 608 vehicles per hour (vph). This 2022 peak hour volume was adjusted to the existing year of 2023 and a build out year of 2033 using

an assumed growth rate of 5%; which is equivalent to Bermont Road's growth rate (Charlotte County: 2023 Roadway Level of Service Data). This results in 638 vph (2023) and 1040 vph (2033).

The level of service (LOS) of SR-31 in 2023 and 2033 was calculated using NCHRP Report 825 Section H and the Highway Capacity Manual (HCM) 2016. The 2033 LOS was then compared to the new LOS of SR-31 in 2033 due to the development of the excavation. See Appendix B for the calculations.

Based on the NCHRP and HCM capacity limits, SR-31 is at an LOS B in 2023 and 2033. With the addition of the proposed excavation the LOS of SR-31 would remain at LOS B in the 2033 Build Out year. This is unchanging from the existing condition; showing the site transitioning from undeveloped farmland to an excavation site would not affect SR-31's LOS in the build out year.

Bermont Road: The Charlotte County 2023 Roadway Level of Service (LOS) Data lists Bermont Road/ CR-74, as currently operating at 14% to 44% capacity and LOS B/C (see Appendix B and Table 2). The list also details the peak hour two-way volume, LOS threshold, for Bermont Road/ CR-74 as 1,330 to 2,180 vehicles per hour with an operating 2023 peak hour two-way volume of 188 to 963 vehicles per hour. Per the data, an annual growth rate of 5.0% will be utilized for this study, with an anticipated build-out year of 2033.

Table 2 identifies the percent capacity used for Bermont Road/ CR-74 during the build out year of 2033, including the 5.0% growth rate per year of the adjacent traffic volume and volume from recently approved excavations on Neal Road (136 vehicles/ hour). As a result of the excavations, the maximum total number of external trips being added to Bermont Road/ CR-74 equals 88 peak two-way trips. If 88 vph is added to the existing traffic along Bermont Road/ CR-74 during the peak hour due to the development of the properties, the resultant peak hour volume would be 530 vph/ 706 vph/ 1,793 vph in the build out year of 2033.

Table 2: No-Build vs. Build LOS Bermont Road/ CR-74 Analysis

| Bermont Road/ CR-74 from U.S. 17 to Happy Hollow Rd | | | | |
|--|---------------------------|---------------------------------------|--------------------------------------|--------------------------|
| Analysis Year | Peak Hour Volume (vph) | Trips added from Excavations (vph) | LOS Limit (Pk. Hr. Two-way Vol.)* | Percent Capacity Used |
| 2023 No-Build* | 963 | 0 | 2,180 | 44.17% |
| 2033 No-Build (w/ 5% annual growth rate and recently approved excavations on Neal Road @ 136 vph) | 1,705 | 0 | | 78.19% |
| 2033 Build | 1,793 | 88 | | 82.23% |

| Bermont Road/ CR-74 from Happy Hollow Rd to S.R. 31 | | | | |
|--|---------------------------|---------------------------------------|--------------------------------------|--------------------------|
| Analysis Year | Peak Hour Volume (vph) | Trips added from Excavations (vph) | LOS Limit (Pk. Hr. Two-way Vol.)* | Percent Capacity Used |
| 2023 No-Build* | 296 | 0 | 1,330 | 22.26% |
| 2033 No-Build (w/ 5% annual growth rate and recently approved excavations on Neal Road @ 136 vph) | 618 | 0 | | 46.48% |
| 2033 Build | 706 | 88 | | 53.09% |

| Bermont Road/ CR-74 from S.R. 31 to County Line | | | | |
|--|---------------------------|---------------------------------------|--------------------------------------|--------------------------|
| Analysis Year | Peak Hour Volume (vph) | Trips added from Excavations (vph) | LOS Limit (Pk. Hr. Two-way Vol.)* | Percent Capacity Used |
| 2023 No-Build* | 188 | 0 | 1,330 | 14.14% |
| 2033 No-Build (w/ 5% annual growth rate and recently approved excavations on Neal Road @ 136 vph) | 442 | 0 | | 33.25% |
| 2033 Build | 530 | 88 | | 39.87% |

* Charlotte County: 2023 Roadway Level of Service Data

The analysis concluded that Bermont Road/ CR-74 would result in 17.8% to 60.1% available capacity, with the addition of the proposed excavations and would not change the existing Level of Service of Bermont Road/ CR-74.

Turn Lane Warrant Analysis

A left and right turn lane warrant analysis were conducted at the proposed entrance of the excavation per the FDOT Access Management Guidebook (November 2019), AASHTO Greenbook (2018), and National Cooperative Highway Research Program (NCHRP) Report 745, Left-Turn Accommodations at Unsignalized Intersections. No turn lanes currently exist at the proposed entrance location on SR-31.

Right Turn Lane:

When referencing FDOT Access Management Guidebook (November 2019) Section 6.2.1 “When to Consider Exclusive Right-Turn Lanes”, two bullet points directly apply to this proposed entrance.

- “Facilities having a high volume of buses, trucks or trailers (2 or 3 per hour)”
- “Very high operating speeds (such as 55 mph or above) and in rural locations where turns are not expected by through drivers”

In addition, Table 27 recommends exclusive right turns at unsignalized driveways when the number of right turns per hour approach 35 vph with a roadway posted speed limit over 45 mph. Even though it is forecasted that only 13 vph will turn right into the property during the peak hour, considering the nature of the vehicles turning (100% trucks) and the rural, 2-lane SR-31 free flow speed (65 mph), it is recommended a right turn lane be provided at a length detailed within FDOT FDM Exhibit 212-1 and the FDOT Access Management Guidebook Table 12 of 460 feet. Storage length, in addition to the length given within FDOT FDM Exhibit 212-1, is unnecessary since it is a free flow right turn lane.

Table 27 – Recommended Guidelines for Exclusive Right-Turn Lanes to Unsignalized Driveway¹⁰

| Roadway Posted Speed Limit | Number of Right Turns Per Hour |
|--|--------------------------------|
| 45 mph or less | 80 – 125¹ |
| Over 45 mph | 35 – 55² |
| <small>Note: A posted speed limit of 45 mph may be used with these thresholds if the operating speeds are known to be over 45 mph during the time of peak right turn demand.</small> | |
| <small>Note on traffic projections: Projecting turning volumes is, at best, a knowledgeable estimate. Keep this in mind especially if the projections of right turns are close to meeting the guidelines. In that case, consider requiring the turn lane.</small> | |
| <small>¹ The lower threshold of 80 right-turn vehicles per hour would be most used for higher volume (greater than 600 vehicles per hour, per lane in one direction on the major roadway) or two-lane roads where lateral movement is restricted. The 125 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with a large entry radius (50 feet or greater).</small> | |
| <small>² The lower threshold of 35 right-turn vehicles per hour would be most appropriately used on higher volume two-lane roadways where lateral movement is restricted. The 55 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with large entry radius (50 feet or greater).</small> | |

Source: NCHRP Report 420 (Impacts of Access Management Techniques)

These recommendations are primarily based on the research done in NCHRP Report 420, Impacts of Access Management Techniques, Chapter 4 – Unsignalized Access Spacing (Technique 1B), and Use of Speed Differential as a Measure to Evaluate the Need for Right-Turn Deceleration Lane at Unsignalized Intersections.

Left Turn Lane:

According to AASHTO Greenbook (2018) Table 9-25 and NCHRP 745 Table 1, referenced within the FDOT Access Management Guidebook and seen below, a left turn lane on a two- lane highway in a rural area “may be desirable” at a three-leg intersection when the major road peak hour volume exceeds 50 (veh/hr/ln) while a left-turn lane peak-hour volume exceeds 20 vph.

Table 9-25. Suggested Left-Turn Treatment Guidelines Based on Results from Benefit–Cost Evaluations for Intersections on Two-Lane Highways in Rural Areas (16)

| Left-Turn Lane Peak-Hour Volume (veh/h) | Three-Leg Intersection, Major-Road Two-Lane Highway Peak-Hour Volume (veh/h/ln) that Warrants a Bypass Lane | Three-Leg Intersection, Major-Road Two-Lane Highway Peak-Hour Volume (veh/h/ln) that Warrants a Left-Turn Lane | Four-Leg Intersection, Major-Road Two-Lane Highway Peak-Hour Volume (veh/h/ln) that Warrants a Left-Turn Lane |
|---|---|--|---|
| 5 | 50 | 200 | 150 |
| 10 | 50 | 100 | 50 |
| 15 | < 50 | 100 | 50 |
| 20 | < 50 | 50 | < 50 |
| 25 | < 50 | 50 | < 50 |
| 30 | < 50 | 50 | < 50 |
| 35 | < 50 | 50 | < 50 |
| 40 | < 50 | 50 | < 50 |
| 45 | < 50 | 50 | < 50 |
| 50 or More | < 50 | 50 | < 50 |

Note: These guidelines apply where the major road is uncontrolled and the minor-road approaches are stop- or yield-controlled. Both the left-turn peak-hour volume and the major-road volume warrants should be met as shown in Figure 9-36.

This guidance includes many variables since it is a based-on benefit-cost evaluations, so the left turn lane was also analyzed with AASHTO Greenbook (2011)/ National Cooperative Highway Research Program (NCHRP) Report 745. When presenting the guidelines for left-turn lanes, the AASHTO Greenbook (2011) references the “Volume Warrants for Left-Turn Storage Lanes At Unsignalized Grade Intersections” which warrants left turn lanes and storage length based on 1) number of travel lanes 2) left turning volume, and 3) opposing volume. Figure 5 on the next page was used for an unsignalized intersection on a two-lane rural highway at 60 mph. This resulted in a left turn lane being warranted when the left-turn volume exceeds 5% of the advancing volume ($5\% \times 347$ advancing veh/hr/ln = 17 vph). When considering the calculated 31 vph turning left (NB) into the proposed entrance, the vehicles being large trucks, and also an opposing NB peak hour volume per lane of SR-31 of 340 veh/hr/ln , a left turn lane is warranted and is also desirable according to the AASHTO Greenbook’s 2011 and 2018. A minimum of 75 feet of storage (in addition to the length detailed within FDOT FDM Exhibit 212-1 and the FDOT Access Management Guidebook Table 12) should be provided to equal 535 feet.

Figure 5: Volume Warrants for Left-Turn Storage Lanes At Unsignalized Grade Intersections

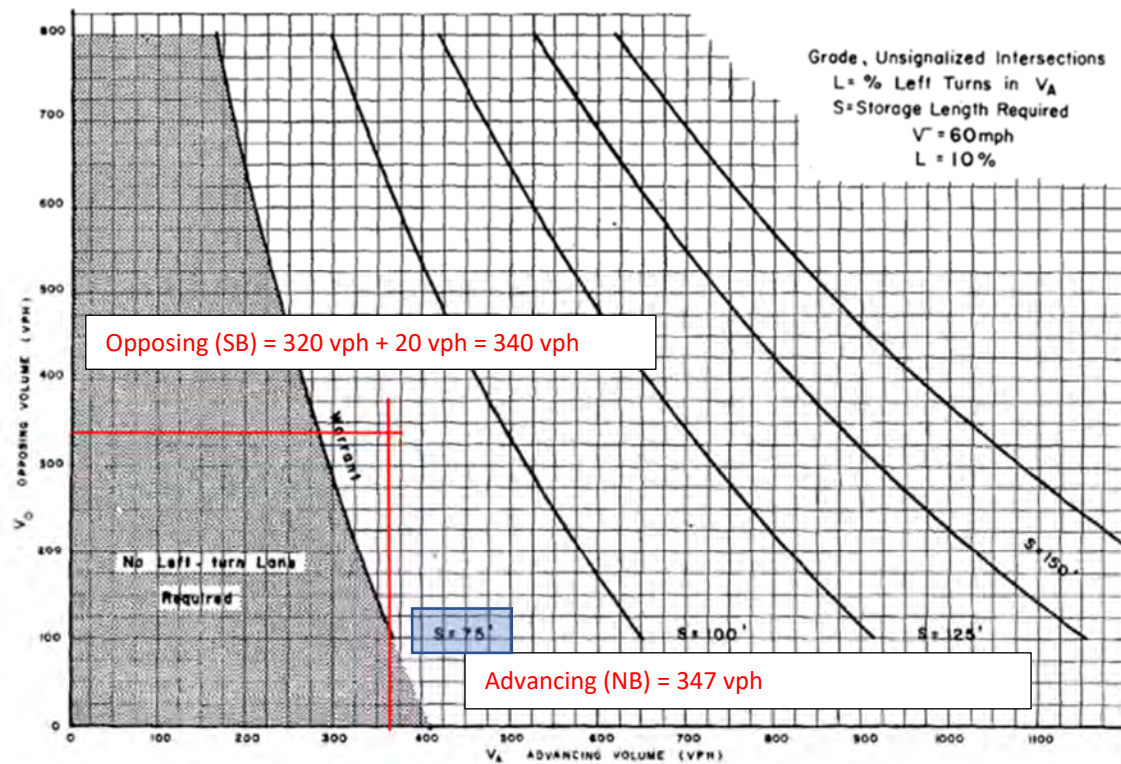


Figure 15. Warrant for left-turn storage lanes on two-lane highways.

Conclusion

It has been concluded that the additional trips generated by the proposed excavation will not be significant enough to affect the LOS of SR-31 or the LOS of Bermont Road/ CR-74.

In addition, both a right turn lane (460 feet) and left turn lane (535 feet) are recommended at the proposed excavation's entrance on SR-31.

Appendix A- Proposed Excavation

1/23/2023 1:45:26 PM P:122-0593 - CHASTAIN 640 ACRE EXCAVATION (RALPH)DESIGNCADDIBASE FILES\BASE_EXCAVATION_FON.DWG - REED MCKOWN



Appendix B – Roadway Level of Service (LOS) Data

Daily Vehicle Volume Report

Study Date: Tuesday, 07/05/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|---------------|----------------------|----------------------|-----------------|
| 00:00 - 00:14 | 0 | 0 | 0 |
| 00:15 - 00:29 | 0 | 0 | 0 |
| 00:30 - 00:44 | 0 | 0 | 0 |
| 00:45 - 00:59 | 0 | 0 | 0 |
| 01:00 - 01:14 | 0 | 0 | 0 |
| 01:15 - 01:29 | 0 | 0 | 0 |
| 01:30 - 01:44 | 0 | 0 | 0 |
| 01:45 - 01:59 | 0 | 0 | 0 |
| 02:00 - 02:14 | 0 | 0 | 0 |
| 02:15 - 02:29 | 0 | 0 | 0 |
| 02:30 - 02:44 | 0 | 0 | 0 |
| 02:45 - 02:59 | 0 | 0 | 0 |
| 03:00 - 03:14 | 0 | 0 | 0 |
| 03:15 - 03:29 | 0 | 0 | 0 |
| 03:30 - 03:44 | 0 | 0 | 0 |
| 03:45 - 03:59 | 0 | 0 | 0 |
| 04:00 - 04:14 | 0 | 0 | 0 |
| 04:15 - 04:29 | 0 | 0 | 0 |
| 04:30 - 04:44 | 0 | 0 | 0 |
| 04:45 - 04:59 | 0 | 0 | 0 |
| 05:00 - 05:14 | 0 | 0 | 0 |
| 05:15 - 05:29 | 0 | 0 | 0 |
| 05:30 - 05:44 | 0 | 0 | 0 |
| 05:45 - 05:59 | 0 | 0 | 0 |
| 06:00 - 06:14 | 0 | 0 | 0 |
| 06:15 - 06:29 | 0 | 0 | 0 |
| 06:30 - 06:44 | 0 | 0 | 0 |
| 06:45 - 06:59 | 0 | 0 | 0 |
| 07:00 - 07:14 | 0 | 0 | 0 |
| 07:15 - 07:29 | 0 | 0 | 0 |
| 07:30 - 07:44 | 0 | 0 | 0 |
| 07:45 - 07:59 | 3 | 3 | 6 |
| 08:00 - 08:14 | 0 | 0 | 0 |
| 08:15 - 08:29 | 0 | 0 | 0 |
| 08:30 - 08:44 | 0 | 0 | 0 |
| 08:45 - 08:59 | 0 | 0 | 0 |
| 09:00 - 09:14 | 0 | 0 | 0 |
| 09:15 - 09:29 | 34 | 41 | 75 |
| 09:30 - 09:44 | 61 | 50 | 111 |
| 09:45 - 09:59 | 48 | 65 | 113 |
| 10:00 - 10:14 | 65 | 62 | 127 |
| 10:15 - 10:29 | 57 | 64 | 121 |
| 10:30 - 10:44 | 69 | 86 | 155 |
| 10:45 - 10:59 | 78 | 57 | 135 |
| 11:00 - 11:14 | 51 | 42 | 93 |
| 11:15 - 11:29 | 61 | 65 | 126 |
| 11:30 - 11:44 | 68 | 77 | 145 |
| 11:45 - 11:59 | 51 | 53 | 104 |
| 12:00 - 12:14 | 60 | 55 | 115 |
| 12:15 - 12:29 | 62 | 52 | 114 |
| 12:30 - 12:44 | 70 | 55 | 125 |
| 12:45 - 12:59 | 62 | 58 | 120 |

add 3 hours = 12:30 pm

SB max = 277 vph

Two-way max = 538 vph

Daily Vehicle Volume Report

Study Date: Tuesday, 07/05/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|----------------|----------------------|----------------------|-----------------|
| 13:00 - 13:14 | 60 | 40 | 100 |
| 13:15 - 13:29 | 63 | 51 | 114 |
| 13:30 - 13:44 | 36 | 41 | 77 |
| 13:45 - 13:59 | 51 | 33 | 84 |
| 14:00 - 14:14 | 48 | 45 | 93 |
| 14:15 - 14:29 | 71 | 39 | 110 |
| 14:30 - 14:44 | 51 | 46 | 97 |
| 14:45 - 14:59 | 43 | 28 | 71 |
| 15:00 - 15:14 | 46 | 23 | 69 |
| 15:15 - 15:29 | 45 | 23 | 68 |
| 15:30 - 15:44 | 42 | 15 | 57 |
| 15:45 - 15:59 | 25 | 18 | 43 |
| 16:00 - 16:14 | 24 | 13 | 37 |
| 16:15 - 16:29 | 31 | 26 | 57 |
| 16:30 - 16:44 | 22 | 19 | 41 |
| 16:45 - 16:59 | 29 | 37 | 66 |
| 17:00 - 17:14 | 22 | 15 | 37 |
| 17:15 - 17:29 | 24 | 19 | 43 |
| 17:30 - 17:44 | 21 | 19 | 40 |
| 17:45 - 17:59 | 6 | 21 | 27 |
| 18:00 - 18:14 | 25 | 21 | 46 |
| 18:15 - 18:29 | 5 | 14 | 19 |
| 18:30 - 18:44 | 23 | 12 | 35 |
| 18:45 - 18:59 | 12 | 10 | 22 |
| 19:00 - 19:14 | 6 | 19 | 25 |
| 19:15 - 19:29 | 12 | 13 | 25 |
| 19:30 - 19:44 | 9 | 18 | 27 |
| 19:45 - 19:59 | 7 | 12 | 19 |
| 20:00 - 20:14 | 9 | 10 | 19 |
| 20:15 - 20:29 | 10 | 11 | 21 |
| 20:30 - 20:44 | 10 | 6 | 16 |
| 20:45 - 20:59 | 7 | 8 | 15 |
| 21:00 - 21:14 | 7 | 6 | 13 |
| 21:15 - 21:29 | 8 | 8 | 16 |
| 21:30 - 21:44 | 6 | 10 | 16 |
| 21:45 - 21:59 | 7 | 6 | 13 |
| 22:00 - 22:14 | 1 | 9 | 10 |
| 22:15 - 22:29 | 2 | 1 | 3 |
| 22:30 - 22:44 | 3 | 3 | 6 |
| 22:45 - 22:59 | 2 | 14 | 16 |
| 23:00 - 23:14 | 2 | 3 | 5 |
| 23:15 - 23:29 | 4 | 5 | 9 |
| 23:30 - 23:44 | 5 | 10 | 15 |
| 23:45 - 23:59 | 4 | 8 | 12 |
| Totals | 1846 | 1693 | 3539 |
| AM Peak Time | 10:00 - 10:59 | 09:55 - 10:54 | 10:00 - 10:59 |
| AM Peak Volume | 269 | 281 | 538 |
| PM Peak Time | 12:10 - 13:09 | 12:00 - 12:59 | 12:00 - 12:59 |
| PM Peak Volume | 264 | 220 | 474 |

Daily Vehicle Volume Report

Study Date: Wednesday, 07/06/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|---------------|----------------------|----------------------|-----------------|
| 00:00 - 00:14 | 3 | 15 | 18 |
| 00:15 - 00:29 | 8 | 12 | 20 |
| 00:30 - 00:44 | 5 | 3 | 8 |
| 00:45 - 00:59 | 11 | 12 | 23 |
| 01:00 - 01:14 | 1 | 8 | 9 |
| 01:15 - 01:29 | 4 | 19 | 23 |
| 01:30 - 01:44 | 9 | 9 | 18 |
| 01:45 - 01:59 | 14 | 22 | 36 |
| 02:00 - 02:14 | 12 | 28 | 40 |
| 02:15 - 02:29 | 16 | 32 | 48 |
| 02:30 - 02:44 | 18 | 27 | 45 |
| 02:45 - 02:59 | 32 | 34 | 66 |
| 03:00 - 03:14 | 28 | 51 | 79 |
| 03:15 - 03:29 | 32 | 78 | 110 |
| 03:30 - 03:44 | 41 | 59 | 100 |
| 03:45 - 03:59 | 41 | 50 | 91 |
| 04:00 - 04:14 | 77 | 54 | 131 |
| 04:15 - 04:29 | 51 | 71 | 122 |
| 04:30 - 04:44 | 64 | 57 | 121 |
| 04:45 - 04:59 | 47 | 65 | 112 |
| 05:00 - 05:14 | 45 | 46 | 91 |
| 05:15 - 05:29 | 54 | 43 | 97 |
| 05:30 - 05:44 | 58 | 36 | 94 |
| 05:45 - 05:59 | 47 | 49 | 96 |
| 06:00 - 06:14 | 67 | 51 | 118 |
| 06:15 - 06:29 | 48 | 47 | 95 |
| 06:30 - 06:44 | 49 | 43 | 92 |
| 06:45 - 06:59 | 73 | 60 | 133 |
| 07:00 - 07:14 | 73 | 44 | 117 |
| 07:15 - 07:29 | 66 | 50 | 116 |
| 07:30 - 07:44 | 46 | 47 | 93 |
| 07:45 - 07:59 | 53 | 65 | 118 |
| 08:00 - 08:14 | 66 | 45 | 111 |
| 08:15 - 08:29 | 65 | 62 | 127 |
| 08:30 - 08:44 | 53 | 45 | 98 |
| 08:45 - 08:59 | 58 | 29 | 87 |
| 09:00 - 09:14 | 59 | 66 | 125 |
| 09:15 - 09:29 | 59 | 39 | 98 |
| 09:30 - 09:44 | 69 | 46 | 115 |
| 09:45 - 09:59 | 36 | 62 | 98 |
| 10:00 - 10:14 | 47 | 64 | 111 |
| 10:15 - 10:29 | 58 | 54 | 112 |
| 10:30 - 10:44 | 52 | 59 | 111 |
| 10:45 - 10:59 | 52 | 59 | 111 |
| 11:00 - 11:14 | 53 | 40 | 93 |
| 11:15 - 11:29 | 50 | 54 | 104 |
| 11:30 - 11:44 | 59 | 45 | 104 |
| 11:45 - 11:59 | 51 | 36 | 87 |
| 12:00 - 12:14 | 54 | 47 | 101 |
| 12:15 - 12:29 | 64 | 51 | 115 |
| 12:30 - 12:44 | 60 | 30 | 90 |
| 12:45 - 12:59 | 46 | 41 | 87 |

Daily Vehicle Volume Report

Study Date: Wednesday, 07/06/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|----------------|----------------------|----------------------|-----------------|
| 13:00 - 13:14 | 61 | 39 | 100 |
| 13:15 - 13:29 | 53 | 38 | 91 |
| 13:30 - 13:44 | 55 | 37 | 92 |
| 13:45 - 13:59 | 45 | 31 | 76 |
| 14:00 - 14:14 | 53 | 40 | 93 |
| 14:15 - 14:29 | 39 | 37 | 76 |
| 14:30 - 14:44 | 46 | 22 | 68 |
| 14:45 - 14:59 | 34 | 28 | 62 |
| 15:00 - 15:14 | 28 | 23 | 51 |
| 15:15 - 15:29 | 26 | 24 | 50 |
| 15:30 - 15:44 | 31 | 19 | 50 |
| 15:45 - 15:59 | 31 | 23 | 54 |
| 16:00 - 16:14 | 13 | 24 | 37 |
| 16:15 - 16:29 | 17 | 28 | 45 |
| 16:30 - 16:44 | 17 | 25 | 42 |
| 16:45 - 16:59 | 25 | 24 | 49 |
| 17:00 - 17:14 | 15 | 10 | 25 |
| 17:15 - 17:29 | 17 | 12 | 29 |
| 17:30 - 17:44 | 15 | 17 | 32 |
| 17:45 - 17:59 | 18 | 16 | 34 |
| 18:00 - 18:14 | 13 | 10 | 23 |
| 18:15 - 18:29 | 18 | 9 | 27 |
| 18:30 - 18:44 | 16 | 15 | 31 |
| 18:45 - 18:59 | 15 | 15 | 30 |
| 19:00 - 19:14 | 14 | 9 | 23 |
| 19:15 - 19:29 | 12 | 13 | 25 |
| 19:30 - 19:44 | 14 | 7 | 21 |
| 19:45 - 19:59 | 9 | 10 | 19 |
| 20:00 - 20:14 | 6 | 12 | 18 |
| 20:15 - 20:29 | 6 | 7 | 13 |
| 20:30 - 20:44 | 7 | 8 | 15 |
| 20:45 - 20:59 | 4 | 9 | 13 |
| 21:00 - 21:14 | 9 | 9 | 18 |
| 21:15 - 21:29 | 4 | 8 | 12 |
| 21:30 - 21:44 | 2 | 16 | 18 |
| 21:45 - 21:59 | 1 | 14 | 15 |
| 22:00 - 22:14 | 2 | 7 | 9 |
| 22:15 - 22:29 | 8 | 8 | 16 |
| 22:30 - 22:44 | 6 | 7 | 13 |
| 22:45 - 22:59 | 3 | 7 | 10 |
| 23:00 - 23:14 | 3 | 3 | 6 |
| 23:15 - 23:29 | 6 | 8 | 14 |
| 23:30 - 23:44 | 1 | 4 | 5 |
| 23:45 - 23:59 | 4 | 12 | 16 |
| Totals | 3126 | 3005 | 6131 |
| AM Peak Time | 06:25 - 07:24 | 04:08 - 05:07 | 04:01 - 05:00 |
| AM Peak Volume | 267 | 252 | 489 |
| PM Peak Time | 12:55 - 13:54 | 12:02 - 13:01 | 12:01 - 13:00 |
| PM Peak Volume | 233 | 170 | 394 |

Daily Vehicle Volume Report

Study Date: Thursday, 07/07/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|---------------|----------------------|----------------------|-----------------|
| 00:00 - 00:14 | 5 | 4 | 9 |
| 00:15 - 00:29 | 9 | 5 | 14 |
| 00:30 - 00:44 | 6 | 5 | 11 |
| 00:45 - 00:59 | 4 | 8 | 12 |
| 01:00 - 01:14 | 7 | 8 | 15 |
| 01:15 - 01:29 | 10 | 16 | 26 |
| 01:30 - 01:44 | 12 | 9 | 21 |
| 01:45 - 01:59 | 13 | 24 | 37 |
| 02:00 - 02:14 | 22 | 31 | 53 |
| 02:15 - 02:29 | 20 | 37 | 57 |
| 02:30 - 02:44 | 27 | 30 | 57 |
| 02:45 - 02:59 | 21 | 55 | 76 |
| 03:00 - 03:14 | 30 | 61 | 91 |
| 03:15 - 03:29 | 30 | 49 | 79 |
| 03:30 - 03:44 | 30 | 63 | 93 |
| 03:45 - 03:59 | 44 | 51 | 95 |
| 04:00 - 04:14 | 63 | 81 | 144 |
| 04:15 - 04:29 | 66 | 47 | 113 |
| 04:30 - 04:44 | 61 | 73 | 134 |
| 04:45 - 04:59 | 71 | 58 | 129 |
| 05:00 - 05:14 | 61 | 48 | 109 |
| 05:15 - 05:29 | 48 | 40 | 88 |
| 05:30 - 05:44 | 48 | 47 | 95 |
| 05:45 - 05:59 | 55 | 38 | 93 |
| 06:00 - 06:14 | 43 | 40 | 83 |
| 06:15 - 06:29 | 64 | 36 | 100 |
| 06:30 - 06:44 | 56 | 63 | 119 |
| 06:45 - 06:59 | 58 | 34 | 92 |
| 07:00 - 07:14 | 81 | 57 | 138 |
| 07:15 - 07:29 | 53 | 43 | 96 |
| 07:30 - 07:44 | 61 | 62 | 123 |
| 07:45 - 07:59 | 79 | 41 | 120 |
| 08:00 - 08:14 | 75 | 54 | 129 |
| 08:15 - 08:29 | 53 | 57 | 110 |
| 08:30 - 08:44 | 54 | 43 | 97 |
| 08:45 - 08:59 | 64 | 40 | 104 |
| 09:00 - 09:14 | 1 | 2 | 3 |
| 09:15 - 09:29 | - | - | - |
| 09:30 - 09:44 | - | - | - |
| 09:45 - 09:59 | - | - | - |
| 10:00 - 10:14 | - | - | - |
| 10:15 - 10:29 | - | - | - |
| 10:30 - 10:44 | - | - | - |
| 10:45 - 10:59 | - | - | - |
| 11:00 - 11:14 | - | - | - |
| 11:15 - 11:29 | - | - | - |
| 11:30 - 11:44 | - | - | - |
| 11:45 - 11:59 | - | - | - |
| 12:00 - 12:14 | - | - | - |
| 12:15 - 12:29 | - | - | - |
| 12:30 - 12:44 | - | - | - |
| 12:45 - 12:59 | - | - | - |

NB max = 274 vph

add 3 hours = 11:45 am

Daily Vehicle Volume Report

Study Date: Thursday, 07/07/2022

Unit ID:

Location: SR 31 North of Neal Road

| | Northbound Volume | Southbound Volume | Total Volume |
|----------------|----------------------|----------------------|-----------------|
| 13:00 - 13:14 | - | - | - |
| 13:15 - 13:29 | - | - | - |
| 13:30 - 13:44 | - | - | - |
| 13:45 - 13:59 | - | - | - |
| 14:00 - 14:14 | - | - | - |
| 14:15 - 14:29 | - | - | - |
| 14:30 - 14:44 | - | - | - |
| 14:45 - 14:59 | - | - | - |
| 15:00 - 15:14 | - | - | - |
| 15:15 - 15:29 | - | - | - |
| 15:30 - 15:44 | - | - | - |
| 15:45 - 15:59 | - | - | - |
| 16:00 - 16:14 | - | - | - |
| 16:15 - 16:29 | - | - | - |
| 16:30 - 16:44 | - | - | - |
| 16:45 - 16:59 | - | - | - |
| 17:00 - 17:14 | - | - | - |
| 17:15 - 17:29 | - | - | - |
| 17:30 - 17:44 | - | - | - |
| 17:45 - 17:59 | - | - | - |
| 18:00 - 18:14 | - | - | - |
| 18:15 - 18:29 | - | - | - |
| 18:30 - 18:44 | - | - | - |
| 18:45 - 18:59 | - | - | - |
| 19:00 - 19:14 | - | - | - |
| 19:15 - 19:29 | - | - | - |
| 19:30 - 19:44 | - | - | - |
| 19:45 - 19:59 | - | - | - |
| 20:00 - 20:14 | - | - | - |
| 20:15 - 20:29 | - | - | - |
| 20:30 - 20:44 | - | - | - |
| 20:45 - 20:59 | - | - | - |
| 21:00 - 21:14 | - | - | - |
| 21:15 - 21:29 | - | - | - |
| 21:30 - 21:44 | - | - | - |
| 21:45 - 21:59 | - | - | - |
| 22:00 - 22:14 | - | - | - |
| 22:15 - 22:29 | - | - | - |
| 22:30 - 22:44 | - | - | - |
| 22:45 - 22:59 | - | - | - |
| 23:00 - 23:14 | - | - | - |
| 23:15 - 23:29 | - | - | - |
| 23:30 - 23:44 | - | - | - |
| 23:45 - 23:59 | - | - | - |
| Totals | 1505 | 1460 | 2965 |
| AM Peak Time | 06:58 - 07:57 | 04:00 - 04:59 | 04:00 - 04:59 |
| AM Peak Volume | 279 | 259 | 520 |
| PM Peak Time | N/A | N/A | N/A |
| PM Peak Volume | 0 | 0 | 0 |

Peak Hour Two-Way Volume:

The peak hours of SR-31, for the two-way volume, were found to be from 7 AM to 8 AM and from 1 PM to 2 PM with an adjusted peak season peak hour volume

Multiple by Peak Season Conversion Factor (PSCF) for SR-31 (1.13) and 5% growth rate. Counts taken on 7/5 to 7/7/2022

$538 * 1.13 = 608$ vph in 2022

$538 * 1.13 * (1.05) = 638$ vph in year 2023

$538 * 1.13 * (1.05^{11}) = 1040$ vph in year 2033

Existing Level of Service Calculation for yr 2023:

| | | | |
|--|-------------------|-------------|--|
| | Posted speed = | 60 mph | |
| | Free Flow Speed = | 65 mph | assume 5 mph greater than posted= 65 mph |
| | PHF = | 0.8677 | PHF = $538 / (155 * 4) = 86.8\%$ |
| One direction (SB) peak hourly flow (adjusted by PSCF and 5% growth rate from 2022 | | | |
| to 2023) = | | 329 vph | |
| Trucks = 45.75% (From FDOT Online Site 010041, see below) = | | 0.4575 | |
| fhv = | | 0.8138 | HCM Eq 11-2 |
| Passenger Car Equivalent flow rate= | | 465 pcphpl | HCM Eq 11-3 |
| Density = $465 \text{ pcphpl} / 65 \text{ mph} = 6.85 \text{ pcpmpl}$ | | 7.16 pcpmpl | |

PER HCM Exhibit 10-6 and NCHRP 825 Exhibit 26 = LOS B

Note: Density range for LOS B is 6 to 14 pcpmpl

Level of Service Calculation for yr 2033:

| | | | |
|--|-------------------|--------------|--|
| | Posted speed = | 60 mph | |
| | Free Flow Speed = | 65 mph | assume 5 mph greater than posted= 65 mph |
| | PHF = | 0.8677 | PHF = $538 / (155 * 4) = 86.8\%$ |
| One direction (SB) peak hourly flow (adjusted by PSCF and 5% growth rate from 2023 | | | |
| to 2033) = | | 510 vph | |
| Trucks = 45.75% (From FDOT Online Site 010041, see below) = | | 0.4575 | |
| fhv = | | 0.8138 | HCM Eq 11-2 |
| Passenger Car Equivalent flow rate= | | 722 pcphpl | HCM Eq 11-3 |
| Density = $465 \text{ pcphpl} / 65 \text{ mph} = 6.85 \text{ pcpmpl}$ | | 11.11 pcpmpl | |

PER HCM Exhibit 10-6 and NCHRP 825 Exhibit 26 = LOS B

Note: Density range for LOS B is 6 to 14 pcpmpl

Build out Year Level of Service Calculation for yr 2033 with Excavation trips added:

| | | | |
|---|-------------------|--------------|--|
| | Posted speed = | 60 mph | |
| | Free Flow Speed = | 65 mph | assume 5 mph greater than posted= 65 mph |
| | PHF = | 0.8677 | PHF = $538 / (155 * 4) = 86.8\%$ |
| One direction (SB) peak hourly flow including the volume generated by the project | | | |
| (assumes the worse case with 44 vph added per lane) | | | |
| = $510 \text{ vph} + 44 \text{ vph} = 554 \text{ vph}$ | | 554 vph | |
| Trucks = 45.75% (From FDOT Online Site 010041, see below) = | | 0.4575 | |
| fhv = | | 0.8138 | HCM Eq 11-2 |
| Passenger Car Equivalent flow rate= | | 784 pcphpl | HCM Eq 11-3 |
| Density = $465 \text{ pcphpl} / 65 \text{ mph} = 6.85 \text{ pcpmpl}$ | | 12.07 pcpmpl | $\leq 14 \text{ pcpmpl}$ |

PER HCM Exhibit 10-6 and NCHRP 825 Exhibit 26 = LOS B

Note: Density range for LOS B is 6 to 14 pcpmpl

Exhibit 26. Level of service criteria for freeway facilities.

| Level of Service | Urban/Suburban Freeway Average Facility or Section Density (pc/mi/ln) | Rural Freeway Average Facility or Section Density (pc/mi/ln) |
|------------------|---|--|
| A | ≤ 11 | ≤ 6 |
| B | $>11-18$ | $>6-14$ |
| C | $>18-26$ | $>14-22$ |
| D | $>26-35$ | $>22-29$ |
| E | $>35-45$ | $>29-39$ |
| F | >45 or any section has $d/c > 1.00$ | >39 or any section has $d/c > 1.00$ |

Source: Adapted from HCM Exhibit 10-6.

Note: d/c = demand-to-capacity ratio.

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 0104 SR 31

| WEEK | DATES | SF | MOCF: 0.96 PSCF |
|------|-------------------------|------|--------------------|
| 1 | 01/01/2021 - 01/02/2021 | 0.94 | 0.98 |
| 2 | 01/03/2021 - 01/09/2021 | 1.00 | 1.04 |
| 3 | 01/10/2021 - 01/16/2021 | 1.07 | 1.11 |
| 4 | 01/17/2021 - 01/23/2021 | 1.05 | 1.09 |
| 5 | 01/24/2021 - 01/30/2021 | 1.04 | 1.08 |
| 6 | 01/31/2021 - 02/06/2021 | 1.02 | 1.06 |
| 7 | 02/07/2021 - 02/13/2021 | 1.01 | 1.05 |
| 8 | 02/14/2021 - 02/20/2021 | 0.99 | 1.03 |
| 9 | 02/21/2021 - 02/27/2021 | 0.98 | 1.02 |
| 10 | 02/28/2021 - 03/06/2021 | 0.97 | 1.01 |
| 11 | 03/07/2021 - 03/13/2021 | 0.96 | 1.00 |
| 12 | 03/14/2021 - 03/20/2021 | 0.95 | 0.99 |
| 13 | 03/21/2021 - 03/27/2021 | 0.96 | 1.00 |
| 14 | 03/28/2021 - 04/03/2021 | 0.97 | 1.01 |
| 15 | 04/04/2021 - 04/10/2021 | 0.98 | 1.02 |
| 16 | 04/11/2021 - 04/17/2021 | 0.99 | 1.03 |
| 17 | 04/18/2021 - 04/24/2021 | 0.99 | 1.03 |
| 18 | 04/25/2021 - 05/01/2021 | 0.99 | 1.03 |
| 19 | 05/02/2021 - 05/08/2021 | 1.00 | 1.04 |
| 20 | 05/09/2021 - 05/15/2021 | 1.00 | 1.04 |
| 21 | 05/16/2021 - 05/22/2021 | 1.01 | 1.05 |
| 22 | 05/23/2021 - 05/29/2021 | 1.01 | 1.05 |
| 23 | 05/30/2021 - 06/05/2021 | 1.02 | 1.06 |
| 24 | 06/06/2021 - 06/12/2021 | 1.03 | 1.07 |
| 25 | 06/13/2021 - 06/19/2021 | 1.04 | 1.08 |
| 26 | 06/20/2021 - 06/26/2021 | 1.05 | 1.09 |
| 27 | 06/27/2021 - 07/03/2021 | 1.07 | 1.11 |
| 28 | 07/04/2021 - 07/10/2021 | 1.08 | 1.13 |
| 29 | 07/11/2021 - 07/17/2021 | 1.10 | 1.15 |
| 30 | 07/18/2021 - 07/24/2021 | 1.09 | 1.14 |
| 31 | 07/25/2021 - 07/31/2021 | 1.09 | 1.14 |
| 32 | 08/01/2021 - 08/07/2021 | 1.08 | 1.13 |
| 33 | 08/08/2021 - 08/14/2021 | 1.08 | 1.13 |
| 34 | 08/15/2021 - 08/21/2021 | 1.07 | 1.11 |
| 35 | 08/22/2021 - 08/28/2021 | 1.06 | 1.10 |
| 36 | 08/29/2021 - 09/04/2021 | 1.06 | 1.10 |
| 37 | 09/05/2021 - 09/11/2021 | 1.05 | 1.09 |
| 38 | 09/12/2021 - 09/18/2021 | 1.04 | 1.08 |
| 39 | 09/19/2021 - 09/25/2021 | 1.02 | 1.06 |
| *40 | 09/26/2021 - 10/02/2021 | 1.01 | 1.05 |
| *41 | 10/03/2021 - 10/09/2021 | 0.99 | 1.03 |
| *42 | 10/10/2021 - 10/16/2021 | 0.97 | 1.01 |
| *43 | 10/17/2021 - 10/23/2021 | 0.96 | 1.00 |
| *44 | 10/24/2021 - 10/30/2021 | 0.96 | 1.00 |
| *45 | 10/31/2021 - 11/06/2021 | 0.95 | 0.99 |
| *46 | 11/07/2021 - 11/13/2021 | 0.94 | 0.98 |
| *47 | 11/14/2021 - 11/20/2021 | 0.94 | 0.98 |
| *48 | 11/21/2021 - 11/27/2021 | 0.94 | 0.98 |
| *49 | 11/28/2021 - 12/04/2021 | 0.94 | 0.98 |
| *50 | 12/05/2021 - 12/11/2021 | 0.94 | 0.98 |
| *51 | 12/12/2021 - 12/18/2021 | 0.94 | 0.98 |
| *52 | 12/19/2021 - 12/25/2021 | 1.00 | 1.04 |
| 53 | 12/26/2021 - 12/31/2021 | 1.07 | 1.11 |

* PEAK SEASON

08-MAR-2022 12:36:21

830UPD

1_0104_PKSEASON.TXT

COUNTY: 01
STATION: 0041
DESCRIPTION: SR 31, NORTH OF CR 74
START DATE: 02/01/2022
START TIME: 0000

| TIME | DIRECTION: N | | | | | DIRECTION: S | | | | | COMBINED TOTAL | |
|-----------------|--------------|-----|-----|-----|-------|--------------|-----|-----|-----|-------|-------------------|------|
| | 1ST | 2ND | 3RD | 4TH | TOTAL | 1ST | 2ND | 3RD | 4TH | TOTAL | | |
| 0000 | 3 | 5 | 5 | 5 | 18 | 8 | 7 | 5 | 3 | 23 | 41 | |
| 0100 | 3 | 5 | 3 | 3 | 14 | 6 | 3 | 5 | 3 | 17 | 31 | |
| 0200 | 6 | 4 | 7 | 4 | 21 | 10 | 4 | 9 | 7 | 30 | 51 | |
| 0300 | 5 | 10 | 21 | 11 | 47 | 12 | 10 | 9 | 18 | 49 | 96 | |
| 0400 | 7 | 21 | 28 | 33 | 89 | 20 | 23 | 27 | 40 | 110 | 199 | |
| 0500 | 35 | 47 | 42 | 35 | 159 | 49 | 46 | 48 | 56 | 199 | 358 | |
| 0600 | 34 | 40 | 24 | 51 | 149 | 37 | 71 | 66 | 54 | 228 | 377 | |
| 0700 | 58 | 58 | 61 | 67 | 244 | 42 | 38 | 55 | 64 | 199 | 443 | |
| 0800 | 75 | 59 | 67 | 57 | 258 | 57 | 44 | 39 | 63 | 203 | 461 | |
| 0900 | 68 | 66 | 49 | 67 | 250 | 65 | 76 | 48 | 65 | 254 | 504 | |
| 1000 | 59 | 65 | 60 | 49 | 233 | 58 | 56 | 75 | 64 | 253 | 486 | |
| 1100 | 40 | 45 | 48 | 52 | 185 | 84 | 60 | 72 | 64 | 280 | 465 | |
| 1200 | 40 | 53 | 59 | 52 | 204 | 61 | 49 | 58 | 74 | 242 | 446 | |
| 1300 | 50 | 50 | 45 | 52 | 197 | 64 | 50 | 59 | 54 | 227 | 424 | |
| 1400 | 45 | 53 | 67 | 39 | 204 | 53 | 67 | 61 | 49 | 230 | 434 | |
| 1500 | 56 | 43 | 45 | 57 | 201 | 34 | 39 | 43 | 61 | 177 | 378 | |
| 1600 | 54 | 59 | 39 | 44 | 196 | 41 | 25 | 44 | 40 | 150 | 346 | |
| 1700 | 40 | 44 | 37 | 16 | 137 | 35 | 27 | 29 | 21 | 112 | 249 | |
| 1800 | 25 | 14 | 24 | 23 | 86 | 30 | 21 | 25 | 21 | 97 | 183 | |
| 1900 | 13 | 21 | 15 | 17 | 66 | 12 | 15 | 9 | 25 | 61 | 127 | |
| 2000 | 7 | 9 | 12 | 5 | 33 | 6 | 14 | 10 | 9 | 39 | 72 | |
| 2100 | 5 | 15 | 4 | 9 | 33 | 11 | 8 | 8 | 14 | 41 | 74 | |
| 2200 | 6 | 11 | 8 | 6 | 31 | 2 | 9 | 11 | 10 | 32 | 63 | |
| 2300 | 6 | 5 | 4 | 2 | 17 | 2 | 4 | 5 | 7 | 18 | 35 | |
| 24-HOUR TOTALS: | | | | | 3072 | | | | | | 3271 | 6343 |

| PEAK VOLUME INFORMATION | | | | | |
|-------------------------|------|--------|--------------|--------|---------------------|
| DIRECTION: N | | | DIRECTION: S | | COMBINED DIRECTIONS |
| A.M. | HOUR | VOLUME | HOUR | VOLUME | HOUR VOLUME |
| | 745 | 268 | 845 | 252 | 830 501 |
| P.M. | 1345 | 217 | 1245 | 247 | 1215 459 |
| DAILY | 745 | 268 | 1030 | 283 | 945 505 |

| | | | |
|------------------|-------|-------|-------|
| TRUCK PERCENTAGE | 48.67 | 43.01 | 45.75 |
|------------------|-------|-------|-------|

| CLASSIFICATION SUMMARY DATABASE | | | | | | | | | | | | | | | | |
|---------------------------------|----|------|-----|----|-----|-----|-----|-----|-----|----|----|----|----|----|----|---------------|
| DIR | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | TOTTRK TOTVOL |
| N | 18 | 919 | 640 | 39 | 247 | 569 | 32 | 172 | 369 | 38 | 17 | 11 | 1 | 0 | 0 | 1495 3072 |
| S | 18 | 1158 | 688 | 30 | 254 | 161 | 410 | 146 | 359 | 14 | 20 | 13 | 0 | 0 | 0 | 1407 3271 |

CHARLOTTE COUNTY: 2023 ROADWAY LEVEL OF SERVICE DATA

| VV SNO | Roadway | Station | From | To | Speed | Lanes | 2023 AADT | Sugg. Gr. Rate | Level of Service Calculations ¹ | | | | | | | | |
|-----------|----------------------|---------|----------------------|----------------------|-------|-------|-----------|-------------------|--|------------------------------|---|------|------|------|------------------|---------|---------------------------------|
| | | | | | | | | | K100 | 100 th Hr Vol. | Level of Service Limits (Pk. Hr. Two-way Vol.) | | | | Level of Service | | Percent (%) Capacity Used |
| | | | | | | | | | | | B | C | D | E | Adopted | Current | |
| 43 | Cornelius Blvd | 6 | SR-776 | Biscayne Dr. | 40 | 2U | 5,349 | 5.00% | 0.091 | 487 | - | 1359 | 1440 | * | D | C | 34% |
| 44 | Cornelius Blvd | 263 | Biscayne Dr. | U.S. 41 | 40 | 2U | 5,870 | 5.00% | 0.091 | 534 | - | 1359 | 1440 | * | D | C | 37% |
| 45 | CR74/Bermont Road | 111 | U.S. 17 | Happy Hollow Rd | 45 | 2U | 10,577 | 5.00% | 0.091 | 963 | 1050 | 1620 | 2180 | 2930 | D | C | 44% |
| 46 | CR74/Bermont Road | 360 | Happy Hollow Rd | SR 31 | 55 | 2U | 3,251 | 5.00% | 0.091 | 296 | 440 | 820 | 1330 | 2710 | D | 0 | 22% |
| 47 | CR74/Bermont Road | 361 | SR 31 | County Line | 55 | 2U | 2,070 | 5.00% | 0.091 | 188 | 440 | 820 | 1330 | 2710 | D | 0 | 14% |
| 48 | CR 771 | 158 | Rotonda Blvd E | KeyStone Blvd | 50 | 4D | 12,697 | 5.00% | 0.091 | 1,155 | - | 3078 | 3222 | * | D | C | 36% |
| 49 | CR 771 | 157 | Rotonda Blvd E | Ingram Blvd | 50 | 4D | 16,573 | 5.00% | 0.091 | 1,508 | - | 3078 | 3222 | * | D | C | 47% |
| 50 | CR 771 | 155 | Ingram Blvd | Marathon Blvd | 50 | 4D | 24,966 | 5.00% | 0.091 | 2,272 | - | 3078 | 3222 | * | D | C | 71% |
| 51 | CR 771 | 159 | Marathon Blvd | SR 776 | 50 | 4D | 19,418 | 5.00% | 0.091 | 1,767 | - | 3078 | 3222 | * | D | C | 55% |
| 52 | CR 775 | 163 | C.R. 771 | Boca Grande Causeway | 35 | 2U | 8,588 | 5.00% | 0.091 | 781 | - | 594 | 1197 | 1269 | D | D | 65% |
| 53 | CR 775 | 164 | Boca Grande Causeway | Gaspar Dr. | 45 | 2U | 6,860 | 3.00% | 0.091 | 624 | - | 1359 | 1440 | * | D | C | 43% |
| 54 | CR 775 | 165 | Gaspar Dr. | Cape Haze Dr. | 45 | 2U | 8,736 | 5.00% | 0.091 | 795 | - | 1359 | 1440 | * | D | C | 55% |
| 55 | CR 775 | 166 | Cape Haze Dr. | Esther St. | 45 | 2U | 9,088 | 5.00% | 0.091 | 827 | - | 1359 | 1440 | * | D | C | 57% |
| 56 | CR 775 | 141 | Esther St. | Rotonda Blvd. W | 45 | 2U | 10,109 | 3.00% | 0.091 | 920 | - | 1359 | 1440 | * | D | C | 64% |
| 57 | CR 775 | 140 | Rotonda Blvd. W | Short St. | 45 | 4D | 14,574 | 3.00% | 0.091 | 1,326 | - | 3078 | 3222 | * | D | C | 41% |
| 58 | CR 775 | 128 | Short St. | San Casa Dr. | 45 | 4D | 12,450 | 3.00% | 0.091 | 1,133 | - | 3078 | 3222 | * | D | C | 35% |
| 59 | CR 775 | 125 | Mississippi Ave. | Ainger Creek | 45 | 4D | 14,548 | 3.00% | 0.091 | 1,324 | - | 3078 | 3222 | * | D | C | 41% |
| 60 | CR 775 | 126 | Ainger Creek | S.R. 776 | 45 | 4D | 15,565 | 3.00% | 0.091 | 1,416 | - | 3078 | 3222 | * | D | C | 44% |
| 61 | Cranberry Blvd | 217 | U.S. 41 | Hillsborough Blvd. | 40 | 2U | 11,268 | 3.00% | 0.091 | 1,025 | - | 1359 | 1440 | * | D | C | 71% |
| 62 | David Blvd | 210 | Lafitte Waterway | Willmington Blvd. | 30 | 2U | 3,471 | 5.00% | 0.091 | 316 | - | 594 | 1197 | 1269 | D | C | 26% |
| 63 | Deep Creek Blvd | 225 | Rio De Janeiro Ave. | Sandhill Blvd. | 35 | 2U | 7,096 | 5.00% | 0.091 | 646 | - | 594 | 1197 | 1269 | D | D | 54% |
| 64 | Deep Creek Blvd | 264 | Rio De Janiero Ave. | Seasons Dr. | 35 | 2U | 2,810 | 5.00% | 0.091 | 256 | - | 594 | 1197 | 1269 | D | C | 21% |
| 65 | Easy Street | 29 | U.S. 41 | Olean Blvd. | 30 | 2U | 2,104 | 2.00% | 0.091 | 191 | - | 594 | 1197 | 1269 | D | C | 16% |
| 66 | Easy Street | 30 | Olean Blvd. | Gibraltar Dr. | 30 | 2U | 2,248 | 4.00% | 0.091 | 205 | - | 594 | 1197 | 1269 | D | C | 17% |
| 67 | Edgewater Drive | 7 | Flamingo Blvd. | Pellam Blvd. | 40 | 2U | 5,463 | 5.00% | 0.091 | 497 | - | 1359 | 1440 | * | D | C | 35% |
| 68 | Edgewater Drive | 40 | Pellam Blvd. | Midway Blvd. | 40 | 2U | 9,268 | 5.00% | 0.091 | 843 | - | 1359 | 1440 | * | D | C | 59% |
| 69 | Edgewater Drive | 39 | Midway Blvd. | Lakeview Blvd. | 35 | 4D | 10,139 | 3.00% | 0.091 | 923 | - | 1179 | 2628 | 2736 | D | C | 35% |
| 70 | Edgewater Drive | 38 | Lakeview Blvd. | W Tarpon Blvd. | 35 | 4D | 12,083 | 3.00% | 0.091 | 1,100 | - | 1179 | 2628 | 2736 | D | C | 42% |
| 71 | Edgewater Drive | 41 | W Tarpon Blvd. | Port Charlotte Blvd. | 35 | 4D | 11,775 | 5.00% | 0.091 | 1,072 | - | 1179 | 2628 | 2736 | D | C | 41% |
| 72 | Edgewater Drive | 37 | Port Charlotte Blvd | Harbor Blvd. | 35 | 4D | 12,429 | 5.00% | 0.091 | 1,131 | - | 1179 | 2628 | 2736 | D | C | 43% |
| 73 | Edgewater Drive | 36 | Harbor Blvd | Cousley Dr. | 35 | 4D | 13,106 | 5.00% | 0.091 | 1,193 | - | 1179 | 2628 | 2736 | D | D | 45% |
| 74 | Edgewater Drive | 34 | Cousley Dr. | Gardner Dr. | 35 | 4D | 12,938 | 5.00% | 0.091 | 1,177 | - | 1179 | 2628 | 2736 | D | C | 45% |
| 75 | Edgewater Drive | 35 | Gardner Dr. | U.S. 41 | 35 | 4D | 13,307 | 5.00% | 0.091 | 1,211 | - | 1179 | 2628 | 2736 | D | D | 46% |
| 76 | Education Way | 88 | Toledo Blade Blvd. | Murdock Circle | 30 | 2U | 5,566 | 5.00% | 0.091 | 506 | - | 594 | 1197 | 1269 | D | C | 42% |
| 77 | Elkcam Blvd | 43 | U.S. 41 | Midway Blvd. | 35 | 2U | 2,674 | 5.00% | 0.091 | 243 | - | 594 | 1197 | 1269 | D | C | 20% |
| 78 | Elmira Blvd | 90 | Conway Blvd. | Beacon Dr. | 30 | 2U | 3,489 | 5.00% | 0.091 | 318 | - | 594 | 1197 | 1269 | D | C | 27% |
| 79 | Elmira Blvd | 91 | Beacon Dr. | Kings Highway | 30 | 2U | 2,521 | 5.00% | 0.091 | 229 | - | 594 | 1197 | 1269 | D | C | 19% |
| 80 | Flamingo Blvd | 8 | Edgewater Dr. | Christopher Waterway | 45 | 2U | 5,646 | 5.00% | 0.091 | 514 | - | 1359 | 1440 | * | D | C | 36% |
| 81 | Flamingo Blvd | 9 | Christopher Waterway | SR-776 | 45 | 2U | 5,849 | 5.00% | 0.091 | 532 | - | 1359 | 1440 | * | D | C | 37% |
| 82 | Florida Street | 172 | Carmalita St. | La Villa Rd. | 40 | 2U | 1,378 | 3.00% | 0.091 | 125 | - | 1359 | 1440 | * | D | C | 9% |
| 83 | Forrest Nelson Blvd | 82 | U.S. 41 | Peachland Blvd. | 35 | 2U | 6,216 | 5.00% | 0.091 | 566 | - | 594 | 1197 | 1269 | D | C | 47% |
| 84 | Boca Grande Causeway | 162 | Boca Grande Causeway | C.R. 775 | 45 | 2U | 8,093 | 3.00% | 0.091 | 736 | - | 1359 | 1440 | * | D | C | 51% |



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.

April 7, 2023

Robert H. Berntsson, Esq.
Wideikis, Benedict & Berntsson, L.L.C.
THE BIG W LAW FIRM
3195 South Access Road
Englewood, Florida 34224

In response to your request on April 7, 2023, the Florida Master Site File lists no cultural resources recorded for the subject property located within T40S R25E Section 23 in Charlotte County, Florida.

- This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.
 - Because vandalism and looting are common at Florida sites, we ask that you limit the distribution of location information on archaeological sites.
 - While many of our records document historically significant resources, the documentation of a resource at the Florida Master Site File does not necessarily mean the resource is historically significant.
- #
- 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, Ph.D.
Florida Master Site File
Eman.Vovsi@DOS.MyFlorida.com