



DEVELOPMENT REVIEW

Property Information

Property address or Location 4001 Oleander Ave. Fort Pierce, FL 34982

Parcel ID #(s) 2433-144-0001-000-6

Project description Construction of an auto parts retail development with associated parking, infrastructure, and stormwater management area.

Application Type

- Site Plan
 Conditional Use w/New Construction
 Conceptual Development Plan
 Minor Amendment
 Major Amendment

Site Information

Non-Residential: Proposed Sq. Ft.: 14,086 Site Acreage: 4.22

Residential: Proposed Units: n/a Proposed Sq. Ft.: n/a Site Acreage: n/a

Performance NAPA LLC

Property Owner(s)

PO Box 220

Street Address

Pahokee FL 33476

City State Zip

Phone Number

Email Address

Michael DePree, Project Engineer, DePree Engineering LLC

Applicant/Representative, Title, Company

1613 Cloverlawn Ave.

Street Address

Orlando FL 32806

City State Zip

(941)932-0166

Phone Number

Michael.DePree@DePreeEngineering.com

Email Address

Property Owner(s) Acknowledgements: - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.

Property Owner(s) Signature(s)

PAUL ALLEN - PRESIDENT
paul@rchatton.com

APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS

CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM

For more information, please refer to the website:

<https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Rev1>



DESIGN REVIEW

Property Information

Property address or Location 4001 Oleander Ave. Fort Pierce, FL 34982
 Parcel ID #(s) 2433-144-0001-000-6
 Project description Construction of an auto parts retail development with associated parking, infrastructure, and stormwater management area.

Performance NAPA LLC

Property Owner(s)

PO Box 220

Street Address

Pahokee FL 33476

City State Zip

Phone Number

Email Address

Michael DePree, Project Engineer, DePree Engineering LLC

Applicant/Representative, Title, Company

1613 Cloverlawn Ave.

Street Address

Orlando FL 32806

City State Zip

(941)932-0166

Phone Number

Michael.DePree@DePreeEngineering.com

Email Address

Property Owner(s) Acknowledgements: - This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Planning staff for purposes of consideration of this Application and/or presentation to the Planning Board and City Commission.

Property Owner(s) Signature(s)

PAUL ALLEN - PRESIDENT
paul@rchatton.com

APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS

CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM

For more information, please refer to the website:

<https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Rev>



CONCURRENCY CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	Undeveloped	Industrial (IND) (St. Lucie County)	Light Industrial (IL) (St. Lucie County)
South	Undeveloped	Medium Density Residential (RM)	Medium Density Residential (R-4)
East	Undeveloped	Industrial (I)	Light Industrial (I-1)
West	Residential	RU - Urban Residential (St. Lucie County)	RS-3 - Residential Single Family (St. Lucie County)

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	General Commercial (GC)	General Commercial (C-3)	60% / 110,294 SF	4.22	X and AE
**Proposed	General Commercial (GC)	General Commercial (C-3)	7.7% / 14,086 SF	4.22	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot 1,760.75 GPD
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day
**Proposed Zoning/FLU	Total gallons per day
**Change in Demand	Total gallons per day

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot 1,760.75 GPD
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day
**Proposed Zoning/FLU	Total gallons per day
**Change in Demand	Total gallons per day

C. Parks and Recreation (Residential Classifications Only): N/A (Du x 2.6 = persons + 44,227 = population /LOS)				
Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people			
Urban District	5 acres per 1,000 people			
Community	2.5 acres per 1,000 people			
Neighborhood	1.36 acres per 1,000 people			

D. Public Schools (Residential Classifications Only): N/A Single Family: (du x 0.405 = students/70% K-8/30% High) Multi-family: (du x 0.207 = students/70% K-8/30% High)		
	K-8	High
School Name		
City		
Distance		
Current Zoning/FLU	Enrollment	
**Proposed Zoning/FLU	Enrollment	
**Change in Demand		

E. Solid Waste: Residential (2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)	
Demand Analysis	Maximum
Current Zoning/FLU	General Commercial (GC) / General Commercial (C-3)
**Proposed Zoning/FLU	General Commercial (GC) / General Commercial (C-3)
*Change in Demand	0

F. Stormwater: Potential increase in volume discharged due to increased impervious coverage, reduced groundwater seepage or loss of surface water storage impacting Adopted LOS of 25-year 3-day storm Pre vs. Post Runoff (Storm sewers to convey 5 year- 1 day storm event; Canals to convey 3 year – 1 day storm event)

Impact	In order to meet the North St. Lucie River Water Control District volumetric criterion, the discharge from the site has been reduced from 41,931 cu.ft. to 21,753 cu.ft.
---------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------

III. Transportation Analysis: Complete ITE Trip Generation Form (Attached)

G. Transportation Analysis: Complete ITE Trip Generation Data Form		
Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	AM/PM Peak Hour Trips
Demand Analysis	Maximum	Maximum
Current Zoning/FLU	C-3 GENERAL COMMERCIAL/GENERAL COMMERCIAL	C-3 GENERAL COMMERCIAL/GENERAL COMMERCIAL
**Proposed Zoning/FLU	C-3 GENERAL COMMERCIAL/GENERAL COMMERCIAL	C-3 GENERAL COMMERCIAL/GENERAL COMMERCIAL
*Change in Demand	Trips ⁰	Trips ⁰
Impact to Capacity	0	

IV. Project Description

PHASING	
Is this project (phase) part of a larger project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.	
Total Project: Residential Units:	Single Family: Multifamily:
Non-residential (square footage):	
Mixed-use (describe use):	
(If this is a single phase project, name it Phase I – Total)	

RESIDENTIAL DATA					
Type	Phase	Number of Units	Acres	Expected beginning date	Expected completion date
Single-family, detached					
Single-family, attached					
Multi-family					
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	Phase	Square footage	Acres	Expecting beginning date	Expected completion date
RETAIL	1/1	14,086	4.22	7/15/23	7/15/24

A. Indicate whether the proposed project will be eliminating any existing recreational facilities. If yes, detail the number and type being eliminated. Yes No

- B. 1. Does this application involve demolition or re-use of any structure(s)? Yes No
 If yes, what is the size of the structure(s) to be demolished or re-used? N/A
2. What is the current use of the structure to be demolished or re-used? N/A
3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? Yes No
 If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested: N/A

** Complete section if requesting a change in zoning, future land use, or expanding

February 15, 2023

Subject: Project Narrative
NAPA – Oleander Ave.
4001 Oleander Avenue Fort Pierce, FL

Project Narrative

The intent of this project is to develop 4001 Oleander Avenue in Fort Pierce, Florida (Parcel No. 2433-144-0002-000-3) into a NAPA Auto Parts store. The building will consist of 3,329 SF of retail area, 508 SF of associated back of house office space, and 10,249 SF of associated warehouse storage. The site is currently undeveloped within the jurisdiction of Fort Pierce with a General Commercial (C-3) zoning and a General Commercial (GC) future land use. The parcel is within the South Florida Water Management District (SFWMD) and the North St. Lucie River Water Control District (NSLRWCD). The site contains woodlands and wetlands acreage is pending FDEP and SFWMD review. Wetland impacts are anticipated to widen the existing ditch crossing to provide access to the site. NSLRWCD Lateral No. 15 runs along the southern property line of the site. South of the NSLRWCD Lateral No. 15 is a currently undeveloped, but recently permitted, residentially zoned (R-4) lot. A St. Lucie County drainage canal runs along the eastern property line, and a roadside swale associated with Oleander Avenue lies to the east of the drainage canal. A ditch runs along the northern property line and connects to the St. Lucie County drainage canal. North of the ditch is an undeveloped parcel within the St. Lucie County Jurisdiction with a light industrial (IL) zoning and an industrial (IND) future land use. The property to the north is pending approval for development of a silica factory. West of the property is residentially zoned (RS-3) properties with urban residential future land uses (RU) within the jurisdiction of St. Lucie County. The utilities for the site will be provided by Fort Pierce Utility Authority (FPUA). A watermain west of Oleander Ave. will provide potable water and a sanitary force main east of Oleander Ave. will accept flows from a private lift station on site. Stormwater runoff will be collected in inlets and conveyed via underground pipes to bubble-up structures in a dry retention pond sized and designed to satisfy state and local stormwater criteria.

Setbacks Observed:

East/Front Setback : 25 ft

North/Side : 15 ft

South/Side : 15 ft

West/Rear : 15 ft

This Instrument Prepared by and Return to:

Anchor Land Title, Inc.

737 SW Port St. Lucie Blvd., Suite C
Port St. Lucie, FL 34953
(772) 621-8255

Lawana M. Brown, CLC
22-5133N
Parcel ID No.: 2433-144-0001-000/6

Special Warranty Deed

27.00 2065.00 SPACE ABOVE THIS LINE FOR RECORDING DATA _____

THIS WARRANTY DEED, made and executed the 26 day of July, 2022 by

Oleander Oaks, LLC, a Florida Limited Liability Company

whose post office address is: **1910 Cypress Avenue, Fort Pierce, FL 34949**, herein called the grantor, to

Performance NAPA, LLC, a Florida Limited Liability Company

whose post office address is: **PO Box 220, Pahokee, FL 33476**, hereinafter called the Grantee:

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives and assigns of individuals, and the successors and assigns of corporations)

WITNESSETH: That the grantor, for and in consideration of the sum of TEN AND 00/100'S (\$10.00) Dollars and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the grantee all that certain land situate in ST. LUCIE County, State of Florida, viz:

THAT PORTION OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LYING NORTHERLY OF SAINT LUCIE RIVER WATER CONTROL DISTRICT CANAL 15, ALSO KNOWN AS PLATTS BRANCH. LESS AND EXCEPTING THEREFROM ALL RIGHTS OF WAY AND EASEMENTS FOR PUBLIC ROAD AND DRAINAGE CANALS.

Subject to easement, restrictions, and reservations of record and to taxes for the year 2021 and thereafter.

TOGETHER, with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

TO HAVE AND TO HOLD, the same in fee simple forever.

AND, the grantor hereby covenants with said grantee that except as above noted, at the time of delivery of this Special Warranty Deed the premises were free of all encumbrances made by them, and they will warrant and defend the same against the lawful claims of all persons claiming by, through or under grantor.

This deed may be signed in counterparts.

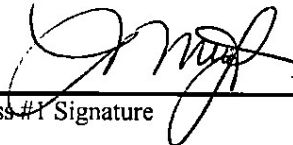
IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:

Oleander Oaks, LLC, a Florida Limited Liability Company

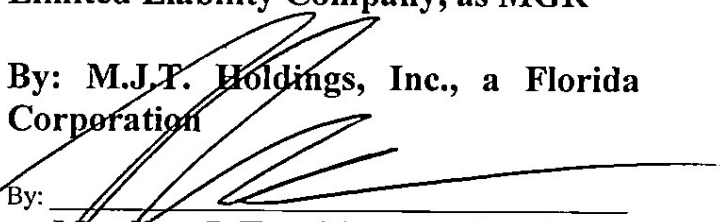
By: Jole Futures, LLC, a Florida Limited Liability Company, as MGR

By: M.J.T. Holdings, Inc., a Florida Corporation



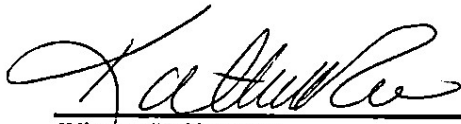
Witness #1 Signature

Lawana M. Brown

By: 

**Matthew J. Toeniskoetter, President,
M.J.T. Holdings, Inc., a Florida Corporation**

Printed Witness #1



Witness #2 Signature


Kathryn Rossman

Printed Witness #2

**STATE OF FLORIDA
COUNTY OF ST. LUCIE**

The foregoing instrument was acknowledged before me this 26 day of July, 2022, by **Matthew J. Toeniskoetter, ^{LLC}** President for **M.J.T. Holdings, Inc. a Florida Corporation, MGR for Jole Futures, a Florida Limited Liability Company, MGR for Oleander Oaks, LLC, a Florida Limited Liability Company** on behalf of the corporation who is personally known to me or who has produced Driver's License or as identification and who did not take an oath.

SEAL



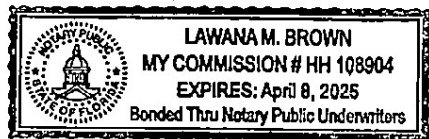
Notary Signature

Lawana M. Brown

My Commission Expires: 4/8/2025

Printed Notary Name

22-5133N



IN WITNESS WHEREOF, the said grantor has signed and sealed these presents the day and year first above written.

Signed, sealed and delivered in the presence of:

Oleander Oaks, LLC, a Florida Limited Liability Company

By: Posterity Ventures, Inc. a Florida Corporation, MGR

[Signature]
Witness #1 Signature
Lawana M. Brown

[Signature]
By: **Michael J. Bradley, Jr. Vice President**

[Signature]
Printed Witness #1
Witness #2 Signature
Kathryn Rossman

Printed Witness #2

STATE OF FLORIDA
COUNTY OF ST. LUCIE

The foregoing instrument was acknowledged before me this 29 day of July, 2022, by **Michael J. Bradley, Jr., Vice President for Posterity Ventures, Inc., a Florida Corporation, MGR for Oleander Oaks, LLC, a Florida Limited Liability Company** on behalf of the corporation who is personally known to me or who has produced Driver's License or _____ as identification and who did not take an oath.

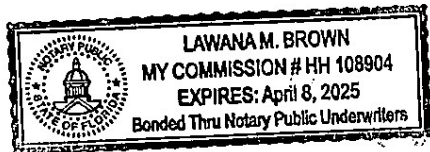
SEAL

[Signature]
Notary Signature
Lawana M. Brown

My Commission Expires: 4/8/2025

Printed Notary Name

22-5133N





**Saint Lucie County
Property Appraiser
Michelle Franklin CFA**

Report generated: Friday, February 3, 2023

Parcel Report



Parcel

PARCELNO: 2433-144-0001-000-6

Property ID: 33036

Owner1: Performance NAPA LLC

SiteAddress: 4001 OLEANDER AVE

Owner

Owner1: Performance NAPA LLC

Owner2:

Owner3:

MailingAddress: PO Box 220 Pahokee, FL 33476-0220

Overview

PrimaryLandUse: 4000 - VCNT INDUS

DistrictGroup: 0022 - Fort Pierce

Subdivision: Metes and Bounds

Just/Market Value: \$340,000

FinishedArea:

Acres: 4.24

TotalArea: 184,694

Legal Description

LegalDescription: 33 35 40 THAT PART OF SE 1/4 OF SE 1/4 OF NE 1/4 LYG N OF CANAL NO. 15-LESS RD AND CANAL R/WS- (4.24 AC - 184,694 SF)

Value History

Year	Just/Market Value	Building Value	Land Value	SFYI Value	Assessed Value	Exemption Amount	County Taxable	Save Our Home OR 10% Cap Differential	Ag Credit
2022	\$340,000	\$0	\$340,000	\$0	\$340,000	\$0	\$340,000	\$0	\$0
2021	\$314,000	\$0	\$314,000	\$0	\$314,000	\$0	\$314,000	\$0	\$0
2020	\$314,000	\$0	\$314,000	\$0	\$314,000	\$0	\$314,000	\$0	\$0
2019	\$314,000	\$0	\$314,000	\$0	\$314,000	\$0	\$314,000	\$0	\$0

Tax Links

[SLC Tax Collector's Office taxes for this parcel](#)

[Download TRIM notice for this parcel](#)

Special Assessments

Description	Start Year	Units	Amount
Fort Pierce Stormwater Charge	2019	11.5	793.5
North St. Lucie Water Management District	2019	4.24	87.98

Improvements

Building Sequence: 1
 Bedrooms: 0
 Bathrooms: 0
 Building Type: -
 Story Height:
 No of Living Units:
 Total Finished Area: 0
 Gross Sketched Area: 0
 Year Built:
 Effective Year:
 Primary Roof Cover:
 Primary Roof Structure:
 Primary Wall:
 A/C %: 0

Land Lines

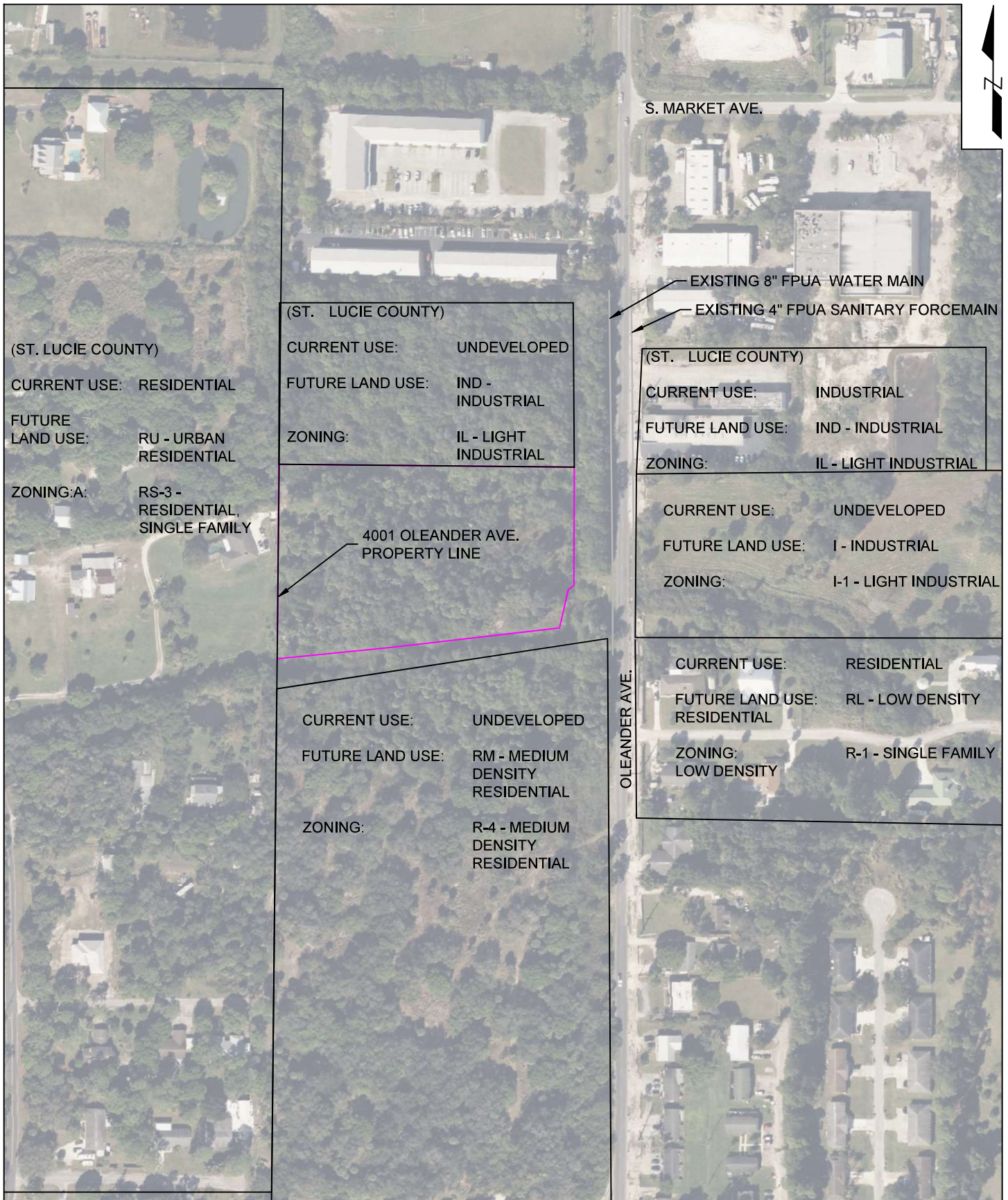
Line Number	Units	Unit Type
1	184,694	SqFt

Sales History

Sale Date	Sale Price	Sale Code	Deed Type	Grantor	Book Page	View Document
07/26/2022	\$295,000	0001	SPWD	Oleander Oaks LLC	4871-920	Clerk of Courts
05/19/2021	\$0	0311	QC	Oleander Oaks LLC	4632-1721	Clerk of Courts
03/19/2021	\$100	0311	QC	Oleander Oaks LLC	4600-1149	Clerk of Courts
10/05/2017	\$100	0111	QC	MJT Holdings Inc	4050-2327	Clerk of Courts
05/11/2017	\$0	0118	CT	MJT Holdings Inc	3995-2451	Clerk of Courts
05/05/2017	\$160,000	0111	QC	MJT Holdings Inc	3994-1479	Clerk of Courts
04/25/2017	\$299,100	0118	CT	Faith Baptist Church Of FP	3988-1547	Clerk of Courts
04/05/1999	\$40,500	XX04	WD	Faith Baptist Church Of Fort	1213-2569	Clerk of Courts
12/30/1998	\$100	XX04	WD	Joseph Lach	1194-1	Clerk of Courts
12/01/1995	\$100	XX01	QC	Joseph Lach	988-882	Clerk of Courts
06/01/1981	\$180,000	XX00	CV		358-2448	Clerk of Courts
05/01/1973	\$50,000	XX00	CV		214-1160	Clerk of Courts

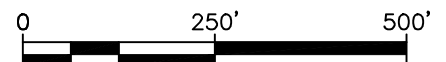
Photos





LEGAL DESCRIPTION:

LOCATION MAP



(O.R.B. 471, PG. 920)

THAT PORTION OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LYING NORTHERLY OF SAINT LUCIE RIVER WATER CONTROL DISTRICT CANAL 15, ALSO KNOWN AS PLATT'S BRANCH, LESS AND EXCEPTING THEREFROM ALL RIGHT OF WAY AND EASEMENTS FOR PUBLIC ROAD AND DRAINAGE CANALS.

**Subject: Fort Pierce TRC Comment Response Letter
NAPA Auto Parts – Oleander Ave.
4001 Oleander Ave. Fort Pierce, FL**

DePree Engineering has prepared the following responses to the comments produced for the April 20th Fort Pierce Technical Review Committee. Plans have been revised accordingly and references to the modified plans are provided in the responses below.

City of Fort Pierce Planning Department

1. Per City Code Section 125-317. – Sidewalks: Please include a sidewalk along Oleander Avenue with a sidewalk connection to the entrance of the proposed building.

Response: A sidewalk has been added in the St. Lucie County ROW with connection to the site. See Sheet C4.0.

2. Per City Code Section 125-315. – Off-Street Parking and Loading(f): Please include bicycle parking (bike rack or lockers) at a calculation of 1 bicycle space per 10 motor vehicle spaces.

Response: Four bicycle parking spaces have been added. See Sheet C4.0.

3. Please include the detailed breakdown of your parking calculations within your Site Data on the Site Plan. (As shown in your narrative)

Response: A detailed parking breakdown has been added to the Site Data table on Sheet C4.0.

4. The Site Plan only shows two (2) Parking wheel stops in the handicap parking spaces. Is this intentional? If so, why?

Response: Parking wheel stops are intended to deter vehicles from blocking the pedestrian ramps and landings providing ADA access to the building.

5. Please provide directional arrows in the driveways, and a stop sign and stop bar at the exit of the Site.

Response: A stop sign, stop bar, and directional arrows have been added to Sheet C4.0.

6. Please see the attached Dumpster Detail Enclosure requirements.

Response: The dumpster enclosure and detail have been updated on sheet C4.0.

7. Per City Code Section 123-37. – General Landscaping Requirements (10): Refuse and recycling dumpsters utilized by multifamily residential complexes, in commercial, industrial, and institutional facilities shall be screened from view on all sides and shall be gated. Gates may be left open only on scheduled pick-up days and must be closed following pick up. Such screening shall consist of a six-foot-high masonry wall or wooden fence. In addition, when feasible, one shrub or hedge shall be planted at two-foot centers along the outside perimeter of the screen. Dumpsters shall be located in an area that minimizes public view. This subsection shall apply to dumpsters servicing structures built on or after June 1, 1996. Please include a six-foot high masonry wall or wooden fence with one shrub or hedge planted at two-foot centers along the outside perimeter of the screen.

Response: A note specifying shrub spacing has been added to sheet LA 1 of 2.

8. Please adhere to City Code Section 123-37. – General Landscaping Requirements. The landscaping seems deficient with the required 10-foot-wide landscape buffer. If you intend to not install landscaping in those western areas, please add the additional required landscaping to the front of the site, facing Oleander Avenue.

Response: Wetland areas will be impacted and mitigated.

9. A completion certification by a landscape architect, cost estimate and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.

Response: Information acknowledged.

10. Prior to the issuance of any site clearing permits, the applicant shall provide a Tree Mitigation Survey and coordinate with the City of Ft. Pierce Arborist for the required mitigation of the City regulated trees proposed to be removed as a result of this site's development/construction activity.

Response: Information acknowledged.

11. Please consider a monument sign and installing a landscaped area around the proposed monument sign base which extends a minimum distance of three (3) feet in all directions. Such landscaped areas shall be completely covered by ground cover and shrubs, hedges, or similar vegetative materials.

Response: Signage will be affixed to the façade of the building as shown in the architectural elevation.

If you choose to do a Pylon Sign, please include a base to cover exposing the pole and install a landscaped area around the proposed monument sign base which extends a minimum distance of three (3) feet in all directions. Such landscaped areas shall be completely covered by ground cover and shrubs, hedges, or similar vegetative materials.

Response: Signage will be affixed to the façade of the building as shown in the architectural elevation.

12. Per City Code Section 125-314. – Design Review, (4) Elevations (k): Blank walls are discouraged. Walls shall be punctuated with windows, doors, or architectural elements. New construction that includes long dimensions of continuous wall shall employ the use of site breaks to punctuate the streetscape. (Please employ site breaks with any of the above examples)

Response: Architectural elevations have been updated to eliminate blank walls.

13. Per City Code Section 125-314. – Design Review, (5) Streetscape improvement guidelines: Streetscape improvements include those architectural or functional facilities or structures which occur on site but are not part of the building and which contribute to the overall appearance of the development and encourage and facilitate human interaction with the environment. Examples include, but are not limited to, decorative light fixtures, fountains, sculpture and other civic art, benches and tables, planters, retaining walls, pedestrian and bicycle paths, bicycle parking structures, trash receptacles and enclosures, vendor areas, bollards, and fences. These improvements shall be designed to be consistent with all guidelines of this section and shall be reviewed for aesthetic functionality and compatibility with the city's design expectations. Please employ Streetscape Improvements such as planters, foundation plantings, and light fixtures.

Response: Foundation plantings have been added along the eastern façade of the building.

14. Please provide justification for the parking calculation that includes the use of interior and exterior storage.

Response: Parking calculations have been updated on Sheet C4.0.

15. If you choose to install fencing, please use a decorative or vinyl fence instead of chain-link.

Response: No fencing is proposed.

St. Lucie County PW/Engineering

1. The County recommends pushing the driveway further north to avoid grading issues with the existing headwall and ditch to the south of the proposed driveway.

Response: The site plan has been revised and the driveway has been shifted north. See sheet C4.0.

2. There are currently two ditches running parallel to Oleander Avenue in the Right-of-Way. The County would encourage combining the ditches along the project frontage and providing a single driveway culvert.

Response: To prevent additional wetland impacts and to allow for sidewalk in the right-of-way, combining the ditches by grading has been avoided. The eastern ditch/roadside swale will discharge to the western ditch/canal via culvert under the proposed sidewalk. The canal will have a culvert crossing under the proposed drive to connect to the NSLRWCD canal to the south. The existing hydraulic capacity of both crossing pipes will be matched by the proposed culvert crossing under the drive.

3. A 6-foot sidewalk is required along the project frontage. The County may consider a fee-in-lieu of sidewalk in this location.

Response: A 6-foot sidewalk has been added along the frontage of the project north of the proposed driveway. Sidewalk south of the proposed drive has been omitted due to space limitations between the edge of pavement of Oleander Ave. and the existing headwall. Plans received from St. Lucie County for the proposed project to the north show the sidewalk in the flowline of the western drainage canal, therefore no connection has been made.

4. A permit for access and drainage outfall from the County prior to initiation of site improvements is required. Please remit a Site Development Permit application, an electronic set of plans and a minimum of one hard copy of all necessary plans and documents to the Engineering Division of the County. The application may be found on the County's website, Public Works Department link.

Response: A Site Development Permit application will be submitted following response submittal to Fort Pierce TRC comments.

St. Lucie County Fire District

1. Please submit a completed application for Development/Site Plan Review (St. Lucie County Fire District Development & Site Plan Review Application). This form is available on-line at <https://www.slcfcd.com>

Response: A Site Development Permit application will be submitted following response submittal to Fort Pierce TRC comments.

2. Fire District review fees are due at the time of submittal. An abbreviated fee schedule is included on the application form.

Response: Information acknowledged.

3. Please send the Fire District electronic plans for the site and buildings.

Response: Electronic plans for the site and building will be submitted with the St. Lucie County Site Plan Review Application.

4. A separate review and permit is required for Underground Fire Mains connected to standpipes or sprinkler systems.

Response: Information acknowledged.

5. Fire department access roads provided in accordance with 18.2.3 shall be provided at the start of a project and shall be maintained throughout construction. (NFPA 1 16.1.4). Surface. Fire department access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with an all-weather driving surface. (NFPA 1.18.2.3.5.2).

Response: Information acknowledged.

6. Per the St. Lucie County Fire District Fire Prevention Code Resolution 740-23. At Least 13 feet 6 inches nominal vertical clearance shall be provided and maintained over the full width of all means of access. Including, but not limited to trees, canopies, etc.

Response: Minimum vertical clearance is met over the full width of all means of access.

7. The Fire District reserves the right for future comments at the site plan & building construction phase.

Response: Information acknowledged.

8. Be advised: Dimensions of largest vehicle are as follows: 38 tons or 77k lbs, 47.5 ft. total length, 21.5 ft. wheel base, 10.5 ft. total width, 41.5 degree turning radius.

Response: Information acknowledged.

9. Minimum roadway pavement width (two-way traffic) shall be twenty (20) ft. Minimum roadway pavement width (one-way traffic) shall be twelve (12) ft.

Response: Minimum roadway pavement width is met for all drive aisles.

10. Dead end roadways serving commercial or residential occupancies must include a cul-de-sac when the roadway length exceeds one hundred-fifty (150) feet. "Y" or "T" type turnaround arrangements are permitted.

Response: A "T" type turnaround arrangement is proposed for this site.

11. Fire hydrants (shall be) are provided for buildings other than detached one-and-two-family dwellings IAW both of the following 1) The maximum distance to a fire hydrant from the closest point in the building shall not exceed 400 feet. 2) The maximum distance between fire hydrants shall not exceed 500 feet. NFPA 1:18.5.3. Please provide fire flow calculations for hydrants.

Response: Information acknowledged.

12. An approved water supply capable of supplying the required fire flow for fire protection (shall be) is identified to all premises upon which facilities, buildings, or portions of buildings which are to be constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1:18.4. See "Needed NFPA Fire Flow Calculator Spreadsheet".

Response: Comment will be addressed during St. Lucie County Site Plan Review Application.

13. Per NFPA 1114 Chapter 9, Section 1.3. Prior to the final occupancy of any building, the permitted water supply for fire protection, including fire hydrants and fire suppression systems, shall be installed, tested, and acceptable to the AHJ (SLCFD).

Response: Information acknowledged.

14. Minimum Size of Water Mains

The minimum size of water mains for supplying water for firefighting purposes shall be six (6) inches. b. The minimum size of water mains supplying hydrants on a dead end main shall be eight (8) inches. c. The maximum number of hydrants located on a dead end main shall be one (1). d. Grid or Tee systems shall be supplied by a minimum of an eight (8) inch looped main. Exceptions may be granted based on the capacity of the water distribution system but in no case shall the main size be less than six (6) inches. e. The minimum size water main(s) shall be determined by the needed fire flow as established by the Fire Marshal and based on the current Insurance Service Office (ISO) requirements.

Response: Information acknowledged.

15. Two-Way Radio Enhancement Systems/BDAS shall be installed, inspected and operationally tested in accordance with the manufacturer's published requirements, by the local fire department, and comply with the most current edition of the Florida Fire Prevention Code and its incorporated standards and codes. Pre-surveys of radio signal strength shall be submitted to the Fire Marshal in the form of heat signature mapping or a certification document of radio signal strength provided by a licensed engineer.

Response: Information acknowledged.

16. Provide the fire district the Pre-Construction Site Checklist Affidavit. This affidavit shall include the pre-construction fire protection plan, pre-construction fire department access

roads, and pre-construction on-site credible water supply for your development and or project (the affidavit can be found at <http://www.slcfd.com/182/Applications-Permits> under fire permits.

Response: Information acknowledged.

17. Site Plans submitted in accordance with this Fire Prevention Code shall include the location of all existing and proposed fire hydrants within one thousand (1,000) feet of the proposed project.

Response: Site plans as described will be submitted with the St. Lucie County Site Plan Review application.

Fort Pierce Engineering

Survey:

1. Identify the overall right-of-way width of Oleander Avenue.

Response: See revised survey sheet 1 of 2.

2. Identify all native palm trees by the clear trunk height as opposed to the diameter at breast height. This is required in order to determine the appropriate mitigation requirements as specified in the City of Fort Pierce Code of Ordinances Section 123-66.

Response: See revised survey sheet 2 of 2.

Landscape Plan:

1. According to the survey, the NSLRWMD Canal (0.31 acre wetland area) encroaches onto the subject parcel by +/- 10' along the eastern property line. The landscape plans indicate proposed plantings within the limits of this canal. Please relocated all plantings from the canal and provide the appropriate 10' landscape buffer as measured from the canal's top of bank westward.

Response: Wetland impacts and the purchasing of wetland mitigation credits are proposed for this site.

2. The above referenced wetland area extends along a portion of the northern property line. Please revise the plans to exclude any proposed encroachments into the wetland.

Response: Wetland impacts and the purchasing of wetland mitigation credits are proposed for this site.

3. Provide a Tree Mitigation Plan.

Response: A tree mitigation plan has been included with this resubmittal.

General Comments:

1. The Environmental Assessment indicates a jurisdictional Riverine Wetland exists along the southern and western areas of the property. Provide the appropriate formal wetland determination as issued by SFWMD and indicate the boundary limits of all wetland areas on the development plans.

Response: SFWMD wetland determination application is being processed. See SFWMD Application No. 230203-37409.

Site Plan:

1. Identify the location of the stop sign and stop bar.

Response: The location of the stop sign and stop bar have been added to Sheet C4.0.

2. Provide a minimum landscape buffer width of 10' along the northern and eastern property lines in accordance with Section 123-37. The required buffers are not permitted to encroach into the limits of the on-site wetlands.

Response: Landscape buffers are provided. Wetlands impacts and purchasing of mitigation credits is proposed for this development.

3. Indicate the existing roadway names on the plan.

Response: See Sheet C4.0.

4. Add a vicinity map to the plan.

Response: A vicinity maps has been added to Sheet C4.0.

5. Add the boundary information to the site plan.

Response: See Sheet C4.0.

6. Add the legal description to the plan.

Response: The legal description has been added to Sheet C4.0.

7. Indicate the setback distance between the retention area and the proposed parking.

Response: The setback distance between the retention area and the proposed parking area has been added to Sheet C4.0.

8. Add a note to the plan that all construction shall comply with the City of Fort Pierce Code of Ordinances Sections 107, 119, and 125.

Response: The note has been added to Sheet C4.0.

Drainage Plan:

1. Revise the plan to indicate a minimum drainage pipe size of 15" as per the City of Fort Pierce Code of Ordinances Section 119-3.

Response: Drainage pipe sizes proposed on site meet the 15" requirement with the exception of the trench drain connection with an 8" PVC pipe needed to connect to the shallow trench drain profile.

2. Advisory Comment: The drainage plan is conceptual at this point and will be reviewed in depth at the time of application for a DPCR approval. The current design proposes an outfall connection to NSLRWCD Canal No. 15 and as such will be required to obtain approval from NSLRWCD. Other permits needed include, but are not limited to, St. Lucie County and SFWMD.

Response: Information acknowledged.

St. Lucie County Planning and Development Services

1. Sidewalk installation and further traffic analysis of whether a northbound left turn lane into the site is requested due to the diminished LOS recognized on Oleander Avenue.

Response: A 6' sidewalk has been added to the frontage of the site along Oleander Ave. north of the proposed driveway (See Sheet C4.0). Connection to the development to the north's proposed sidewalk was not feasible as the northern sidewalk alignment is in the centerline of the St. Lucie County Canal. The sidewalk has been placed between the St. Lucie County roadside swale and the St. Lucie County canal along the Oleander Ave. ROW western limit.

A northbound left turn lane has been further investigated and coordinated with SLC staff and determined to not be warranted based on additional information discussed. Furthermore, the ditch crossing south of the driveway connection the site limits available space to widen the roadway to add a left turn lane. No left turn lane has been added at this time.

DePree Engineering

1613 Cloverlawn Ave.

Orlando, FL 32806

(941)932-0166

2. Staff encourages preservation of native trees and vegetation on the western portion of the site to serve as a buffer to single-family residential. Further, staff recommends incorporation of foundational plantings along the eastern building façade as part of the design review.

Response: Clearing of the site will be limited to the extents of the proposed improvements. Trees and vegetation on the western portion of the site will remain. Foundational plantings have been added to the eastern building façade (See Architectural Elevations).

DePree Engineering appreciates the feedback received from review team and has provided these responses to aid in the review of the resubmittal. Feel free to contact me with any questions or concerns by email at Michael.DePree@DePreeEngineering.com or by phone at 941-932-0166.

Kind Regards,



Michael DePree, P.E.

DePree Engineering, LLC.

Cool and Cobb Engineering Company

City of Ft. Pierce – Design Review Narrative

July 31, 2023

Project: Performance NAPA Auto Parts Store and Warehouse
4001 Oleander Ave.
Ft. Pierce, FL 34982

Client: Performance NAPA, LLC
209 S. Main St.
Belle Glade, FL 33430

Architect: Thomas LaPerriere, AIA
Cool and Cobb Engineering Co.
203 W. Main Street
Avon Park, FL 33825

GENERAL PROJECT INFORMATION:

The project consists of an approx. 100'-0" x 100'-0" Commercial Building being developed on a 4.24-acre parcel zoned C-3 as a Performance NAPA Auto Parts Store. The building will be mixed-use occupancy consisting of a 3,232 s.f. Mercantile Space and associated 502 s.f. of Office Space (M) and 10,777 s.f. of Warehouse/Storage Space (S-1) for a total of 14,511 s.f.

PROJECT NARRATIVE:

The building design has been considered as combination of a typical, function-based NAPA Auto Parts with an updated modern approach to make the building more visibly pleasing and cohesive with the City of Ft. Pierce Design Guidelines.

The primary color palette for the building is based on the National Automotive Parts Association corporate brand standards. The primary exterior material will be a Insulated Metal Panel with a stucco-like surface to reflect the traditional construction materials of the region. The primary South, East and North-East Corner Façades will be punctuated with split-face block columns at regular intervals and inset surfaces, paying homage to the typical masonry construction and providing visual scale and depth and will be separated from the rest of the building by a yellow band that is distinctive to NAPA Auto Parts Stores Nationwide. The inset walls of the East Façade will also be adorned with wood-slat planters, providing a pedestrian scale to the streetscape, and the split-faced columns will feature cylindrical sconce light fixtures to enhance the visual presence of the building at night. The southmost "bay" of the façade will have a storefront window with a Bahama style awning.

The upper surface of the South and East Facades will have the primary signage attached and will serve to break up the monolithic wall surfaces. Additionally, clerestory windows have been added to the upper portions of the North, East and West walls, again to break up the monolithic wall surface and to provide natural light to the interior of the building. Additionally, the windows and signs will be embellished with surface mounted warehouse shade light fixtures.

Cool and Cobb Engineering Company

The inset entry porch on the South Façade will demarcated by a surface material change to change the surface scale and indicate the primary entrance, which will be comprised of a storefront door and windows and the ceiling surface will have recessed lighting fixtures to provide illumination at night.

H E A R T L A N D

Designs

P.O. Box 3164
Lake Placid, FL 33862

(863) 464-0210 Mobile
chad@heartlanddesigns.biz

Chad Clouser

PROJECT DESCRIPTION

NAPA Auto Parts
4001 Oleander Avenue
Ft. Pierce, Florida
TRC No. 23-0700010

Mr. Vennis Gilmore, Assistant Planning Director,

Please find this letter as a supplement to the revised plans to summarize the revisions requested as per the Landscaping Check List that was provided and as per our discussion during our virtual meeting.

- Although it was for informational purposes only, I still added a note regarding the competition certificate for project close out. I added it under misc. notes on the landscape plans.
- For check list item (1.a.1) I adjusted my size specifications to reflect the nomenclature utilized by the City. All trees are now specified at 12' overall height, 2.5" DBH and 5' spread.
- To address the informational item in (1.a.2) I added a note under misc. notes on the landscape plans.
- As per our virtual meeting, check list item (2) was informational only.
- I made the dimension labels larger on the buffers to address item (3.a).
- To address the check list items pertaining to the remaining north buffer and the west buffer, I delineated them on the plans with their respective square footages. I kept the previously shown portion of the north buffer and the additional portion of the north buffer separate on the plan portion and in the calculations for plant count purposes and to make it easier to see exactly how much additional material was added.

The additional north buffer is 2,179 square feet. This equated to an additional 11 trees. A continuous hedge would equate to 73 additional plants.

The west buffer is 1,916 square feet. This equated to an additional 10 trees. A continuous hedge would equate to 65 additional plants.

As per the comment in the check list and per our discussion during our virtual meeting, I added these additional trees and shrubs to the visible areas of the project. I added 21 Dahoon Holly trees. Some were added along the front between the building and Oleander. The remainder were added around the perimeter of the parking lot. I added an additional 88 Viburnum and 62 Indian Hawthorn in and around the perimeter of the parking lot. This more evenly distributed the plants and trees and should adhere better to the intent of the ordinance with regard to providing a visually harmonious landscape that is of a compatible scale and proportions to the project.

Please let me know if you have any additional questions or concerns.



Chad Clouser
Registered Landscape Architect 6666811

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTION 33
TOWNSHIP 35 SOUTH
RANGE 40 EAST

LEGEND:		F.D.O.T.	FLORIDA DEPARTMENT OF TRANSPORTATION
BM	BENCHMARK	H.D.P.E.	HIGH DENSITY POLYETHYLENE
(C)	CALCULATED	N.S.L.R.W.M.D.	NORTH ST. LUCIE RIVER WATER MANAGEMENT DISTRICT
C/L	CENTERLINE	PG.	PAGE
CMP	CORRUGATED METAL PIPE	R/W	RIGHT-OF-WAY
E	EASTING	—	PROPERTY LINE
ELEV.	ELEVATION	—	WELL
FND	FOUND	—	POWER POLE
ID	IDENTIFICATION	—	WITH TRANSFORMER
N	NORTHING	—	EXISTING ELEVATION
PG.	PAGE	—	ON SITE WETLAND AREA
R/W	RIGHT-OF-WAY	—	ON SITE OTHER SURFACE
O.R.B.	OFFICIAL RECORDS BOOK	—	WATER AREA
S	SECTION OR SOUTH	—	WATER AREA
T	TOWNSHIP	—	WATER AREA
R	RANGE	—	WATER AREA

LEGAL DESCRIPTION:

(O.R.B. 471, PG. 920)

THAT PORTION OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LYING NORTHERLY OF SAINT LUCIE RIVER WATER CONTROL DISTRICT CANAL 15, ALSO KNOWN AS PLATT'S BRANCH, LESS AND EXCEPTING THEREFROM ALL RIGHT OF WAY AND EASEMENTS FOR PUBLIC ROAD AND DRAINAGE CANALS.

THE LEGAL DESCRIPTION OF THE WETLAND AREA CONTAINED WITHIN THIS PARCEL IS ON SHEET 2 OF 2.

SURVEYOR'S NOTES:

1. THE SURVEY DATE IS OCTOBER 12, 2022.
2. THIS IS A **BOUNDARY & TOPOGRAPHIC SURVEY**, AS DEFINED IN CHAPTER 5J-17.050(1) OF THE FLORIDA ADMINISTRATIVE CODE.
3. THIS SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
4. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
5. BEARINGS SHOWN HEREON ARE BASED ON GRID NORTH, AND ARE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT. THE BEARING BASE FOR THIS SURVEY IS THE CENTERLINE OF OLEANDER AVENUE, SAID LINE BEARS SOUTH 00°02'44" WEST AND ALL OTHER BEARINGS ARE RELATIVE THERETO.
6. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). ELEVATION DEPICTED ON THIS SURVEY WERE OBTAINED USING REAL TIME KINEMATIC (RTK) GPS METHODS WITH AN EXPECTED ACCURACY OF +/- 0.1.
7. THE COORDINATES SHOWN HEREON ARE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983, 2011 ADJUSTMENT (NAD83/2011), AS ESTABLISHED USING REAL-TIME KINEMATIC GLOBAL POSITIONING SYSTEM (RTK GPS) SURVEY METHODS. THE CORRECTED POSITIONS COMPUTED WERE VERIFIED THROUGH A REDUNDANCY OF MEASUREMENTS. ALL DISTANCES SHOWN HEREON ARE IN GRID U.S. SURVEY FEET.
8. THIS SURVEY DOES NOT HAVE THE BENEFIT OF A CURRENT TITLE COMMITMENT, OPINION, OR ABSTRACT. DURING THE COURSE OF THE SURVEY SOME SEARCHES OF THE PUBLIC RECORDS WERE MADE, BUT THESE SEARCHES WERE NOT EXHAUSTIVE AND SHOULD NOT BE CONSIDERED A SUBSTITUTE FOR A PROPER TITLE COMMITMENT, OPINION, OR ABSTRACT OBTAINED FROM A TITLE AGENCY OR OTHER TITLE PROFESSIONAL.
9. THE LEGAL DESCRIPTION OF THE LAND CONTAINED IN THIS BOUNDARY SURVEY IS BASED ON THE DESCRIPTION RECORDED IN OFFICIAL RECORDS BOOK 4871, PAGE 920, AS RECORDED IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
10. THIS SURVEY DELINEATES THE LOCATIONS OF THE LEGAL DESCRIPTIONS ON THE GROUND, BUT DOES NOT DETERMINE OWNERSHIP OR PROPERTY RIGHTS.
11. ADJOINING PROPERTY INFORMATION WAS OBTAINED FROM ST. LUCIE COUNTY PROPERTY APPRAISER OFFICE.
12. SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE AE 8.2 AND X PER FEMA MAP NUMBER 12111C, PANEL NUMBER 0189K, WITH AN EFFECTIVE DATE OF 02/19/20.
13. THE DELINEATION AND LOCATION OF THE WETLAND LINE SHOWN HEREON WAS PROVIDED BY TAYLOR LAND PLANNING LLC.
14. THE LOCATION OF THE TREES SHOWN HEREON WERE PROVIDED BY ELLA TAYLOR WITH TAYLOR LAND PLANNING LLC AND WERE NOT VERIFIED BY THE SIGNING SURVEYOR.

CERTIFICATION:

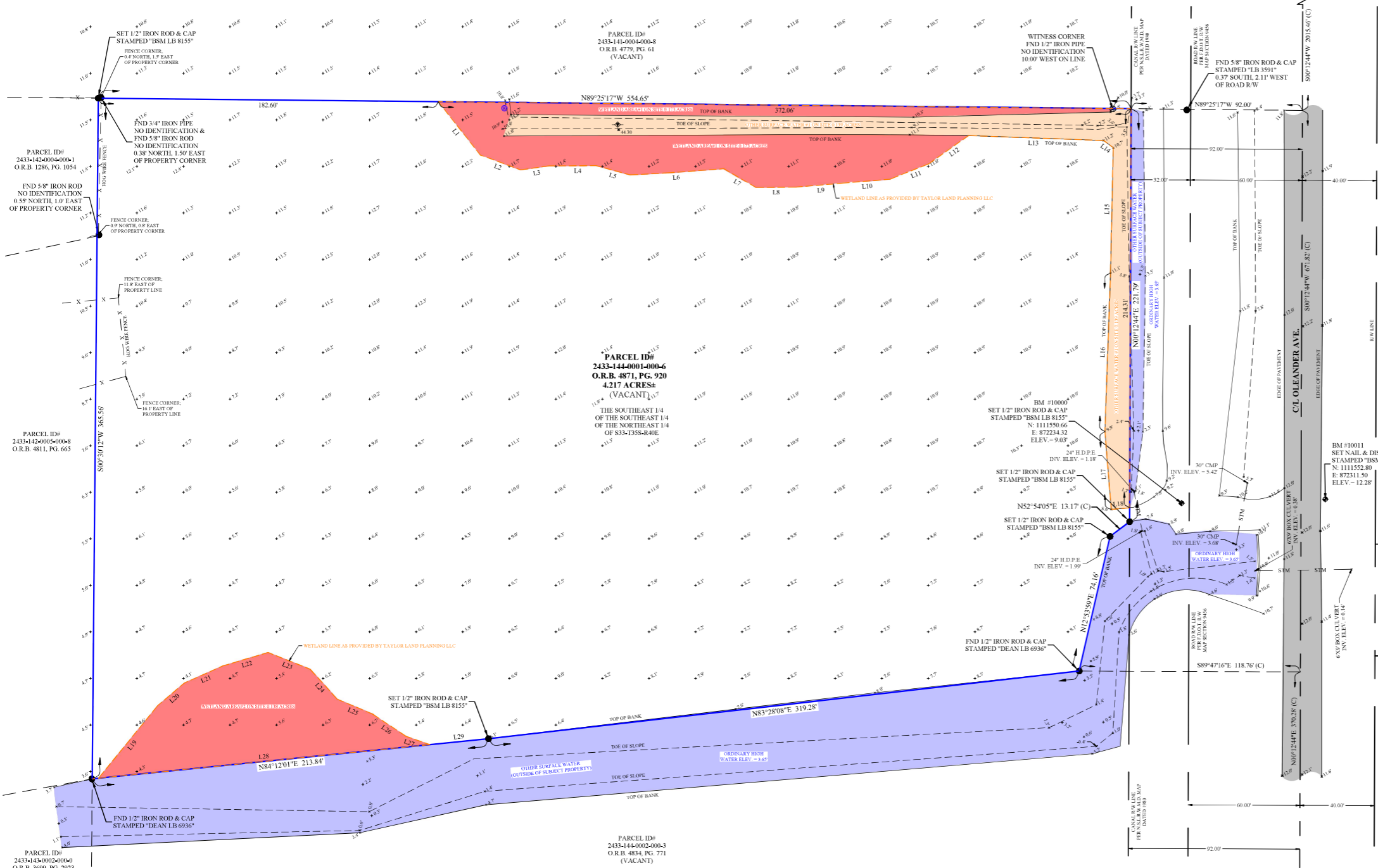
I HEREBY CERTIFY THAT THE ATTACHED SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT IT MEETS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE.

FOR THE BENEFIT OF THE FOLLOWING PARTIES ONLY:

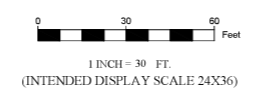
- 1) CLYDE JOHNSON CONTRACTING & ROOFING, INC.

FOR THE FIRM:
BSM & ASSOCIATES, INC.

DATE: _____
RICHARD E. BARNES III
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA LICENSE NO. 7074



GRAPHIC SCALE

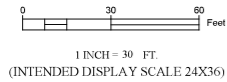


LINE#	DIRECTION	LENGTH	LINE#	DIRECTION	LENGTH
L1	S38°18'01"E	36.45	L19	S39°49'57"W	56.25
L2	S09°49'42"E	23.00	L20	S49°39'14"W	18.84
L3	S82°17'44"E	15.46	L21	S66°01'23"W	22.64
L4	S89°47'39"E	25.24	L22	S73°29'56"W	25.34
L5	S°47'39"E	18.72	L23	S68°29'23"W	24.30
L6	S85°47'08"E	28.92	L24	S42°03'44"W	21.66
L7	S59°49'47"E	19.88	L25	S67°11'54"W	29.58
L8	S89°47'38"E	21.63	L26	S46°23'57"W	21.72
L9	S85°07'24"E	25.32	L27	S76°49'28"W	15.46
L10	S85°09'53"E	25.32	L28	N84°12'03"E	178.87
L11	S88°24'24"E	22.25			
L12	S5°40'07"E	26.28			
L13	S87°54'07"E	72.59			
L14	S53°14'47"E	6.40			
L15	S01°42'27"E	49.35			
L16	S02°04'19"E	84.15			
L17	S04°39'03"E	42.00			
L18	S84°36'36"E	9.92			

BOUNDARY & TOPOGRAPHIC SURVEY
4001 OLEANDER AVENUE
FORT PIERCE, FLORIDA 34982

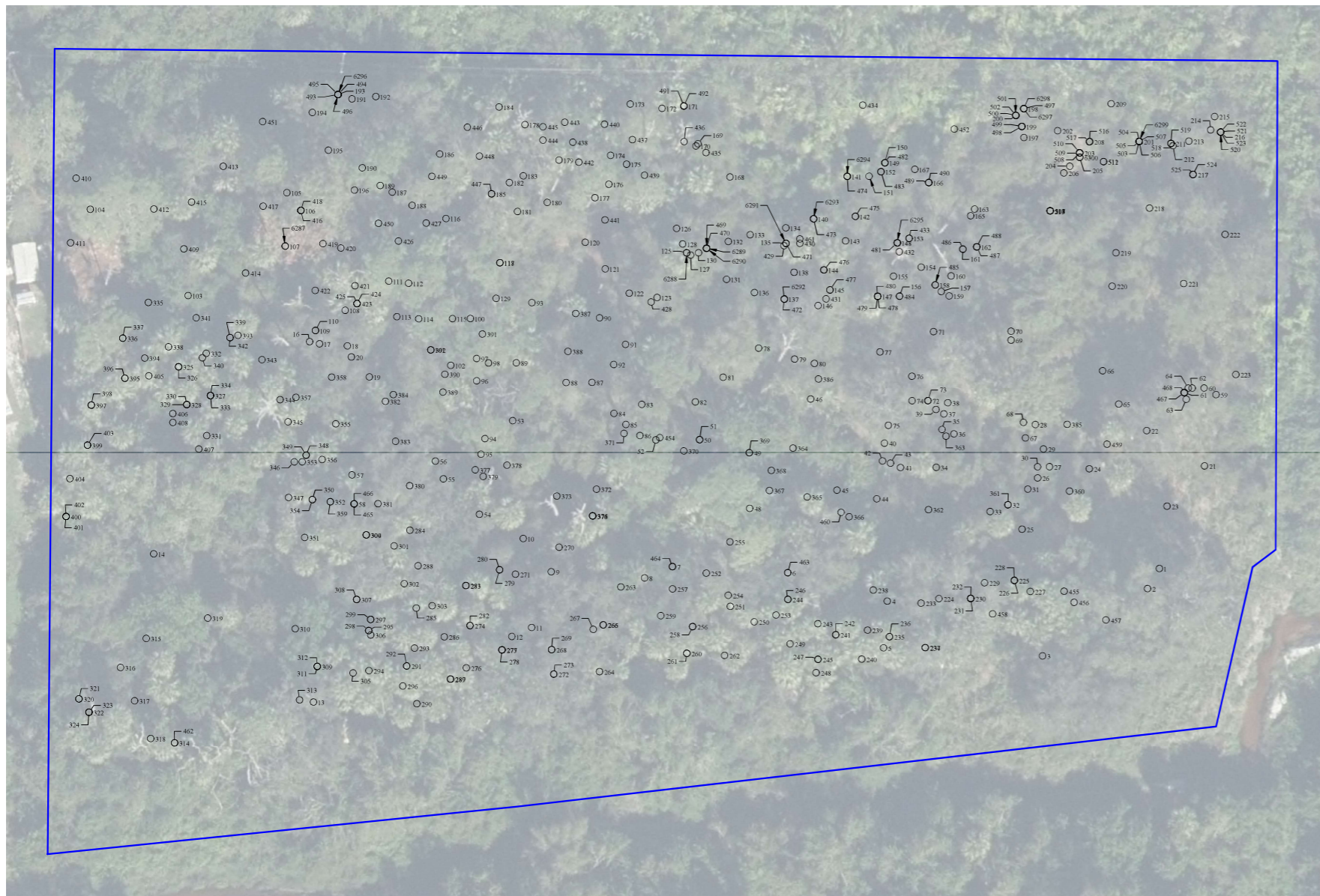
REVISIONS	DATE	BY
REB III	4/17/23	
REB III	5/29/23	
REB III	9/27/23	

GRAPHIC SCALE



BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN SECTION 33
TOWNSHIP 35 SOUTH
RANGE 40 EAST



THE LOCATION OF THE TREES SHOWN HEREON WERE PROVIDED BY ELLA TAYLOR WITH TAYLOR LAND PLANNING LLC AND WERE NOT VERIFIED BY THE SIGNING SURVEYOR.

LEGAL DESCRIPTION OF WETLAND AREA:

A WETLAND PARCEL LOCATED IN SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF SAID SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, THENCE SOUTH 00°12'44" WEST ALONG THE EAST LINE OF THE NORTHEAST 1/4 OF SAID SECTION 33, A DISTANCE OF 2015.46 FEET; THENCE NORTH 89°25'17" WEST, A DISTANCE OF 92.00 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89°25'17" WEST, A DISTANCE OF 372.06 FEET; THENCE SOUTH 38°18'01" EAST, A DISTANCE OF 36.45 FEET; THENCE SOUTH 69°49'42" EAST, A DISTANCE OF 23.09 FEET; THENCE NORTH 82°11'34" EAST, A DISTANCE OF 15.46 FEET; THENCE NORTH 89°41'39" EAST, A DISTANCE OF 25.24 FEET; THENCE SOUTH 74°39'34" EAST, A DISTANCE OF 18.72 FEET; THENCE NORTH 87°01'09" EAST, A DISTANCE OF 21.66 FEET; THENCE NORTH 85°41'08" EAST, A DISTANCE OF 28.92 FEET; THENCE SOUTH 59°46'47" EAST, A DISTANCE OF 19.88 FEET; THENCE NORTH 89°41'38" EAST, A DISTANCE OF 21.63 FEET; THENCE NORTH 85°07'24" EAST, A DISTANCE OF 25.32 FEET; THENCE NORTH 85°06'53" EAST, A DISTANCE OF 25.32 FEET; THENCE NORTH 68°24'24" EAST, A DISTANCE OF 22.25 FEET; THENCE NORTH 54°40'07" EAST, A DISTANCE OF 26.28 FEET; THENCE SOUTH 87°54'10" EAST, A DISTANCE OF 72.59 FEET; THENCE SOUTH 53°14'14" EAST, A DISTANCE OF 6.43 FEET; THENCE SOUTH 1°14'22" WEST, A DISTANCE OF 67.35 FEET; THENCE SOUTH 2°01'43" WEST, A DISTANCE OF 85.15 FEET; THENCE SOUTH 4°39'03" EAST, A DISTANCE OF 42.03 FEET; THENCE NORTH 84°30'36" EAST, A DISTANCE OF 9.92 FEET; THENCE NORTH 0°12'44" EAST, A DISTANCE OF 214.31 FEET TO THE POINT OF BEGINNING.

CONTAINING 0.310 ACRES MORE OR LESS.

Four columns of tree tables, each with columns for Tree #, Type, and Diameter. The tables list various tree species such as Live Oak, Sabal Palm, Laurel Oak, Slush Pine, and Wax Myrtle with their respective diameters.

Tree Table with columns for Tree #, Type, and Diameter. It lists trees like Live Oak, Sabal Palm, Laurel Oak, Slush Pine, and Wax Myrtle with diameters ranging from 3" to 10".

BSM & ASSOCIATES logo and contact information: LAND SURVEYING SERVICES, 80 SE 31st Lane, Okeechobee, FL 34974, ricky.barnes@bsmsurvey.com, 863.484.8324, LB 8155

Boundary & Topographic Survey title block containing project details: 4001 OLEANDER AVENUE, FORT PIERCE, FLORIDA 34982, SHEET 2 OF 2, and various revision and date stamps.

REVISIONS:	DATE:	COMMENTS:

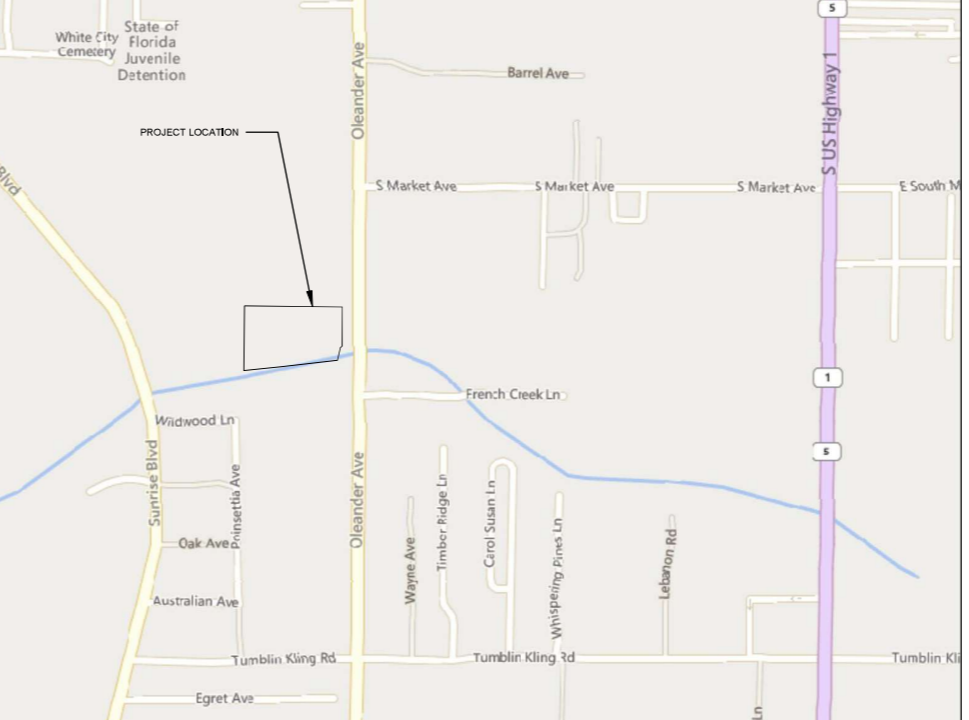
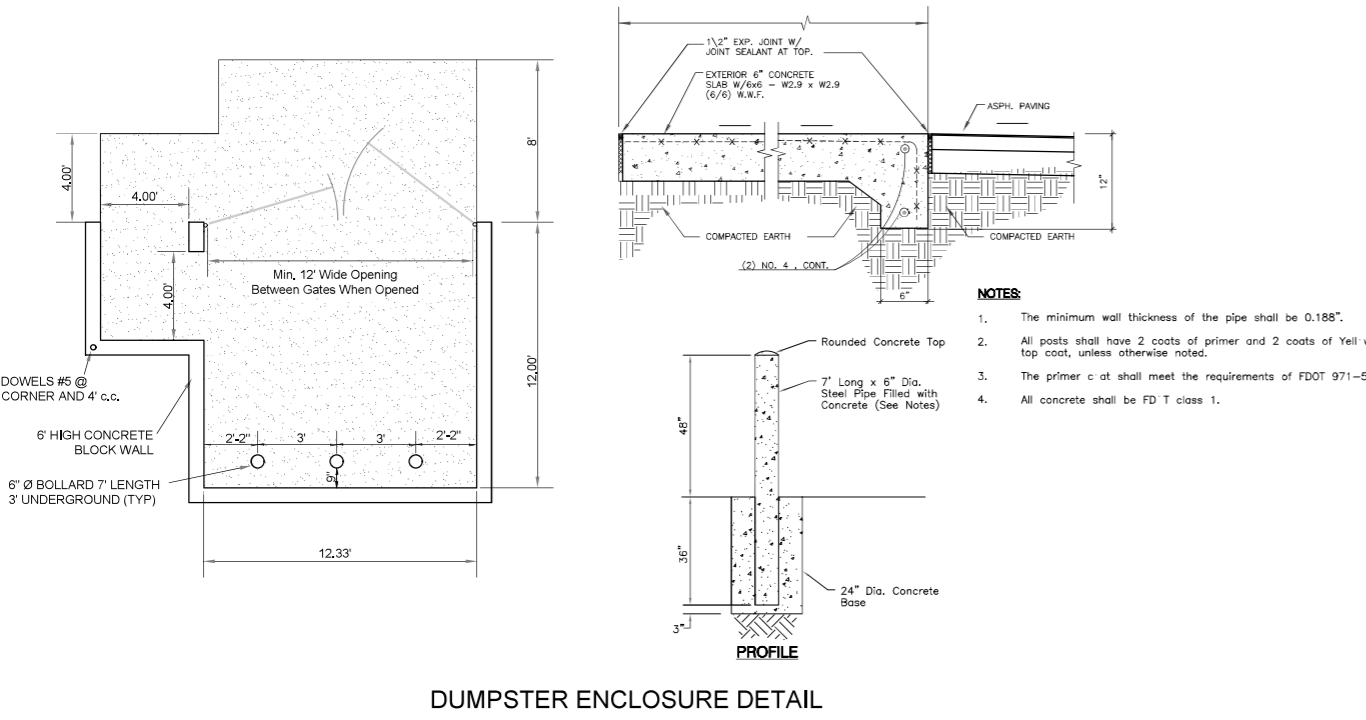
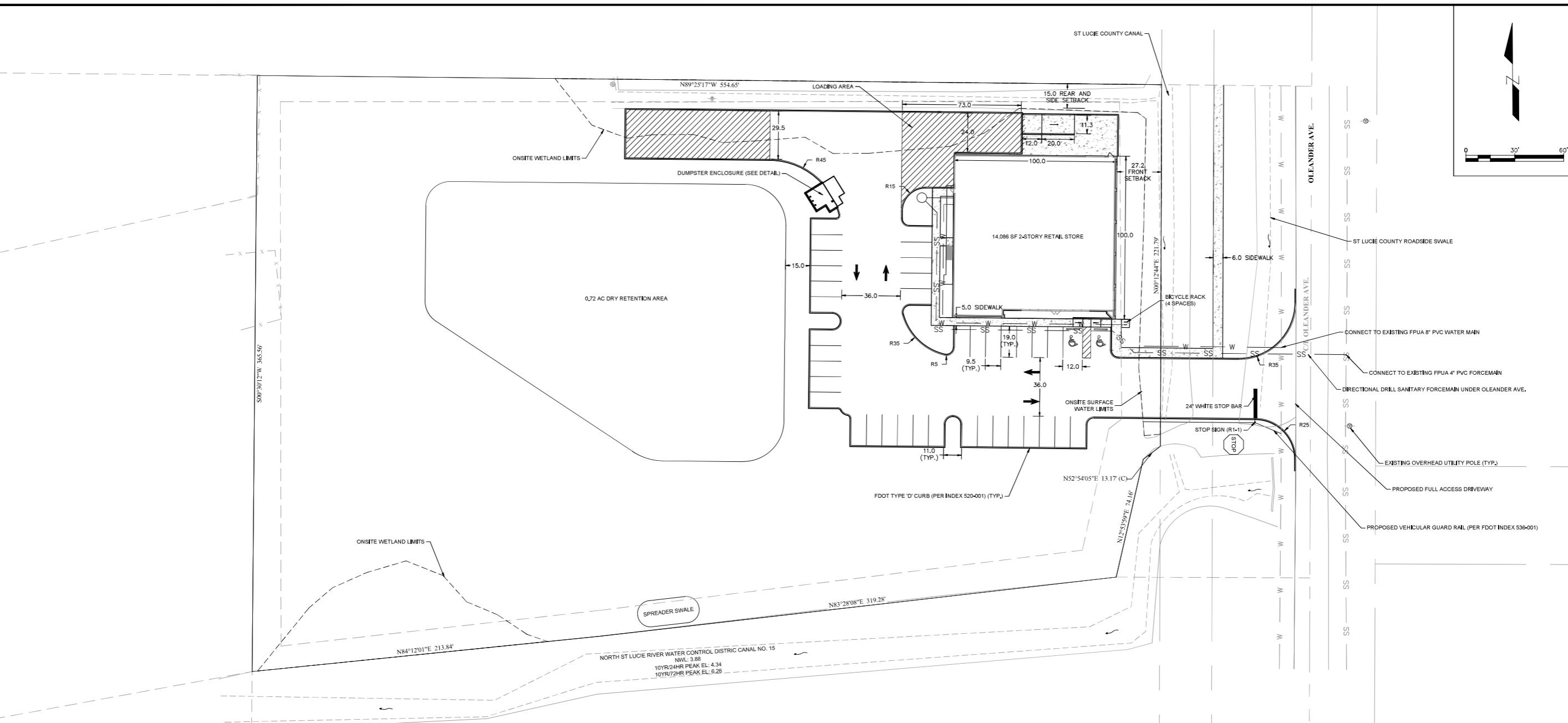
DATE : 03/15/2023

MICHAEL DEPREE, PE
 FL PE NO 86863

SITE PLAN

NAPA - OLEANDER AVE.

SHEET NO.
C4.0



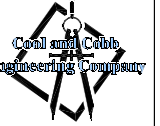
SITE DATA

PROJECT NAME:	NAPA - OLEANDER AVE.
OWNER:	PERFORMANCE NAPA, LLC
CONSULTANT:	DEPREE ENGINEERING, LLC
SITE ADDRESS:	4001 OLEANDER AVE, FORT PIERCE, FL
LOT SIZE:	4.22 ACRES
EXISTING ZONING:	C-3 - GENERAL COMMERCIAL
PROPOSED ZONING:	C-3 - GENERAL COMMERCIAL
EXISTING FUTURE LAND USE:	GC - GENERAL COMMERCIAL
PROPOSED FUTURE LAND USE:	GC - GENERAL COMMERCIAL
PROJECT USE:	RETAIL
BUILDING FOOTPRINT:	10,000 SF (5.4% LOT COVERAGE)
GROSS FLOOR AREA:	14,086 SF
RETAIL FLOOR AREA:	3,837 SF
WAREHOUSE FLOOR AREA:	10,249 SF
PARKING SPACES PROVIDED:	39 SPACES
PARKING REQUIRED (PER SEC 125-315):	38 SPACES
RETAIL < 50,000 SF:	1 SPACE / 200 SF GFA
WAREHOUSE:	3,837 SF RETAIL / 200 SF = 20 SPACES
	1 SPACE / 600 SF GFA
	10,249 SF WAREHOUSE / 600 SF = 18 SPACES
MAX BUILDING HEIGHT:	35'

LEGAL DESCRIPTION:
 (O.R.B. 471, PG. 929)
 THAT PORTION OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA, LYING NORTHERLY OF SAINT LUCIE RIVER WATER CONTROL DISTRICT CANAL 15, ALSO KNOWN AS PLATTS BRANCH, LESS AND EXCEPTING THEREFROM ALL RIGHT OF WAY AND EASEMENTS FOR PUBLIC ROAD AND DRAINAGE CANALS.

THE LEGAL DESCRIPTION OF THE WETLAND AREA CONTAINED WITHIN THIS PARCEL IS ON SHEET 2 OF 2.

All construction shall comply with the City of Fort Pierce Code of Ordinances Sections 107, 119, and 125.



COOL AND COBB
ENGINEERING COMPANY
203 W. MAIN ST.
AVON PARK, FL 33825
OFFICE: (863) 657-2323
FAX: (863) 657-2324
mail@coolandcobb.com

SEAL

THOMAS LAPERIERE, AIA
AR 101160

CONTRACTOR

CLIENT
PERFORMANCE NAPA, LLC
PROJECT
PERFORMANCE NAPA
4001 OLEANDER AVE.
FT. PIERCE, FL 34982

BUILDING AREA
1st Floor
3329 sq. ft. - Retail
508 sq. ft. - Office
5904 sq. ft. - Storage
2nd Floor
3631 sq. ft. - Mezzanine
714 sq. ft. - Storage Rooms/
Walkway
14,086 sq. ft. - Total

PHASE
PRELIMINARY DRAWINGS

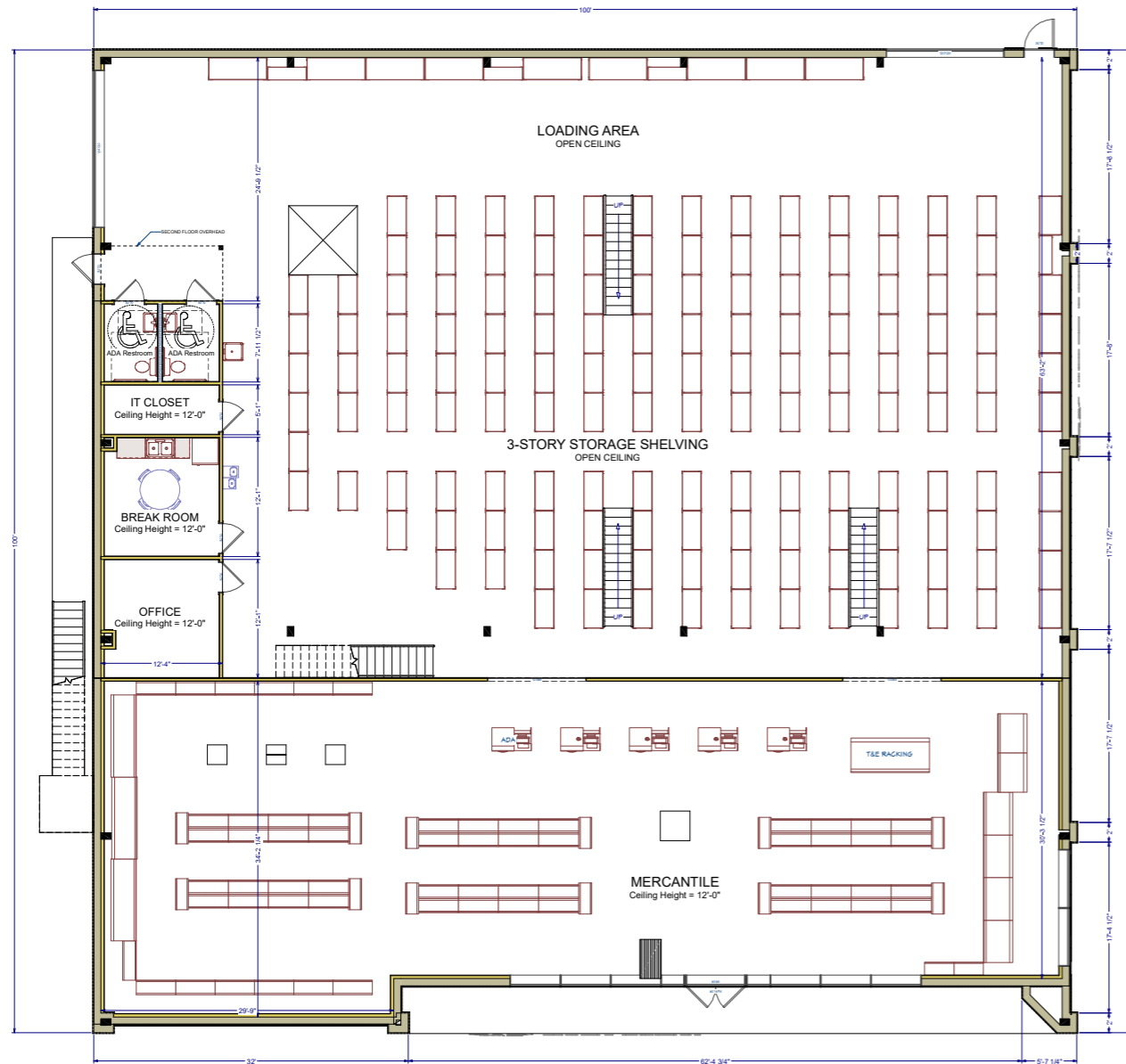
ISSUE DATE:
Monday, July 31, 2023

REV. #	DATE	DESCRIPTION OF REVISION

DRAWN BY: CW
CHECKED BY: TL
SHEET # 1 OF 4

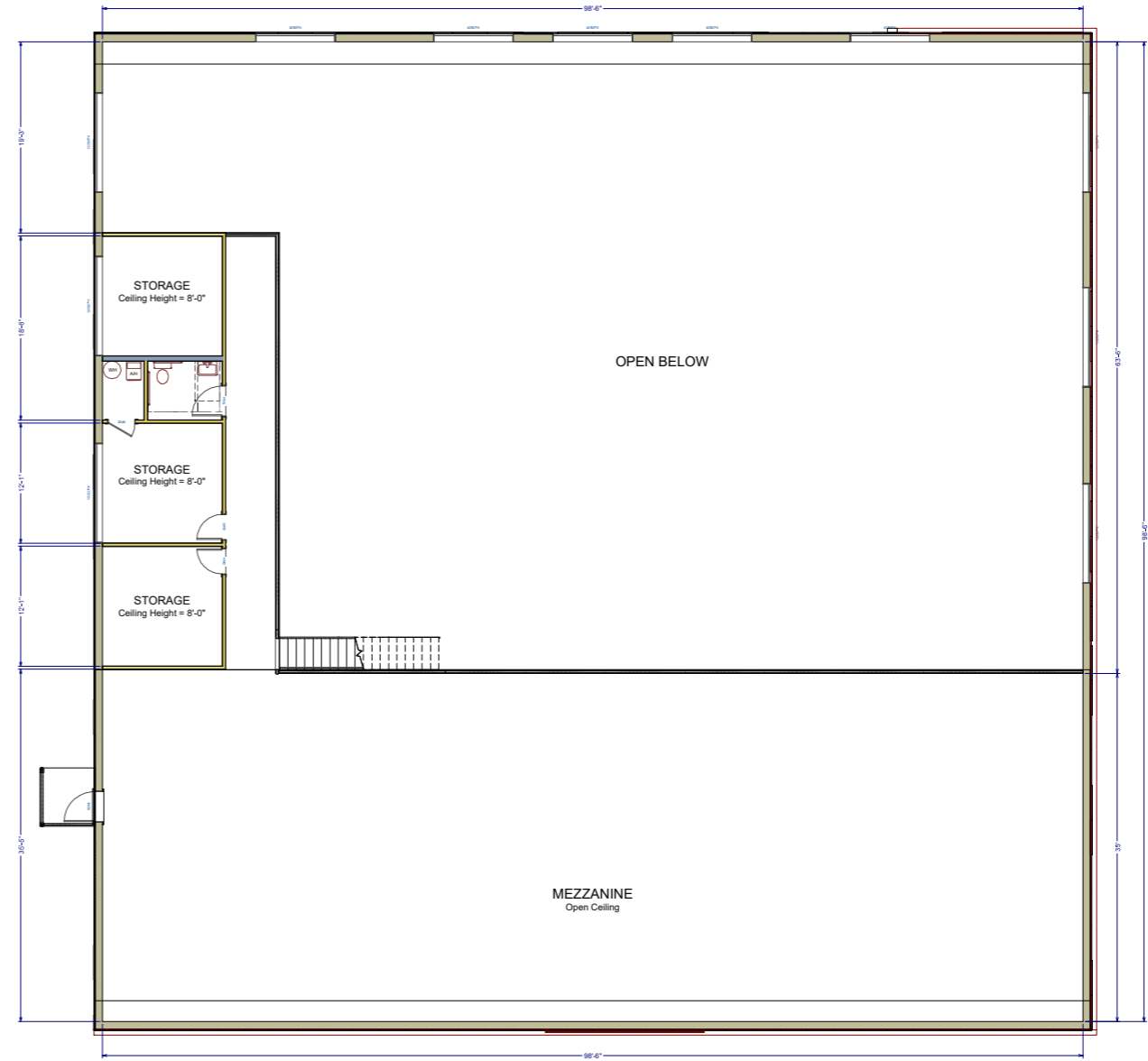
FLOOR PLAN
/ DETAILS

JOB #: 22-236-2071



FLOOR PLAN

SCALE: 1/8" = 1'-0"



2ND FLOOR PLAN

SCALE: 1/8" = 1'-0"



COOL AND COBB
ENGINEERING COMPANY
203 W. MAIN ST.
AVON PARK, FL 33825
OFFICE: (863) 657-2323
FAX: (863) 657-2324
mail@coolandcobb.com

SEAL

THOMAS LAPERIERE, AIA
AR 101160
CONTRACTOR

CLIENT: PERFORMANCE NAPA, LLC
PROJECT: PERFORMANCE NAPA
4001 OLEANDER AVE.
FT. PIERCE, FL 34982

BUILDING AREA
1st Floor: 3329 sq. ft. - Retail
508 sq. ft. - Office
5904 sq. ft. - Storage
2nd Floor: 9631 sq. ft. - Mezzanine
714 sq. ft. - Storage Rooms/
Walkway
14,086 sq. ft. Total

PHASE
PRELIMINARY DRAWINGS

ISSUE DATE:
Monday, July 31, 2023

REVISIONS:	DESCRIPTION OF REVISION
REV #	
DATE	

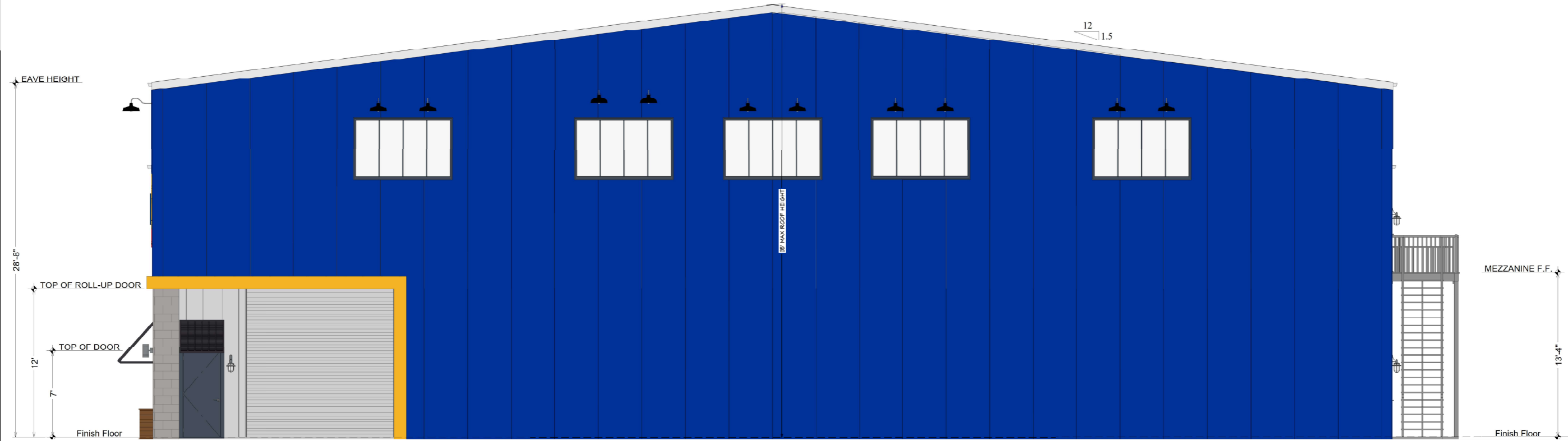
DRAWN BY: CW
CHECKED BY: TI
SHEET # 2 OF 4

JOB #: 22-236-2071



FRONT ELEVATION

SCALE: 1/4" = 1'-0"



REAR ELEVATION

SCALE: 1/4" = 1'-0"



COOL AND COBB
ENGINEERING COMPANY
203 W. MAIN ST.
AVON PARK, FL 33825
OFFICE: (888) 637-2323
FAX: (888) 637-2324
mail@coolandcobb.com

SEAL

THOMAS LAPERIERRE, AIA
AR 101180
CONTRACTOR

CLIENT
PERFORMANCE NAPA, LLC

PROJECT
PERFORMANCE NAPA
4001 OLEANDER AVE.
FT. PIERCE, FL 34982

BUILDING AREA

1st Floor
3329 sq. ft. - Retail
508 sq. ft. - Office
5004 sq. ft. - Storage
2nd Floor
3631 sq. ft. - Mezzanine
714 sq. ft. - Storage Rooms/
Walkway
14,086 sq. ft. - Total

PHASE
PRELIMINARY DRAWINGS

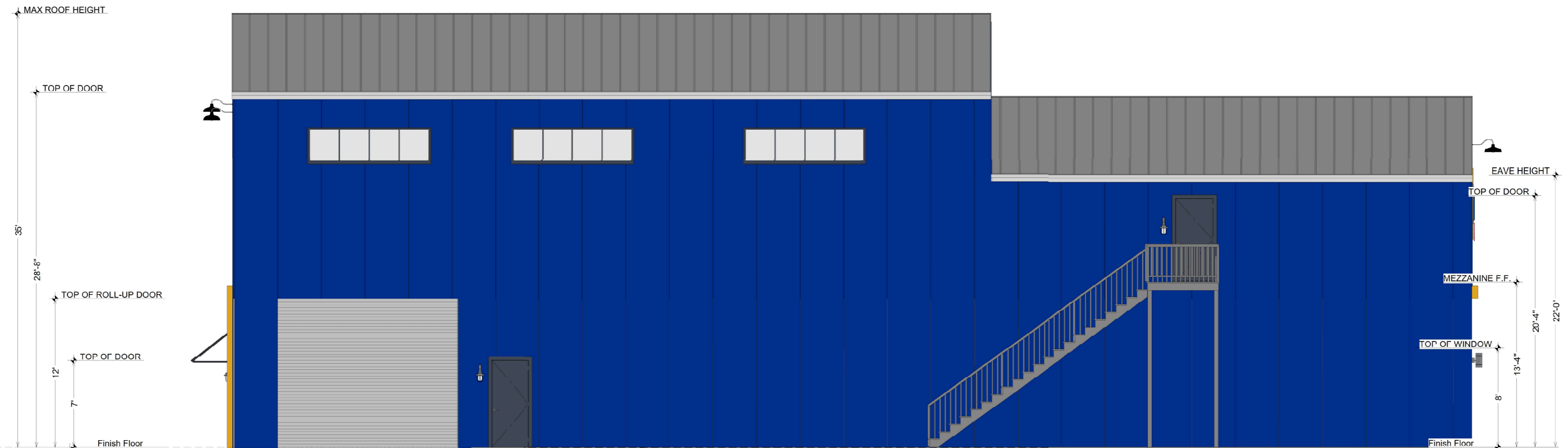
ISSUE DATE:
Monday, July 31, 2023

REVISIONS	REV. #	DATE	DESCRIPTION OF REVISION

DRAWN BY: CW
CHECKED BY: TL

SHEET # 3.OE.4

JOB # 22-236-2071



WEST ELEVATION
SCALE: 1/4" = 1'-0"



EAST ELEVATION
SCALE: 1/4" = 1'-0"



COOL AND COBB
ENGINEERING COMPANY
203 W. MAIN ST.
AVON PARK, FL 33825
OFFICE: (863) 657-2323
FAX: (863) 657-2324
mail@coolandcobb.com

SEAL

THOMAS LAPERIERE, AIA
AR 101160

CONTRACTOR

CLIENT
PERFORMANCE NAPA, LLC
PROJECT
PERFORMANCE NAPA
4001 OLEANDER AVE.
FT. PIERCE, FL 34982

BUILDING AREA

1st Floor
3329 sq. ft. - Retail
508 sq. ft. - Office
5904 sq. ft. - Storage
2nd Floor
3631 sq. ft. - Mezzanine
714 sq. ft. - Storage Rooms/
Walkway
14,086 sq. ft. - Total

PHASE

PRELIMINARY DRAWINGS

ISSUE DATE:

Monday, July 31, 2023

REVISIONS:

REV. #	DATE	DESCRIPTION OF REVISION

DRAWN BY: CW

CHECKED BY: TL

SHEET # 4 OF 4

JOB #: 22-236-2071

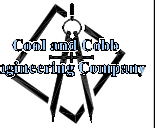
SOUTH PROPERTY BOUNDARY
VACANT LOT

NORTH PROPERTY BOUNDARY
VACANT LOT



OLEANDER AVENUE STREETSCAPE

SCALE: 3/32" = 1'-0"



COOL AND COBB
ENGINEERING COMPANY
203 W. MAIN ST.
AVON PARK, FL 33825
OFFICE: (863) 657-2323
FAX: (863) 657-2324
mail@coolandcobb.com

SEAL

THOMAS LAPERRIERE, AIA
AR 101160

CLIENT: PERFORMANCE NAPA, LLC
PROJECT: PERFORMANCE NAPA
4001 OLEANDER AVE.
FT. PIERCE, FL 34982

PHASE
PERMIT SUBMITTAL

ISSUE DATE:

REVISIONS:	DESCRIPTION OF REVISION
REV. #	
DATE	

DRAWN BY: CW
CHECKED BY: TL
SHEET # 1 OF 1

JOB #: 22-236-2071

EXTERIOR LIGHT FIXTURES



Overall/ Logo Height	Overall Width	Logo Width	Letter Height	Letter Width	Sign Illumination	Boxed Square Footage
A	B	C	D	E		
2'-5"	9'-10 1/4"	2'-8 3/4"	1'-1 1/4"	6'-8 1/4"	LED	23.9
3'-2"	12'-11 1/2"	3'-7"	1'-6"	8'-10"	LED	41.0
4'-6"	18'-5"	5'-1 1/4"	2'-1 1/4"	12'-6 1/4"	LED	82.9
5'-9"	23'-6 1/2"	6'-6"	2'-8 1/4"	16'-0 1/2"	LED	135.4

EXTERIOR SIGN DIMENSIONS

NAPA Blue Pantone: 27 56 C DIGITAL PMS 69/104 RGB 10 52 145	NAPA Yellow Pantone: 133 C DIGITAL PMS 108/139 RGB 225 200 54	Stainless Gray Pantone: Light Gray DIGITAL PMS 44/45 RGB 219 216 217
--------------------------------------------------------------------------------	----------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------

EXTERIOR COLOR PALETTE

METL SPAN
a NUCOR company

CF 7.2 INSUL-RIB
INSULATED METAL WALL PANEL WITH PUR FOAM CORE

The CF 7.2 Insul-Rib insulated metal panel combines a traditional 7.2 rib panel with an insulated core. With a bold, ribbed pattern, this panel creates a unique building profile that stands out. Ideal for any commercial or industrial application. The 7.2 Insul-Rib panel can be installed both vertically and horizontally, allowing architects flexibility with design.

LOCK & GROOVE SYSTEM

PANEL PROFILE

PRODUCT SPECIFICATIONS

WIDTH • Nominal 36"

THICKNESS • 3", 4" Rib height included in thickness

LENGTH NON-DIRECTIONAL EMBOSSED
8'-0" to 32'-0" Horizontal
8'-0" to 40'-0" Vertical
UNEMBOSSED
8'-0" to 32'-0" Horizontal
8'-0" to 40'-0" Vertical

EXTERIOR PROFILE • 72" on center rib pattern, 1 1/2" tall, embossed or unembossed

EXTERIOR FACE • G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

INTERIOR PROFILE • Mesa, nominal 1/4" deep, embossed or unembossed

DESIGN FEATURES & BENEFITS

- Sweeping profile with unique shadow effects
- Utilizes concealed clips and eliminates thermal short circuits
- Easy and fast installation, with reduced construction labor costs
- Interior and exterior applications
- Can be used in conjunction with other Metl-Span CF joint profiles of the same thickness

INTERIOR FACE • G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

CORE • Foamed-in-place, PUR Foam Core, zero ozone depleting (zero ODP) Class 1 foam

JOINT • Offset double tongue-and-groove with extended metal shelf for positive face fastening*

U-FACTORS AND R-VALUES*

U-FACTOR (BTU/h-ft ² -F)	R-VALUE (h-ft ² -F/BTU)	PANEL WIDTH: 36"	PANEL WIDTH: 36"
3"	0.066	3"	15.2
4"	0.043	4"	23.3

*Based on ASTM C563 and thermal modeling
*Not available in unembossed
*Through fastening required at joints ends

MAIN ACCENT MATERIAL



SPLIT-FACE BLOCK COLUMNS



SLATTED WOOD PLANTERS



HALF-BAHAMA STYLE AWNING

METL SPAN
a NUCOR company

CF TUFF WALL®
INSULATED METAL WALL PANEL WITH PUR FOAM CORE

The Metl-Span CF Tuff Wall is an attractive, stucco-like insulated metal panel that exhibits the natural beauty sought by many designers and owners. The exterior surface of the panel is a hard aggregated, fiber-reinforced polymer coating created with the factory applied Tuff Cote® finish system. Tuff Cote® finish offers an extremely durable, impact and abrasion-resistant coating that can withstand severe weather conditions.

LOCK & GROOVE SYSTEM

PANEL PROFILE

PRODUCT SPECIFICATIONS

WIDTH • 36", 42"

THICKNESS • 2", 2 1/2", 3", 4", 5", 6"

LENGTH • 8'-0" to 40'-0"

EXTERIOR FACE • Stucco-embossed, G-90 galvanized or AZ-50 aluminum-zinc coated steel in 24 and 22 Ga. with factory applied Tuff Cote® finish system

INTERIOR FACE • Stucco-embossed, G-90 galvanized or AZ-50 aluminum-zinc coated steel in 26, 24 and 22 Ga.

JOINT • Offset double tongue and groove with extended metal shelf for positive face fastening

EXTERIOR PROFILE • 2" 2 1/2", 3" and 4" are no profile with Tuff Cote® finish system; 5" and 6" are Mesa nominal 1/4" deep with Tuff Cote® finish system

INTERIOR PROFILE • Light Mesa nominal 1/4" deep

DESIGN FEATURES & BENEFITS

- Look of finished precast concrete with the efficiency of an insulated metal panel
- Field-tested and proven Tuff Cote® technology
- Durable finish that is highly resistant to impact and abrasion
- 10-year limited exterior finish warranty
- Utilizes concealed clips and eliminates thermal short circuits
- Easy and fast installation, with reduced construction labor costs

THERMAL VALUES • K-Factor® @ 35° F (2° C) is 0.114

EXTERIOR TEXTURE • Tuff Cote® finish system—hard aggregated fiber-reinforced polymer coating

FASTENINGS • Fastener and clip concealed in this side joint

U-FACTORS AND R-VALUES**

U-FACTOR (BTU/h-ft ² -F)	R-VALUE (h-ft ² -F/BTU)	PANEL WIDTH: 42"	PANEL WIDTH: 42"
2"	0.099	2"	17.5
2 1/2"	0.066	2 1/2"	23.9
3"	0.038	3"	25.2
4"	0.028	4"	35.6
5"	0.023	5"	43.7
6"	0.019	6"	52.5

**Based on ASTM C563, ASTM C563 and thermal modeling

MAIN EXTERIOR MATERIAL

The NAPA logo is made up of two colours: blue and yellow.




Red is also used for the NAPA Auto Parts logo. The official NAPA colours must be used as indicated in the table on the right.

In the event that reproducing the logo with the official colours is not possible, one-colour versions are available (see following pages).




IMPORTANT

The colours shown in this document must not serve as a reference for printing official documents. Please provide the printer with the Pantone* numbers to ensure that the precise colours are used. Ask to see and approve colour tests prior to printing.

Glossy, coated and matte paper

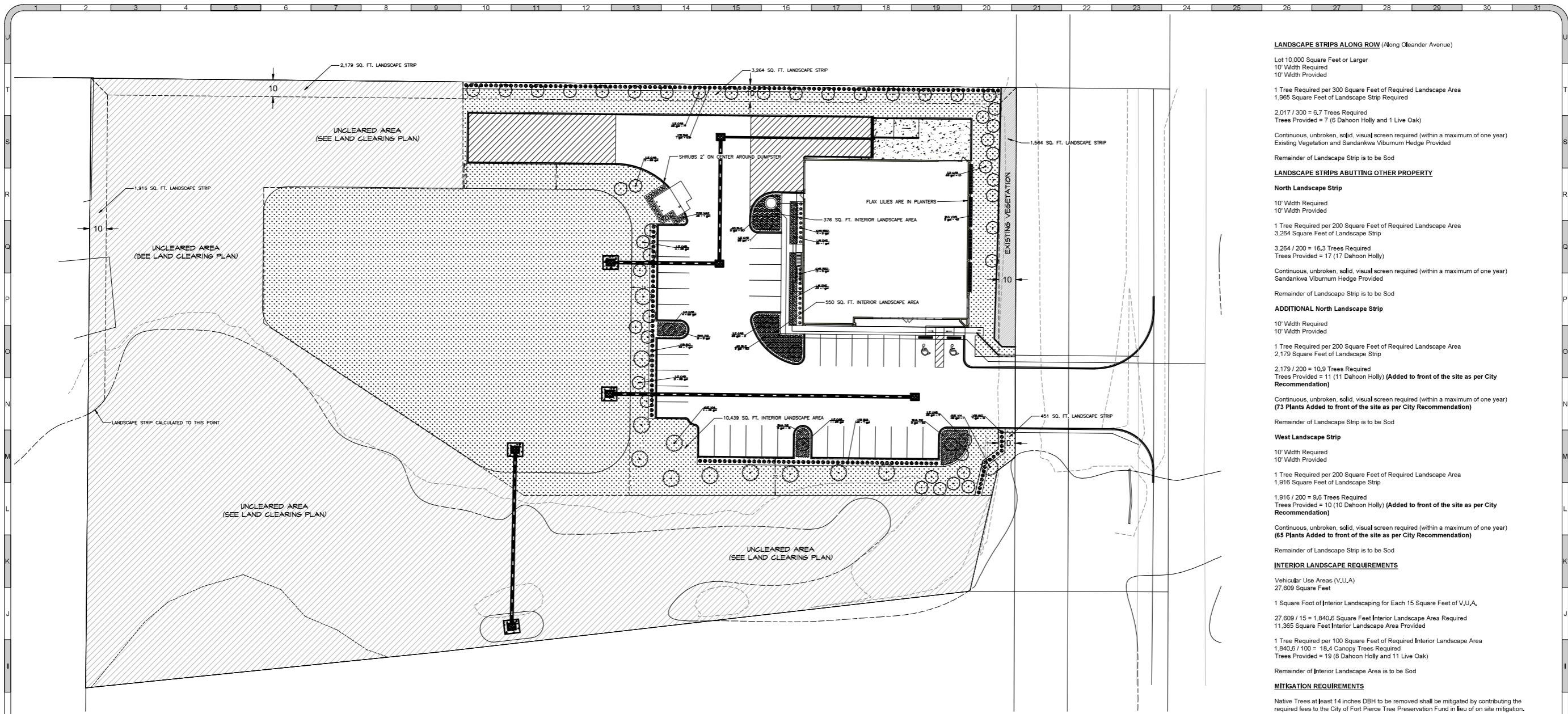
	PMS ¹	CMYK ²	RGB ³	HEX ⁴
 Blue	Reflex Blue	100 • 72 • 0 • 6	0 • 83 • 159	#00539F
 Yellow*	123	0 • 30 • 94 • 0	253 • 185 • 39	#FDB927
 Red	185	0 • 91 • 76 • 0	239 • 62 • 66	#EF3E42

Uncoated paper

	PMS ¹	CMYK ²	RGB ³	HEX ⁴
 Blue	Reflex Blue	100 • 72 • 0 • 6	0 • 83 • 159	#00539F
 Yellow*	109	1 • 16 • 100 • 0	255 • 209 • 0	#FFD100
 Red	185	0 • 91 • 76 • 0	239 • 62 • 66	#EF3E42

PLEASE NOTE:

- * The colour yellow changes depending on the paper used.
- ¹ PMS (PANTONE Matching System) is a trademark of Pantone Inc.
- ² CMYK (4-colour process) printing: cyan, magenta, yellow, and key (black).
- ³ RGB is an additive colour model of red, green and blue light.
- ⁴ HEX are colours used for web pages.



LANDSCAPE STRIPS ALONG ROW (Along Olander Avenue)
 Lot 10,000 Square Feet or Larger
 10' Width Required
 10' Width Provided
 1 Tree Required per 300 Square Feet of Required Landscape Area
 1,965 Square Feet of Landscape Strip Required
 2,017 / 300 = 6.7 Trees Required
 Trees Provided = 7 (6 Dahoon Holly and 1 Live Oak)
 Continuous, unbroken, solid, visual screen required (within a maximum of one year)
 Existing Vegetation and Sandankwa Viburnum Hedge Provided
 Remainder of Landscape Strip is to be Sod

LANDSCAPE STRIPS ABUTTING OTHER PROPERTY
North Landscape Strip
 10' Width Required
 10' Width Provided
 1 Tree Required per 200 Square Feet of Required Landscape Area
 3,264 Square Feet of Landscape Strip
 3,264 / 200 = 16.3 Trees Required
 Trees Provided = 17 (17 Dahoon Holly)
 Continuous, unbroken, solid, visual screen required (within a maximum of one year)
 Sandankwa Viburnum Hedge Provided
 Remainder of Landscape Strip is to be Sod

ADDITIONAL North Landscape Strip
 10' Width Required
 10' Width Provided
 1 Tree Required per 200 Square Feet of Required Landscape Area
 2,179 Square Feet of Landscape Strip
 2,179 / 200 = 10.9 Trees Required
 Trees Provided = 11 (11 Dahoon Holly) (Added to front of the site as per City Recommendation)
 Continuous, unbroken, solid, visual screen required (within a maximum of one year)
 (73 Plants Added to front of the site as per City Recommendation)
 Remainder of Landscape Strip is to be Sod

West Landscape Strip
 10' Width Required
 10' Width Provided
 1 Tree Required per 200 Square Feet of Required Landscape Area
 1,916 Square Feet of Landscape Strip
 1,916 / 200 = 9.6 Trees Required
 Trees Provided = 10 (10 Dahoon Holly) (Added to front of the site as per City Recommendation)
 Continuous, unbroken, solid, visual screen required (within a maximum of one year)
 (65 Plants Added to front of the site as per City Recommendation)
 Remainder of Landscape Strip is to be Sod

INTERIOR LANDSCAPE REQUIREMENTS
 Vehicular Use Areas (V,U,A)
 27,609 Square Feet
 1 Square Foot of Interior Landscaping for Each 15 Square Feet of V,U,A
 27,609 / 15 = 1,840.6 Square Feet Interior Landscape Area Required
 11,385 Square Feet Interior Landscape Area Provided
 1 Tree Required per 100 Square Feet of Required Interior Landscape Area
 1,840.6 / 100 = 18.4 Canopy Trees Required
 Trees Provided = 19 (8 Dahoon Holly and 11 Live Oak)
 Remainder of Interior Landscape Area is to be Sod

MITIGATION REQUIREMENTS
 Native Trees at least 14 inches DBH to be removed shall be mitigated by contributing the required fees to the City of Fort Pierce Tree Preservation Fund in lieu of on site mitigation.
 See Mitigation Plan for details.

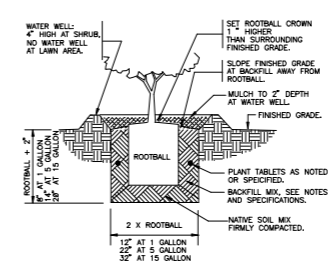
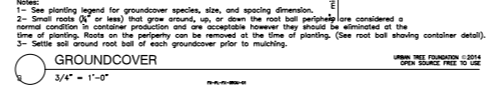
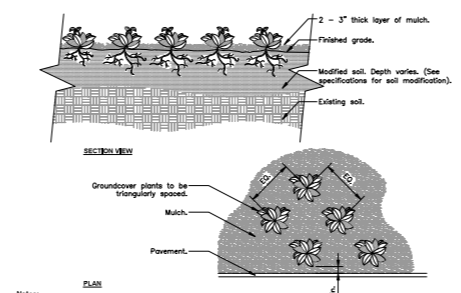
MISC. NOTES
 Prior to issuance of certificate of occupancy, final landscape installation shall be certified as complete and in conformance to the approved landscape plan by submission of a certification letter by a landscape architect.
 All trees are capable of reaching a mature crown spread of 15' at maturity.

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	GAL	SIZE	SPRD	QTY	
	Ilex cassine / Dahoon Holly	65 gal	2.5" DBH	12" oa	60" spr	52	
	Quercus virginiana / Southern Live Oak	45 gal	2.5" DBH	12" oa	60" spr	12	
SHRUBS	BOTANICAL / COMMON NAME	CONT	NATIVE	SIZE			
	Chrysobalanus icaco 'Red Tip' / Red Tip Cocoplum	9 gal	Yes	24"		21	
	Dianella tasmanica 'Variegata' / Flax Lily	3 gal		16"		40	
	Podocarpus macrophyllus / Yew Pine	7 gal		24"		26	
	Viburnum suspensum / Sandankwa Viburnum	7 gal		24"		212	
SHRUB AREAS	BOTANICAL / COMMON NAME	CONT	NATIVE	SIZE	SPREAD	SPACING	QTY
	Juniperus conferta 'Blue Pacific' / Blue Pacific Juniper	9 gal		4"		36" o.c.	82
	Liriope muscari 'Emerald Goddess' / Liriope	1 gal	No	12"		24" o.c.	68
	Rhaphiolepis indica / Indian Hawthorn	9 gal		14"		36" o.c.	62
SOD/SEED	BOTANICAL / COMMON NAME	CONT	NATIVE	SIZE	SPACING		
	Paspalum notatum 'Argentine' / Bahia Grass Does Not Include Waste or Account for Topographic Changes	sod					48,011 sq ft

REFERENCE NOTES SCHEDULE

SYMBOL	MULCH DESCRIPTION	QTY	DETAIL
M-101	Brown Shredded Grade "A" Mulch 3" Depth	44.72 cy	



Notes:
 1- See planting legend for groundcover species, size, and spacing dimension.
 2- Small roots (2" or less) that grow around, up, or down the root ball periphery are considered a normal condition to optimize production and are acceptable however they should be eliminated at the time of planting. Roots on the periphery can be removed at the time of planting. (See root ball showing container detail).
 3- Settle soil around root ball of each groundcover prior to mulching.

CLOUSER Design
 LANDSCAPE ARCHITECTURE AND IRRIGATION DESIGN
 P.O. BOX 3164
 LAKE PLACID, FL 33962
 TELEPHONE (863) 464-0210
 chad@clouserdesigns.biz
 FL. Land, Arch, Bus. No. LC26000581

THIS PLAN HAS BEEN CAREFULLY DRAWN AND SEALED BY CHAD CLOUSER ON THE DATE ADJACENT TO THE SEAL.

 CHAD CLOUSER
 LICENSE No. LA666811
 STATE OF FLORIDA
 LANDSCAPE ARCHITECT

DRAWN BY	CAC
CHECKED BY	CAC
APPROV. BY	CAC

LANDSCAPE PLAN
NAPA
 4001 OLANDER AVENUE
 FORT PIERCE, FLORIDA 34982

DATE	02-07-2023
------	------------

NO.	DATE	DESCRIPTION
1	05-02-2023	AS PER SITE PLAN REVISIONS AND PER TRC COMMENTS
2	07-17-2023	AS PER VIRTUAL MEETING AND DESIGN REVIEW CHECK LIST

SCALE
 1" = 30' - 0"

LANDSCAPE GENERAL SPECIFICATIONS

Install landscaping in accordance with all applicable codes regarding materials, methods of work and disposal of waste material. Obtain and pay for all required permits and inspections.

Visit the site and examine the conditions under which the work is to be performed. Do not proceed with the work until all unsatisfactory conditions have been rectified.

Locate and protect all existing underground and overhead utilities, benchmarks, control points and monuments within the work area. Repair made do to damage to any of these items will be made at the contractor's expense. If incorrectly located utilities are encountered, contact the applicable utility company to receive any further instructions or assistance that may be needed.

Take all measures necessary to protect all existing paving, buildings, utilities, etc. on and adjacent to the site. Repair made do to damage to any of these items will be made at the landscape contractor's expense.

It is the responsibility of the contractor to satisfy themselves as to the accuracy of the quantities on the plan. If there are any discrepancies between the plan and the material list this should be addressed prior to bidding and beginning work. In any instance that a discrepancy does occur between the plan and material list, the plan rules. No extra compensation will be allowed on account of discrepancies between the plan and material list.

It is the responsibility of the landscape contractor to review the irrigation plan to assure that the irrigation design is adequate for warranty purposes. If there are any concerns, this should be addressed prior to bidding and beginning work. If no concerns are acknowledged, it is assumed that the irrigation system is adequate and the warranty herein is in full effect.

Square foot, cubic yard and lineal foot quantities do not account for any waste and it is the contractor's responsibility to calculate any extra material necessary to offset this.

It is the responsibility of the contractor to order or provide all material, equipment, labor, etc. necessary to complete the work according to the plans and specifications.

All existing invasive plant materials are to be removed as per applicable code.

The landscape designer has the final say in any and all disputes regarding layout, performance, material, quality, size, grading, etc. The contractor shall take corrective action based on the landscape designer's instructions. Any corrective action made due to any of these items will be made at the landscape contractor's expense.

Warranty all palms, trees and plant materials to remain alive and in healthy condition for a period of one year after acceptance. Plants must be given proper care during this time. This includes maintenance, fertilizing, spraying, and being provided with adequate irrigation as necessary. Replace each palm, tree or plant that is dead or in severely unhealthy condition once within the warranty period of one year. The warranty becomes void in cases of vandalism, fire, flood, freezing or extreme cold not typical for the area, lightning strikes, hurricane force wind, improperly functioning or turned off irrigation or owner negligence. Any replacement desired or required do to any of these unwarranted causes will be at the owner's expense.

LANDSCAPE INSTALLATION SPECIFICATIONS

Treat all areas to receive landscaping with a broad-spectrum herbicide and allow enough time for the herbicide to take full effect prior to beginning any landscape installation.

Treat all landscaping beds with a pre-emergent herbicide prior to beginning any landscape installation.

The landscape contractor shall make sure that all planting beds are free from rocks, trash, waste material and other construction debris prior to landscape installation and shall notify the owner prior to installation so that they may have the site contractor remove their waste.

Install all palms, trees and plant materials in the locations and at the quantity specified on the landscape plans. The owner or their representative must approve any deviations from the landscape plans in advance.

All palms, trees and plant materials shall be planted as per the details shown on the landscape plans. The planting pit shall be twice the diameter of the root ball or pot and shall be backfilled with planting soil and watered in thoroughly.

All palms and trees shall be fertilized using a full spectrum slow release fertilizer according to the manufacturer's recommendations to quantity per tree according to tree size. All plant materials shall be fertilized at the time of installation with a full spectrum slow release fertilizer according to the manufacturer's recommendations.

All burlap, grow bags, wire cages, etc. shall be removed from the root ball of all palms and trees prior to planting.

Stake and guy all palms and trees to ensure they remain in their proper growing positions. All staking and guying should be well marked to prevent tripping hazards or other possible injuries. Staking and guying shall not permit nails, screws, wire, and etc. to penetrate the outer surface of the palm or tree. Any palms or trees damaged due to such practice shall be replaced at the landscape contractor's expense.

All planting areas shall have 3" of grade "A" brown mulch and all palms and trees not located within a planting area shall have a ring of mulch around the base a minimum of 24" in diameter and 3" deep.

Prepare all areas to receive sod to be smooth, free from trash and debris and free draining. Site contractor shall leave the grade + or - 1". Install the sod to form a solid mass with tightly fitting joints that are staggered with each additional course. Tamp or roll the sod once laid to ensure contact with the soil. Sod should be flush with sidewalks, curbs and all other adjacent surfaces. Water the sod thoroughly immediately after installation.

Adhere to all federal, state and local laws regarding the handling and application of herbicides and fertilizers. Follow manufacturer's recommendations regarding mixing ratio and application rate of herbicide.

LANDSCAPE MATERIAL SPECIFICATIONS

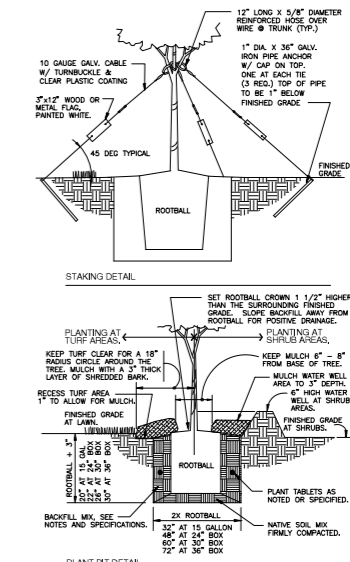
All palms, trees and plant materials are to be Florida #1 or better as described in the latest edition of Grades and Standards for Nursery Plants published by the State of Florida Department of Agriculture and Consumer Services.

All palms, trees and plant materials shall be the variety specified in the material list for the landscape plans. All palms, trees and plant materials are to be referred to, ordered and planted according to the "scientific" or "botanical" name. Any errors made when referring to, ordering or planting any material by the "common" name will be corrected at the landscape contractor's expense.

All palms, trees and plant materials are to meet the minimum measurements for each category shown in the material list for the landscape plans regarding height, caliper, spread and container size. In some instances a measurement in one category may need to increase to meet the minimum measurement for another category. This shall be verified prior to beginning work and any necessary increase in size from what is shown in the material list shall be made to meet all minimum measurements for each category. No extra compensation will be allowed to increase one category of measure to meet the minimum measurement of another category once the job has been contracted or has commenced.

The sod shall be of the variety specified in the material list for the landscape plans. All sod should be healthy, well rooted and uniform in both color and density. It shall be free from pests, disease and weeds. All sod shall be delivered on pallets in the square footage typical per pallet with regard to the variety of sod specified. The landscape contractor shall field verify all quantities prior to ordering.

Mulch shall be brown and of the quantity specified in the material list for the landscape plans. This quantity is based on coverage 3" in depth in all planting areas and a 24" ring 3" in depth around all trees located in lawn areas. The landscape contractor shall verify all quantities of mulch on the plan. No extra compensation will be allowed to increase the quantity of mulch to attain a 3" depth once the job has been contracted or has commenced. Mulch shall be grade "A" if not otherwise specified in the material list.



TREE GUY WIRE PLANTING
1" = 1'-0"

CLOUSER Design
LANDSCAPE ARCHITECTURE AND IRRIGATION DESIGN

P.O. BOX 3164
LAKE PLACID, FL 33962
TELEPHONE: (863) 464-0210
chad@clouserdesigns.biz
FL, Land, Arch, Bus, No.
LC29000581

THIS ITEM HAS BEEN CAREFULLY DRAWN AND CHECKED BY CHAD CLOUSER ON THE DATE ADJACENT TO THE SEAL.

CHAD CLOUSER
LICENSE
No. LA6666811
STATE OF FLORIDA
LANDSCAPE ARCHITECT

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED BOUND AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

DRAWN BY: CAC
CHECKED BY: CAC
APPROV. BY: CAC

LANDSCAPE PLAN
NAPA
4001 OLEANDER AVENUE
FORT PIERCE, FLORIDA 34982

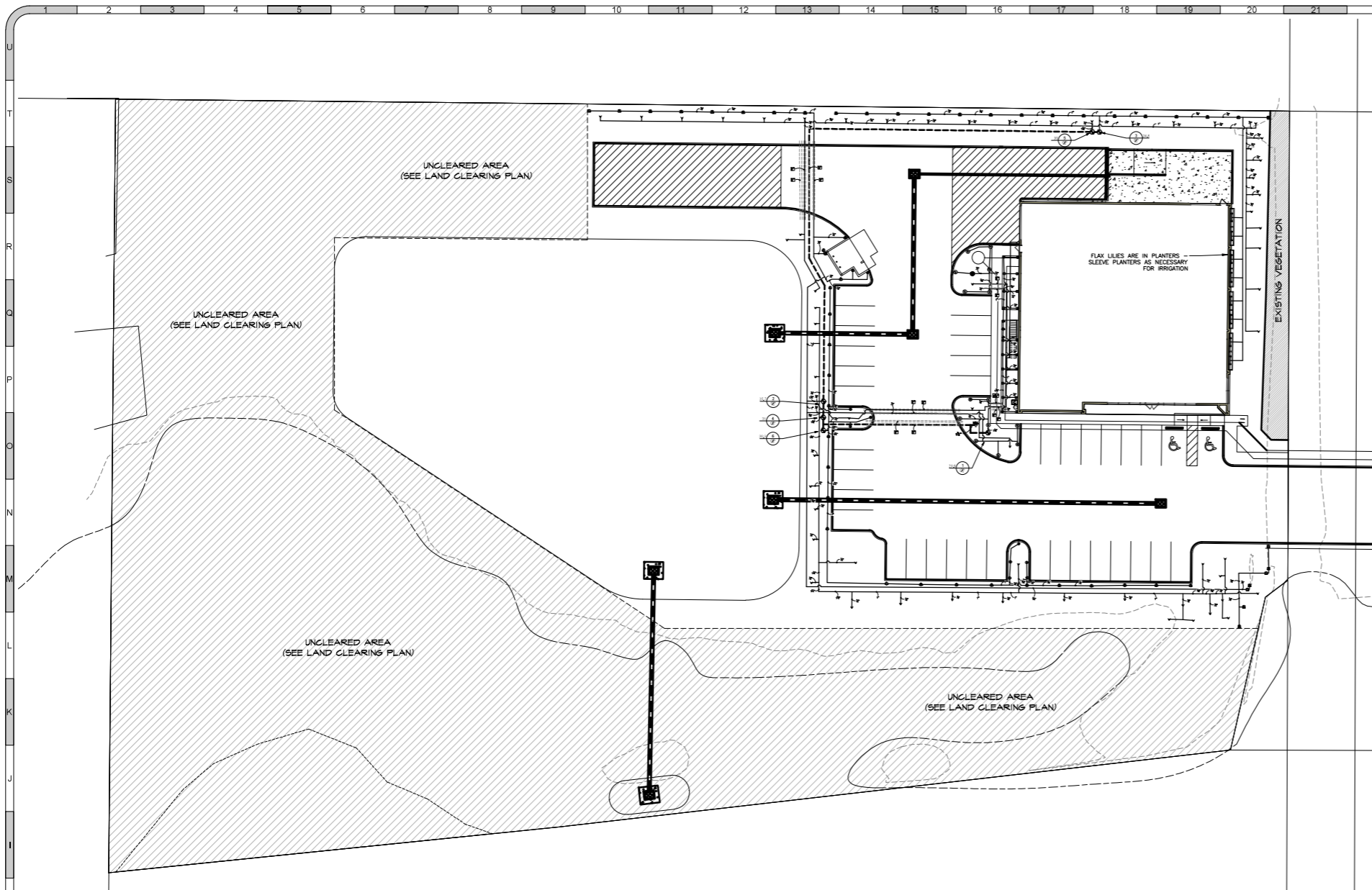
DATE
02-07-2023

NO.	DATE	DESCRIPTION	BY
1	05-02-2023	AS PER SITE PLAN REVISIONS AND PER TRC COMMENTS	CAC
2	07-17-2023	AS PER VIRTUAL MEETING AND DESIGN REVIEW CHECK LIST	CAC

SCALE
N.T.S.

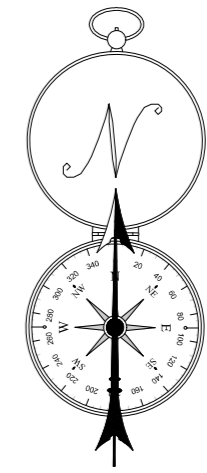
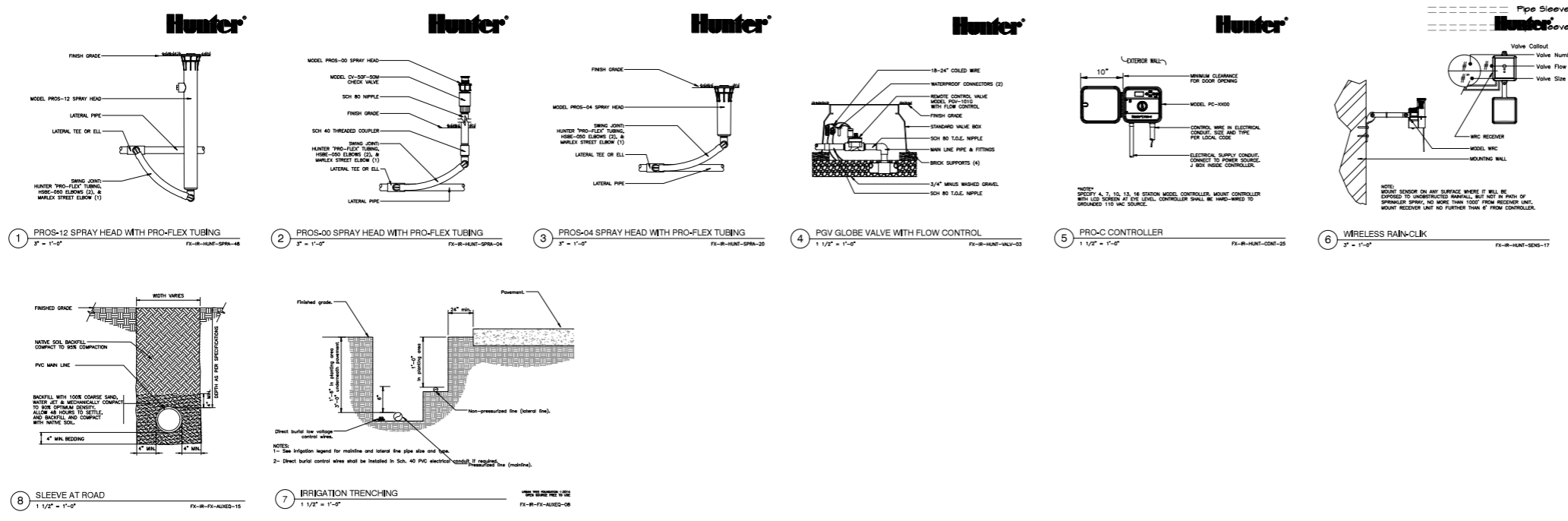
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THIS COPY IS NOT TO SCALE

SHEET NUMBER
LA2 of 2



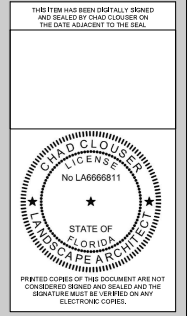
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	ARC	PSI	GPM	RADIUS
●	Hunter PROS-12 02H Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	16	180	40	0.18	2'
●	Hunter PROS-12 04H Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	1	180	40	0.46	4'
●	Hunter PROS-12 04G Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	2	90	40	0.24	4'
●	Hunter PROS-12 LCS-515 Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	2	LCS	40	0.75	5'x15'
●	Hunter PROS-12 RCS-515 Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	2	RCS	40	0.75	5'x15'
●	Hunter PROS-12 55-530 Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	15	55T	40	1.5	5'x30'
●	Hunter PROS-12 10F Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	1	360	40	1.84	11'
●	Hunter PROS-12 05A Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	20	Adj	40	≤1.37	4'
●	Hunter PROS-12 10A Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	2	Adj	40	≤2.3	11'
●	Hunter PROS-12 12A Shrub Spray, 12.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	12	Adj	40	≤2.45	18'
●	Hunter PROS-00 06G Shrub Spray, Fixed Riser. Co-molded niper seal with UV Resistant Material.	1	90	40	0.52	6'
●	Hunter PROS-00 LCS-515 Shrub Spray, Fixed Riser. Co-molded niper seal with UV Resistant Material.	2	LCS	40	0.75	5'x15'
●	Hunter PROS-00 RCS-515 Shrub Spray, Fixed Riser. Co-molded niper seal with UV Resistant Material.	2	RCS	40	0.75	5'x15'
●	Hunter PROS-00 08A Shrub Spray, Fixed Riser. Co-molded niper seal with UV Resistant Material.	11	Adj	40	≤1.37	4'
●	Hunter PROS-06 LCS-515 Shrub Spray, 6.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	4	LCS	40	0.75	5'x15'
●	Hunter PROS-06 RCS-515 Shrub Spray, 6.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	4	RCS	40	0.75	5'x15'
●	Hunter PROS-06 55-530 Shrub Spray, 6.0" Pop-Up. Co-molded niper seal with UV Resistant Material.	22	55T	40	1.5	5'x30'
●	Hunter PROS-04-PCN 10 Flood Evolver, 4.0" pop-up.	61	360	30	1	1'
●	Hunter PGV-151 Globe 1-1/2" 1-1/2" Plastic Electric Remote Control Valve, for Residential/Light Commercial Use. Female NPT Inlet/Outlet, With Flow Control. Globe Configuration.	6				
●	Hunter PC-400 with (0) PCM-300 Light Commercial & Residential Controller. T-Station expanded module controller, 120 VAC, Outdoor model.	1				
●	Hunter WIR-CLK Rain Sensor, install within 1000 ft of controller, in line of sight. 22-28 VAC/VDC 100 mA power from timer transformer. Mount as noted.	1				
WELL	4" Well with Submersible Pump	1				
---	Irrigation Lateral Line: PVC Class 160 SDR 26 1/2"	1,744 l.f.				
---	Irrigation Lateral Line: PVC Class 160 SDR 26 3/4"	348.1 l.f.				
---	Irrigation Lateral Line: PVC Class 160 SDR 26 1"	676.9 l.f.				
---	Irrigation Lateral Line: PVC Class 160 SDR 26 1 1/4"	175.6 l.f.				
---	Irrigation Lateral Line: PVC Class 160 SDR 26 1 1/2"	71 l.f.				
---	Irrigation Mainline: PVC Schedule 40 1 1/2"	365.7 l.f.				
---	Pipe Sleeve: PVC Schedule 40 2"	270.8 l.f.				
---	Pipe Sleeve: PVC Schedule 40 2 1/2"	5.7 l.f.				
---	Pipe Sleeve: PVC Schedule 40 3"	82.9 l.f.				



CLOUSER Design
LANDSCAPE ARCHITECTURE AND IRRIGATION DESIGN

P.O. BOX 3164
LAKE PLACID, FL 33862
TELEPHONE (863) 464-0210
chad@clouserdesigns.biz
FL Land Arch. Bus. No. LC26000581



DRAWN BY CAC
CHECKED BY CAC
APPROV. BY CAC

IRRIGATION PLAN
NAPA
4001 OLEANDER AVENUE
FORT PIERCE, FLORIDA 34982

DATE
05-02-2023

NO.	DATE	DESCRIPTION
1	07-20-2023	AS PER LANDSCAPE CHANGES

SCALE
1" = 30'-0"

IF THIS BAR DOES NOT MEASURE 1" THIS COPY IS NOT TO SCALE

SHEET NUMBER
IR1 of 2

IRRIGATION GENERAL SPECIFICATIONS

Irrigation contractor shall thoroughly review, read and understand both the plans, details and specifications prior to bidding or installing the project. By bidding or installing the project it is assumed the irrigation contractor has read and understands the plans, details and specifications and shall fully adhere to all aspects of them.

Install irrigation system in accordance with all applicable codes and ordinances regarding materials, methods of work and disposal of waste material. Obtain and pay for all required permits and inspections.

Visit the site prior to work commencing and examine the conditions under which the work is to be performed. (e.g., check that the site is to grade, if sleeves have been provided in the locations and sizes specified, power is provided to the locations specified, etc.) Do not proceed with the work until all unsatisfactory conditions have been rectified. Proceeding with work assumes that all conditions are satisfactory and no extra compensation shall be allowed to correct the unsatisfactory conditions.

Locate and protect all existing underground and overhead utilities, benchmarks, control points and monuments within the work area. Repairs made due to damage to any of these items will be made at the irrigation contractor's expense. If incorrectly located utilities are encountered, contact the applicable utility company to receive any further instructions or assistance that may be needed.

Take all measures necessary to protect all existing paving, buildings, utilities, etc. on and adjacent to the site. Repair made due to damage to any of these items will be made at the irrigation contractor's expense.

It is the responsibility of the irrigation contractor to satisfy themselves as to the accuracy of the quantities on the plan. If there are any discrepancies between the plan and the material list this should be addressed prior to beginning work. In any instance that a discrepancy does occur between the plan and material list, the plan rules. No extra compensation will be allowed on account of discrepancies between the plan and material list.

It is the responsibility of the irrigation contractor to satisfy themselves to the installation method of components as depicted in the details or addressed in the specifications. In any instance that a discrepancy does occur between the details and specifications, the more stringent requirement rules. No extra compensation will be allowed on account of discrepancies between the details and specifications.

It is the responsibility of the irrigation contractor to order or provide all material, equipment, labor, etc. necessary to complete the work according to the plans and specifications and to provide a fully functioning automatic irrigation system.

It is the responsibility of the irrigation contractor when retrofitting or expanding an existing system, to include all material, equipment, labor, etc. to bring all non-code, detail or specification compliant portions of the existing system to current code, details and specifications to compliance. Proceeding with work assumes that all corrective actions are included in the bid and no extra compensation shall be allowed to bring these items to current code, details or specifications.

Supply the owner with all instruction sheets, maintenance manuals, and parts sheets covering all of the operating and electrical equipment installed on the job. Also furnish the owner with keys to any locking items installed on the job.

Supply the irrigation designer with a set of asbuilt plans clearly indicating GPS locations and any changes made to the irrigation plans such as main line routing, valve locations or any other field adjustments that were necessary for a proper installation.

The irrigation designer has the final say in any and all disputes regarding layout, function, performance, material, product, stringency requirements, etc. The irrigation contractor shall take corrective action based on the irrigations designer's instructions. Any corrective action made due to any of these items will be made at the irrigation contractor's expense.

Warranty the irrigation system for a period of one year after acceptance for workmanship and material defects. This includes system adjustments, replacement of any damaged parts or broken pipe, unclogging of emitters and nozzles, cleaning of screens, valve adjustments and all other maintenance items necessary to maintain the system in functioning order. The warranty becomes void in cases of vandalism, fire, lightning strikes or owner negligence for the parts of the irrigation system directly affected. Warranty shall stay fully in effect for all other unaffected portions of the irrigation system. Any repair desired or required due to any of these unwarranted causes will be at the owner's expense.

IRRIGATION INSTALLATION SPECIFICATIONS

Irrigation contractor is responsible for verifying that the water source is capable of providing the gallons per minute (gpm) of volume and pounds per square inch (psi) of pressure required for the irrigation system to function as designed prior to commencing installation. Provide this water source information on the water source data portion of the Irrigation Association field audit submission package or in a similar format showing the flow test result.

Water source shall be equipped with a pressure gauge that reads in 1 psi increments. Well and pump systems shall also be equipped with a pressure relief valve that will alleviate pressure on the system due to a possible failure somewhere in the system that allows the water source to run while the system is not. Pressure relief valve shall be pointed away from all electrical equipment and other items that should not be subjected to the blown off water.

Coordinate the irrigation system installation with the landscape contractor and landscaping plan to avoid conflicts between irrigation heads, piping, etc. and palms and tree locations whenever possible.

All piping is to be installed with labels facing upward. Any piping installed with labels facing down shall be reinstalled correctly at the irrigation contractor's expense.

All main line pipe is to have a minimum cover of 18" of backfill measured from the top of the pipe and all lateral lines are to have a minimum cover of 12" of backfill measured from the top of the pipe unless otherwise specified. Turns and termination in the main line shall be located utilizing a minimum a GPS WASS system and documented on the plans along with measurements from two fixed points for future locating.

All backfill is to be fine grained and free from stone, rock, etc. larger than 2" in diameter that may damage or cut the pipe. Take care not to damage or deform the pipe when backfilling and compacting.

Assure that all cuts are made squarely and that all pipes and fittings are clean and free from PVC shavings and debris prior to cementing. Be sure to fully engage all joints when cementing. Prime all main line and fittings prior to cementing.

Do not lay marking flags on any hardscape surface such as concrete sidewalks, brick pavers, etc. to avoid causing rust stains. Remove all flags upon conclusion of their usefulness and collect them for future use or properly dispose of them. Irrigation contractor is responsible for the removal or correction of any rust stains caused by the marking flags.

Flush all pipes and body assemblies prior to sprinkler head installation. When installing nozzles or body assemblies while flushing under pressure, start at the heads nearest the valve and work toward the end of the lateral run to force debris toward the end. When retrofitting or expanding an existing irrigation system all existing heads and zones shall be flushed as though they were newly installed. Flush only one zone at a time and allow a minimum of 15 minutes time for the system to flush prior to installing nozzles or body assemblies. If the irrigation contractor is found to be flushing multiple zones at a time or not allowing adequate time for each zone to properly flush, all nozzles and body assemblies shall be removed, flush caps reinstalled on spray heads and the entire system will be required to be flushed again at the irrigation contractor's expense.

All systems shall be voltage checked for each wire run at the clock, between valves, splices, grounding modules and decoders and the voltage shall be recorded on the plans for each item. If an unusual resistance (an ohm load more than 10 percent different than all other wire runs of similar gauge and length) is encountered the irrigation designer shall be notified the problem shall be corrected at the irrigation contractor's expense.

After installation, field adjust the entire system to assure proper 100% head to head coverage and to minimize overspray onto paved surfaces. Assure that all heads are a minimum of 12" from any building and that they are not directly spraying onto the building. Assure that all turf heads are a minimum of 3" from the edge of sidewalks, parking or any other hardscape area that may require an edger for maintenance. Assure that all drip zones are spaced at the designed or specified distances. No extra compensation shall be allowed for readjusting heads or respacing drip zones.

Utilizing a minimum a GPS WASS system, document all major irrigation component locations. These include valves or valve clusters, any underground sensors, main line turns, wire splices, sleeves, and any other components that might aid in future system maintenance, repairs or modifications.

IRRIGATION MATERIAL SPECIFICATIONS

Irrigation contractor shall use the items specified in the material list or specifications for all bidding, ordering and installation. Do not substitute items or change sizes of irrigation components or piping without prior written consent from the irrigation designer. Unauthorized substitutions or under sizing of components or piping will constitute an immediate failure upon inspection and shall be replaced with the item of the correct size or manufacturer at the irrigation contractor's expense and irrigation contractor shall be responsible for all subsequent future inspections of failed item.

All material shall be installed according to manufacturer's specifications unless otherwise noted. In any instance that a discrepancy does occur between the manufacture's specifications and the irrigation plans, details and specifications, the more stringent requirement rules.

Securely install the specified controller in the location shown on the irrigation plan or in a location coordinated with the owner or their representative. The owner is responsible for providing all necessary electrical for the controller.

All controllers shall be equipped with a rain sensor or ET device as specified in the material list that will override the irrigation cycle of the system when adequate rainfall has occurred. This sensor shall be properly wired into the controller, in the on position, outside the range of the irrigation system and mounted in an area to receive rainfall.

All controllers utilized in coordination with a well must be supplied with an accompanying pump start relay and a control box if single phase or a magnetic starter if three phase. The irrigation contractor shall coordinate the phasing, voltage, disconnect location, amps, etc. with the owner or their representative prior to ordering the pump. The irrigation contractor is responsible for verifying that the well and pump is capable of providing the gallons per minute of volume and pounds per square inch of pressure required for the irrigation system to function as designed prior to commencing installation.

All controllers utilized in coordination with a continually pressurized water source such as a city water meter must be supplied with an accompanying master valve and appropriately sized backflow-preventer that adheres to all local ordinances. The irrigation contractor is responsible for verifying that the water source is capable of providing the gallons per minute of volume and pounds per square inch of pressure required for the irrigation system to function as designed prior to commencing installation.

All valves are to be electric valves of the brand and type specified in the irrigation plan material list and shall be sized according to their location on the plan and their accompanying key. All valves are to be installed in a minimum 12" X 18" green plastic valve box unless otherwise specified. The top of the box is to be flush with finished grade. All valve clusters are to be installed with a capped stub out for ease of future expansion. Number each valve box according to the valve number found on the irrigation plans. Each valve or valve cluster shall also be located utilizing at a minimum a GPS WASS system and documented on the plans for future locating.

All remote valve control wire shall be 14-1 UF direct burial wire for use with 24 VAC applications. Place wire under pipes whenever possible to help avoid accidental cutting. Common wire is to be white. Control wire is to be red. Run two blue wires from the controller to the farthest valve in each direction for spares.

All standard remote control valve wire that utilizes a common wire and multiple hot wires shall be spiced to the electric valves using DBY or DBR splice kits of the appropriate size. All "Two-Wire" valve wire shall be spiced to the Decoders using DBY-6 or DBR-6 splice kits of the appropriate size.

Provide a minimum of 24" expansion coils in the wire at every valve connection, at every sharp turn and at 100' intervals along straight runs of wire.

All irrigation pipes and control wires passing under sidewalks, drives or other paved or hard surfaces shall be placed in a schedule 40 PVC sleeve.

All main line pipe shall be schedule 40 PVC and all lateral pipes shall be class 160 PVC unless specified differently in the irrigation plan material list.

All rotor heads are to be of the brand specified in the irrigation plan material list and the nozzle shall be sized and the head adjusted according to their location on the plan.

All spray heads are to be of the brand specified in the irrigation plan material list and their spray pattern and radius shall match their location found on the plan.

All bubbler heads are to be of the brand specified in the irrigation plan material list and shall be against the rootball of the tree they are intended to water on the uphill side.

All sprinkler heads shall be in a plumb or vertical position as per their detail and all pop up sprinklers shall be affixed to swing joints or funny pipe limited to a length of 18" unless otherwise noted. Do not place multiple sprinkler heads on a single run of funny pipe.

IRRIGATION SLEEVE SPECIFICATIONS

Irrigation sleeves shall be schedule 40 PVC pipe. All fittings shall be schedule 40.

All cuts to the irrigation sleeves shall be made squarely and all connections between pipes shall be fully engaged to eliminate any inconsistent gaps at fittings or bell end connections that can cause pipes passing through to catch.

Irrigation contractor is responsible for installation of all irrigation sleeves unless prior arrangements are made with the owner.

Irrigation sleeves shall be installed a minimum of 18" below the paving they are passing under and shall extend 18" beyond the paving or as per code if more stringent.

Sleeving is shown on the plans for convenience only. Irrigation contractor shall thoroughly review the sleeve locations prior to bidding or installing the project. Any sleeving that is missing shall be installed as specified herein.

Irrigation sleeves shall be installed where shown on the plans. If the irrigation sleeves cannot be installed where shown on the plans, they shall be field adjusted. This adjustment must still allow access to the area the irrigation sleeves where intended to service. This adjustment shall be documented on the plans for future locating of the irrigation sleeves and asbuilt preparation. Irrigation sleeves shown directly adjacent to each other on the plans shall be placed in a single trench.

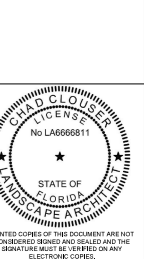
Irrigation sleeves shall be installed at the size shown on the plans. If no size is indicated on the plans, the irrigation sleeve shall be a minimum of twice the diameter of the pipe passing through it. This will allow for adequate room in the irrigation sleeve for the pipe passing through it and any necessary control wires. If it is believed that the diameter of the irrigation sleeve is not sufficient to allow all of the required control wires to pass through along with the piping, an additional irrigation sleeve shall be added at a size sufficient for all necessary control wire to pass through.

The ends of the irrigation sleeves shall be marked with pipe, boards, etc. prior to backfilling the trench for ease of future locating. The ends of the irrigation sleeves shall also be located utilizing at a minimum a GPS WASS system and documented on the plans for future locating in the event the physical marker is removed or destroyed during site work. The GPS locations shall also be documented on the asbuilts to aid in locating the irrigation sleeves at any point in the future.



P.O. BOX 3164
LAKE PLACID, FL 33862
TELEPHONE: (863) 464-0210
chad@hearlanddesigns.biz
FL, Land, Arch, Bus, No.
LC29000581

THIS ITEM HAS BEEN CAREFULLY DRAWN AND SEaled BY CHAD CLOUSER ON THE DATE ADJACENT TO THE SEAL.



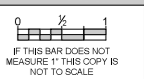
DRAWN BY: CAC
CHECKED BY: CAC
APPROV. BY: CAC

IRRIGATION PLAN
NAPA
4001 OLEANDER AVENUE
FORT PIERCE, FLORIDA 34982

DATE
06-02-2023

NO.	DATE	DESCRIPTION	BY
1	07-20-2023	AS PER LANDSCAPE CHANGES	CAC

SCALE
N.T.S.



SHEET NUMBER
IR2 of 2

*TREE SURVEY
REFERENCES
BOUNDARY SURVEY
CONDUCTED BY DEAN
SURVEYING AND
MAPPING, INC -
PRODUCED 07/22/22
UNDER RICHARD N
DEAN, FLORIDA
SURVEYOR & MAPPER
- FL CERTIFICATE
NO. 4406 L.B. 6936

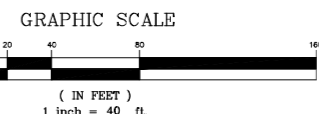
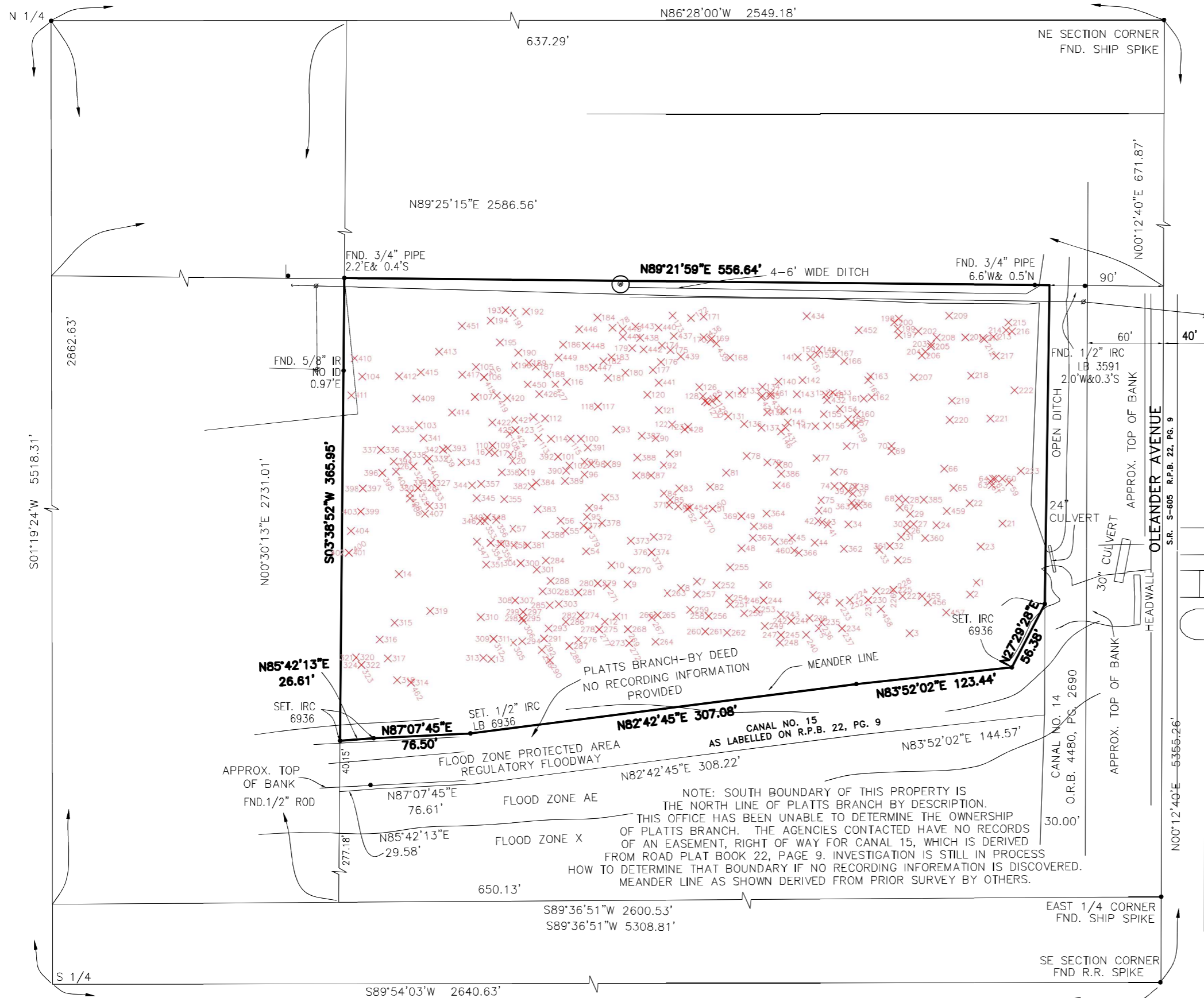


LAND CLEARING PLAN
PG 1 OF 2
4001 OLEANDER AVE.,
FORT PIERCE, FL 34982
PREPARED FOR:
JOHNSON GROUP GLOBAL

PROJECT DETAILS

TREE SURVEY
CONDUCTED 08/06/22
BY TAYLOR LAND
PLANNING, LLC -
ENVIRONMENTAL
CONSULTANTS

INITIAL	08/15/22
MODIFIED	
DRAWN BY	EDT
SCALE	1:40
SHEET	01



NOTE: SOUTH BOUNDARY OF THIS PROPERTY IS THE NORTH LINE OF PLATTS BRANCH BY DESCRIPTION. THIS OFFICE HAS BEEN UNABLE TO DETERMINE THE OWNERSHIP OF AN EASEMENT, RIGHT OF WAY FOR CANAL 15, WHICH IS DERIVED FROM ROAD PLAT BOOK 22, PAGE 9. INVESTIGATION IS STILL IN PROCESS HOW TO DETERMINE THAT BOUNDARY IF NO RECORDING INFORMATION IS DISCOVERED. MEANDER LINE AS SHOWN DERIVED FROM PRIOR SURVEY BY OTHERS.

FLOOD ZONE PROTECTED AREA REGULATORY FLOODWAY
FLOOD ZONE AE
FLOOD ZONE X

PLATTS BRANCH-BY DEED NO RECORDING INFORMATION PROVIDED

CANAL NO. 15 AS LABELLED ON R.P.B. 22, PG. 9

SET. IRC 6936

SET. 1/2" IRC LB 6936

SET. IRC 6936

SET. 1/2" IRC LB 6936

SET. IRC 6936

SET. 1/2" IRC LB 6936

SET. IRC 6936

SET. 1/2" IRC LB 6936

SET. IRC 6936

SET. 1/2" IRC LB 6936

SET. IRC 6936

SET. 1/2" IRC LB 6936

SET. IRC 6936

SET. 1/2" IRC LB 6936

ID	TYPE	CALIPER	LATITUDE	LONGITUDE	ID	TYPE	CALIPER	LATITUDE	LONGITUDE	ID	TYPE	CALIPER	CT HEIGHT	LATITUDE	LONGITUDE	ID	TYPE	CALIPER	CT HEIGHT	LATITUDE	LONGITUDE
1	LIVE OAK		26 N 27° 23' 24.12"	W 80° 20' 3.79"	112	SLASH PINE		17 N 27° 23' 25.42"	W 80° 20' 7.56"	224	SABAL PALM	13		10 N 27° 23' 23.99"	W 80° 20' 4.90"	331	SABAL PALM	10		10 N 27° 23' 24.74"	W 80° 20' 8.58"
2	LIVE OAK		37 N 27° 23' 24.03"	W 80° 20' 3.85"	113	SLASH PINE		15 N 27° 23' 25.27"	W 80° 20' 7.62"	225	SABAL PALM	10		10 N 27° 23' 24.07"	W 80° 20' 4.52"	332	SABAL PALM	10		10 N 27° 23' 25.11"	W 80° 20' 8.58"
3	LIVE OAK		44 N 27° 23' 23.73"	W 80° 20' 4.38"	114	SLASH PINE		16 N 27° 23' 25.26"	W 80° 20' 7.51"	226	SABAL PALM	10		10 N 27° 23' 24.07"	W 80° 20' 4.52"	333	SABAL PALM	10		12 N 27° 23' 24.92"	W 80° 20' 8.56"
4	LIVE OAK		44 N 27° 23' 23.98"	W 80° 20' 5.16"	115	SLASH PINE		14 N 27° 23' 25.26"	W 80° 20' 7.34"	227	SABAL PALM	10		10 N 27° 23' 24.07"	W 80° 20' 4.44"	334	SABAL PALM	10		10 N 27° 23' 24.92"	W 80° 20' 8.56"
5	LIVE OAK		6 N 27° 23' 23.77"	W 80° 20' 5.18"	116	LAUREL OAK		11 N 27° 23' 25.71"	W 80° 20' 7.37"	228	SABAL PALM	10		10 N 27° 23' 24.07"	W 80° 20' 4.52"	335	SABAL PALM	10		10 N 27° 23' 25.34"	W 80° 20' 8.87"
6	LIVE OAK - GROUP	12, 22	12 N 27° 23' 24.11"	W 80° 20' 5.66"	117	LAUREL OAK		5 N 27° 23' 25.51"	W 80° 20' 7.10"	229	SABAL PALM	10		10 N 27° 23' 24.06"	W 80° 20' 4.67"	336	SABAL PALM	10		10 N 27° 23' 25.18"	W 80° 20' 9.00"
7	LIVE OAK - GROUP	9, 12	12 N 27° 23' 24.14"	W 80° 20' 6.24"	118	LAUREL OAK		8 N 27° 23' 25.51"	W 80° 20' 7.10"	230	SABAL PALM	10		10 N 27° 23' 23.99"	W 80° 20' 4.74"	337	SABAL PALM	10		10 N 27° 23' 25.18"	W 80° 20' 9.00"
8	LIVE OAK		15 N 27° 23' 24.09"	W 80° 20' 6.38"	120	LAUREL OAK		7 N 27° 23' 25.60"	W 80° 20' 6.67"	231	SABAL PALM	10		10 N 27° 23' 23.99"	W 80° 20' 4.74"	338	SABAL PALM	10		10 N 27° 23' 25.14"	W 80° 20' 8.77"
9	LIVE OAK		9 N 27° 23' 24.12"	W 80° 20' 6.85"	121	LIVE OAK		7 N 27° 23' 25.48"	W 80° 20' 6.57"	232	SABAL PALM	10		10 N 27° 23' 23.99"	W 80° 20' 4.74"	339	SABAL PALM	10		10 N 27° 23' 25.18"	W 80° 20' 8.46"
10	LIVE OAK		20 N 27° 23' 24.27"	W 80° 20' 6.99"	122	LIVE OAK		5, 7 N 27° 23' 25.37"	W 80° 20' 6.45"	233	SABAL PALM	10		10 N 27° 23' 23.97"	W 80° 20' 4.99"	340	SABAL PALM	10		10 N 27° 23' 25.09"	W 80° 20' 8.60"
11	LIVE OAK		25 N 27° 23' 23.87"	W 80° 20' 6.95"	123	LIVE OAK		6 N 27° 23' 25.35"	W 80° 20' 6.31"	234	SABAL PALM	10		10 N 27° 23' 23.97"	W 80° 20' 4.97"	341	SABAL PALM	10		10 N 27° 23' 25.27"	W 80° 20' 8.93"
12	LIVE OAK		36 N 27° 23' 23.83"	W 80° 20' 7.05"	125	LIVE OAK		5 N 27° 23' 25.33"	W 80° 20' 6.34"	235	SABAL PALM	10		10 N 27° 23' 23.82"	W 80° 20' 5.15"	342	SABAL PALM	10		10 N 27° 23' 25.09"	W 80° 20' 8.44"
13	LIVE OAK		52 N 27° 23' 23.54"	W 80° 20' 8.05"	126	LIVE OAK		6 N 27° 23' 25.55"	W 80° 20' 6.16"	236	SABAL PALM	10		10 N 27° 23' 23.82"	W 80° 20' 5.15"	343	SABAL PALM	10		12 N 27° 23' 25.18"	W 80° 20' 8.30"
14	LIVE OAK		13 N 27° 23' 24.21"	W 80° 20' 8.85"	127	LIVE OAK		7 N 27° 23' 25.66"	W 80° 20' 6.21"	237	SABAL PALM	10		10 N 27° 23' 23.77"	W 80° 20' 4.97"	344	SABAL PALM	10		10 N 27° 23' 24.90"	W 80° 20' 8.21"
16	LIVE OAK		5 N 27° 23' 25.16"	W 80° 20' 8.06"	128	LIVE OAK		6 N 27° 23' 25.54"	W 80° 20' 6.14"	238	SABAL PALM	10		10 N 27° 23' 24.03"	W 80° 20' 5.23"	345	SABAL PALM	10		10 N 27° 23' 26.10"	W 80° 20' 8.19"
17	LIVE OAK		9 N 27° 23' 25.15"	W 80° 20' 8.01"	129	LIVE OAK		6 N 27° 23' 25.59"	W 80° 20' 6.12"	239	SABAL PALM	10		10 N 27° 23' 23.85"	W 80° 20' 5.26"	346	SABAL PALM	10		10 N 27° 23' 24.62"	W 80° 20' 8.14"
18	LIVE OAK		6 N 27° 23' 25.14"	W 80° 20' 7.87"	128	LAUREL OAK		7 N 27° 23' 25.35"	W 80° 20' 7.18"	240	SABAL PALM	10		10 N 27° 23' 23.72"	W 80° 20' 5.29"	347	SABAL PALM	10		10 N 27° 23' 24.46"	W 80° 20' 8.17"
19	LIVE OAK		11 N 27° 23' 25.00"	W 80° 20' 7.76"	129	LIVE OAK		5, 5 N 27° 23' 25.57"	W 80° 20' 6.06"	241	SABAL PALM	10		10 N 27° 23' 23.83"	W 80° 20' 5.42"	348	SABAL PALM	10		10 N 27° 23' 24.65"	W 80° 20' 8.08"
20	LIVE OAK		8 N 27° 23' 25.09"	W 80° 20' 7.85"	130	LAUREL OAK		6 N 27° 23' 25.55"	W 80° 20' 6.10"	242	SABAL PALM	10		10 N 27° 23' 23.83"	W 80° 20' 5.42"	349	SABAL PALM	10		10 N 27° 23' 24.65"	W 80° 20' 8.08"
21	LIVE OAK		5 N 27° 23' 24.58"	W 80° 20' 3.56"	131	LIVE OAK		7 N 27° 23' 25.43"	W 80° 20' 5.96"	243	SABAL PALM	10		10 N 27° 23' 23.88"	W 80° 20' 5.51"	350	SABAL PALM	10		10 N 27° 23' 24.45"	W 80° 20' 8.05"
22	LIVE OAK		5 N 27° 23' 24.74"	W 80° 20' 3.85"	132	LAUREL OAK		9 N 27° 23' 25.60"	W 80° 20' 5.95"	244	SABAL PALM	10		10 N 27° 23' 23.99"	W 80° 20' 5.66"	351	SABAL PALM	10		10 N 27° 23' 24.28"	W 80° 20' 8.09"
23	LIVE OAK		7 N 27° 23' 24.40"	W 80° 20' 3.75"	133	LAUREL OAK		4 N 27° 23' 25.63"	W 80° 20' 5.84"	245	SABAL PALM	10		10 N 27° 23' 23.72"	W 80° 20' 5.51"	352	SABAL PALM	10		12 N 27° 23' 24.44"	W 80° 20' 8.96"
24	LIVE OAK - GROUP	6, 9	9 N 27° 23' 24.57"	W 80° 20' 4.14"	134	LAUREL OAK		6 N 27° 23' 25.66"	W 80° 20' 5.66"	246	SABAL PALM	10		12 N 27° 23' 23.99"	W 80° 20' 5.66"	353	SABAL PALM	10		12 N 27° 23' 24.62"	W 80° 20' 8.10"
25	LIVE OAK		8 N 27° 23' 24.30"	W 80° 20' 4.48"	135	WAX MYRTLE - GROUP		3, 4 N 27° 23' 25.69"	W 80° 20' 5.51"	247	SABAL PALM	10		10 N 27° 23' 23.72"	W 80° 20' 5.51"	354	SABAL PALM	10		12 N 27° 23' 24.45"	W 80° 20' 8.05"
26	LIVE OAK		5 N 27° 23' 24.53"	W 80° 20' 4.40"	136	LIVE OAK		5 N 27° 23' 25.37"	W 80° 20' 5.82"	248	SABAL PALM	10		10 N 27° 23' 23.66"	W 80° 20' 5.52"	355	SABAL PALM	10		12 N 27° 23' 24.79"	W 80° 20' 7.93"
27	LIVE OAK		5 N 27° 23' 24.58"	W 80° 20' 4.34"	137	LIVE OAK		2, 3 N 27° 23' 25.34"	W 80° 20' 5.67"	249	SABAL PALM	10		10 N 27° 23' 23.66"	W 80° 20' 5.65"	356	SABAL PALM	10		10 N 27° 23' 24.39"	W 80° 20' 8.00"
28	LIVE OAK		7 N 27° 23' 24.77"	W 80° 20' 4.41"	138	LIVE OAK		9 N 27° 23' 25.46"	W 80° 20' 5.62"	250	SABAL PALM	10		10 N 27° 23' 23.89"	W 80° 20' 5.83"	357	SABAL PALM	10		10 N 27° 23' 24.91"	W 80° 20' 8.13"
29	LIVE OAK		7 N 27° 23' 24.66"	W 80° 20' 4.37"	140	WAX MYRTLE - GROUP		3, 4 N 27° 23' 25.70"	W 80° 20' 5.52"	251	SABAL PALM	10		10 N 27° 23' 23.96"	W 80° 20' 5.95"	358	SABAL PALM	10		10 N 27° 23' 25.00"	W 80° 20' 7.95"
30	LIVE OAK		4 N 27° 23' 24.58"	W 80° 20' 4.40"	141	LAUREL OAK		5, 6 N 27° 23' 25.89"	W 80° 20' 5.35"	252	SABAL PALM	10		10 N 27° 23' 24.11"	W 80° 20' 6.07"	359	SABAL PALM	10		10 N 27° 23' 24.44"	W 80° 20' 7.96"
31	LIVE OAK		9 N 27° 23' 24.48"	W 80° 20' 4.45"	142	LIVE OAK		3, 4 N 27° 23' 25.71"	W 80° 20' 5.31"	253	SABAL PALM	10		10 N 27° 23' 24.03"	W 80° 20' 5.72"	360	SABAL PALM	10		10 N 27° 23' 24.47"	W 80° 20' 7.96"
32	LIVE OAK		7 N 27° 23' 24.41"	W 80° 20' 4.55"	143	LAUREL OAK		4 N 27° 23' 25.60"	W 80° 20' 5.36"	254	SABAL PALM	10		10 N 27° 23' 24.01"	W 80° 20' 5.96"	361	SABAL PALM	10		10 N 27° 23' 24.41"	W 80° 20' 4.55"
33	LIVE OAK		6 N 27° 23' 24.38"	W 80° 20' 4.64"	144	LIVE OAK		3, 5 N 27° 23' 25.47"	W 80° 20' 5.47"	255	SABAL PALM	10		10 N 27° 23' 24.25"	W 80° 20' 5.95"	362	SABAL PALM	10		10 N 27° 23' 24.39"	W 80° 20' 4.95"
34	LIVE OAK		7 N 27° 23' 24.58"	W 80° 20' 4.91"	145	LIVE OAK		3, 6 N 27° 23' 25.38"	W 80° 20' 5.44"	256	SABAL PALM	10		10 N 27° 23' 23.87"	W 80° 20' 6.14"	363	SABAL PALM	10		10 N 27° 23' 24.72"	W 80° 20' 4.86"
35	LIVE OAK		6 N 27° 23' 24.75"	W 80° 20' 4.88"	146	LIVE OAK		4 N 27° 23' 25.31"	W 80° 20' 5.50"	257	SABAL PALM	10		10 N 27° 23' 24.07"	W 80° 20' 6.24"	364	SABAL PALM	10		10 N 27° 23' 24.67"	W 80° 20' 5.63"
36	LIVE OAK		9 N 27° 23' 24.73"	W 80° 20' 4.82"	147	LIVE OAK - GROUP	2, 3, 4	4 N 27° 23' 25.35"	W 80° 20' 5.20"	258	SABAL PALM	10		10 N 27° 23' 23.84"	W 80° 20' 6.14"	365	SABAL PALM	10		10 N 27° 23' 24.45"	W 80° 20' 5.56"
37	LIVE OAK		6 N 27° 23' 24.82"	W 80° 20' 4.87"	148	LIVE OAK		4 N 27° 23' 25.55"	W 80° 20' 5.09"	259	SABAL PALM	10		10 N 27° 23' 23.92"	W 80° 20' 6.30"	366	SABAL PALM	10		10 N 27° 23' 24.36"	W 80° 20' 5.35"
38	LIVE OAK		5 N 27° 23' 24.87"	W 80° 20' 4.85"	148	LIVE OAK		3, 5 N 27° 23' 25.59"	W 80° 20' 5.10"	260	SABAL PALM	10		10 N 27° 23' 23.75"	W 80° 20' 6.17"	367	SABAL PALM	10		10 N 27° 23' 24.48"	W 80° 20' 5.74"
39	LIVE OAK		9 N 27° 23' 24.94"	W 80° 20' 4.91"	149	LIVE OAK		3, 4 N 27° 23' 25.95"	W 80° 20' 5.16"	261	SABAL PALM	10		10 N 27° 23' 23.75"	W 80° 20' 6.17"	368	SABAL PALM	10		10 N 27° 23' 24.57"	W 80° 20' 5.54"
40	LIVE OAK		4 N 27° 23' 24.69"	W 80° 20' 5.17"	150	LIVE OAK		7 N 27° 23' 25.95"	W 80° 20' 5.16"	262	SABAL PALM	10		12 N 27° 23' 23.74"	W 80° 20' 5.98"	369	SABAL PALM	10		10 N 27° 23' 24.65"	W 80° 20' 5.85"
41	LIVE OAK		7 N 27° 23' 24.58"	W 80° 20' 5.09"	151	LIVE OAK		5 N 27° 23' 25.89"	W 80° 20' 5.24"	263	SABAL PALM	10		12 N 27° 23' 24.05"	W 80° 20' 6.50"	370	SABAL PALM	10		10 N 27° 23' 24.66"	W 80° 20' 6.18"
42	LAUREL OAK		6 N 27° 23' 24.61"	W 80° 20' 5.18"	152	LAUREL OAK		2, 3 N 27° 23' 25.91"	W 80° 20' 5.18"	264	SABAL PALM	10		10 N 27° 23' 23.67"	W 80° 20' 6.61"	371	SABAL PALM	10		10 N 27° 23' 24.74"	W 80° 20' 6.48"
43	LIVE OAK		5 N 27° 23' 24.60"	W 80° 20' 5.14"	153	LAUREL OAK - GROUP		4 N 27° 23' 25.61"	W 80° 20' 5.04"	265	SABAL PALM	10		12 N 27° 23' 23.88"	W 80° 20' 6.59"	372	SABAL PALM	10		10 N 27° 23' 24.49"	W 80° 20' 6.62"
44	LAUREL OAK		6 N 27° 23' 24.44"	W 80° 20' 5.21"	154	LIVE OAK		5 N 27° 23' 25.48"	W 80° 20' 4.98"	266	SABAL PALM	10		10 N 27° 23' 23.88"	W 80° 20' 6.59"	373	SABAL PALM	10		10 N 27° 23' 24.46"	W 80° 20' 6.82"
45	LAUREL OAK		10 N 27° 23' 24.48"	W 80° 20' 5.41"	155	LIVE OAK		6 N 27° 23' 25.44"	W 80° 20' 5.12"	267	SABAL PALM	10		10 N 27° 23' 23.86"	W 80° 20' 6.64"	374	SABAL PALM	10		10 N 27° 23' 24.37"	W 80° 20' 6.64"
46	LO		10 N 27° 23' 24.89"	W 80° 20' 5.54"	156	LIVE OAK		5, 7 N 27° 23' 25.35"	W 80° 20' 5.09"	268	SABAL PALM	10		10 N 27° 23' 23.77"	W 80° 20' 6.85"	375	SABAL PALM	10		10 N 27° 23' 24.37"	W 80° 20' 6.64"
48	SLASH PINE		23 N 27° 23' 24.40"	W 80° 20' 5.85"	157	LIVE OAK		4 N 27° 23' 25.37"	W 80° 20' 4.88"	269	SABAL PALM	10		10 N 27° 23' 23.77"	W 80° 20' 6.85"	376	SABAL PALM	10		10 N 27° 23' 24.37"	W

*TREE SURVEY
 REFERENCES
 BOUNDARY SURVEY
 CONDUCTED BY DEAN
 SURVEYING AND
 MAPPING, INC -
 PRODUCED 07/22/22
 UNDER RICHARD N
 DEAN, FLORIDA
 SURVEYOR & MAPPER
 - FL CERTIFICATE
 NO. 4406 L.B. 6936

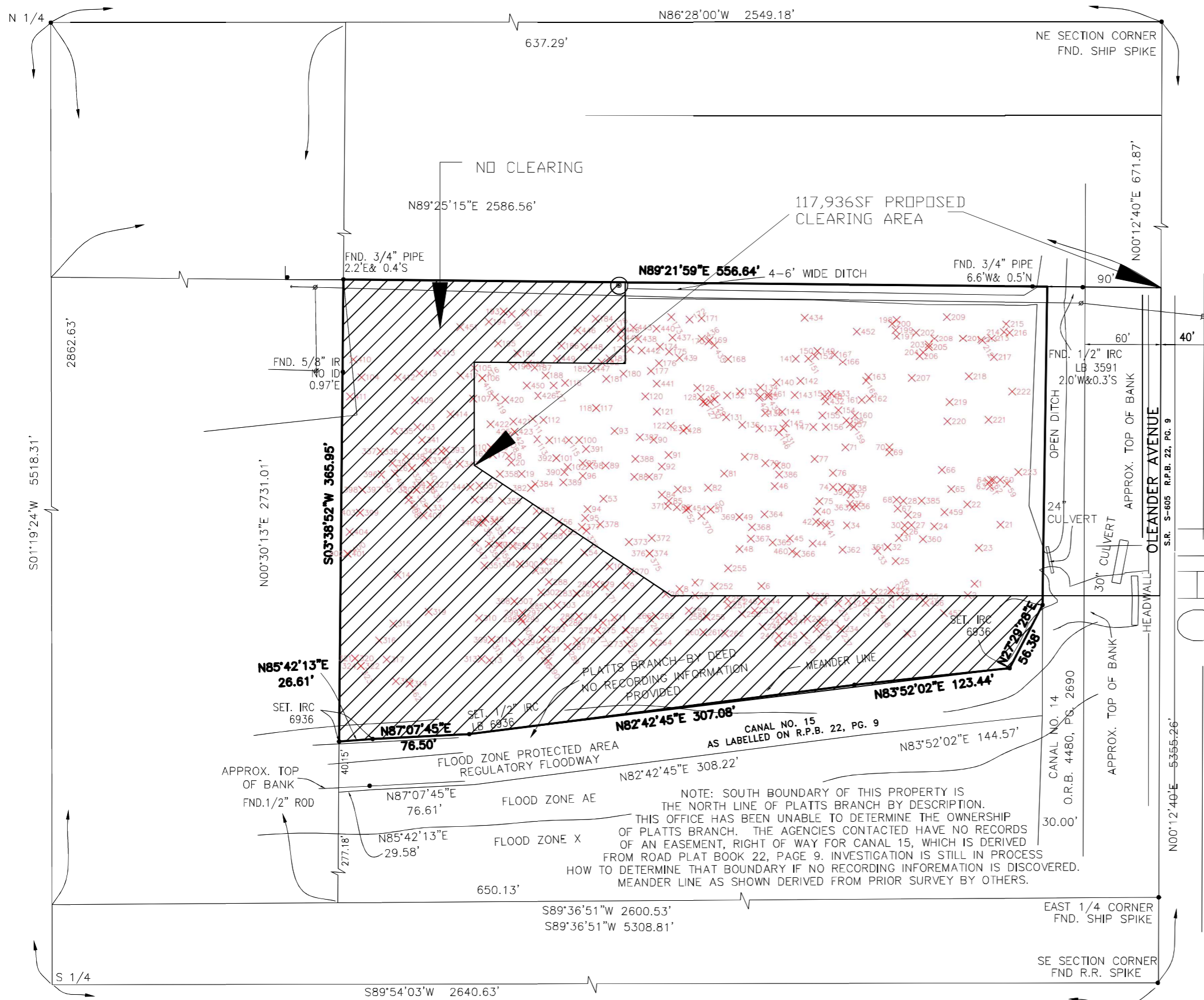


LAND CLEARING PLAN
 PG 1 OF 2
 4001 OLEANDER AVE.,
 FORT PIERCE, FL 34982
 PREPARED FOR:
 JOHNSON GROUP GLOBAL

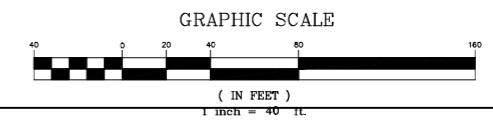
PROJECT DETAILS

TREE SURVEY
 CONDUCTED 08/06/22
 BY TAYLOR LAND
 PLANNING, LLC -
 ENVIRONMENTAL
 CONSULTANTS

INITIAL	3/23/23
MODIFIED	
DRAWN BY	EDT
SCALE	1:40
SHEET	01



NOTE: SOUTH BOUNDARY OF THIS PROPERTY IS THE NORTH LINE OF PLATTS BRANCH BY DESCRIPTION. THIS OFFICE HAS BEEN UNABLE TO DETERMINE THE OWNERSHIP OF PLATTS BRANCH. THE AGENCIES CONTACTED HAVE NO RECORDS OF AN EASEMENT, RIGHT OF WAY FOR CANAL 15, WHICH IS DERIVED FROM ROAD PLAT BOOK 22, PAGE 9. INVESTIGATION IS STILL IN PROCESS HOW TO DETERMINE THAT BOUNDARY IF NO RECORDING INFOREMATON IS DISCOVERED. MEANDER LINE AS SHOWN DERIVED FROM PRIOR SURVEY BY OTHERS.



LAND CLEARING

MITIGATION PLAN

TREE REMOVAL LIST

ID	TYPE	CALIPER	LATITUDE	LONGITUDE
1	LIVE OAK	26	N 27° 23' 24.12"	W 80° 20' 3.79"
2	LIVE OAK	37	N 27° 23' 24.03"	W 80° 20' 3.85"
6	LIVE OAK - GROUP	12, 22	N 27° 23' 24.11"	W 80° 20' 5.66"
7	LIVE OAK - GROUP	9, 12	N 27° 23' 24.14"	W 80° 20' 6.24"
8	LIVE OAK	15	N 27° 23' 24.09"	W 80° 20' 6.38"
16	LIVE OAK	5	N 27° 23' 25.16"	W 80° 20' 8.06"
17	LIVE OAK	9	N 27° 23' 25.15"	W 80° 20' 8.01"
18	LIVE OAK	6	N 27° 23' 25.14"	W 80° 20' 7.87"
19	LIVE OAK	11	N 27° 23' 25.00"	W 80° 20' 7.76"
20	LIVE OAK	8	N 27° 23' 25.09"	W 80° 20' 7.85"
25	LIVE OAK	8	N 27° 23' 24.30"	W 80° 20' 4.48"
53	SLASH PINE	15	N 27° 23' 24.80"	W 80° 20' 7.04"
56	LIVE OAK	26	N 27° 23' 24.62"	W 80° 20' 7.43"
89	LAUREL OAK	8	N 27° 23' 25.06"	W 80° 20' 7.02"
93	LAUREL OAK - GROUP	4, 4, 4, 4, 4, 6, 6	N 27° 23' 25.33"	W 80° 20' 6.94"
94	SLASH PINE	20	N 27° 23' 24.72"	W 80° 20' 7.18"
95	SLASH PINE	15	N 27° 23' 24.65"	W 80° 20' 7.20"
96	SLASH PINE	21	N 27° 23' 24.98"	W 80° 20' 7.22"
97	LIVE OAK	4	N 27° 23' 25.08"	W 80° 20' 7.22"
98	LIVE OAK	5	N 27° 23' 25.06"	W 80° 20' 7.16"
100	LIVE OAK	8	N 27° 23' 25.26"	W 80° 20' 7.25"
101	LIVE OAK	9	N 27° 23' 25.12"	W 80° 20' 7.45"
102	LIVE OAK	6	N 27° 23' 25.05"	W 80° 20' 7.35"
105	LAUREL OAK	15	N 27° 23' 25.83"	W 80° 20' 8.17"
106	SLASH PINE	30	N 27° 23' 25.75"	W 80° 20' 8.10"
107	SLASH PINE	15	N 27° 23' 25.24"	W 80° 20' 7.93"
108	LAUREL OAK	4	N 27° 23' 25.30"	W 80° 20' 7.88"
109	LIVE OAK	12	N 27° 23' 25.21"	W 80° 20' 8.03"
110	LIVE OAK	18	N 27° 23' 25.21"	W 80° 20' 8.03"
111	LIVE OAK	4	N 27° 23' 25.43"	W 80° 20' 7.66"
112	SLASH PINE	15	N 27° 23' 25.42"	W 80° 20' 7.56"
113	SLASH PINE	17	N 27° 23' 25.27"	W 80° 20' 7.62"
114	SLASH PINE	16	N 27° 23' 25.26"	W 80° 20' 7.51"
115	SLASH PINE	14	N 27° 23' 25.26"	W 80° 20' 7.34"
116	LAUREL OAK	11	N 27° 23' 25.71"	W 80° 20' 7.37"
117	LAUREL OAK	5	N 27° 23' 25.51"	W 80° 20' 7.10"
118	LAUREL OAK	8	N 27° 23' 25.51"	W 80° 20' 7.10"
180	LAUREL OAK	9	N 27° 23' 25.78"	W 80° 20' 6.86"
181	LAUREL OAK	20	N 27° 23' 25.74"	W 80° 20' 7.01"
185	LAUREL OAK	8	N 27° 23' 25.82"	W 80° 20' 7.14"
187	SLASH PINE	18	N 27° 23' 25.83"	W 80° 20' 7.64"
188	LAUREL OAK	6	N 27° 23' 25.77"	W 80° 20' 7.54"
189	LAUREL OAK	5	N 27° 23' 25.86"	W 80° 20' 7.70"
196	LAUREL OAK	11	N 27° 23' 25.84"	W 80° 20' 7.83"
225	SABAL PALM	10	N 27° 23' 24.07"	W 80° 20' 4.52"
227	SABAL PALM	10	N 27° 23' 24.02"	W 80° 20' 4.44"
229	SABAL PALM	10	N 27° 23' 24.06"	W 80° 20' 4.67"
238	SABAL PALM	10	N 27° 23' 24.03"	W 80° 20' 5.23"
252	SABAL PALM	10	N 27° 23' 24.11"	W 80° 20' 6.07"
255	SABAL PALM	10	N 27° 23' 24.25"	W 80° 20' 5.95"
257	SABAL PALM	10	N 27° 23' 24.04"	W 80° 20' 6.24"
263	SABAL PALM	10	N 27° 23' 24.05"	W 80° 20' 6.50"
270	SABAL PALM	10	N 27° 23' 24.23"	W 80° 20' 6.81"
358	SABAL PALM	10	N 27° 23' 25.00"	W 80° 20' 7.95"
377	SABAL PALM	10	N 27° 23' 24.58"	W 80° 20' 7.23"
378	SABAL PALM	10	N 27° 23' 24.60"	W 80° 20' 7.07"
379	SABAL PALM	10	N 27° 23' 24.55"	W 80° 20' 7.19"
382	SABAL PALM	10	N 27° 23' 24.89"	W 80° 20' 7.68"
384	SABAL PALM	10	N 27° 23' 24.92"	W 80° 20' 7.64"
389	SABAL PALM	10	N 27° 23' 24.93"	W 80° 20' 7.39"
390	SABAL PALM	10	N 27° 23' 25.01"	W 80° 20' 7.38"
391	SABAL PALM	10	N 27° 23' 25.19"	W 80° 20' 7.19"
392	SABAL PALM	10	N 27° 23' 25.12"	W 80° 20' 7.45"
416	SABAL PALM	10	N 27° 23' 25.75"	W 80° 20' 8.10"
418	SABAL PALM	10	N 27° 23' 25.75"	W 80° 20' 8.10"
419	SABAL PALM	10	N 27° 23' 25.60"	W 80° 20' 7.99"
420	SABAL PALM	10	N 27° 23' 25.58"	W 80° 20' 7.90"
421	SABAL PALM	10	N 27° 23' 25.41"	W 80° 20' 7.83"
422	SABAL PALM	10	N 27° 23' 25.39"	W 80° 20' 8.03"
423	SABAL PALM	10	N 27° 23' 25.33"	W 80° 20' 7.82"
424	SABAL PALM	10	N 27° 23' 25.33"	W 80° 20' 7.82"
425	SABAL PALM	10	N 27° 23' 25.33"	W 80° 20' 7.82"
426	SABAL PALM	10	N 27° 23' 25.61"	W 80° 20' 7.61"
427	SABAL PALM	10	N 27° 23' 25.69"	W 80° 20' 7.47"
447	SABAL PALM	10	N 27° 23' 25.82"	W 80° 20' 7.14"
450	SABAL PALM	10	N 27° 23' 25.69"	W 80° 20' 7.71"
455	SABAL PALM	10	N 27° 23' 24.02"	W 80° 20' 4.27"

TREE REMOVAL LIST

ID	TYPE	CALIPER	LATITUDE	LONGITUDE
1	LIVE OAK	26	N 27° 23' 24.12"	W 80° 20' 3.79"
2	LIVE OAK	37	N 27° 23' 24.03"	W 80° 20' 3.85"
6	LIVE OAK - GROUP	12, 22	N 27° 23' 24.11"	W 80° 20' 5.66"
8	LIVE OAK	15	N 27° 23' 24.09"	W 80° 20' 6.38"
53	SLASH PINE	15	N 27° 23' 24.80"	W 80° 20' 7.04"
56	LIVE OAK	26	N 27° 23' 24.62"	W 80° 20' 7.43"
94	SLASH PINE	20	N 27° 23' 24.72"	W 80° 20' 7.18"
95	SLASH PINE	15	N 27° 23' 24.65"	W 80° 20' 7.20"
96	SLASH PINE	21	N 27° 23' 24.98"	W 80° 20' 7.22"
105	LAUREL OAK	15	N 27° 23' 25.83"	W 80° 20' 8.17"
106	SLASH PINE	30	N 27° 23' 25.75"	W 80° 20' 8.10"
107	SLASH PINE	15	N 27° 23' 25.24"	W 80° 20' 7.93"
110	LIVE OAK	18	N 27° 23' 25.21"	W 80° 20' 8.03"
112	SLASH PINE	15	N 27° 23' 25.42"	W 80° 20' 7.56"
113	SLASH PINE	17	N 27° 23' 25.27"	W 80° 20' 7.62"
114	SLASH PINE	16	N 27° 23' 25.26"	W 80° 20' 7.51"
115	SLASH PINE	14	N 27° 23' 25.26"	W 80° 20' 7.34"
181	LAUREL OAK	20	N 27° 23' 25.74"	W 80° 20' 7.01"
187	SLASH PINE	18	N 27° 23' 25.83"	W 80° 20' 7.64"

REQUIRED MITIGATION CALCULATIONS

TYPE	CALIPER TOTAL	REQUIRED 1:1	REPLACEMENT TYPE	CALIPER	NUMBER OF REPLACEMENTS
LIVE OAK	144	144	LIVE OAK	4"	36
SLASH PINE	196	196	LIVE OAK	4"	49
LAUREL OAK	35	35	LIVE OAK	4"	9

MITIGATION IS 1:1 PER SECTION 123.66.(D)(2). THE TOTAL MITIGATION REQUIRED IS 375". REPLACEMENT TREES ARE AS FOLLOWS FOR THE REQUIRED MITIGATION:

ILEX CASSINE: 3" CAL. X 27 TREES = 81" (22%)
 QUERCUS VIRGINIA: 3" CAL. X 22 TREES = 66" (18%)

40% OF THE TREE MITIGATION REQUIREMENTS ARE MET VIA NEW PLANTINGS. THESE PLANTINGS WILL BE MAINTAINED BY THE PROPERTY OWNER AND WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO REPLACE UNHEALTHY AND DEAD TREES. THE PROPERTY OWNER SHALL SUBMIT TO AN ON-SITE INSPECTION OF THE PLANTED VEGETATION 12 MONTHS AFTER ISSUANCE OF THE FINAL DEVELOPMENT ORDER.

PLANTING DETAILS, METHODS, AND MATERIALS ARE OUTLINED IN THE LANDSCAPE PLAN.

THE REMAINING 228 INCHES (60%) MITIGATION REQUIRED WILL BE SATISFIED THROUGH THE CONTRIBUTION OF FUNDS TO THE CITY OF FORT PIERCE TREE PRESERVATION FUNDS.



MITIGATION CALCULATIONS FOR
 TREE REMOVAL
 PG 2 OF 2
 4001 CLEANDER AVE.,
 FORT PIERCE, FL 34982
 PREPARED FOR:
 JOHNSON GROUP GLOBAL

PROJECT DETAILS

TREE SURVEY
 CONDUCTED 08/06/22
 BY TAYLOR LAND
 PLANNING, LLC -
 ENVIRONMENTAL
 CONSULTANTS

INITIAL	08/15/22
MODIFIED	
DRAWN BY	EDT
SCALE	1:40
SHEET	02

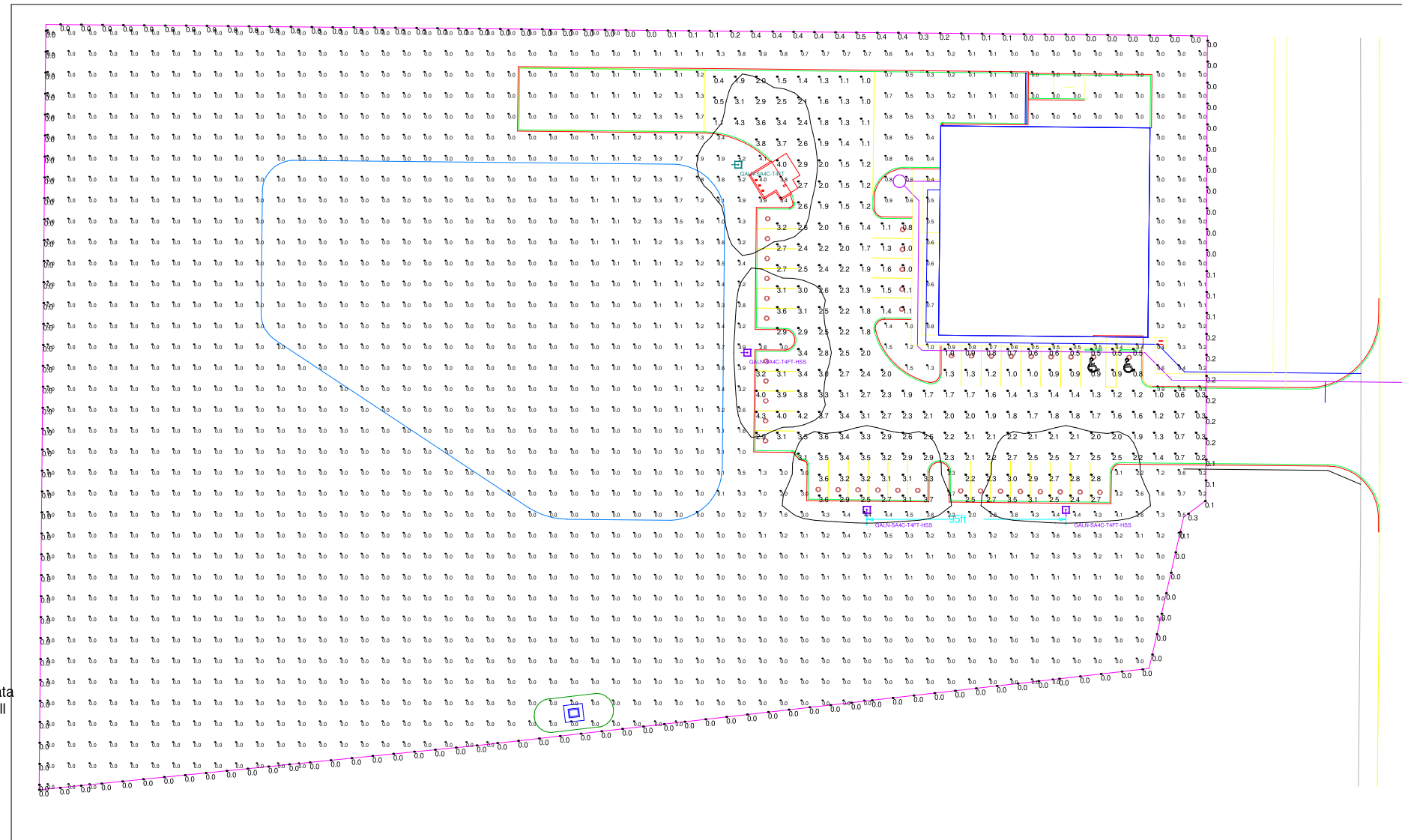
Building Height: 30'-0"
 Mounting Height: 25'-0"

Building Reflectance: 50%
 Calculation Height: Pavement

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	LLF	Luminaire Lumens	Description	Total Watts
	1	GALN-SA4C-T4FT	Single	0.900	27751	GALN-SA4C-740-U-T4FT SNGL	213
	3	GALN-SA4C-T4FT-HSS	Single	0.900	20027	GALN-SA4C-740-U-T4FT-HSS SNGL	639

Calculation Summary										
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb	
Parking Lot at Pavement	Illuminance	Fc	2.15	4.3	0.2	10.75	21.50	10	10	
Property Line at Pavement	Illuminance	Fc	0.04	0.5	0.0	N.A.	N.A.	10	N.A.	
Site Outside Parking Lot to Property Line	Illuminance	Fc	0.18	5.2	0.0	N.A.	N.A.	10	10	

Iso-illuminance Template: 0.5fc

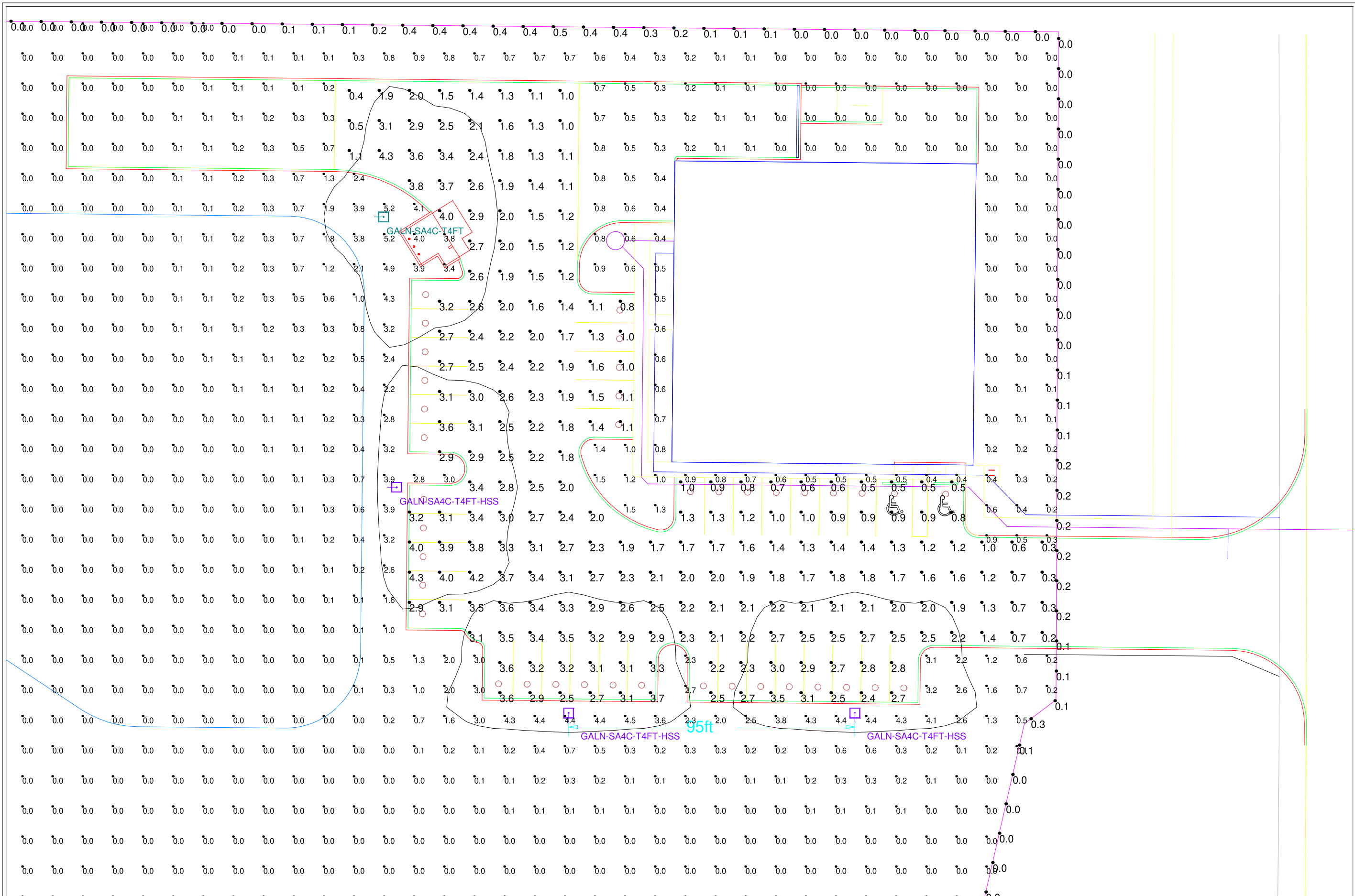


The calculations provided in this report are predicted lighting levels based on the above described input data and characteristics. All information should be reviewed for accuracy, understanding and agreement with all information. Any discrepancies should be noted and the preparer of this report immediately advised to clarify or change as required.

Actual lighting levels may vary from this report due to a variety of circumstances, such as: reflectances, voltage variations, objects blocking or redirecting light, different mounting heights, installation, lamp and ballast tolerances, etc. Room is considered completely empty unless noted otherwise above. Unless specifically stated otherwise, predicted foot candles are not a recommendation of lighting levels.

Ardd & Winter, Inc. assumes no responsibility for any such variances and will not be held responsible for lighting levels different from predicted levels in this report. Recipient of this report, or someone designated by recipient, must verify that lighting fixtures will physically fit within the specified location(s). Catalog numbers of lighting fixtures may not be complete as all conditions may not be known.

Where backgrounds are shown, these are typically used for reference purposes only, unless noted otherwise. Additional details available upon request.



See Page 1 for A+W Disclaimer.

Calculations By: MAB
Revised By:
Date: 5/12/2023
Scale: Not to Scale

Project Name: NAPA - Fort Pierce FL Parking Lot Lighting

Revision: P2



NAPA Auto Parts

Traffic Impact Analysis

December 2022

Kimley»»Horn



TRAFFIC IMPACT ANALYSIS

NAPA Auto Parts

City of Fort Pierce, FL

Prepared for:

DePree Engineering, LLC

Prepared by:

Kimley-Horn and Associates, Inc.

December 2022

Alex Memering, P.E.

PE #91501

Table of Contents

1.0	INTRODUCTION	1
2.0	STUDY AREA DETERMINATION	1
2.1	Trip Generation	1
2.2	Trip Distribution and Trip Assignment.....	3
2.3	Study Area.....	6
3.0	EXISTING CONDITIONS ANALYSIS – YEAR 2022	9
3.1	Existing Traffic.....	9
3.2	Existing Roadway Segment Conditions.....	9
3.3	Existing Intersection Conditions.....	11
4.0	BACKGROUND CONDITIONS ANALYSIS – YEAR 2025	13
4.1	Background Traffic	13
4.2	Background Growth Rate.....	13
4.3	Committed Improvements.....	14
4.4	Background Roadway Segment Analysis	14
4.5	Background Intersection Analysis	16
5.0	BUILDOUT CONDITIONS ANALYSIS – YEAR 2025	18
5.1	Buildout Traffic.....	18
5.2	Buildout Roadway Segment Analysis	18
5.3	Buildout Intersection Analysis.....	20
6.0	SITE ACCESS ANALYSIS.....	24
7.0	CONCLUSION	25

Tables

Table 1: Trip Generation Summary	2
Table 2: Roadway Segment Significance Test.....	7
Table 3: Existing (2022) AM Peak Hour Roadway Segment Analysis	10
Table 4: Existing (2022) PM Peak Hour Roadway Segment Analysis	10
Table 5: Existing (2022) AM Peak Hour Intersection Conditions	12
Table 6: Existing (2022) PM Peak Hour Intersection Conditions	12
Table 7: BEBR Growth Rate Calculation	13
Table 8: Background (2025) AM Peak Hour Roadway Segment Analysis.....	15
Table 9: Background (2025) PM Peak Hour Roadway Segment Analysis.....	15
Table 10: Background (2025) AM Peak Hour Intersection Conditions.....	17
Table 11: Background (2025) PM Peak Hour Intersection Conditions	17
Table 12: Buildout (2025) AM Peak Hour Roadway Segment Analysis	19
Table 13: Buildout (2025) PM Peak Hour Roadway Segment Analysis	19
Table 14: Buildout (2025) AM Peak Hour Intersection Conditions.....	20
Table 15: Buildout (2025) PM Peak Hour Intersection Conditions	21

Figures

Figure 1: Project Trip Distribution.....	4
Figure 2: Project Trip Assignment.....	5
Figure 3: Project Location and Study Area Roadway Segments/Intersections.....	8
Figure 4: Buildout (2025) Traffic Volumes: AM Peak Hour.....	22
Figure 5: Buildout (2025) Traffic Volumes: PM Peak Hour.....	23

Appendices

Appendix A: Conceptual Site Plan

Appendix B: Excerpts from ITE Trip Generation Manual, Trip Generation Handbook, and Internal Capture Calculation Worksheets

Appendix C: Greater Treasure Coast Regional Planning Model (GTCRPM) Model Plots

Appendix D: Excerpts from St. Lucie TPO Traffic Counts and Level of Service Report 2022

Appendix E: Turning Movement Counts

Appendix F: FDOT’s Florida Traffic Online 2021 Peak Season Factor Category Report

Appendix G: Turning Movement Volume Worksheets

Appendix H: Signal Timing/Phasing Plans

Appendix I: Synchro Outputs

Appendix J: Excerpts from Traffic Impact Studies Within Study Area

Appendix K: NCHRP Report 457 Outputs

1.0 INTRODUCTION

Kimley-Horn has been retained by DePree Engineering to analyze and document the traffic impacts associated with the development of an auto parts store in the City of Fort Pierce, Florida. The following is a Traffic Impact Analysis (TIA) that generally conforms to the policies and guidelines of the St. Lucie Transportation Planning Organization (TPO), St. Lucie County Land Development Code (LDC) Section 11.02.09, and the City of Fort Pierce LDC.

The proposed auto parts store is generally located on the west side of Oleander Avenue, south of Market Avenue in City of Fort Pierce, Florida. The project property is currently vacant. The proposed development is anticipated to be built by Year 2025 and is proposed to consist of up to 10,000 square feet of space.

Access to the site will be provided via one full-access driveway onto Oleander Avenue. This access point is shown on the conceptual site plan provided in **Appendix A**.

2.0 STUDY AREA DETERMINATION

2.1 TRIP GENERATION

Trip generation for the proposed project was calculated per procedures published in the 11th Edition of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. The Land Use Codes (LUC) used for the proposed site are:

- LUC 843, Automobile Parts Sales

Per procedures published in the ITE *Trip Generation Handbook*, 3rd Edition, the fitted curve equation was used to determine trip rates except when the R^2 value for the fitted curve was less than 0.75 or when no fitted curve equation was provided. In those cases, the weighted average rate was used.

Internal capture and pass-by reductions were applied using procedures published in the ITE *Trip Generation Handbook*, 3rd Edition. Relevant excerpts from the ITE Trip Generation Manual and Trip Generation Handbook, along with internal capture calculation spreadsheets, are included in **Appendix B**.

Table 1 provides the Daily, AM peak hour, and PM peak hour trip generation summary for the project.

Table 1: Trip Generation Summary

Land Use	Intensity	Daily Trips	AM Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
			Total	In	Out	Total	In	Out
Proposed Development								
Automobile Parts Sales	10 KSF	546	25	14	11	49	23	26
	<i>Subtotal</i>	546	25	14	11	49	23	26
Pass-By Traffic								
Automobile Parts Sales	43%	235	11	6	5	21	11	10
	<i>Subtotal</i>	235	11	6	5	21	11	10
Net External Trips		311	14	8	6	28	12	16
TOTAL NET EXTERNAL TRIPS		311	14	8	6	28	12	16

Note 1: Trip Generation was calculated using the data from ITE's Trip Generation Manual, 11th Edition

Automobile Parts Sales [ITE 843]

Daily T = 54.57*X; (X is KSF)
 AM Peak Hour of Adjacent Street T = 2.51*X; (X is KSF); (55% in/ 45% out)
 PM Peak Hour of Adjacent Street T = 4.90*X; (X is KSF); (48% in/ 52% out)

2.2 TRIP DISTRIBUTION AND TRIP ASSIGNMENT

Projected traffic demand of project trips on study roadways was derived with use of the adopted regional travel demand model. Land use data for the project was entered into a new traffic analysis zone (TAZ) within the Greater Treasure Coast Regional Planning Model (GTCRPM) set and situated within the existing roadway network to appropriately represent project access. The model was used to assign trips for all trip purposes between allocated origin and destination pairs using project buildout year model data. Trip distribution for the project was extracted from the completed model assignment and reviewed for logic. The resulting model plots showing percent of daily project distribution are provided in **Appendix C**.

Daily model project distribution was referenced to manually assign project distribution at the study area intersections and driveways in general accordance with model output. **Figure 1** shows the intersection movement project distribution surrounding the proposed auto parts store used in this TIR.

Project trip distribution percentages were used to assign anticipated project trips to the study area roadways and intersections. **Figure 2** shows the anticipated AM and PM peak hour project volumes at the study area intersections.

Figure 1: Project Trip Distribution

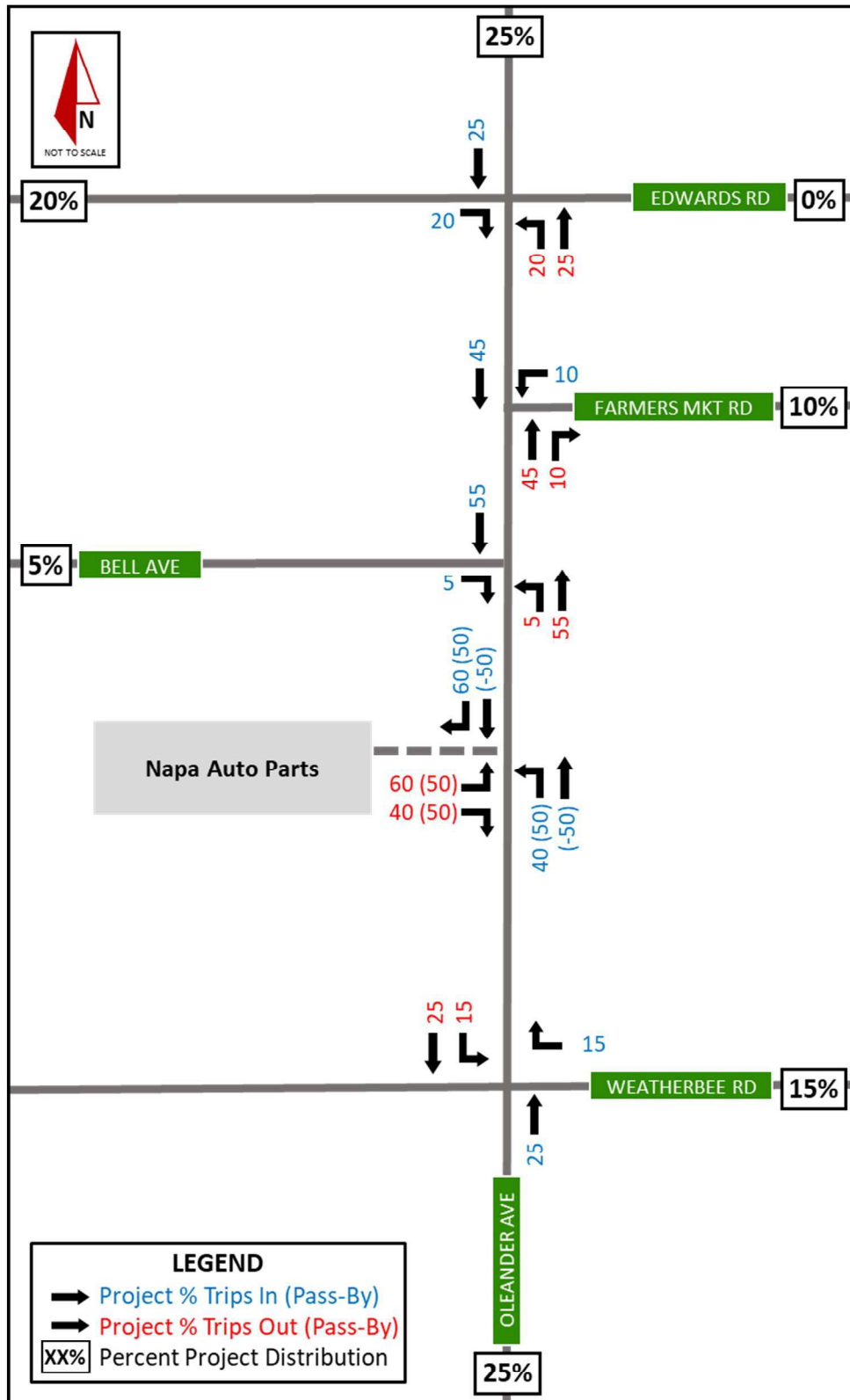
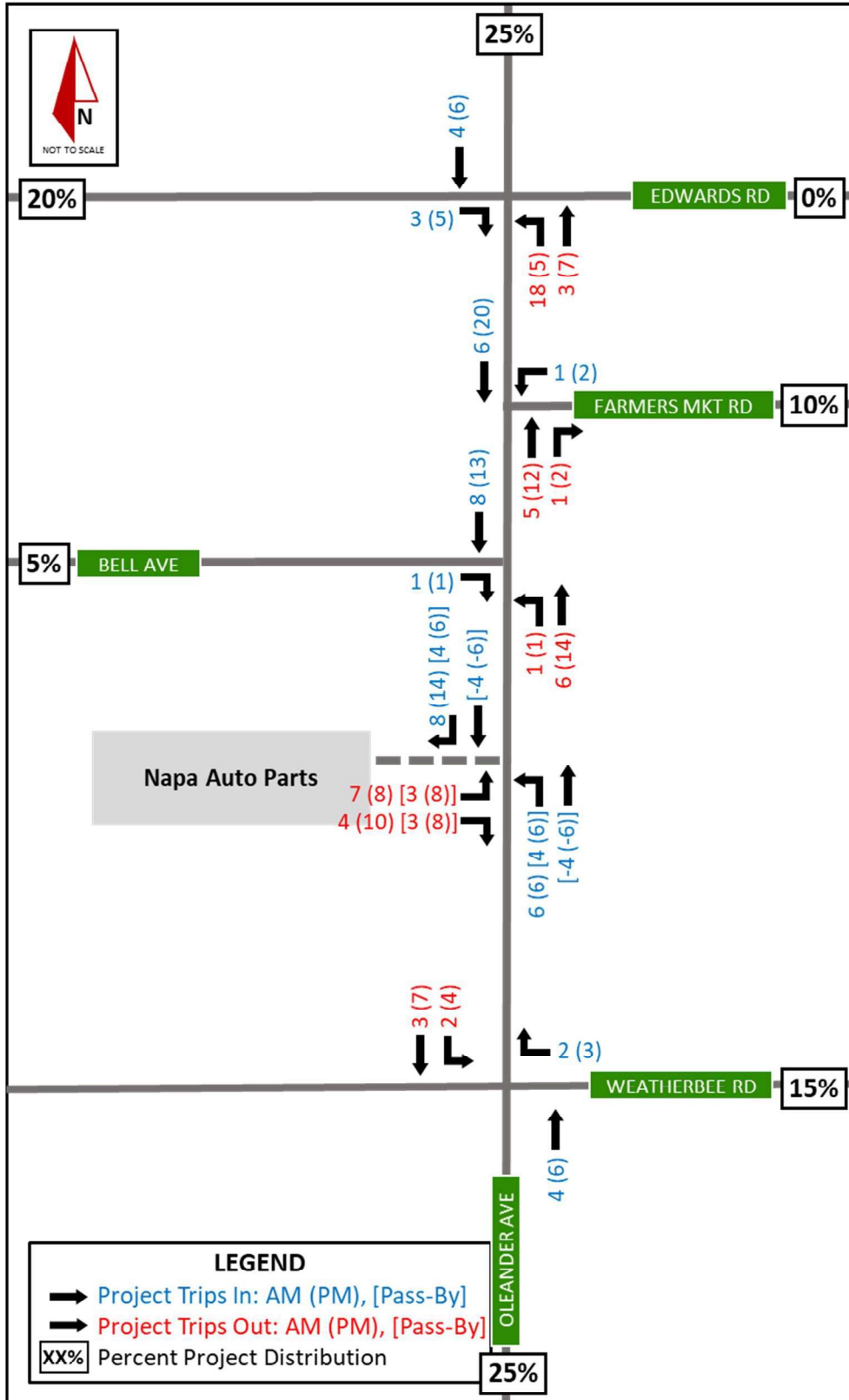


Figure 2: Project Trip Assignment



2.3 STUDY AREA

To determine roadway segments to be included in this TIA, a 1.0% significance test was performed for all major roadway segments within a 2-mile radius of the project site. The results of the 1.0% significance test are shown in **Table 2**. The percent significance for project trips was determined by comparing the maximum directional peak hour project trips to the directional peak hour service capacity as provided in the latest St. Lucie TPO Traffic Counts and Level of Service Report. Excerpts from the St. Lucie TPO traffic count report are included in **Appendix D**.

The resulting study area roadway segments are listed below and displayed on **Figure 3**:

- Oleander Avenue, from Weatherbee Road to Bell Avenue
- Oleander Avenue, from Bell Avenue to Farmers Market Road
- Oleander Avenue, from Farmers Market Road to Edwards Road

The project driveway and major impacted intersections along study area roadway segments were included in this TIA. The resulting study area intersections are listed below and displayed on **Figure 3**.

- Oleander Avenue & Weatherbee Road
- Oleander Avenue & Bell Avenue
- Oleander Avenue & Farmers Market Road
- Oleander Avenue & Edwards Road
- Oleander Avenue & Project Driveway

Table 2: Roadway Segment Significance Test

Roadway		Directional Peak Hour Service Capacity	% Project Distribution	Max Directional Peak Hour Project Trips (25 OUT)	% Project Significance
From	To				
Bell Avenue					
25th Street	Sunrise Boulevard	790	1%	0	0.0%
Sunrise Boulevard	Oleander Avenue	600	2%	0	0.1%
Edwards Road					
Selvitz Road	25th Street	880	6%	1	0.1%
25th Street	Sunrise Boulevard	1,630	19%	3	0.2%
Sunrise Boulevard	Oleander Avenue	1,630	19%	3	0.2%
Oleander Avenue	US 1	1,630	0%	0	0.0%
Farmers Market Road					
Oleander Avenue	US 1	750	6%	1	0.1%
Midway Road					
Selvitz Road	Christensen Road	2,100	7%	1	0.1%
Christensen Road	25th Street	2,100	7%	1	0.1%
25th Street	Sunrise Boulevard	2,100	14%	2	0.1%
Sunrise Boulevard	Oleander Avenue	2,100	15%	2	0.1%
Oleander Avenue	US 1	2,100	0%	0	0.0%
US 1	Wallace Street	790	3%	1	0.1%
Wallace Street	Weatherbee Road	920	3%	1	0.1%
Weatherbee Road	Indian River Drive	630	1%	0	0.0%
Oleander Avenue					
Kitterman Road	Midway Road	750	9%	1	0.2%
Midway Road	Weatherbee Road	750	26%	4	0.6%
Weatherbee Road	Bell Avenue	540	59%	9	1.7%
Bell Avenue	Farmers Market Road	540	55%	9	1.6%
Farmers Market Road	Edwards Road	750	49%	8	1.0%
Edwards Road	Wisteria Avenue	750	25%	4	0.5%
Wisteria Avenue	Gardenia Avenue	540	24%	4	0.7%
Sunrise Boulevard					
Midway Road	Bell Avenue	540	0%	0	0.0%
Bell Avenue	Edwards Road	750	1%	0	0.0%
Edwards Road	Cortez Boulevard	600	0%	0	0.0%
Cortez Boulevard	Virginia Avenue	750	0%	0	0.0%
US 1					
Easy Street	Midway Road	3,170	8%	1	0.0%
Midway Road	Weatherbee Road	2,100	11%	2	0.1%
Weatherbee Road	Farmers Market Road	2,000	2%	0	0.0%
Farmers Market Road	Edwards Road	2,000	4%	1	0.0%
Edwards Road	Savannah Road	2,000	3%	1	0.0%
Savannah Road	Gardenia Avenue	2,000	3%	1	0.0%
Weatherbee Road					
Oleander Avenue	US 1	750	15%	2	0.3%
US 1	Midway Road	750	3%	1	0.1%
25th Street					
Midway Road	Bell Avenue	2,100	1%	0	0.0%
Bell Avenue	Edwards Road	2,100	0%	0	0.0%
Edwards Road	Cortez Boulevard	2,000	13%	14	0.7%

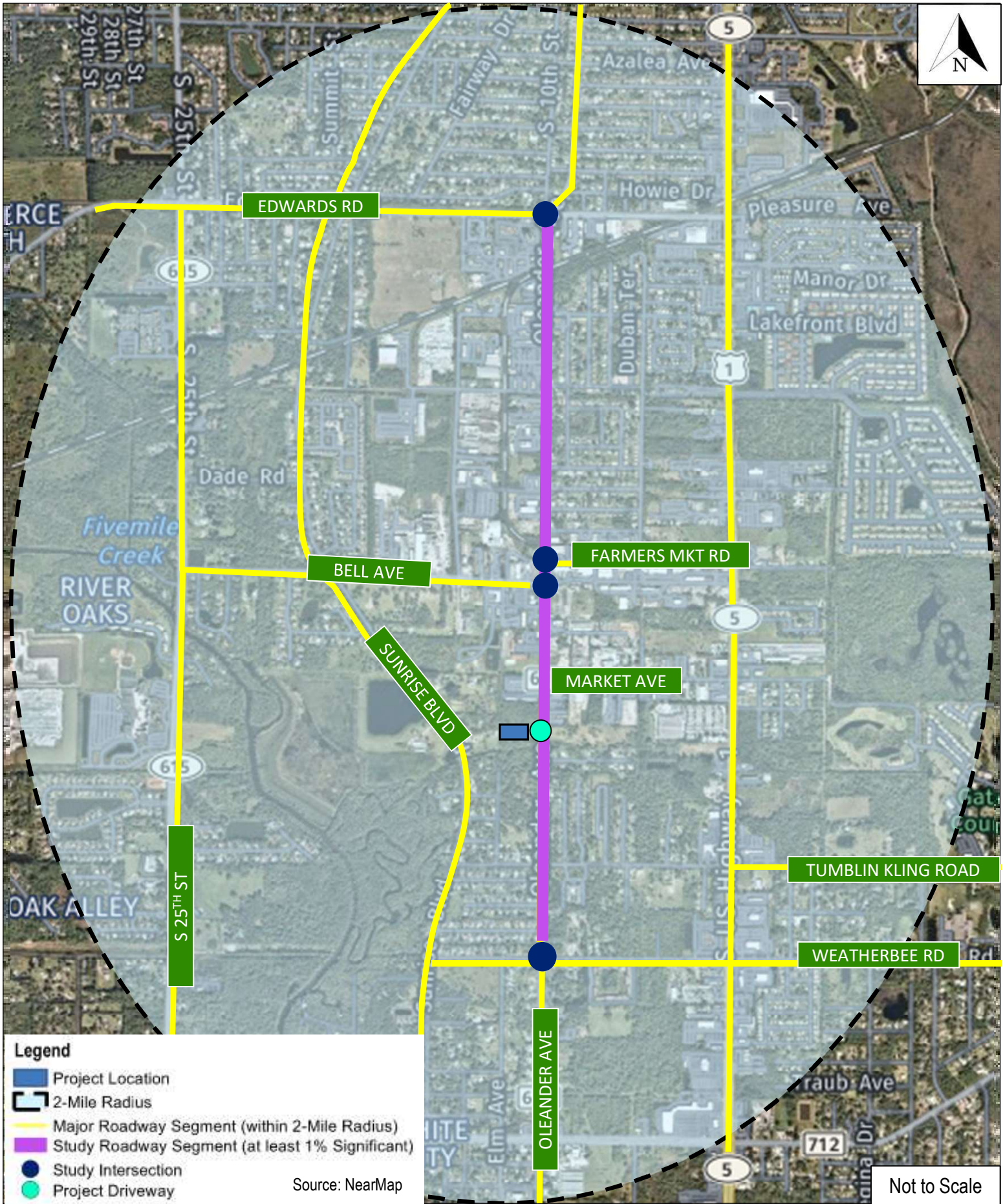


Figure 3 – Project Location and Study Area Roadway Segments/Intersections

3.0 EXISTING CONDITIONS ANALYSIS – YEAR 2022

3.1 EXISTING TRAFFIC

Turning movement counts (TMCs) were collected at the study intersections on Tuesday, November 15, 2022 and are provided in **Appendix E**. Data was collected during the AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak periods.

The existing turning movement volumes were adjusted to peak season using a 1.05 adjustment factor published by the Florida Department of Transportation (FDOT). The data referenced from FDOT's Florida Traffic Online 2022 Peak Season Factor Category Report is included in **Appendix F**. Adjusted turning movement volume worksheets for all intersections are included in **Appendix G**. The AM and PM peak hour intersection turning movement volumes at the study area intersections are illustrated on **Figures 4 and 5**, respectively.

3.2 EXISTING ROADWAY SEGMENT CONDITIONS

A roadway segment analysis was performed within the study area to determine existing AM and PM peak hour conditions. The analysis was conducted by comparing Year 2022 peak hour peak direction (PHPD) traffic volumes to the PHPD service capacities per the latest St. Lucie TPO Traffic Counts and Level of Service Report (excerpts included in **Appendix D**).

The existing roadway segment data is included in **Tables 3 and 4** for AM and PM peak hour roadway segment conditions, respectively. As shown in the tables, the analysis identifies an existing capacity deficiency for both scenarios for the study area roadway segment of Oleander Avenue from Bell Avenue to Farmers Market Road.

Table 3: Existing (2022) AM Peak Hour Roadway Segment Analysis

Roadway Segment	Roadway Attributes ¹				PHPD Service Capacity ²	2022 Existing AM PHPD ¹	V/C Ratio	Exceeds Capacity?
	Functional Classification	Area Type	Adopted LOS	Number of Lanes				
Oleander Avenue								
Weatherbee Road to Bell Avenue	Minor Arterial	Urban	D	2U	540	370	0.69	No
Bell Avenue to Farmers Market Road	Minor Arterial	Urban	D	2U	540	605	1.12	Yes
Farmers Market Road to Edwards Road	Minor Arterial	Urban	D	2U	750	605	0.81	No

1. Roadway attributes were obtained from the 2010 FDOT St. Lucie County Federal Functional Classification Map, St. Lucie County Transportation Element, and supplemented with the 2020 FDOT Quality/LOS Tables.

2. Obtained from the latest St. Lucie TPO Traffic Counts and Level of Service Report

Table 4: Existing (2022) PM Peak Hour Roadway Segment Analysis

Roadway Segment	Roadway Attributes ¹				PHPD Service Capacity ²	2022 Existing PM PHPD ¹	V/C Ratio	Exceeds Capacity?
	Functional Classification	Area Type	Adopted LOS	Number of Lanes				
Oleander Avenue								
Weatherbee Road to Bell Avenue	Minor Arterial	Urban	D	2U	540	401	0.74	No
Bell Avenue to Farmers Market Road	Minor Arterial	Urban	D	2U	540	574	1.06	Yes
Farmers Market Road to Edwards Road	Minor Arterial	Urban	D	2U	750	574	0.77	No

1. Roadway attributes were obtained from the 2010 FDOT St. Lucie County Federal Functional Classification Map, St. Lucie County Transportation Element, and supplemented with the 2020 FDOT Quality/LOS Tables.

2. Obtained from the latest St. Lucie TPO Traffic Counts and Level of Service Report

3.3 EXISTING INTERSECTION CONDITIONS

Intersection operational analyses were performed for 2022 existing conditions in the AM and PM peak hour using procedures outlined in the *Highway Capacity Manual (2010)* with Synchro (v11) software. Signal timing and phasing plans were provided by St. Lucie County staff and are included in **Appendix H**. A summary of intersection level of service (LOS), delay, and maximum volume/capacity (v/c) ratios for AM and PM peak hour existing conditions are provided in **Tables 5 and 6**, respectively. Synchro outputs are provided in **Appendix I**.

As shown in the tables, the study area intersections operate at an acceptable LOS with turning movements demonstrating maximum v/c ratios of less than one (1.0) in both scenarios.

Table 5: Existing (2022) AM Peak Hour Intersection Conditions

Intersection	AM Peak Hour Existing Conditions		
	LOS	Delay (Sec)	Max V/C Ratio
Oleander Avenue & Weatherbee Road	C	16.9	0.32
Oleander Avenue & Bell Avenue	C	19.1	0.42
Oleander Avenue & Farmers Market Road	B	14.8	0.18
Oleander Avenue & Edwards Road	C	22.2	0.79

Notes:

1. Intersection LOS and delay at unsignalized intersections are reported for the most critical stop-controlled approach only.

Table 6: Existing (2022) PM Peak Hour Intersection Conditions

Intersection	PM Peak Hour Existing Conditions		
	LOS	Delay (Sec)	Max V/C Ratio
Oleander Avenue & Weatherbee Road	D	28.0	0.44
Oleander Avenue & Bell Avenue	D	27.0	0.56
Oleander Avenue & Farmers Market Road	C	19.0	0.28
Oleander Avenue & Edwards Road	C	25.4	0.85

Notes:

1. Intersection LOS and delay at unsignalized intersections are reported for the most critical stop-controlled approach only.

4.0 BACKGROUND CONDITIONS ANALYSIS – YEAR 2025

4.1 BACKGROUND TRAFFIC

Background traffic conditions, without the impact of project trips on the roadway network, were evaluated for Year 2025. Background volumes on study area intersections and roadway segments were derived by applying an annual growth rate to existing traffic counts, then adding vested trips.

Vested trips from Oleander Oaks, a planned single-family residential development located just south of the project site, and American Silicone, a planned mixed-use development located south of the project site, were incorporated into the background analysis. Relevant excerpts from both traffic studies are included in **Appendix J**.

Turning movement volume worksheets for all intersections are provided in **Appendix G**. The AM and PM peak hour intersection turning movement volumes at the study area intersections are illustrated on **Figures 4 and 5**, respectively.

4.2 BACKGROUND GROWTH RATE

The University of Florida’s Bureau of Economic and Business Research (BEBR) analyzes population growth trends in counties throughout the state, along with other statistical metrics. Per direction from the St. Lucie TPO, the BEBR high growth rate shall be used as it reflects the actual annual growth rate in the County since 1995.

As shown in **Table 7**, the St. Lucie County BEBR high growth rate for Year 2025 is approximately 2.21%. Therefore, a 2.21% annual background growth rate was used in this analysis.

Table 7: BEBR Growth Rate Calculation

County	BEBR Pop Estimate April 1, 2021	BEBR Population Projections (April 1)		2025
		Range	2025	
St. Lucie	340,060	Low	348,200	0.34%
		Medium	370,400	1.27%
		High	392,600	2.21%

4.3 COMMITTED IMPROVEMENTS

The St. Lucie TPO 2045 Long Range Transportation Plan (LRTP), the TPO's Transportation Improvement Program (TIP), and FDOT's 5-year work program, was referenced to determine that no roadway improvements are planned within the study area. Therefore, no improvements were included in the intersection operational analyses (existing, background, and buildout scenarios).

4.4 BACKGROUND ROADWAY SEGMENT ANALYSIS

A roadway segment analysis was performed within the study area to determine background AM and PM peak hour conditions. The analysis was conducted by comparing Year 2025 peak hour peak direction (PHPD) traffic volumes to the PHPD service capacities per the latest St. Lucie TPO Traffic Counts and Level of Service Report (excerpts included in **Appendix D**). Year 2025 PHPD volumes were derived by applying a 2.21% annual growth rate to Year 2022 PHPD volumes, then adding vested trips.

For the AM and PM peak hour background and buildout analyses, the LOS standard and corresponding peak hour service capacity for the segments of Oleander Avenue from Bell Avenue to Farmers Market, was increased from LOS E to F (AM) and LOS D to E (PM) as the St. Lucie County Comprehensive Plan Transportation Element (October 26, 2010) states the following:

"The County wishes to maintain a LOS D or better for all roadways but recognizes that allowing a LOS E allows development to proceed while a minimum of LOS D might cause severe constraints on private development. However, a LOS D will be utilized for these roadways when establishing transportation impact fees."

The background roadway segment data is included in **Tables 8 and 9** for AM and PM peak hour roadway segment conditions, respectively. As shown in the tables, the analysis identifies all study area roadway segments will operate acceptably during AM and PM peak hour background traffic conditions, with the LOS increase for the roadway segment of Oleander Avenue from Bell Avenue to Farmers Market.

Table 8: Background (2025) AM Peak Hour Roadway Segment Analysis

Roadway Segment	Adopted LOS	PHPD Service Capacity ¹	2022 Existing AM PHPD	Annual Growth Rate	Vested Trips	2025 Bkgrd AM PHPD ²	V/C Ratio	Exceeds Capacity?
Oleander Avenue								
Weatherbee Road to Bell Avenue	D	540	370	2.21%	87	482	0.89	No
Bell Avenue to Farmers Market Road	E ³	800	605	2.21%	81	726	0.91	No
Farmers Market Road to Edwards Road	D	750	605	2.21%	72	717	0.96	No

1. Obtained from the latest St. Lucie TPO Traffic Counts and Level of Service Report.

2. 2022 PHPD values were grown annually by 2.21%, then summed with vested trips to reach 2025 PM PHPD values.

3. LOS standard and corresponding service capacity were increased per the St. Lucie County Comprehensive Plan (October 26, 2010).

Table 9: Background (2025) PM Peak Hour Roadway Segment Analysis

Roadway Segment	Adopted LOS	PHPD Service Capacity ¹	2022 Existing PM PHPD	Annual Growth Rate	Vested Trips	2025 Bkgrd PM PHPD ²	V/C Ratio	Exceeds Capacity?
Oleander Avenue								
Weatherbee Road to Bell Avenue	D	800	401	2.21%	57	485	0.61	No
Bell Avenue to Farmers Market Road	E ³	800	574	2.21%	54	666	0.83	No
Farmers Market Road to Edwards Road	D	800	574	2.21%	47	659	0.82	No

1. Obtained from the latest St. Lucie TPO Traffic Counts and Level of Service Report.

2. 2022 PHPD values were grown annually by 2.21%, then summed with vested trips to reach 2025 PM PHPD values.

3. LOS standard and corresponding service capacity were increased per the St. Lucie County Comprehensive Plan (October 26, 2010).

4.5 BACKGROUND INTERSECTION ANALYSIS

Intersection operational analyses were performed for 2025 background conditions in the AM and PM peak hour using procedures outlined in the *Highway Capacity Manual 6* with Synchro (v11) software. Signal timing and phasing plans were provided by St. Lucie County staff and are included in **Appendix H**. A summary of intersection level of service (LOS), delay, and maximum volume/capacity (v/c) ratios for AM and PM peak hour existing conditions are provided in **Tables 10 and 11**, respectively. Synchro outputs are provided in **Appendix I**.

As shown in the tables, the study area intersections operate at an acceptable LOS with turning movements demonstrating maximum v/c ratios of less than one (1.0) in both scenarios.

Table 10: Background (2025) AM Peak Hour Intersection Conditions

Intersection	AM Peak Hour Background Conditions		
	LOS	Delay (Sec)	Max V/C Ratio
Oleander Avenue & Weatherbee Road	C	22.1	0.35
Oleander Avenue & Bell Avenue	D	29.0	0.59
Oleander Avenue & Farmers Market Road	C	19.2	0.28
Oleander Avenue & Edwards Road	C	23.4	0.83

Notes:

1. Intersection LOS and delay at unsignalized intersections are reported for the most critical stop-controlled approach only.

Table 11: Background (2025) PM Peak Hour Intersection Conditions

Intersection	PM Peak Hour Background Conditions		
	LOS	Delay (Sec)	Max V/C Ratio
Oleander Avenue & Weatherbee Road	E	41.5	0.62
Oleander Avenue & Bell Avenue	E	42.2	0.72
Oleander Avenue & Farmers Market Road	C	23.6	0.37
Oleander Avenue & Edwards Road	C	27.5	0.87

Notes:

1. Intersection LOS and delay at unsignalized intersections are reported for the most critical stop-controlled approach only.

5.0 BUILDOUT CONDITIONS ANALYSIS – YEAR 2025

5.1 BUILDOUT TRAFFIC

Buildout traffic conditions were evaluated for Year 2025. Buildout volumes were developed by adding anticipated project trips to background volumes. Turning movement volume worksheets for all intersections can be found in **Appendix G**.

5.2 BUILDOUT ROADWAY SEGMENT ANALYSIS

A roadway segment analysis was performed within the study area to determine buildout AM and PM peak hour conditions. The analysis was conducted by comparing Year 2025 peak hour peak direction (PHPD) traffic volumes to the PHPD service capacities per the latest St. Lucie TPO Traffic Counts and Level of Service Report (excerpts included in **Appendix D**). Year 2025 PHPD volumes were derived by adding anticipated project trips to background volumes.

The buildout roadway segment data is included in **Tables 12 and 13** for AM and PM peak hour roadway segment conditions, respectively. As shown in the tables, the analysis identifies all study area roadway segments will operate acceptably during AM and PM peak hour buildout traffic conditions, with the LOS increase for the roadway segment of Oleander Avenue from Bell Avenue to Farmers Market

Table 12: Buildout (2025) AM Peak Hour Roadway Segment Analysis

Roadway Segment	Adopted LOS	PHPD Service Capacity ^{1, 2}	2025 Bkgrd AM PHPD	Project Dist.	Project Trips AM PHPD	2025 Buildout AM PHPD	V/C Ratio	Exceeds Capacity?
Oleander Avenue								
Weatherbee Road to Bell Avenue	D	540	482	59%	5	487	0.90	No
Bell Avenue to Farmers Market Road	E ³	800	726	55%	4	730	0.91	No
Farmers Market Road to Edwards Road	D	750	717	49%	4	721	0.96	No

1. Obtained from the latest St. Lucie TPO Traffic Counts and Level of Service Report.
2. 2022 PHPD values were grown annually by 2.21%, then summed with vested trips to reach 2025 PM PHPD values.
3. LOS standard and corresponding service capacity were increased per the St. Lucie County Comprehensive Plan (October 26, 2010).

Table 13: Buildout (2025) PM Peak Hour Roadway Segment Analysis

Roadway Segment	Adopted LOS	PHPD Service Capacity ^{1, 2}	2025 Bkgrd PM PHPD	Project Dist.	Project Trips PM PHPD	2025 Buildout PM PHPD	V/C Ratio	Exceeds Capacity?
Oleander Avenue								
Weatherbee Road to Bell Avenue	D	540	485	59%	9	494	0.91	No
Bell Avenue to Farmers Market Road	E ³	800	666	55%	9	675	0.84	No
Farmers Market Road to Edwards Road	D	750	659	49%	8	667	0.89	No

1. Obtained from the latest St. Lucie TPO Traffic Counts and Level of Service Report.
2. 2022 PHPD values were grown annually by 2.21%, then summed with vested trips to reach 2025 PM PHPD values.
3. LOS standard and corresponding service capacity were increased per the St. Lucie County Comprehensive Plan (October 26, 2010).

5.3 BUILDOUT INTERSECTION ANALYSIS

Intersection operational analyses were performed for 2025 buildout conditions in the AM and PM peak hour using procedures outlined in the *Highway Capacity Manual 6* with Synchro (v11) software. Signal timing and phasing plans were provided by St. Lucie County staff and are included in **Appendix H**. A summary of intersection level of service (LOS), delay, and maximum volume/capacity (v/c) ratios for AM and PM peak hour existing conditions are provided in **Tables 14 and 15**, respectively. Synchro outputs are provided in **Appendix I**.

As shown in the tables, the study area intersections operate at an acceptable LOS with turning movements demonstrating maximum v/c ratios of less than one (1.0) in both scenarios. The AM and PM peak hour intersection turning movement volumes at buildout for the study area intersections are illustrated on **Figures 4 and 5**, respectively.

Table 14: Buildout (2025) AM Peak Hour Intersection Conditions

Intersection	AM Peak Hour Buildout Conditions		
	LOS	Delay (Sec)	Max V/C Ratio
Oleander Avenue & Weatherbee Road	C	22.7	0.47
Oleander Avenue & Bell Avenue	D	29.5	0.59
Oleander Avenue & Farmers Market Road	C	19.6	0.29
Oleander Avenue & Edwards Road	C	23.5	0.83
Oleander Avenue & Project Driveway	B	14.8	0.05

Notes:

1. Intersection LOS and delay at unsignalized intersections are reported for the most critical stop-controlled approach only.

Table 15: Buildout (2025) PM Peak Hour Intersection Conditions

Intersection	PM Peak Hour Buildout Conditions		
	LOS	Delay (Sec)	Max V/C Ratio
Oleander Avenue & Weatherbee Road	E	41.5	0.62
Oleander Avenue & Bell Avenue	E	47.1	0.75
Oleander Avenue & Farmers Market Road	D	25.6	0.40
Oleander Avenue & Edwards Road	C	28.9	0.88
Oleander Avenue & Project Driveway	C	16.6	0.13

Notes:

1. Intersection LOS and delay at unsignalized intersections are reported for the most critical stop-controlled approach only.

<p>1</p> <p>34+[22]+(2)+(-)=58 213+[47]+(3)+(-)=263 4+[0]+(0)+(-)=4</p>	<p>Oleander Avenue</p> <p>34+[20]+(2)+(-)=56 79+[5]+(0)+(-)=84 17+[1]+(0)+(-)=18</p>	<p>2</p> <p>8+[1]+(0)+(-)=9 269+[79]+(8)+(-)=356 70+[5]+(0)+(-)=75</p>	<p>Oleander Avenue</p> <p>7+[0]+(0)+(-)=7 0+[0]+(0)+(-)=0 0+[0]+(0)+(-)=0</p>
<p>Weatherbee Road</p> <p>7+[0]+(0)+(-)=7 81+[5]+(0)+(-)=86 15+[1]+(0)+(-)=16</p>	<p>35+[2]+(0)+(-)=37 236+[47]+(4)+(-)=287 5+[0]+(0)+(-)=5</p>	<p>Bell Avenue</p> <p>82+[6]+(0)+(-)=88 8+[1]+(0)+(-)=9 81+[11]+(1)+(-)=93</p>	<p>Oleander Avenue</p> <p>6+[0]+(0)+(-)=6 223+[67]+(6)+(-)=296 49-[8]+(1)+(-)=58</p>
<p>3</p> <p>17+[1]+(0)+(-)=18 305+[71]+(6)+(-)=382 0+[0]+(0)+(-)=0</p>	<p>Oleander Avenue</p> <p>32+[2]+(0)+(-)=34 0+[0]+(0)+(-)=0 42+[14]+(1)+(-)=57</p>	<p>4</p> <p>30+[2]+(0)+(-)=32 217+[43]+(4)+(-)=264 71+[5]+(0)+(-)=76</p>	<p>Oleander Avenue</p> <p>13+[1]+(0)+(-)=14 163+[11]+(0)+(-)=174 18+[1]+(0)+(-)=19</p>
<p>Farmers Market Road</p> <p>0+[0]+(0)+(-)=0 0+[0]+(0)+(-)=0 0+[0]+(0)+(-)=0</p>	<p>49+[13]+(1)+(-)=63 265+[60]+(5)+(-)=330 0+[0]+(0)+(-)=0</p>	<p>Edwards Road</p> <p>46+[3]+(0)+(-)=49 280+[19]+(0)+(-)=299 160+[33]+(3)+(-)=196</p>	<p>Oleander Avenue</p> <p>29+[2]+(0)+(-)=31 200+[38]+(3)+(-)=241 147+[29]+(18)+(-)=193</p>
<p>5</p> <p>330+[99]+(0)+(-)=437 0+[0]+(8)+(-)=12</p>	<p>Oleander Avenue</p> <p>277+[98]+(0)+(-)=375 0+[0]+(6)+(-)=10</p>	<p>X Study Area Intersection</p> <p>SITE Project Location</p> <p>← Buildout Volume = {Pass-By Volume} + {Project Volume} + {Background Growth} + Existing Volume</p>	
<p>Driveway</p> <p>0+[0]+(7)+(-)=10 0+[0]+(4)+(-)=7</p>			



Figure 4 - Buildout (2025) Traffic Volumes: AM Peak Hour

<p>1</p> <p>62+[16]+(4)+0=82 307+[44]+(7)+0=355 6+[0]+(0)+0=6</p>	<p>Oleander Avenue</p> <p>43+[15]+(3)+0=61 51+[3]+(0)+0=54 20+[1]+(0)+0=21</p>	<p>2</p> <p>2+[0]+(0)+0=2 294+[44]+(13)+0=351 68+[5]+(0)+0=73</p>	<p>Oleander Avenue</p> <p>7+[0]+(0)+0=7 4+[0]+(0)+0=4 5+[0]+(0)+0=5</p>
<p>Weatherbee Road</p> <p>7+[0]+(0)+0=7 80+[5]+(0)+0=85 14+[1]+(0)+0=15</p>	<p>29+[2]+(0)+0=31 252+[38]+(6)+0=296 15+[1]+(0)+0=16</p>	<p>Bell Avenue</p> <p>78+[5]+(0)+0=83 0+[0]+(0)+0=0 99+[9]+(1)+0=109</p>	<p>3+[0]+(0)+0=3 341+[54]+(14)+0=409 71+[8]+(1)+0=80</p>
<p>3</p> <p>27+[2]+(0)+0=29 316+[41]+(20)+0=377 0+[0]+(0)+0=0</p>	<p>Oleander Avenue</p> <p>42+[3]+(0)+0=45 0+[0]+(0)+0=0 50+[7]+(2)+0=59</p>	<p>4</p> <p>25+[2]+(0)+0=27 264+[29]+(6)+0=299 101+[7]+(0)+0=108</p>	<p>Oleander Avenue</p> <p>8+[1]+(0)+0=9 300+[20]+(0)+0=320 18+[1]+(0)+0=19</p>
<p>Farmers Market Road</p> <p>0+[0]+(0)+0=0 0+[0]+(0)+0=0 0+[0]+(0)+0=0</p>	<p>51+[9]+(3)+0=62 372+[50]+(12)+0=434 0+[0]+(0)+0=0</p>	<p>Edwards Road</p> <p>78+[5]+(0)+0=83 230+[16]+(0)+0=246 189+[22]+(5)+0=216</p>	<p>27+[2]+(0)+0=29 311+[35]+(7)+5=358 187+[24]+(5)+0=216</p>
<p>5</p> <p>398+[78]+(0)+(-6)=470 0+[0]+(14)+6=20</p>	<p>Oleander Avenue</p> <p>302+[69]+(0)+6=364 0+[0]+(9)+6=15</p>	<p>X Study Area Intersection</p> <p>SITE Project Location</p> <p>← Buildout Volume = (Pass-By Volume) + (Project Volume) + [Background Growth] + Existing Volume</p>	
<p>Driveway</p> <p>0+[0]+(16)+8=24 0+[0]+(10)+8=18</p>			



Figure 5 - Buildout (2025) Traffic Volumes: PM Peak Hour

6.0 SITE ACCESS ANALYSIS

Access to the site will be provided via one full-access driveway onto Oleander Avenue. The need for exclusive ingress turn lanes was evaluated at the proposed project driveway using National Cooperative of Highway Research Programs (NCHRP) Report 457 criteria.

The projected buildout year 2025 traffic volumes on Oleander Avenue, as well as the projected northbound ingress turning movement volumes at the proposed project driveway, were compared to the thresholds of the NCHRP Report 457 for determination of whether a major road left-turn lane is required at a stop-controlled minor street intersection. Report NCHRP 457 compares the major street speed, approach volume, opposing volume, and left-turning volume to determine whether a dedicated left-turn lane is warranted on the major street approach. Based on the low ingress left-turn volumes projected at the project driveway during the AM peak hour, an exclusive northbound left-turn lane at the project driveway is not warranted based on the criteria within the NCHRP 457 analysis.

The observed traffic volumes on Oleander Avenue, as well as the projected southbound ingress turning volumes at the proposed project driveway, were compared to the thresholds of the NCHRP Report 457 for determination of whether a major road right-turn lane is required at a stop-controlled minor street intersection. Report NCHRP 457 compares the major street speed, approach volume, and right-turning volume to determine whether a dedicated right-turn lane is warranted on the major street approach. Based on the low ingress right-turn volumes projected at the project driveway, and the low existing traffic volumes on Oleander Avenue during the AM and PM peak hours, an exclusive southbound right-turn lane at the project driveway is not warranted based on the criteria within the NCHRP 457 analysis.

The NCRHP Report 457 outputs for the northbound left-turn lane and southbound right-turn lane for the projected buildout AM and PM peak hour scenarios are provided in **Appendix K**.

7.0 CONCLUSION

This TIA was completed to assess the transportation impacts of associated with the development of Napa Auto Parts in the City of Fort Pierce, Florida. NAPA Auto Parts is a proposed retail development generally located on the east side of Oleander Avenue, south of Market Avenue in City of Fort Pierce, Florida. The development is anticipated to be built by Year 2025 and is proposed to consist of ±10,000 square feet of retail space. Access to the site will be provided via one full-access driveway onto Oleander Avenue.

The project is expected to generate 311 net new external Daily traffic volumes, 14 net new AM peak hour external trips (8 in, 6 out) and 28 net new PM peak hour external trips (12 in, 16 out) based on ITE trip generation data and procedures. Project trips were distributed onto the surrounding roadway network using the latest adopted regional travel demand model and manual assignment at the study area intersections.

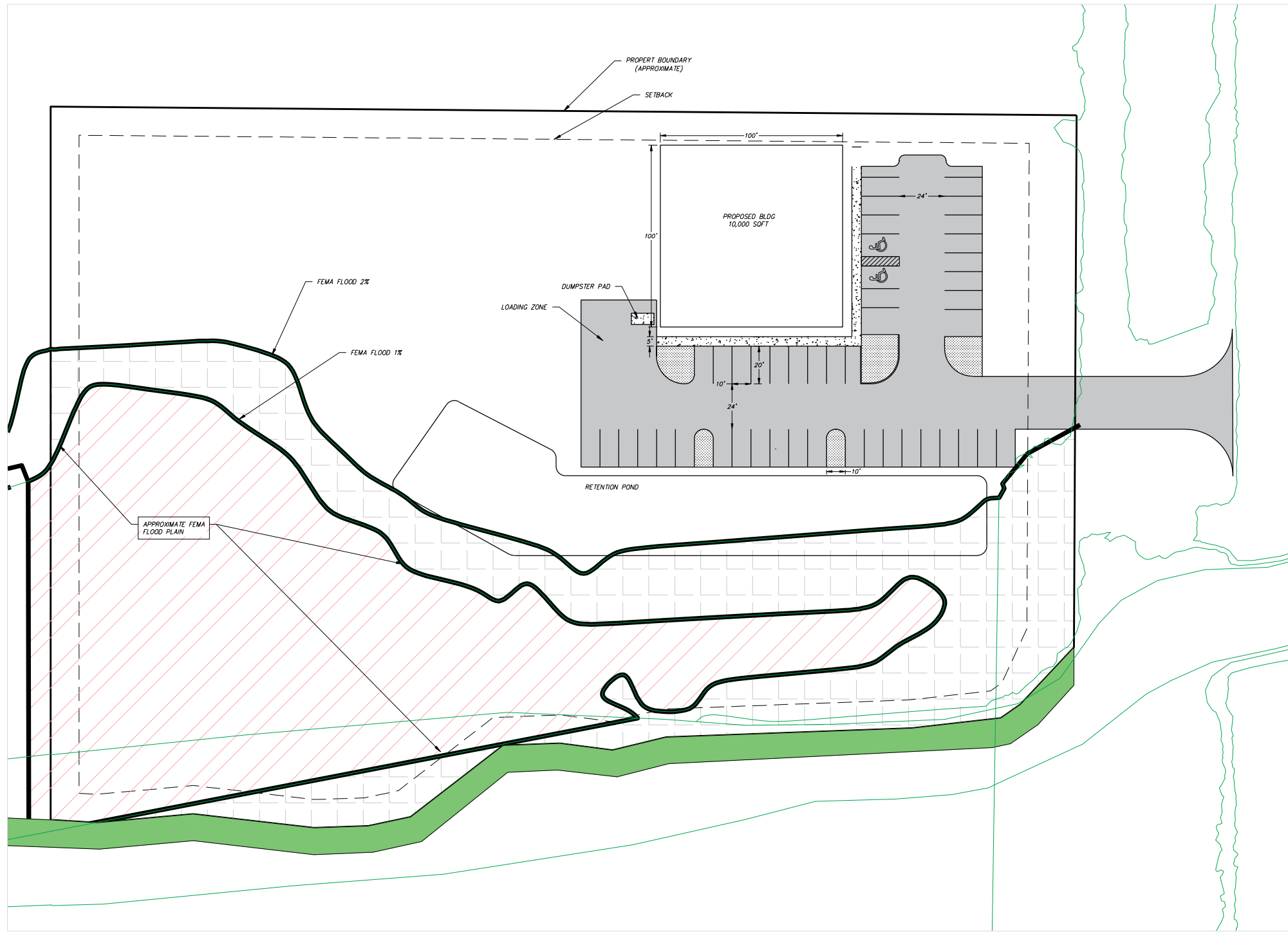
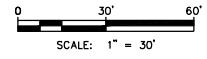
AM and PM peak hour roadway segment capacity analyses were performed for study area roadway segments for existing (2022), background (2025), and buildout (2025) conditions. The analyses identified the roadway segment of Oleander Avenue from Bell Avenue to Farmers Market Road to be deficient 2022 existing AM and PM peak hour traffic conditions. However, based upon information within the St. Lucie County Comprehensive Plan Transportation Element (October 26, 2010), the LOS capacity was increased for this study area roadway segment during 2025 background and buildout AM and PM peak hour traffic conditions. Therefore, all study area roadway segments will operate acceptably upon buildout of the development.

AM and PM peak hour operational analyses for existing (2022), background (2025), and buildout (2025) conditions were performed at study area intersections. All study area intersections are projected operate at an acceptable LOS with overall v/c ratios of less than one (1.0) in the AM and PM peak hours for all analysis scenarios.

Based on the criteria within the NCHRP 457 analysis, an exclusive northbound left-turn lane and an exclusive southbound right-turn lane are not warranted at the project access driveway on Oleander Avenue.

The results within this report satisfy the requirements set forth by St. Lucie County for evaluating proposed development impacts.

APPENDIX A
Conceptual Site Plan



TOTAL LAND 184,694 (4.24 ACRES)
 USABLE LAND 99,003.00 (2.27 ACRES)
 1% FEMA FLOOD PLAIN 51,979 (1.19 ACRES)
 2% FEMA FLOOD PLAIN 33,711 (.77 ACRES)

CLYDE JONHSON
 NAPA FT PEIRCE
 OLEANDER AVE
 FT. PIERCE FL

SEAL
 James "Mason" Cobb, P.E.
 Friday, June 24, 2022

ENGINEERS
 Florida License Numbers:
 Carl E. Cool, P.E. - 16921
 James "Mason" Cobb, P.E. - 78600
 Kenneth F. Wheeler P.E. - 60417
 ken@coolandcobb.com
 carl@coolandcobb.com
 mason@coolandcobb.com

ENGINEERING FIRM
Cool and Cobb
 Engineering Company
 203 West Main Street
 Avon Park, FL 33825
 (863) 657-2323 Office
 (863) 657-2324 Fax
 5/18 Jun 24, 2022 7:30am by User

REVISIONS	
5/13/22	BW
PROJECT #22-236-2071	
C-1	
SHEET 1 of 1	

CONCEPTUAL

APPENDIX B

Excerpts from ITE Trip Generation Manual,
Trip Generation Handbook,
and Internal Capture Calculation Worksheets

Land Use: 843

Automobile Parts Sales

Description

An automobile parts sales facility specializes in the sale of automobile parts for maintenance and repair. The facilities within this land use are not typically equipped for on-site vehicle repair. Tire store (Land Use 848), tire superstore (Land Use 849), and automobile parts and service center (Land Use 943) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1990s, the 2000s, and the 2010s in Alberta (CAN), Florida, Montana, New Hampshire, Texas, and Wisconsin.

Source Numbers

436, 439, 618, 881, 882, 959, 975, 1047

Automobile Parts Sales (843)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 14

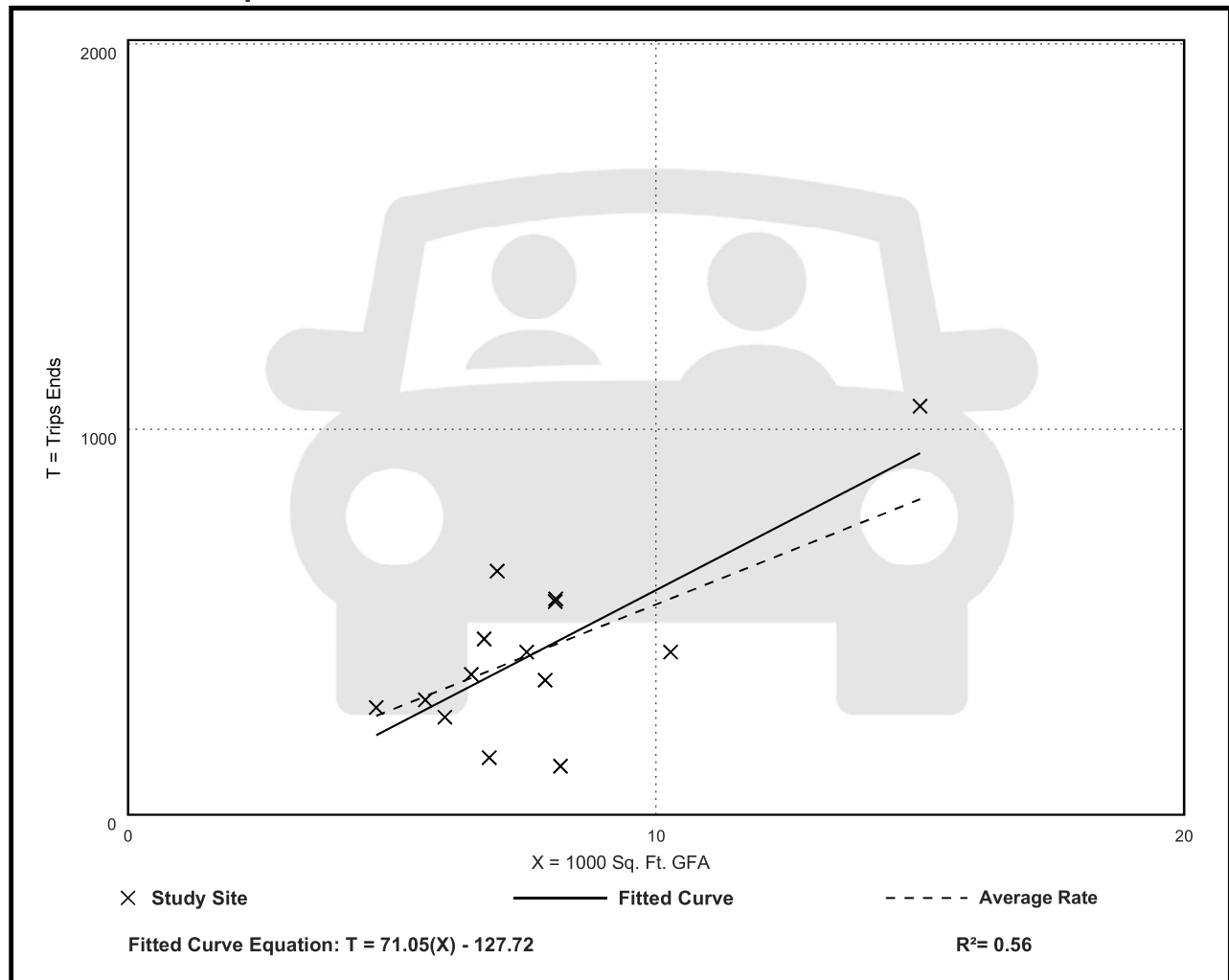
Avg. 1000 Sq. Ft. GFA: 8

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
54.57	15.38 - 90.41	20.19

Data Plot and Equation



Automobile Parts Sales (843)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 14

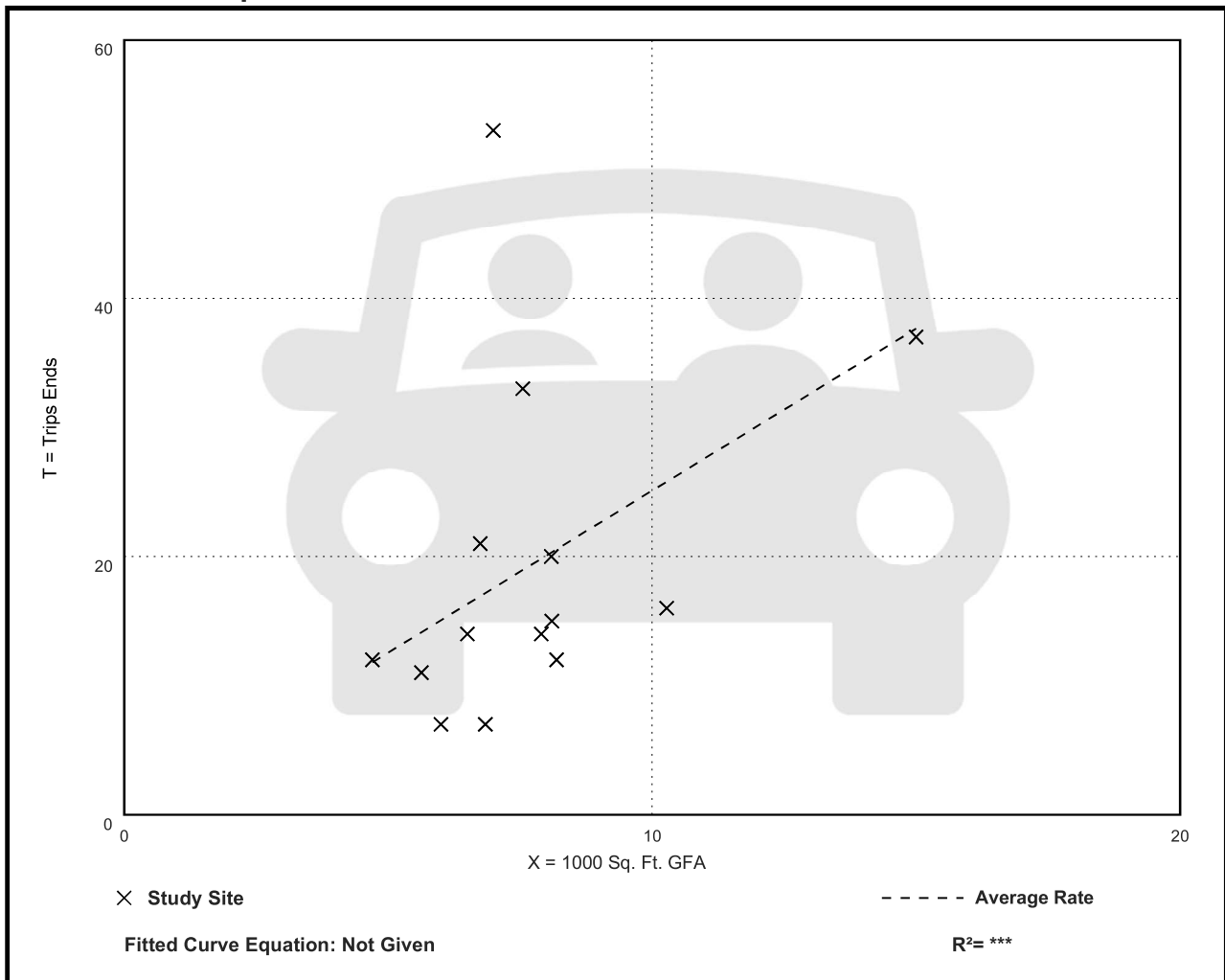
Avg. 1000 Sq. Ft. GFA: 8

Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.51	1.02 - 7.58	1.62

Data Plot and Equation



Automobile Parts Sales (843)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 16

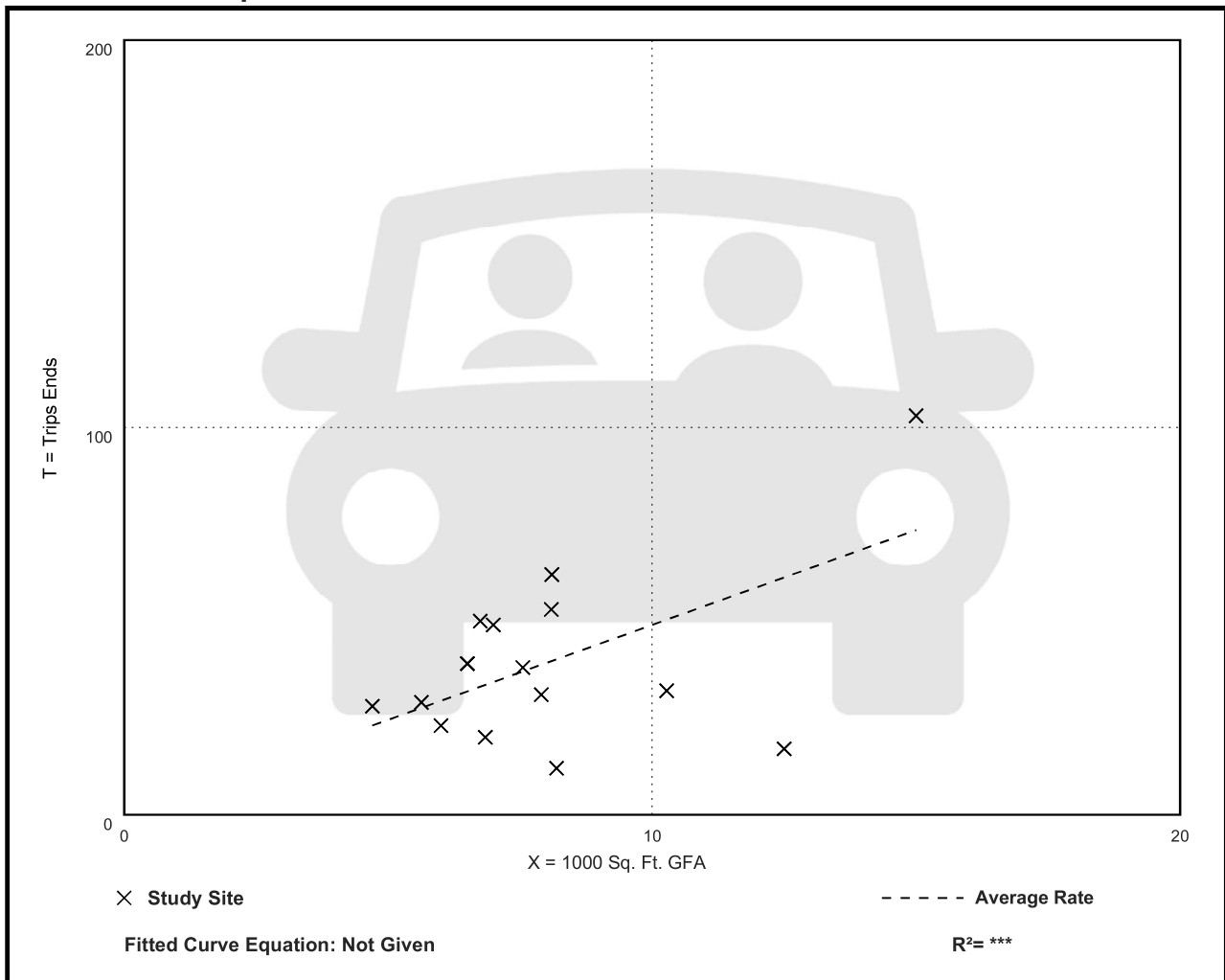
Avg. 1000 Sq. Ft. GFA: 8

Directional Distribution: 48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.90	1.36 - 7.65	2.17

Data Plot and Equation



**Table E.11 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period
Land Use Code 843—Automobile Parts Sales**

SIZE (1,000 SQ. FT. GFA)	LOCATION	SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIPS (%)			ADJ. STREET PEAK HOUR VOLUME	SOURCE
						PRIMARY	DIVERTED	TOTAL		
15	Orlando, FL	1995	409	2:00–6:00 p.m.	43	44	13	57	—	TPD Inc.

“—” means no data were provided

**Table E.12 Pass-By and Non-Pass-By Trips Weekday, PM Peak Period
Land Use Code 848—Tire Store**

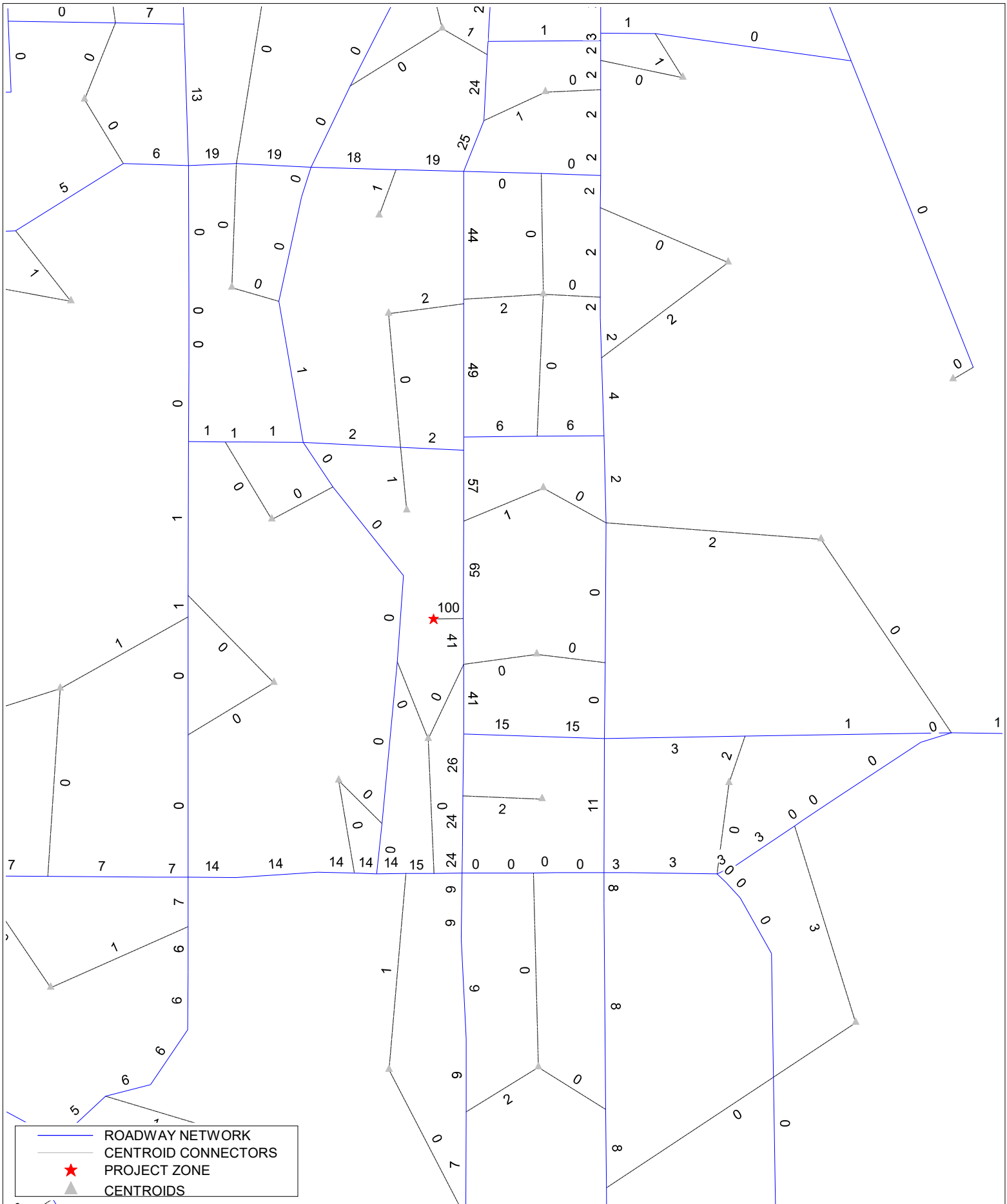
SIZE (1,000 SQ. FT. GFA)	LOCATION	SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PASS-BY TRIP (%)	NON-PASS-BY TRIPS (%)			ADJ. STREET PEAK HOUR VOLUME	SOURCE
						PRIMARY	DIVERTED	TOTAL		
4.9	Orlando, FL	1995	178	2:00–6:00 p.m.	23	67	10	77	—	TPD Inc.
2.8	Land O' Lakes, FL	1995	46	2:00–6:00 p.m.	26	—	—	74	—	TPD Inc.
4.7	Orlando, FL	1988	22	2:00–6:00 p.m.	36	—	—	64	—	TPD Inc.

Average Pass-By Trip Percentage: 28

“—” means no data were provided

APPENDIX C

Greater Treasure Coast Regional Planning Model (GTCRPM) Model Plots



- ROADWAY NETWORK
- CENTROID CONNECTORS
- ★ PROJECT ZONE
- ▲ CENTROIDS

MODEL RUN - NAPA AUTO PARTS
TRAFFIC DISTRIBUTION (PERCENTAGES)
 11/22/2022

C:\FSUTMSID4\GTCRPM\NGTC33\Bases\minor mods\OUTPUT\FINAL_LOADED_A05.NET



(Licensed to Kimley-Horn and Associates, Inc.)

APPENDIX D
St. Lucie TPO
Traffic Counts and Level of Service Report
2022 (Excerpts)

Traffic Counts and Level of Service Report 2022

Roadway Name	Location	STATION ID	2022 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
OLD DIXIE HWY	SR A1A NORTH to ST LUCIE BLVD	948521	1,452	2020	750	68	C	0.091	68	C	0.091
OLD DIXIE HWY	ST LUCIE BLVD to INDRIO RD	227	2,200	2022	790	162	C	0.205	126	C	0.159
OLD DIXIE HWY	INDRIO RD to INDIAN RIVER C.L.	948523	1,323	2020	870	62	C	0.071	62	C	0.071
OLEANDER AVE	BEACH AVE to KITTERMAN RD	692	2,943	2020	540	170	C	0.315	193	C	0.357
OLEANDER AVE	KITTERMAN RD to MIDWAY RD	141	6,151	2021	750	384	D	0.512	404	D	0.539
OLEANDER AVE	MIDWAY RD to WEATHERBEE RD	139	6,759	2019	750	370	C	0.493	401	D	0.535
OLEANDER AVE	WEATHERBEE RD to BELL AVE	139	6,759	2019	540	370	D	0.685	401	D	0.743
OLEANDER AVE	BELL AVE to FARMER'S MARKET RD	240	12,543	2020	540	605	F	1.12	574	E	1.063
OLEANDER AVE	FARMER'S MARKET RD to EDWARDS RD	240	12,543	2020	750	605	D	0.807	574	D	0.765
OLEANDER AVE	EDWARDS RD to WISTERIA AVE	505	9,891	2020	750	600	D	0.8	499	D	0.665
OLEANDER AVE	WISTERIA AVE to GARDENIA AVE	505	9,891	2020	540	600	F	1.111	499	D	0.924
OLEANDER AVE	GARDENIA AVE to VIRGINIA AVE	505	9,891	2020	790	600	D	0.759	499	D	0.632
OLEANDER AVE	VIRGINIA AVE to SUNRISE BLVD	503	4,537	2018	600	258	C	0.43	268	C	0.447
ORANGE AVE	OKEECHOBEE C.L. to SNEED RD	144	5,052	2020	670	295	C	0.44	281	C	0.419
ORANGE AVE	SNEED RD to HEADER CANAL RD	144	5,052	2020	670	295	C	0.44	281	C	0.419
ORANGE AVE	SHINN RD to CAMPBELL RD	940144	2,851	2020	1,070	156	B	0.146	156	B	0.146
ORANGE AVE	CAMPBELL RD to KINGS HWY	940144	2,851	2020	1,070	156	B	0.146	156	B	0.146
ORANGE AVE	KINGS HWY to I-95	940041	18,954	2020	2,100	902	C	0.43	909	C	0.433
ORANGE AVE	I-95 to JENKINS RD	940035	14,453	2020	2,100	827	C	0.394	778	C	0.37
ORANGE AVE	JENKINS RD to HARTMAN RD	940028	15,435	2020	2,100	797	C	0.38	741	C	0.353
ORANGE AVE	HARTMAN RD to ANGLE RD	940028	15,435	2020	2,100	797	C	0.38	741	C	0.353
ORANGE AVE	ANGLE RD to 25TH ST	940151	9,848	2013	1,710	505	C	0.295	587	C	0.343
ORANGE AVE	25TH ST to 17TH ST	945040	12,894	2020	1,630	622	C	0.382	682	C	0.418
ORANGE AVE	17TH ST to 13TH ST	945040	12,894	2020	1,710	622	C	0.364	682	C	0.399
ORANGE AVE	13TH ST to 10TH ST	945040	12,894	2020	750	622	D	0.829	682	D	0.909

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT

* Volumes shown were adjusted using FDOT Seasonal Factors

* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

* **NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.

* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

APPENDIX E
Turning Movement Counts



[Click here for Map](#)

Peak Hour Turning Movement Count

Ft. Pierce, FL



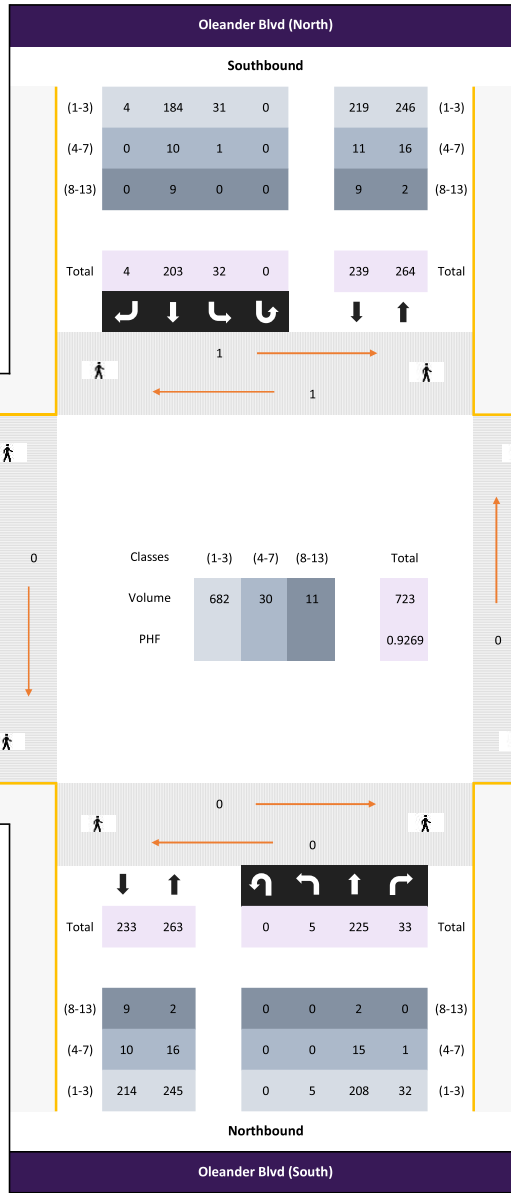
www.marrtraffic.com

Tuesday, November 15, 2022	
Period	0700 - 0900
Peak Hour	0745 - 0845

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)



W Weatherbee Rd (West)

W Weatherbee Rd (East)



[Click here for Map](#)

Peak Hour Turning Movement Count

Ft. Pierce, FL



www.marrtraffic.com

Tuesday, November 15, 2022	
Period	1600 - 1800
Peak Hour	1615 - 1715

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					W Weatherbee Rd (West)					W Weatherbee Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1615 - 1630	3	62	6	0	71	17	71	0	0	88	2	15	4	0	21	0	8	5	0	13	193
1630 - 1645	4	54	8	0	66	12	59	2	0	73	1	25	4	0	30	6	13	13	0	32	201
1645 - 1700	2	56	7	0	65	16	74	2	0	92	0	19	1	0	20	7	12	7	0	26	203
1700 - 1715	5	68	7	0	80	14	88	2	0	104	4	17	4	0	25	6	16	16	0	38	247
Total	14	240	28	0	282	59	292	6	0	357	7	76	13	0	96	19	49	41	0	109	844
Approach %	4.96	85.11	9.93	0.00	-	16.53	81.79	1.68	0.00	-	7.29	79.17	13.54	0.00	-	17.43	44.95	37.61	0.00	-	
PHF	0.70	0.88	0.88	0.00	0.88	0.87	0.83	0.75	0.00	0.86	0.44	0.76	0.81	0.00	0.80	0.68	0.77	0.64	0.00	0.72	0.85

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					W Weatherbee Rd (West)					W Weatherbee Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					W Weatherbee Rd (West)					W Weatherbee Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1615 - 1630	3	61	6	0	70	16	64	0	0	80	2	13	4	0	19	0	6	4	0	10	179
1630 - 1645	4	52	7	0	63	12	55	2	0	69	1	25	4	0	30	6	13	13	0	32	194
1645 - 1700	2	54	7	0	63	14	69	2	0	85	0	18	1	0	19	7	12	6	0	25	192
1700 - 1715	5	64	7	0	76	12	85	2	0	99	3	17	4	0	24	6	16	16	0	38	237
Total	14	231	27	0	272	54	273	6	0	333	6	73	13	0	92	19	47	39	0	105	802
Approach %	5.15	84.93	9.93	0.00	-	16.22	81.98	1.80	0.00	-	6.52	79.35	14.13	0.00	-	18.10	44.76	37.14	0.00	-	
PHF	0.70	0.90	0.96	0.00	0.89	0.84	0.80	0.75	0.00	0.84	0.50	0.73	0.81	0.00	0.77	0.68	0.73	0.61	0.00	0.69	0.85

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					W Weatherbee Rd (West)					W Weatherbee Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1615 - 1630	0	0	0	0	0	1	6	0	0	7	0	2	0	0	2	0	1	1	0	2	11
1630 - 1645	0	1	1	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4
1645 - 1700	0	0	0	0	0	2	3	0	0	5	0	1	0	0	1	0	0	0	0	0	6
1700 - 1715	0	2	0	0	2	0	3	0	0	3	1	0	0	0	1	0	0	0	0	0	6
Total	0	3	1	0	4	3	14	0	0	17	1	3	0	0	4	0	1	1	0	2	27
Approach %	0.00	75.00	25.00	0.00	-	17.65	82.35	0.00	0.00	-	25.00	75.00	0.00	0.00	-	0.00	50.00	50.00	0.00	-	
PHF	0.00	0.38	0.25	0.00	0.50	0.38	0.58	0.00	0.00	0.61	0.25	0.38	0.00	0.00	0.50	0.00	0.25	0.25	0.00	0.25	0.61

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					W Weatherbee Rd (West)					W Weatherbee Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1615 - 1630	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
1630 - 1645	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
1645 - 1700	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	5
1700 - 1715	0	2	0	0	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
Total	0	6	0	0	6	2	5	0	0	7	0	0	0	0	0	0	1	1	0	2	15
Approach %	0.00	100.00	0.00	0.00	-	28.57	71.43	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	50.00	50.00	0.00	-	
PHF	0.00	0.75	0.00	0.00	0.75	0.25	0.63	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	0.00	0.50	0.75



[Click here for Map](#)

Peak Hour Turning Movement Count

Ft. Pierce, FL



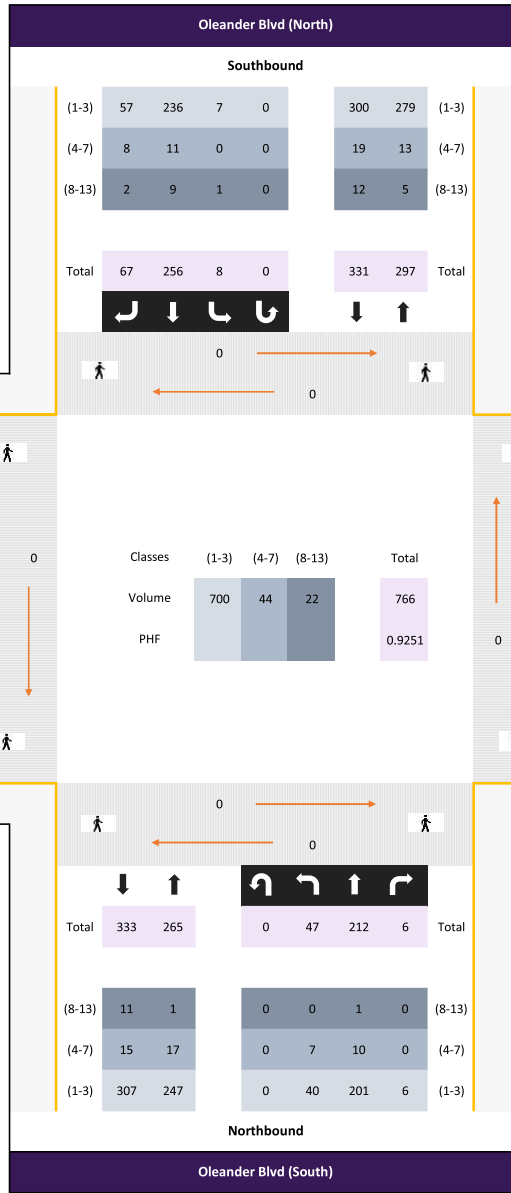
www.marrtraffic.com

Tuesday, November 15, 2022	
Period	0700 - 0900
Peak Hour	0745 - 0845

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)



Oleander Blvd (North)

Southbound

(1-3)	57	236	7	0	300	279	(1-3)
(4-7)	8	11	0	0	19	13	(4-7)
(8-13)	2	9	1	0	12	5	(8-13)
Total	67	256	8	0	331	297	Total

Eastbound

(1-3)	97	15	2	114
(4-7)	149	8	6	163
(8-13)	0	0	0	0
Total	246	23	2	271

Westbound

(8-13)	3	0	4	7
(4-7)	0	0	0	0
(1-3)	0	0	0	0
Total	3	0	4	7

Classes

(1-3)	700	44	22	766
Volume				
PHF				0.9251

Oleander Blvd (South)

Northbound

(8-13)	11	1	0	0	0	1	0	(8-13)
(4-7)	15	17	0	7	10	0	0	(4-7)
(1-3)	307	247	0	40	201	6	6	(1-3)
Total	333	265	0	47	212	6	6	Total

All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
0745 - 0800	12	37	4	0	53	1	70	17	0	88	23	4	17	0	44	0	0	2	0	2	187
0800 - 0815	14	55	2	0	71	4	66	19	0	89	20	0	26	0	46	0	0	1	0	1	207
0815 - 0830	7	47	0	0	54	3	74	16	0	93	24	1	16	0	41	0	0	2	0	2	190
0830 - 0845	14	73	0	0	87	0	46	15	0	61	11	3	18	0	32	0	0	2	0	2	182
Total	47	212	6	0	265	8	256	67	0	331	78	8	77	0	163	0	0	7	0	7	766
Approach %	17.74	80.00	2.26	0.00	-	2.42	77.34	20.24	0.00	-	47.85	4.91	47.24	0.00	-	0.00	0.00	100.00	0.00	-	-
PHF	0.84	0.73	0.38	0.00	0.76	0.50	0.86	0.88	0.00	0.89	0.81	0.50	0.74	0.00	0.89	0.00	0.00	0.88	0.00	0.88	0.93

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	-
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
0745 - 0800	10	31	4	0	45	1	67	13	0	81	23	3	15	0	41	0	0	1	0	1	168
0800 - 0815	13	53	2	0	68	4	59	16	0	79	17	0	25	0	42	0	0	1	0	1	190
0815 - 0830	7	46	0	0	53	2	67	16	0	85	23	0	16	0	39	0	0	1	0	1	178
0830 - 0845	10	71	0	0	81	0	43	12	0	55	11	1	15	0	27	0	0	1	0	1	164
Total	40	201	6	0	247	7	236	57	0	300	74	4	71	0	149	0	0	4	0	4	700
Approach %	16.19	81.38	2.43	0.00	-	2.33	78.67	19.00	0.00	-	49.66	2.68	47.65	0.00	-	0.00	0.00	100.00	0.00	-	-
PHF	0.77	0.71	0.38	0.00	0.76	0.44	0.88	0.89	0.00	0.88	0.80	0.33	0.71	0.00	0.89	0.00	0.00	1.00	0.00	1.00	0.92

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
0745 - 0800	2	5	0	0	7	0	1	4	0	5	0	0	1	0	1	0	0	0	0	0	13
0800 - 0815	1	2	0	0	3	0	4	2	0	6	2	0	1	0	3	0	0	0	0	0	12
0815 - 0830	0	1	0	0	1	0	4	0	0	4	1	0	0	0	1	0	0	0	0	0	6
0830 - 0845	4	2	0	0	6	0	2	2	0	4	0	1	2	0	3	0	0	0	0	0	13
Total	7	10	0	0	17	0	11	8	0	19	3	1	4	0	8	0	0	0	0	0	44
Approach %	41.18	58.82	0.00	0.00	-	0.00	57.89	42.11	0.00	-	37.50	12.50	50.00	0.00	-	0.00	0.00	0.00	0.00	-	-
PHF	0.44	0.50	0.00	0.00	0.61	0.00	0.69	0.50	0.00	0.79	0.38	0.25	0.50	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.85

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
0745 - 0800	0	1	0	0	1	0	2	0	0	2	0	1	1	0	2	0	0	1	0	1	6
0800 - 0815	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	0	0	0	0	0	5
0815 - 0830	0	0	0	0	0	1	3	0	0	4	0	1	0	0	1	0	0	1	0	1	6
0830 - 0845	0	0	0	0	0	0	1	1	0	2	0	1	1	0	2	0	0	1	0	1	5
Total	0	1	0	0	1	1	9	2	0	12	1	3	2	0	6	0	0	3	0	3	22
Approach %	0.00	100.00	0.00	0.00	-	8.33	75.00	16.67	0.00	-	16.67	50.00	33.33	0.00	-	0.00	0.00	100.00	0.00	-	-
PHF	0.00	0.25	0.00	0.00	0.25	0.25	0.75	0.50	0.00	0.75	0.25	0.75	0.50	0.00	0.75	0.00	0.00	0.75	0.00	0.75	0.92



[Click here for Map](#)

Peak Hour Turning Movement Count

Ft. Pierce, FL



www.marrtraffic.com

Tuesday, November 15, 2022	
Period	1600 - 1800
Peak Hour	1615 - 1715

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



Bell Ave

Driveway

All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
1615 - 1630	17	68	2	0	87	1	71	13	0	85	20	0	26	0	46	1	0	1	0	2	220
1630 - 1645	14	79	0	0	93	1	67	16	0	84	19	0	16	0	35	1	1	1	0	3	215
1645 - 1700	15	79	0	0	94	0	73	16	0	89	21	0	24	1	46	2	1	1	0	4	233
1700 - 1715	23	99	1	0	123	0	69	20	0	89	13	0	28	0	41	1	2	4	0	7	260
Total	69	325	3	0	397	2	280	65	0	347	73	0	94	1	168	5	4	7	0	16	928
Approach %	17.38	81.86	0.76	0.00	-	0.58	80.69	18.73	0.00	-	43.45	0.00	55.95	0.60	-	31.25	25.00	43.75	0.00	-	
PHF	0.75	0.82	0.38	0.00	0.81	0.50	0.96	0.81	0.00	0.97	0.87	0.00	0.84	0.25	0.91	0.63	0.50	0.44	0.00	0.57	0.89

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645 - 1700	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Approach %	100.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.25	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
1615 - 1630	15	67	1	0	83	0	67	13	0	80	19	0	24	0	43	0	0	1	0	1	207
1630 - 1645	12	77	0	0	89	1	63	15	0	79	17	0	16	0	33	0	1	1	0	2	203
1645 - 1700	13	78	0	0	91	0	68	15	0	83	20	0	24	1	45	2	1	1	0	4	223
1700 - 1715	22	98	0	0	120	0	63	20	0	83	13	0	27	0	40	1	2	4	0	7	250
Total	62	320	1	0	383	1	261	63	0	325	69	0	91	1	161	3	4	7	0	14	883
Approach %	16.19	83.55	0.26	0.00	-	0.31	80.31	19.38	0.00	-	42.86	0.00	56.52	0.62	-	21.43	28.57	50.00	0.00	-	
PHF	0.70	0.82	0.25	0.00	0.80	0.25	0.96	0.79	0.00	0.98	0.86	0.00	0.84	0.25	0.89	0.38	0.50	0.44	0.00	0.50	0.88

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
1615 - 1630	1	1	0	0	2	1	3	0	0	4	1	0	1	0	2	1	0	0	0	1	9
1630 - 1645	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	6
1645 - 1700	0	0	0	0	0	0	4	1	0	5	1	0	0	0	1	0	0	0	0	0	6
1700 - 1715	0	1	0	0	1	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	7
Total	1	4	0	0	5	1	17	1	0	19	2	0	1	0	3	1	0	0	0	1	28
Approach %	20.00	80.00	0.00	0.00	-	5.26	89.47	5.26	0.00	-	66.67	0.00	33.33	0.00	-	100.00	0.00	0.00	0.00	-	
PHF	0.25	0.50	0.00	0.00	0.63	0.25	0.71	0.25	0.00	0.79	0.50	0.00	0.25	0.00	0.38	0.25	0.00	0.00	0.00	0.25	0.78

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Bell Ave					Driveway					
	Left 3.1	Thru 3.2	Right 3.3	U-Turn 3.4	App Total	Left 3.5	Thru 3.6	Right 3.7	U-Turn 3.8	App Total	Left 3.9	Thru 3.10	Right 3.11	U-Turn 3.12	App Total	Left 3.13	Thru 3.14	Right 3.15	U-Turn 3.16	App Total	
1615 - 1630	1	0	1	0	2	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	4
1630 - 1645	2	0	0	0	2	0	0	1	0	1	2	0	0	0	2	1	0	0	0	1	6
1645 - 1700	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
1700 - 1715	1	0	1	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
Total	5	1	2	0	8	0	2	1	0	3	2	0	2	0	4	1	0	0	0	1	16
Approach %	62.50	12.50	25.00	0.00	-	0.00	66.67	33.33	0.00	-	50.00	0.00	50.00	0.00	-	100.00	0.00	0.00	0.00	-	
PHF	0.63	0.25	0.50	0.00	1.00	0.00	0.50	0.25	0.00	0.75	0.25	0.00	0.50	0.00	0.50	0.25	0.00	0.00	0.00	0.25	0.67



[Click here for Map](#)

Peak Hour Turning Movement Count

Ft. Pierce, FL



www.marrtraffic.com

Tuesday, November 15, 2022	
Period	0700 - 0900
Peak Hour	0745 - 0845

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)

Peak Hour

Volume



Oleander Blvd (North)

Southbound

(1-3)	0	264	15	0	279	266	(1-3)
(4-7)	0	16	1	0	17	12	(4-7)
(8-13)	0	10	0	0	10	4	(8-13)
Total	0	290	16	0	306	282	Total



(1-3)	(4-7)	(8-13)	Total	
0	0	0	0	↑
0	0	0	0	↑
0	0	0	0	↓
0	0	0	0	↓
0	0	0	0	↓
0	0	0	0	↓
(1-3)	(4-7)	(8-13)	Total	

Classes	(1-3)	(4-7)	(8-13)	Total
Volume	622	36	17	675
PHF				0.9323

Total	(8-13)	(4-7)	(1-3)
30	1	4	25
0	0	0	0
40	2	2	36
0	0	0	0
70	3	6	61
63	1	6	56
Total	(8-13)	(4-7)	(1-3)

Total	330	299	0	0	252	47	Total
(8-13)	12	4	0	0	3	1	(8-13)
(4-7)	18	13	0	0	8	5	(4-7)
(1-3)	300	282	0	0	241	41	(1-3)

Oleander Blvd (South)

Driveway

Eastbound

Westbound

Farmers Market Rd

All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0745 - 0800	0	53	12	0	65	5	77	0	0	82	0	0	0	0	0	11	0	9	0	20	167
0800 - 0815	0	63	11	0	74	4	75	0	0	79	0	0	0	0	0	12	0	5	0	17	170
0815 - 0830	0	64	10	0	74	2	88	0	0	90	0	0	0	0	0	6	0	11	0	17	181
0830 - 0845	0	72	14	0	86	5	50	0	0	55	0	0	0	0	0	11	0	5	0	16	157
Total	0	252	47	0	299	16	290	0	0	306	0	0	0	0	0	40	0	30	0	70	675
Approach %	0.00	84.28	15.72	0.00	-	5.23	94.77	0.00	0.00	-	0.00	0.00	0.00	0.00	-	57.14	0.00	42.86	0.00	-	
PHF	0.00	0.88	0.84	0.00	0.87	0.80	0.82	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.68	0.00	0.88	0.93

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0745 - 0800	0	49	10	0	59	5	73	0	0	78	0	0	0	0	0	10	0	8	0	18	155
0800 - 0815	0	60	9	0	69	4	68	0	0	72	0	0	0	0	0	11	0	4	0	15	156
0815 - 0830	0	62	10	0	72	2	80	0	0	82	0	0	0	0	0	5	0	8	0	13	167
0830 - 0845	0	70	12	0	82	4	43	0	0	47	0	0	0	0	0	10	0	5	0	15	144
Total	0	241	41	0	282	15	264	0	0	279	0	0	0	0	0	36	0	25	0	61	622
Approach %	0.00	85.46	14.54	0.00	-	5.38	94.62	0.00	0.00	-	0.00	0.00	0.00	0.00	-	59.02	0.00	40.98	0.00	-	
PHF	0.00	0.86	0.85	0.00	0.86	0.75	0.83	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.78	0.00	0.85	0.93

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0745 - 0800	0	3	2	0	5	0	2	0	0	2	0	0	0	0	0	1	0	1	0	2	9
0800 - 0815	0	3	1	0	4	0	5	0	0	5	0	0	0	0	0	1	0	0	0	1	10
0815 - 0830	0	1	0	0	1	0	5	0	0	5	0	0	0	0	0	0	0	3	0	3	9
0830 - 0845	0	1	2	0	3	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	8
Total	0	8	5	0	13	1	16	0	0	17	0	0	0	0	0	2	0	4	0	6	36
Approach %	0.00	61.54	38.46	0.00	-	5.88	94.12	0.00	0.00	-	0.00	0.00	0.00	0.00	-	33.33	0.00	66.67	0.00	-	
PHF	0.00	0.67	0.63	0.00	0.65	0.25	0.80	0.00	0.00	0.85	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.33	0.00	0.50	0.90

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
0745 - 0800	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
0800 - 0815	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	4
0815 - 0830	0	1	0	0	1	0	3	0	0	3	0	0	0	0	0	1	0	0	0	1	5
0830 - 0845	0	1	0	0	1	0	3	0	0	3	0	0	0	0	0	1	0	0	0	1	5
Total	0	3	1	0	4	0	10	0	0	10	0	0	0	0	0	2	0	1	0	3	17
Approach %	0.00	75.00	25.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	66.67	0.00	33.33	0.00	-	
PHF	0.00	0.75	0.25	0.00	1.00	0.00	0.83	0.00	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.25	0.00	0.75	0.85



[Click here for Map](#)

Peak Hour Turning Movement Count

Ft. Pierce, FL



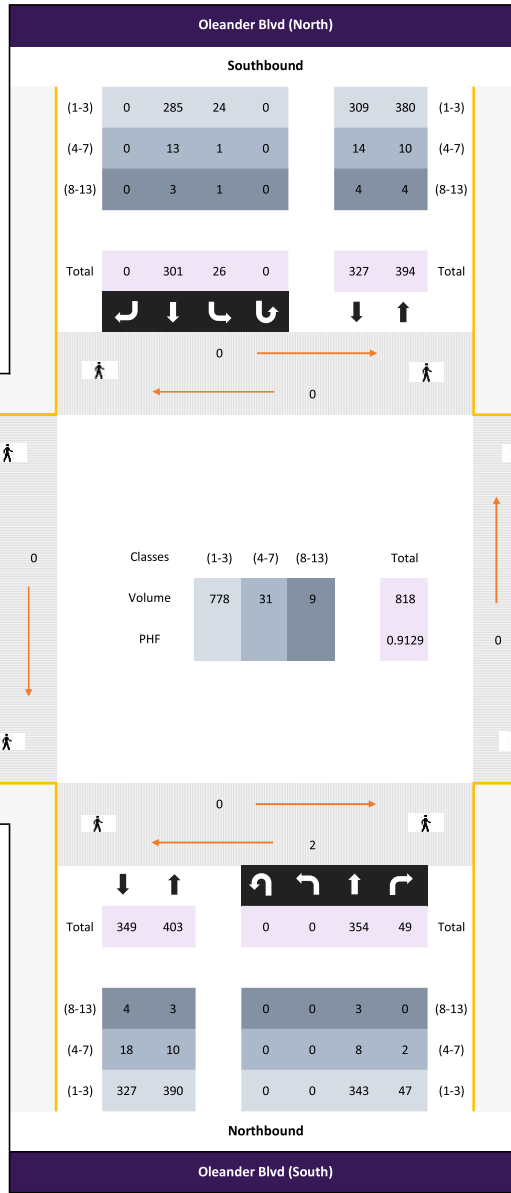
www.marrtraffic.com

Tuesday, November 15, 2022	
Period	1600 - 1800
Peak Hour	1615 - 1715

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)



Oleander Blvd (North)

Southbound

(1-3)	0	285	24	0	309	380	(1-3)
(4-7)	0	13	1	0	14	10	(4-7)
(8-13)	0	3	1	0	4	4	(8-13)

Total	0	301	26	0	327	394	Total
-------	---	-----	----	---	-----	-----	-------



(1-3)	(4-7)	(8-13)	Total	
0	0	0	0	↑
0	0	0	0	↑
0	0	0	0	↶
0	0	0	0	↶
0	0	0	0	↶
0	0	0	0	↶
0	0	0	0	↶
0	0	0	0	↶
0	0	0	0	↶
(1-3)	(4-7)	(8-13)	Total	

Classes	(1-3)	(4-7)	(8-13)	Total
Volume	778	31	9	818
PHF				0.9129

Total	(8-13)	(4-7)	(1-3)
40	1	2	37
0	0	0	0
48	1	5	42
0	0	0	0
88	2	7	79
75	1	3	71
Total	(8-13)	(4-7)	(1-3)



Total	349	403	0	0	354	49	Total
-------	-----	-----	---	---	-----	----	-------

(8-13)	4	3	0	0	3	0	(8-13)
(4-7)	18	10	0	0	8	2	(4-7)
(1-3)	327	390	0	0	343	47	(1-3)

Northbound

Oleander Blvd (South)

Driveway

Eastbound

Westbound

Farmers Market Rd

All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1615 - 1630	0	76	10	0	86	5	72	0	0	77	0	0	0	0	0	10	0	5	0	15	178
1630 - 1645	0	86	10	0	96	8	73	0	0	81	0	0	0	0	0	14	0	12	0	26	203
1645 - 1700	0	89	14	0	103	9	78	0	0	87	0	0	0	0	0	14	0	9	0	23	213
1700 - 1715	0	103	15	0	118	4	78	0	0	82	0	0	0	0	0	10	0	14	0	24	224
Total	0	354	49	0	403	26	301	0	0	327	0	0	0	0	0	48	0	40	0	88	818
Approach %	0.00	87.84	12.16	0.00	-	7.95	92.05	0.00	0.00	-	0.00	0.00	0.00	0.00	-	54.55	0.00	45.45	0.00	-	
PHF	0.00	0.86	0.82	0.00	0.85	0.72	0.96	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.71	0.00	0.85	0.91

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1615 - 1630	0	76	9	0	85	5	67	0	0	72	0	0	0	0	0	8	0	5	0	13	170
1630 - 1645	0	83	10	0	93	7	69	0	0	76	0	0	0	0	0	12	0	11	0	23	192
1645 - 1700	0	84	14	0	98	8	74	0	0	82	0	0	0	0	0	12	0	7	0	19	199
1700 - 1715	0	100	14	0	114	4	75	0	0	79	0	0	0	0	0	10	0	14	0	24	217
Total	0	343	47	0	390	24	285	0	0	309	0	0	0	0	0	42	0	37	0	79	778
Approach %	0.00	87.95	12.05	0.00	-	7.77	92.23	0.00	0.00	-	0.00	0.00	0.00	0.00	-	53.16	0.00	46.84	0.00	-	
PHF	0.00	0.86	0.84	0.00	0.86	0.75	0.95	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.66	0.00	0.82	0.90

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1615 - 1630	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	2	0	0	0	2	7
1630 - 1645	0	2	0	0	2	0	3	0	0	3	0	0	0	0	0	1	0	1	0	2	7
1645 - 1700	0	3	0	0	3	1	3	0	0	4	0	0	0	0	0	2	0	1	0	3	10
1700 - 1715	0	3	1	0	4	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	7
Total	0	8	2	0	10	1	13	0	0	14	0	0	0	0	0	5	0	2	0	7	31
Approach %	0.00	80.00	20.00	0.00	-	7.14	92.86	0.00	0.00	-	0.00	0.00	0.00	0.00	-	71.43	0.00	28.57	0.00	-	
PHF	0.00	0.67	0.50	0.00	0.63	0.25	0.81	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.50	0.00	0.58	0.78

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					Driveway					Farmers Market Rd					
	Left 2.1	Thru 2.2	Right 2.3	U-Turn 2.4	App Total	Left 2.5	Thru 2.6	Right 2.7	U-Turn 2.8	App Total	Left 2.9	Thru 2.10	Right 2.11	U-Turn 2.12	App Total	Left 2.13	Thru 2.14	Right 2.15	U-Turn 2.16	App Total	
1615 - 1630	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1630 - 1645	0	1	0	0	1	1	1	0	0	2	0	0	0	0	0	1	0	0	0	1	4
1645 - 1700	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	4
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	0	0	3	1	3	0	0	4	0	0	0	0	0	1	0	1	0	2	9
Approach %	0.00	100.00	0.00	0.00	-	25.00	75.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	50.00	0.00	50.00	0.00	-	
PHF	0.00	0.38	0.00	0.00	0.38	0.25	0.75	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.25	0.00	0.50	0.56



[Click here for Map](#)

Peak Hour Turning Movement Count

Ft. Pierce, FL



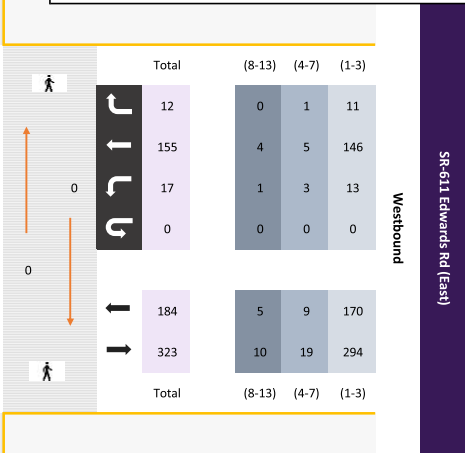
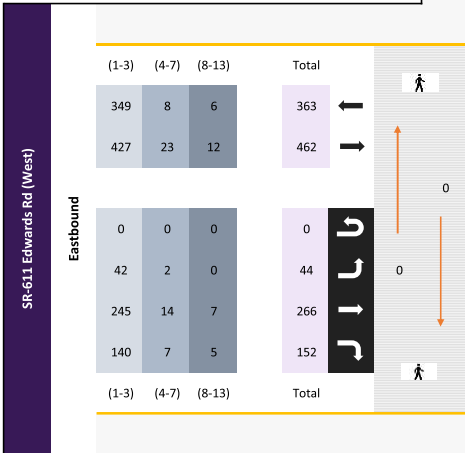
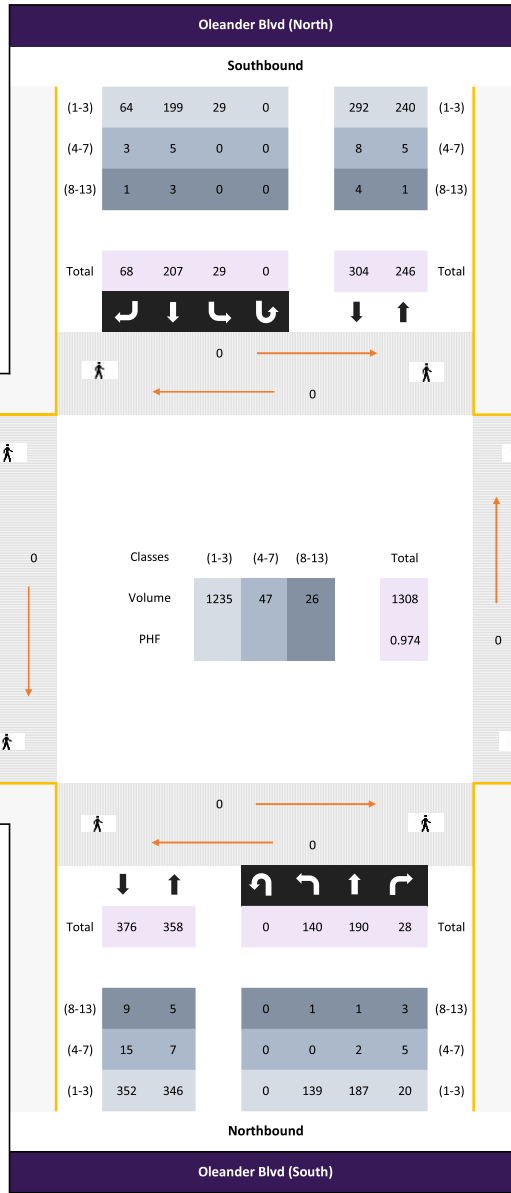
www.marrtraffic.com

Tuesday, November 15, 2022	
Period	0700 - 0900
Peak Hour	0745 - 0845

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)



All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0745 - 0800	36	40	4	0	80	3	46	15	0	64	13	78	39	0	130	3	34	2	0	39	313
0800 - 0815	36	49	8	0	93	11	60	19	0	90	6	58	40	0	104	4	43	2	0	49	336
0815 - 0830	33	45	9	0	87	7	58	18	0	83	16	65	35	0	116	5	41	4	0	50	336
0830 - 0845	35	56	7	0	98	8	43	16	0	67	9	66	38	0	113	5	37	4	0	46	324
Total	140	190	28	0	358	29	207	68	0	304	44	267	152	0	463	17	155	12	0	184	1309
Approach %	39.11	53.07	7.82	0.00	-	9.54	68.09	22.37	0.00	-	9.50	57.67	32.83	0.00	-	9.24	84.24	6.52	0.00	-	
PHF	0.97	0.85	0.78	0.00	0.91	0.66	0.86	0.89	0.00	0.84	0.69	0.86	0.95	0.00	0.89	0.85	0.90	0.75	0.00	0.92	0.97

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.25

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0745 - 0800	35	40	2	0	77	3	45	13	0	61	11	71	37	0	119	3	33	2	0	38	295
0800 - 0815	36	49	5	0	90	11	58	18	0	87	6	52	36	0	94	2	37	2	0	41	312
0815 - 0830	33	43	8	0	84	7	57	18	0	82	16	62	35	0	113	5	39	3	0	47	326
0830 - 0845	35	55	5	0	95	8	39	15	0	62	9	60	32	0	101	3	37	4	0	44	302
Total	139	187	20	0	346	29	199	64	0	292	42	245	140	0	427	13	146	11	0	170	1235
Approach %	40.17	54.05	5.78	0.00	-	9.93	68.15	21.92	0.00	-	9.84	57.38	32.79	0.00	-	7.65	85.88	6.47	0.00	-	
PHF	0.97	0.85	0.63	0.00	0.91	0.66	0.86	0.89	0.00	0.84	0.66	0.86	0.95	0.00	0.90	0.65	0.94	0.69	0.00	0.90	0.95

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0745 - 0800	0	0	1	0	1	0	1	2	0	3	2	5	1	0	8	0	0	0	0	0	12
0800 - 0815	0	0	2	0	2	0	0	0	0	0	0	3	3	0	6	1	5	0	0	6	14
0815 - 0830	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	0	1	0	1	4
0830 - 0845	0	1	2	0	3	0	3	1	0	4	0	5	3	0	8	2	0	0	0	2	17
Total	0	2	5	0	7	0	5	3	0	8	2	14	7	0	23	3	5	1	0	9	47
Approach %	0.00	28.57	71.43	0.00	-	0.00	62.50	37.50	0.00	-	8.70	60.87	30.43	0.00	-	33.33	55.56	11.11	0.00	-	
PHF	0.00	0.50	0.63	0.00	0.58	0.00	0.42	0.38	0.00	0.50	0.25	0.70	0.58	0.00	0.72	0.38	0.25	0.25	0.00	0.38	0.69

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left 1.1	Thru 1.2	Right 1.3	U-Turn 1.4	App Total	Left 1.5	Thru 1.6	Right 1.7	U-Turn 1.8	App Total	Left 1.9	Thru 1.10	Right 1.11	U-Turn 1.12	App Total	Left 1.13	Thru 1.14	Right 1.15	U-Turn 1.16	App Total	
0745 - 0800	1	0	1	0	2	0	0	0	0	0	0	1	1	0	2	0	1	0	0	1	5
0800 - 0815	0	0	1	0	1	0	2	1	0	3	0	3	1	0	4	1	1	0	0	2	10
0815 - 0830	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	6
0830 - 0845	0	0	0	0	0	0	1	0	0	1	0	1	3	0	4	0	0	0	0	0	5
Total	1	1	3	0	5	0	3	1	0	4	0	7	5	0	12	1	4	0	0	5	26
Approach %	20.00	20.00	60.00	0.00	-	0.00	75.00	25.00	0.00	-	0.00	58.33	41.67	0.00	-	20.00	80.00	0.00	0.00	-	
PHF	0.25	0.25	0.75	0.00	0.63	0.00	0.38	0.25	0.00	0.33	0.00	0.58	0.42	0.00	0.75	0.25	0.50	0.00	0.00	0.63	0.65



[Click here for Map](#)

Peak Hour Turning Movement Count

Ft. Pierce, FL



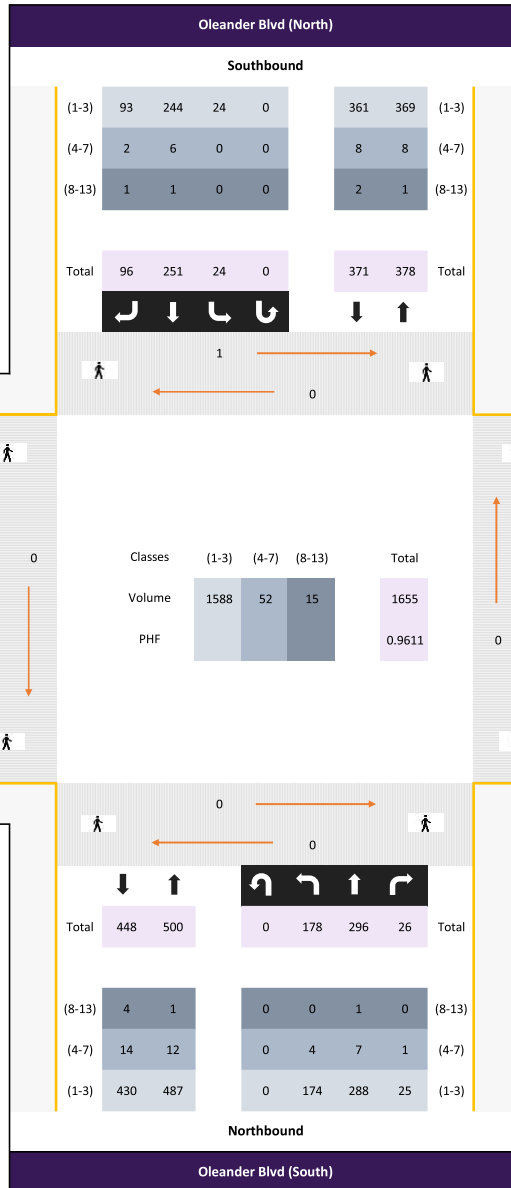
www.marrtraffic.com

Tuesday, November 15, 2022	
Period	1600 - 1800
Peak Hour	1645 - 1745

* the Peak Hour Diagram does not include Bikes

Session Parameters

(Drop Down Menu)



All vehicles

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1645 - 1700	34	63	7	0	104	9	67	20	0	96	18	63	61	0	142	4	60	3	0	67	409
1700 - 1715	57	92	8	0	157	3	64	26	0	93	15	41	38	0	94	6	78	3	0	87	431
1715 - 1730	50	66	4	0	120	6	62	21	0	89	23	58	44	0	125	5	71	1	0	77	411
1730 - 1745	37	75	7	0	119	6	58	29	0	93	18	58	37	0	113	2	78	1	0	81	406
Total	178	296	26	0	500	24	251	96	0	371	74	220	180	0	474	17	287	8	0	312	1657
Approach %	35.60	59.20	5.20	0.00	-	6.47	67.65	25.88	0.00	-	15.61	46.41	37.97	0.00	-	5.45	91.99	2.56	0.00	-	
PHF	0.78	0.80	0.81	0.00	0.80	0.67	0.94	0.83	0.00	0.97	0.80	0.87	0.74	0.00	0.83	0.71	0.92	0.67	0.00	0.90	0.96

Bikes

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715 - 1730	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
1730 - 1745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
Approach %	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	0.00	100.00	0.00	0.00	-	
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.25	0.00	0.00	0.25	0.25

Passenger Vehicles (1-3)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1645 - 1700	32	62	6	0	100	9	64	19	0	92	17	58	58	0	133	4	58	3	0	65	390
1700 - 1715	57	89	8	0	154	3	63	25	0	91	15	38	37	0	90	6	76	3	0	85	420
1715 - 1730	48	64	4	0	116	6	60	20	0	86	23	53	41	0	117	3	65	1	0	69	388
1730 - 1745	37	73	7	0	117	6	57	29	0	92	18	51	35	0	104	2	74	1	0	77	390
Total	174	288	25	0	487	24	244	93	0	361	73	200	171	0	444	15	273	8	0	296	1588
Approach %	35.73	59.14	5.13	0.00	-	6.65	67.59	25.76	0.00	-	16.44	45.05	38.51	0.00	-	5.07	92.23	2.70	0.00	-	
PHF	0.76	0.81	0.78	0.00	0.79	0.67	0.95	0.80	0.00	0.98	0.79	0.86	0.74	0.00	0.83	0.63	0.90	0.67	0.00	0.87	0.95

Single Unit Trucks (4-7)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1645 - 1700	2	0	1	0	3	0	3	0	0	3	1	4	2	0	7	0	1	0	0	1	14
1700 - 1715	0	3	0	0	3	0	1	1	0	2	0	0	1	0	1	0	2	0	0	2	8
1715 - 1730	2	2	0	0	4	0	1	1	0	2	0	4	3	0	7	1	3	0	0	4	17
1730 - 1745	0	2	0	0	2	0	1	0	0	1	0	7	1	0	8	0	2	0	0	2	13
Total	4	7	1	0	12	0	6	2	0	8	1	15	7	0	23	1	8	0	0	9	52
Approach %	33.33	58.33	8.33	0.00	-	0.00	75.00	25.00	0.00	-	4.35	65.22	30.43	0.00	-	11.11	88.89	0.00	0.00	-	
PHF	0.50	0.58	0.25	0.00	0.75	0.00	0.50	0.50	0.00	0.67	0.25	0.54	0.58	0.00	0.72	0.25	0.67	0.00	0.00	0.56	0.76

Combination Trucks (8-13)

Time	Northbound					Southbound					Eastbound					Westbound					Int Total
	Oleander Blvd (South)					Oleander Blvd (North)					SR-611 Edwards Rd (West)					SR-611 Edwards Rd (East)					
	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	Left	Thru	Right	U-Turn	App Total	
1645 - 1700	0	1	0	0	1	0	0	1	0	1	0	1	1	0	2	0	1	0	0	1	5
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
1715 - 1730	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	2	0	0	0	3	4
1730 - 1745	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	2	3
Total	0	1	0	0	1	0	1	1	0	2	0	4	2	0	6	1	5	0	0	6	15
Approach %	0.00	100.00	0.00	0.00	-	0.00	50.00	50.00	0.00	-	0.00	66.67	33.33	0.00	-	16.67	83.33	0.00	0.00	-	
PHF	0.00	0.25	0.00	0.00	0.25	0.00	0.25	0.25	0.00	0.50	0.00	0.33	0.50	0.00	0.50	0.25	0.63	0.00	0.00	0.50	0.75

APPENDIX F
FDOT's Florida Traffic Online
2021 Peak Season Factor Category Report

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 9401 CEN.-W OF US1 TO I95

MOCF: 0.97

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

* PEAK SEASON

08-MAR-2022 12:36:27

830UPD

4_9401_PKSEASON.TXT

APPENDIX G

Turning Movement Volume Worksheets

INTERSECTION VOLUME DEVELOPMENT

Oleander Avenue & Weatherbee Road

WEEKDAY AM PEAK HOUR (8:00 AM to 9:00 AM)	Oleander Avenue			Oleander Avenue			Weatherbee Road			Weatherbee Road		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 11/15/2022	5	225	33	32	203	4	7	77	14	16	75	32
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	5	236	35	34	213	4	7	81	15	17	79	34
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	0	16	2	2	14	0	0	5	1	1	5	2
Oleander Oaks Vested Trips		3		6	9							2
American Silicone Vested Trips		28		14	24							16
Background Traffic	0	47	2	22	47	0	0	5	1	1	5	20
Project Traffic % Assignment		25%		15%	25%							15%
Project Traffic Direction		IN		OUT	OUT							IN
Project Traffic		4		2	3							2
2025 Total Background Traffic	5	283	37	56	260	4	7	86	16	18	84	54
2025 Total Traffic	5	287	37	58	263	4	7	86	16	18	84	56

WEEKDAY PM PEAK HOUR (4:30 PM to 5:30 PM)	Oleander Avenue			Oleander Avenue			Weatherbee Road			Weatherbee Road		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 11/15/2022	14	240	28	59	292	6	7	76	13	19	49	41
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	15	252	29	62	307	6	7	80	14	20	51	43
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	1	17	2	4	21	0	0	5	1	1	3	3
Oleander Oaks Vested Trips		10		4	6							6
American Silicone Vested Trips		11		8	14							6
Background Traffic	1	38	2	16	41	0	0	5	1	1	3	15
Project Traffic % Assignment		25%		15%	25%							15%
Project Traffic Direction		IN		OUT	OUT							IN
Project Traffic		6		4	7							3
2025 Total Background Traffic	16	290	31	78	348	6	7	85	15	21	54	58
2025 Total Traffic	16	296	31	82	355	6	7	85	15	21	54	61

INTERSECTION VOLUME DEVELOPMENT

Oleander Avenue & Bell Avenue

WEEKDAY AM PEAK HOUR (8:00 AM to 9:00 AM)	Oleander Avenue			Oleander Avenue			Bell Avenue			Driveway		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 11/15/2022	47	212	6	8	256	67	78	8	77	0	0	7
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	49	223	6	8	269	70	82	8	81	0	0	7
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	3	15	0	1	18	5	6	1	5	0	0	0
Oleander Oaks Vested Trips	2	20			7				1			
American Silicone Vested Trips	5	52			61				6			
Background Traffic	8	67	0	1	79	5	6	1	11	0	0	0
Project Traffic % Assignment	5%	55%			55%				5%			
Project Traffic Direction	OUT	OUT			IN				IN			
Project Traffic	1	6			8				1			
2025 Total Background Traffic	57	290	6	9	348	75	88	9	92	0	0	7
2025 Total Traffic	58	296	6	9	356	75	88	9	93	0	0	7

WEEKDAY PM PEAK HOUR (4:15 PM to 5:15 PM)	Oleander Avenue			Oleander Avenue			Bell Avenue			Driveway		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 11/15/2022	68	325	3	2	280	65	74	0	94	5	4	7
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	71	341	3	2	294	68	78	0	99	5	4	7
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	5	23	0	0	20	5	5	0	7	0	0	0
Oleander Oaks Vested Trips	1	13			23				2			
American Silicone Vested Trips	3	31			24				2			
Background Traffic	8	54	0	0	44	5	5	0	9	0	0	0
Project Traffic % Assignment	5%	55%			55%				5%			
Project Traffic Direction	OUT	OUT			IN				IN			
Project Traffic	1	14			13				1			
2025 Total Background Traffic	79	395	3	2	338	73	83	0	108	5	4	7
2025 Total Traffic	80	409	3	2	351	73	83	0	109	5	4	7

INTERSECTION VOLUME DEVELOPMENT

Oleander Avenue & Farmers Market Road

WEEKDAY AM PEAK HOUR (8:00 AM to 9:00 AM)	Oleander Avenue			Oleander Avenue			Driveway			Farmers Market Road		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 11/15/2022	0	252	47	16	290	0	0	0	0	40	0	30
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	0	265	49	17	305	0	0	0	0	42	0	32
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	0	18	3	1	21	0	0	0	0	3	0	2
Oleander Oaks Vested Trips		17	3		6					1		
American Silicone Vested Trips		42	10		50					11		
Background Traffic	0	60	13	1	71	0	0	0	0	14	0	2
Project Traffic % Assignment		45%	10%		45%					10%		
Project Traffic Direction		OUT	OUT		IN					IN		
Project Traffic		5	1		6					1		
2025 Total Background Traffic	0	325	62	18	376	0	0	0	0	56	0	34
2025 Total Traffic	0	330	63	18	382	0	0	0	0	57	0	34

WEEKDAY PM PEAK HOUR (4:15 PM to 5:15 PM)	Oleander Avenue			Oleander Avenue			Driveway			Farmers Market Road		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 11/15/2022	0	354	49	26	301	0	0	0	0	48	0	40
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	0	372	51	27	316	0	0	0	0	50	0	42
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	0	25	3	2	21	0	0	0	0	3	0	3
Oleander Oaks Vested Trips		11	2		19					4		
American Silicone Vested Trips		25	6		20					4		
Background Traffic	0	50	9	2	41	0	0	0	0	7	0	3
Project Traffic % Assignment		45%	10%		45%					10%		
Project Traffic Direction		OUT	OUT		IN					IN		
Project Traffic		12	2		20					2		
2025 Total Background Traffic	0	422	60	29	357	0	0	0	0	57	0	45
2025 Total Traffic	0	434	62	29	377	0	0	0	0	59	0	45

INTERSECTION VOLUME DEVELOPMENT

Oleander Avenue & Edwards Road

WEEKDAY AM PEAK HOUR (8:00 AM to 9:00 AM)	Oleander Avenue			Oleander Avenue			Edwards Road			Edwards Road		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 11/15/2022	140	190	28	29	207	68	44	267	152	17	155	12
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	147	200	29	30	217	71	46	280	160	18	163	13
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	10	14	2	2	15	5	3	19	11	1	11	1
Oleander Oaks Vested Trips	8	9			3				3			
American Silicone Vested Trips	18	24			28				22			
Background Traffic	28	38	2	2	43	5	3	19	33	1	11	1
Project Traffic % Assignment	20%	25%			25%				20%			
Project Traffic Direction	OUT	OUT			IN				IN			
Project Traffic	18	3			4				3			
2025 Total Background Traffic	175	238	31	32	260	76	49	299	193	19	174	14
2025 Total Traffic	193	241	31	32	264	76	49	299	196	19	174	14

WEEKDAY PM PEAK HOUR (4:45 PM to 5:45 PM)	Oleander Avenue			Oleander Avenue			Edwards Road			Edwards Road		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Counted on 11/15/2022	178	296	26	24	251	96	74	219	180	17	286	8
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	187	311	27	25	264	101	78	230	189	18	300	8
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	13	21	2	2	18	7	5	16	13	1	20	1
Oleander Oaks Vested Trips	5	6			11				8			
American Silicone Vested Trips	11	14			11				9			
Background Traffic	24	35	2	2	29	7	5	16	22	1	20	1
Project Traffic % Assignment	20%	25%			25%				20%			
Project Traffic Direction	OUT	OUT			IN				IN			
Project Traffic	5	7			6				5			
2025 Total Background Traffic	211	346	29	27	293	108	83	246	211	19	320	9
2025 Total Traffic	216	353	29	27	299	108	83	246	216	19	320	9

INTERSECTION VOLUME DEVELOPMENT

Oleander Avenue & Project Driveway

WEEKDAY AM PEAK HOUR (8:00 AM to 9:00 AM)	Oleander Avenue			Oleander Avenue			Project Driveway			-		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	N/A	N/A	N/A
Counted on 11/15/2022		264			333							
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	0	277	0	0	350	0	0	0	0	0	0	0
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	0	19	0	0	24	0	0	0	0	0	0	0
Oleander Oaks Vested Trips		22			8							
American Silicone Vested Trips		57			67							
Project Traffic % Assignment	40%					60%	60%			40%		
Project Traffic Direction	IN					IN	OUT			OUT		
Project Trips	6					8	7			4		
Pass-by Trips	4	-4			-4	4	3			3		
2025 Total Background Traffic	0	353	0	0	441	0	0	0	0	0	0	0
2025 Total Traffic	10	349	0	0	437	12	10	0	7	0	0	0

WEEKDAY PM PEAK HOUR (4:15 PM to 5:15 PM)	Oleander Avenue			Oleander Avenue			Project Driveway			-		
	Northbound			Southbound			Eastbound			Westbound		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	N/A	N/A	N/A
Counted on 11/15/2022		288			379							
Peak Season Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
2022 Total Existing Traffic	0	302	0	0	398	0	0	0	0	0	0	0
Annual Growth Rate	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
2025 Background Growth	0	20	0	0	27	0	0	0	0	0	0	0
Oleander Oaks Vested Trips		14			25							
American Silicone Vested Trips		34			26							
Project Traffic % Assignment	40%					60%	60%			40%		
Project Traffic Direction	IN					IN	OUT			OUT		
Project Trips	9					14	16			10		
Pass-by Trips	6	-6			-6	6	8			8		
2025 Total Background Traffic	0	370	0	0	476	0	0	0	0	0	0	0
2025 Total Traffic	15	364	0	0	470	20	24	0	18	0	0	0

APPENDIX H

Signal Timing/Phasing Plans

St. Lucie County



MOVING TRAFFIC FORWARD

00011 - EDWARDS RD @ OLEANDER AVE - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Q in use

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N-L	S-T	E-L	W-T	S-L	N-T	W-L	E-T	N	N	N	N	N	N	N	N
Min Green	8	10	6	10	8	10	6	10	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	7	0	7	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	15	0	19	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	4.0	3.0	3.0	3.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	10	30	10	30	10	30	10	30	35	35	35	35	35	35	35	35
Max2	0	0	0	0	0	0	0	0	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

APPENDIX I

Synchro Outputs

Lanes, Volumes, Timings
 1: Oleander Ave & Weatherbee Rd

2022 Existing Traffic Conditions
 Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	7	81	15	17	79	34	5	236	35	34	213	4
Future Volume (vph)	7	81	15	17	79	34	5	236	35	34	213	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	7%	7%	7%	8%	8%	8%
Adj. Flow (vph)	8	87	16	18	85	37	5	254	38	37	229	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	0	0	140	0	0	297	0	0	270	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	81	15	17	79	34	5	236	35	34	213	4
Future Vol, veh/h	7	81	15	17	79	34	5	236	35	34	213	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	7	7	7	8	8	8
Mvmt Flow	8	87	16	18	85	37	5	254	38	37	229	4

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	649	607	231	640	590	273	233	0	0	292	0	0
Stage 1	305	305	-	283	283	-	-	-	-	-	-	-
Stage 2	344	302	-	357	307	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.17	-	-	4.18	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.263	-	-	2.272	-	-
Pot Cap-1 Maneuver	384	412	811	388	420	766	1306	-	-	1236	-	-
Stage 1	707	664	-	724	677	-	-	-	-	-	-	-
Stage 2	673	666	-	661	661	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	298	396	811	307	404	766	1306	-	-	1236	-	-
Mov Cap-2 Maneuver	298	396	-	307	404	-	-	-	-	-	-	-
Stage 1	703	641	-	720	674	-	-	-	-	-	-	-
Stage 2	557	663	-	541	639	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.7	16.9	0.1	1.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1306	-	-	418	440	1236	-	-
HCM Lane V/C Ratio	0.004	-	-	0.265	0.318	0.03	-	-
HCM Control Delay (s)	7.8	0	-	16.7	16.9	8	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.1	1.3	0.1	-	-

Lanes, Volumes, Timings
2: Oleander Ave & Bell Ave

2022 Existing Traffic Conditions
Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	82	8	81	0	0	7	49	223	6	8	269	70
Future Volume (vph)	82	8	81	0	0	7	49	223	6	8	269	70
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	9%	9%	9%	43%	43%	43%	7%	7%	7%	9%	9%	9%
Adj. Flow (vph)	88	9	87	0	0	8	53	240	6	9	289	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	184	0	0	8	0	0	299	0	0	373	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	82	8	81	0	0	7	49	223	6	8	269	70
Future Vol, veh/h	82	8	81	0	0	7	49	223	6	8	269	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	9	9	9	43	43	43	7	7	7	9	9	9
Mvmt Flow	88	9	87	0	0	8	53	240	6	9	289	75

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	698	697	327	742	731	243	364	0	0	246	0	0
Stage 1	345	345	-	349	349	-	-	-	-	-	-	-
Stage 2	353	352	-	393	382	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.53	6.93	6.63	4.17	-	-	4.19	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.53	5.93	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.53	5.93	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.887	4.387	3.687	2.263	-	-	2.281	-	-
Pot Cap-1 Maneuver	346	356	698	285	304	705	1167	-	-	1280	-	-
Stage 1	656	624	-	590	567	-	-	-	-	-	-	-
Stage 2	650	619	-	557	547	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	326	334	698	233	285	705	1167	-	-	1280	-	-
Mov Cap-2 Maneuver	326	334	-	233	285	-	-	-	-	-	-	-
Stage 1	621	618	-	559	537	-	-	-	-	-	-	-
Stage 2	609	586	-	476	542	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	19.1		10.2		1.5		0.2	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1167	-	-	437	705	1280	-	-
HCM Lane V/C Ratio	0.045	-	-	0.421	0.011	0.007	-	-
HCM Control Delay (s)	8.2	0	-	19.1	10.2	7.8	0	-
HCM Lane LOS	A	A	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	2	0	0	-	-

Lanes, Volumes, Timings
 3: Oleander Ave & Farmers Market Rd

2022 Existing Traffic Conditions
 Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	0	0	0	42	0	32	0	265	49	17	305	0
Future Volume (vph)	0	0	0	42	0	32	0	265	49	17	305	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	13%	13%	13%	6%	6%	6%	9%	9%	9%
Adj. Flow (vph)	0	0	0	45	0	34	0	285	53	18	328	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	79	0	0	338	0	0	346	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	42	0	32	0	265	49	17	305	0
Future Vol, veh/h	0	0	0	42	0	32	0	265	49	17	305	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	13	13	13	6	6	6	9	9	9
Mvmt Flow	0	0	0	45	0	34	0	285	53	18	328	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	693	702	328	676	676	312	328	0	0	338	0	0
Stage 1	364	364	-	312	312	-	-	-	-	-	-	-
Stage 2	329	338	-	364	364	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.23	6.63	6.33	4.16	-	-	4.19	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.23	5.63	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.23	5.63	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.617	4.117	3.417	2.254	-	-	2.281	-	-
Pot Cap-1 Maneuver	360	365	718	353	362	703	1209	-	-	1183	-	-
Stage 1	659	627	-	676	638	-	-	-	-	-	-	-
Stage 2	688	644	-	633	605	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	337	358	718	348	355	703	1209	-	-	1183	-	-
Mov Cap-2 Maneuver	337	358	-	348	355	-	-	-	-	-	-	-
Stage 1	659	615	-	676	638	-	-	-	-	-	-	-
Stage 2	654	644	-	621	594	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	14.8	0	0.4
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1209	-	-	-	445	1183	-	-
HCM Lane V/C Ratio	-	-	-	-	0.179	0.015	-	-
HCM Control Delay (s)	0	-	-	0	14.8	8.1	0	-
HCM Lane LOS	A	-	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.6	0	-	-

Lanes, Volumes, Timings
4: Oleander Ave & Edwards Rd

2022 Existing Traffic Conditions
Timing Plan: AM Peak Hour

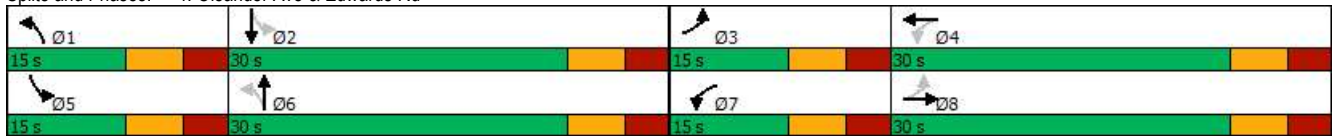


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	280	160	18	163	13	147	200	29	30	217	71
Future Volume (vph)	46	280	160	18	163	13	147	200	29	30	217	71
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	3%	3%	3%	4%	4%	4%
Adj. Flow (vph)	47	289	165	19	168	13	152	206	30	31	224	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	454	0	19	181	0	152	236	0	31	297	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	3	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0		8.0	10.0		8.0	10.0	
Minimum Split (s)	13.0	17.0		13.0	17.0		15.0	17.0		15.0	17.0	
Total Split (s)	15.0	30.0		15.0	30.0		15.0	30.0		15.0	30.0	
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.12	0.49		0.06	0.25		0.35	0.36		0.07	0.65	
Control Delay	16.8	19.1		16.2	25.0		16.1	21.8		13.9	30.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.8	19.1		16.2	25.0		16.1	21.8		13.9	30.9	
Queue Length 50th (ft)	13	53		5	35		37	58		7	108	
Queue Length 95th (ft)	37	130		20	68		92	180		26	225	
Internal Link Dist (ft)		2737			3439			4912			1451	
Turn Bay Length (ft)	295			350			150					
Base Capacity (vph)	398	1340		354	1325		432	798		472	713	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.12	0.34		0.05	0.14		0.35	0.30		0.07	0.42	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 64.9
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Oleander Ave & Edwards Rd



HCM 6th Signalized Intersection Summary
4: Oleander Ave & Edwards Rd

2022 Existing Traffic Conditions
Timing Plan: AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	280	160	18	163	13	147	200	29	30	217	71
Future Volume (veh/h)	46	280	160	18	163	13	147	200	29	30	217	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	47	289	0	19	168	0	152	206	30	31	224	73
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	3	3	3	4	4	4
Cap, veh/h	344	638		279	547		385	441	64	402	282	92
Arrive On Green	0.05	0.19	0.00	0.03	0.16	0.00	0.12	0.28	0.28	0.05	0.21	0.21
Sat Flow, veh/h	1697	3474	0	1697	3474	0	1767	1583	231	1753	1329	433
Grp Volume(v), veh/h	47	289	0	19	168	0	152	0	236	31	0	297
Grp Sat Flow(s),veh/h/ln	1697	1692	0	1697	1692	0	1767	0	1814	1753	0	1763
Q Serve(g_s), s	1.4	4.7	0.0	0.6	2.7	0.0	3.9	0.0	6.7	0.8	0.0	9.9
Cycle Q Clear(g_c), s	1.4	4.7	0.0	0.6	2.7	0.0	3.9	0.0	6.7	0.8	0.0	9.9
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.13	1.00		0.25
Lane Grp Cap(c), veh/h	344	638		279	547		385	0	505	402	0	374
V/C Ratio(X)	0.14	0.45		0.07	0.31		0.40	0.00	0.47	0.08	0.00	0.79
Avail Cap(c_a), veh/h	472	1259		453	1259		401	0	675	535	0	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.6	22.3	0.0	20.7	22.9	0.0	16.0	0.0	18.5	17.0	0.0	23.1
Incr Delay (d2), s/veh	0.2	0.7	0.0	0.1	0.4	0.0	0.7	0.0	0.7	0.1	0.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.8	0.0	0.2	1.0	0.0	1.5	0.0	2.6	0.3	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	23.0	0.0	20.8	23.3	0.0	16.7	0.0	19.2	17.1	0.0	26.9
LnGrp LOS	B	C		C	C		B	A	B	B	A	C
Approach Vol, veh/h		336	A		187	A		388			328	
Approach Delay, s/veh		22.6			23.1			18.2			26.0	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.4	20.1	10.3	17.0	10.3	24.2	8.7	18.7				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	8.0	23.0	8.0	23.0	8.0	23.0	8.0	23.0				
Max Q Clear Time (g_c+I1), s	5.9	11.9	3.4	4.7	2.8	8.7	2.6	6.7				
Green Ext Time (p_c), s	0.1	1.2	0.0	1.2	0.0	1.1	0.0	2.1				

Intersection Summary												
HCM 6th Ctrl Delay											22.2	
HCM 6th LOS											C	

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
 1: Oleander Ave & Weatherbee Rd

2021 Existing Traffic Conditions
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	7	80	14	20	51	43	15	252	29	62	307	6
Future Volume (vph)	7	80	14	20	51	43	15	252	29	62	307	6
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	7%	7%	7%
Adj. Flow (vph)	8	94	16	24	60	51	18	296	34	73	361	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	135	0	0	348	0	0	441	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	7.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	80	14	20	51	43	15	252	29	62	307	6
Future Vol, veh/h	7	80	14	20	51	43	15	252	29	62	307	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	7	7	7
Mvmt Flow	8	94	16	24	60	51	18	296	34	73	361	7

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	916	877	365	915	863	313	368	0	0	330	0	0
Stage 1	511	511	-	349	349	-	-	-	-	-	-	-
Stage 2	405	366	-	566	514	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.17	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.263	-	-
Pot Cap-1 Maneuver	251	285	676	251	290	723	1180	-	-	1202	-	-
Stage 1	542	534	-	663	630	-	-	-	-	-	-	-
Stage 2	618	619	-	505	532	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	179	258	676	164	263	723	1180	-	-	1202	-	-
Mov Cap-2 Maneuver	179	258	-	164	263	-	-	-	-	-	-	-
Stage 1	532	493	-	650	618	-	-	-	-	-	-	-
Stage 2	509	607	-	368	492	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	28	25.9	0.4	1.4
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1180	-	-	273	304	1202	-	-
HCM Lane V/C Ratio	0.015	-	-	0.435	0.441	0.061	-	-
HCM Control Delay (s)	8.1	0	-	28	25.9	8.2	0	-
HCM Lane LOS	A	A	-	D	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	2.1	2.2	0.2	-	-

Lanes, Volumes, Timings
2: Oleander Ave & Bell Ave

2021 Existing Traffic Conditions
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	78	0	99	5	4	7	71	341	3	2	294	68
Future Volume (vph)	78	0	99	5	4	7	71	341	3	2	294	68
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	4%	4%	13%	13%	13%	3%	3%	3%	6%	6%	6%
Adj. Flow (vph)	88	0	111	6	4	8	80	383	3	2	330	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	199	0	0	18	0	0	466	0	0	408	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	78	0	99	5	4	7	71	341	3	2	294	68
Future Vol, veh/h	78	0	99	5	4	7	71	341	3	2	294	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	4	4	4	13	13	13	3	3	3	6	6	6
Mvmt Flow	88	0	111	6	4	8	80	383	3	2	330	76

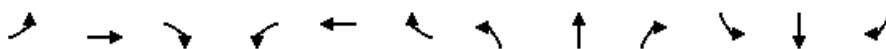
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	923	918	368	973	955	385	406	0	0	386	0	0
Stage 1	372	372	-	545	545	-	-	-	-	-	-	-
Stage 2	551	546	-	428	410	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.23	6.63	6.33	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.23	5.63	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.23	5.63	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.617	4.117	3.417	2.227	-	-	2.254	-	-
Pot Cap-1 Maneuver	248	270	673	221	248	639	1147	-	-	1151	-	-
Stage 1	644	615	-	503	501	-	-	-	-	-	-	-
Stage 2	515	515	-	584	577	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	224	245	673	172	225	639	1147	-	-	1151	-	-
Mov Cap-2 Maneuver	224	245	-	172	225	-	-	-	-	-	-	-
Stage 1	587	614	-	458	456	-	-	-	-	-	-	-
Stage 2	459	469	-	486	576	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27	18.9	1.4	0
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1147	-	-	357	277	1151	-	-
HCM Lane V/C Ratio	0.07	-	-	0.557	0.065	0.002	-	-
HCM Control Delay (s)	8.4	0	-	27	18.9	8.1	0	-
HCM Lane LOS	A	A	-	D	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	3.2	0.2	0	-	-

Lanes, Volumes, Timings
 3: Oleander Ave & Farmers Market Rd

2021 Existing Traffic Conditions
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	0	0	0	50	0	42	0	372	51	27	316	0
Future Volume (vph)	0	0	0	50	0	42	0	372	51	27	316	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	10%	10%	10%	3%	3%	3%	6%	6%	6%
Adj. Flow (vph)	0	0	0	55	0	46	0	409	56	30	347	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	101	0	0	465	0	0	377	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	50	0	42	0	372	51	27	316	0
Future Vol, veh/h	0	0	0	50	0	42	0	372	51	27	316	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	10	10	10	3	3	3	6	6	6
Mvmt Flow	0	0	0	55	0	46	0	409	56	30	347	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	867	872	347	844	844	437	347	0	0	465	0	0
Stage 1	407	407	-	437	437	-	-	-	-	-	-	-
Stage 2	460	465	-	407	407	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.2	6.6	6.3	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.59	4.09	3.39	2.227	-	-	2.254	-	-
Pot Cap-1 Maneuver	275	291	701	274	291	603	1206	-	-	1076	-	-
Stage 1	625	601	-	583	566	-	-	-	-	-	-	-
Stage 2	585	566	-	605	584	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	247	281	701	267	281	603	1206	-	-	1076	-	-
Mov Cap-2 Maneuver	247	281	-	267	281	-	-	-	-	-	-	-
Stage 1	625	580	-	583	566	-	-	-	-	-	-	-
Stage 2	540	566	-	584	564	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	19	0	0.7
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1206	-	-	-	358	1076	-	-
HCM Lane V/C Ratio	-	-	-	-	0.282	0.028	-	-
HCM Control Delay (s)	0	-	-	0	19	8.4	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	1.1	0.1	-	-

Lanes, Volumes, Timings
4: Oleander Ave & Edwards Rd

2021 Existing Traffic Conditions
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	230	189	18	300	8	187	311	27	25	264	101
Future Volume (vph)	78	230	189	18	300	8	187	311	27	25	264	101
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	81	240	197	19	313	8	195	324	28	26	275	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	437	0	19	321	0	195	352	0	26	380	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	3	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0		8.0	10.0		8.0	10.0	
Minimum Split (s)	13.0	17.0		13.0	17.0		15.0	17.0		15.0	17.0	
Total Split (s)	15.0	30.0		15.0	30.0		15.0	30.0		15.0	30.0	
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.24	0.44		0.06	0.50		0.54	0.48		0.06	0.79	
Control Delay	19.0	14.8		17.3	31.4		20.7	23.8		13.2	39.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.0	14.8		17.3	31.4		20.7	23.8		13.2	39.1	
Queue Length 50th (ft)	27	42		6	76		56	109		7	163	
Queue Length 95th (ft)	56	102		20	117		#113	#268		22	#313	
Internal Link Dist (ft)		2737			3439			4912			1451	
Turn Bay Length (ft)	295			350			150					
Base Capacity (vph)	351	1217		331	1100		364	731		456	581	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.23	0.36		0.06	0.29		0.54	0.48		0.06	0.65	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 74.2

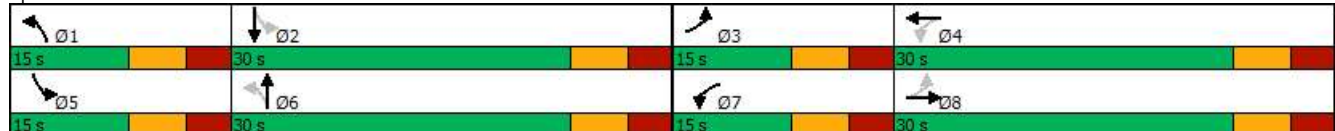
Natural Cycle: 65

Control Type: Actuated-Uncoordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Oleander Ave & Edwards Rd



HCM 6th Signalized Intersection Summary
4: Oleander Ave & Edwards Rd

2021 Existing Traffic Conditions
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	230	189	18	300	8	187	311	27	25	264	101
Future Volume (veh/h)	78	230	189	18	300	8	187	311	27	25	264	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1826	1826	1826	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	81	240	0	19	312	0	195	324	28	26	275	105
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	3	3	3
Cap, veh/h	292	656		297	513		359	544	47	352	324	124
Arrive On Green	0.07	0.19	0.00	0.03	0.15	0.00	0.12	0.32	0.32	0.05	0.25	0.25
Sat Flow, veh/h	1725	3532	0	1739	3561	0	1767	1684	146	1767	1279	488
Grp Volume(v), veh/h	81	240	0	19	312	0	195	0	352	26	0	380
Grp Sat Flow(s),veh/h/ln	1725	1721	0	1739	1735	0	1767	0	1829	1767	0	1768
Q Serve(g_s), s	2.6	4.1	0.0	0.6	5.7	0.0	5.3	0.0	10.9	0.7	0.0	13.8
Cycle Q Clear(g_c), s	2.6	4.1	0.0	0.6	5.7	0.0	5.3	0.0	10.9	0.7	0.0	13.8
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.08	1.00		0.28
Lane Grp Cap(c), veh/h	292	656		297	513		359	0	591	352	0	448
V/C Ratio(X)	0.28	0.37		0.06	0.61		0.54	0.00	0.60	0.07	0.00	0.85
Avail Cap(c_a), veh/h	376	1171		457	1180		364	0	622	480	0	601
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.0	23.8	0.0	23.3	27.0	0.0	16.9	0.0	19.2	17.2	0.0	24.0
Incr Delay (d2), s/veh	0.5	0.5	0.0	0.1	1.7	0.0	1.6	0.0	1.4	0.1	0.0	8.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.6	0.0	0.2	2.3	0.0	2.1	0.0	4.4	0.3	0.0	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	24.3	0.0	23.4	28.6	0.0	18.5	0.0	20.6	17.2	0.0	32.5
LnGrp LOS	C	C		C	C		B	A	C	B	A	C
Approach Vol, veh/h		321	A		331	A		547			406	
Approach Delay, s/veh		23.8			28.3			19.9			31.5	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.8	24.1	11.7	17.0	10.1	28.8	8.8	19.9				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	8.0	23.0	8.0	23.0	8.0	23.0	8.0	23.0				
Max Q Clear Time (g_c+I1), s	7.3	15.8	4.6	7.7	2.7	12.9	2.6	6.1				
Green Ext Time (p_c), s	0.0	1.3	0.0	2.2	0.0	1.4	0.0	1.7				

Intersection Summary												
HCM 6th Ctrl Delay											25.4	
HCM 6th LOS											C	

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
 1: Oleander Ave & Weatherbee Rd

2025 Background Traffic Conditions
 Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	7	86	16	18	84	54	5	283	37	56	260	4
Future Volume (vph)	7	86	16	18	84	54	5	283	37	56	260	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	7%	7%	7%	8%	8%	8%
Adj. Flow (vph)	8	92	17	19	90	58	5	304	40	60	280	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	167	0	0	349	0	0	344	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	86	16	18	84	54	5	283	37	56	260	4
Future Vol, veh/h	7	86	16	18	84	54	5	283	37	56	260	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	7	7	7	8	8	8
Mvmt Flow	8	92	17	19	90	58	5	304	40	60	280	4

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	810	756	282	791	738	324	284	0	0	344	0	0
Stage 1	402	402	-	334	334	-	-	-	-	-	-	-
Stage 2	408	354	-	457	404	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.17	-	-	4.18	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.263	-	-	2.272	-	-
Pot Cap-1 Maneuver	300	339	759	307	346	717	1250	-	-	1182	-	-
Stage 1	627	602	-	680	643	-	-	-	-	-	-	-
Stage 2	622	632	-	583	599	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	206	317	759	221	324	717	1250	-	-	1182	-	-
Mov Cap-2 Maneuver	206	317	-	221	324	-	-	-	-	-	-	-
Stage 1	624	566	-	677	640	-	-	-	-	-	-	-
Stage 2	489	629	-	448	563	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	21.5		22.1		0.1		1.4	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1250	-	-	334	375	1182	-	-
HCM Lane V/C Ratio	0.004	-	-	0.351	0.447	0.051	-	-
HCM Control Delay (s)	7.9	0	-	21.5	22.1	8.2	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.5	2.2	0.2	-	-

Lanes, Volumes, Timings
2: Oleander Ave & Bell Ave

2025 Background Traffic Conditions
Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	88	9	92	0	0	7	57	290	6	9	348	75
Future Volume (vph)	88	9	92	0	0	7	57	290	6	9	348	75
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	9%	9%	9%	43%	43%	43%	7%	7%	7%	9%	9%	9%
Adj. Flow (vph)	95	10	99	0	0	8	61	312	6	10	374	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	204	0	0	8	0	0	379	0	0	465	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	88	9	92	0	0	7	57	290	6	9	348	75
Future Vol, veh/h	88	9	92	0	0	7	57	290	6	9	348	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	9	9	9	43	43	43	7	7	7	9	9	9
Mvmt Flow	95	10	99	0	0	8	61	312	6	10	374	81

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	876	875	415	926	912	315	455	0	0	318	0	0
Stage 1	435	435	-	437	437	-	-	-	-	-	-	-
Stage 2	441	440	-	489	475	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.53	6.93	6.63	4.17	-	-	4.19	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.53	5.93	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.53	5.93	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.887	4.387	3.687	2.263	-	-	2.281	-	-
Pot Cap-1 Maneuver	262	280	623	211	235	640	1080	-	-	1204	-	-
Stage 1	586	569	-	526	515	-	-	-	-	-	-	-
Stage 2	582	566	-	491	494	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	243	258	623	162	216	640	1080	-	-	1204	-	-
Mov Cap-2 Maneuver	243	258	-	162	216	-	-	-	-	-	-	-
Stage 1	546	563	-	490	479	-	-	-	-	-	-	-
Stage 2	535	527	-	401	489	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29	10.7	1.4	0.2
HCM LOS	D	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1080	-	-	347	640	1204	-	-
HCM Lane V/C Ratio	0.057	-	-	0.586	0.012	0.008	-	-
HCM Control Delay (s)	8.5	0	-	29	10.7	8	0	-
HCM Lane LOS	A	A	-	D	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	3.5	0	0	-	-

Lanes, Volumes, Timings
 3: Oleander Ave & Farmers Market Rd

2025 Background Traffic Conditions
 Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	0	0	0	56	0	34	0	325	62	18	376	0
Future Volume (vph)	0	0	0	56	0	34	0	325	62	18	376	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	13%	13%	13%	6%	6%	6%	9%	9%	9%
Adj. Flow (vph)	0	0	0	60	0	37	0	349	67	19	404	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	97	0	0	416	0	0	423	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	56	0	34	0	325	62	18	376	0
Future Vol, veh/h	0	0	0	56	0	34	0	325	62	18	376	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	13	13	13	6	6	6	9	9	9
Mvmt Flow	0	0	0	60	0	37	0	349	67	19	404	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	843	858	404	825	825	383	404	0	0	416	0	0
Stage 1	442	442	-	383	383	-	-	-	-	-	-	-
Stage 2	401	416	-	442	442	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.23	6.63	6.33	4.16	-	-	4.19	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.23	5.63	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.23	5.63	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.617	4.117	3.417	2.254	-	-	2.281	-	-
Pot Cap-1 Maneuver	286	297	651	279	296	641	1133	-	-	1106	-	-
Stage 1	598	580	-	618	593	-	-	-	-	-	-	-
Stage 2	630	595	-	574	558	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	265	290	651	274	289	641	1133	-	-	1106	-	-
Mov Cap-2 Maneuver	265	290	-	274	289	-	-	-	-	-	-	-
Stage 1	598	567	-	618	593	-	-	-	-	-	-	-
Stage 2	594	595	-	561	546	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	19.2	0	0.4
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1133	-	-	-	350	1106	-	-
HCM Lane V/C Ratio	-	-	-	-	0.276	0.017	-	-
HCM Control Delay (s)	0	-	-	0	19.2	8.3	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	1.1	0.1	-	-

Lanes, Volumes, Timings
4: Oleander Ave & Edwards Rd

2025 Background Traffic Conditions
Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	299	193	19	174	14	175	238	31	32	260	76
Future Volume (vph)	49	299	193	19	174	14	175	238	31	32	260	76
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	3%	3%	3%	4%	4%	4%
Adj. Flow (vph)	51	308	199	20	179	14	180	245	32	33	268	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	507	0	20	193	0	180	277	0	33	346	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	3	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0		8.0	10.0		8.0	10.0	
Minimum Split (s)	13.0	17.0		13.0	17.0		15.0	17.0		15.0	17.0	
Total Split (s)	15.0	30.0		15.0	30.0		15.0	30.0		15.0	30.0	
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.14	0.56		0.07	0.28		0.45	0.37		0.07	0.76	
Control Delay	17.4	19.4		16.8	25.7		18.4	21.9		14.1	37.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.4	19.4		16.8	25.7		18.4	21.9		14.1	37.0	
Queue Length 50th (ft)	15	60		6	40		45	72		8	135	
Queue Length 95th (ft)	39	139		20	72		109	216		28	#295	
Internal Link Dist (ft)		2737			3439			4912			1451	
Turn Bay Length (ft)	295			350			150					
Base Capacity (vph)	367	1195		303	1140		400	743		479	616	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.14	0.42		0.07	0.17		0.45	0.37		0.07	0.56	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 70.6

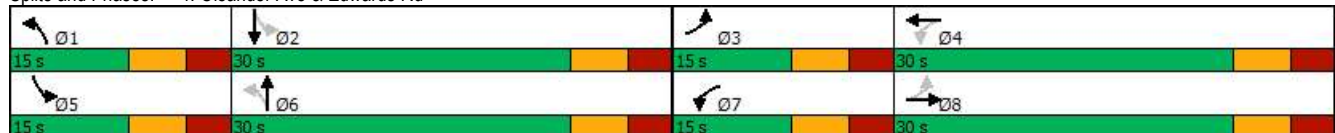
Natural Cycle: 65

Control Type: Actuated-Uncoordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Oleander Ave & Edwards Rd



HCM 6th Signalized Intersection Summary
4: Oleander Ave & Edwards Rd

2025 Background Traffic Conditions
Timing Plan: AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	299	193	19	174	14	175	238	31	32	260	76
Future Volume (veh/h)	49	299	193	19	174	14	175	238	31	32	260	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	51	308	0	20	179	0	180	245	32	33	268	78
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	3	3	3	4	4	4
Cap, veh/h	329	618		262	524		375	483	63	398	325	95
Arrive On Green	0.06	0.18	0.00	0.03	0.15	0.00	0.12	0.30	0.30	0.06	0.24	0.24
Sat Flow, veh/h	1697	3474	0	1697	3474	0	1767	1608	210	1753	1370	399
Grp Volume(v), veh/h	51	308	0	20	179	0	180	0	277	33	0	346
Grp Sat Flow(s),veh/h/ln	1697	1692	0	1697	1692	0	1767	0	1818	1753	0	1769
Q Serve(g_s), s	1.6	5.3	0.0	0.6	3.0	0.0	4.7	0.0	8.1	0.9	0.0	12.0
Cycle Q Clear(g_c), s	1.6	5.3	0.0	0.6	3.0	0.0	4.7	0.0	8.1	0.9	0.0	12.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.12	1.00		0.23
Lane Grp Cap(c), veh/h	329	618		262	524		375	0	547	398	0	419
V/C Ratio(X)	0.15	0.50		0.08	0.34		0.48	0.00	0.51	0.08	0.00	0.83
Avail Cap(c_a), veh/h	445	1205		424	1205		383	0	647	518	0	630
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.8	23.7	0.0	21.9	24.4	0.0	16.3	0.0	18.6	16.6	0.0	23.4
Incr Delay (d2), s/veh	0.2	0.9	0.0	0.1	0.5	0.0	1.0	0.0	0.7	0.1	0.0	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.0	0.0	0.2	1.2	0.0	1.8	0.0	3.2	0.3	0.0	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	24.6	0.0	22.0	24.9	0.0	17.2	0.0	19.4	16.7	0.0	28.9
LnGrp LOS	C	C		C	C		B	A	B	B	A	C
Approach Vol, veh/h		359	A		199	A		457			379	
Approach Delay, s/veh		24.1			24.6			18.5			27.9	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	22.3	10.6	17.0	10.6	26.4	8.8	18.8				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	8.0	23.0	8.0	23.0	8.0	23.0	8.0	23.0				
Max Q Clear Time (g_c+I1), s	6.7	14.0	3.6	5.0	2.9	10.1	2.6	7.3				
Green Ext Time (p_c), s	0.1	1.3	0.0	1.3	0.0	1.2	0.0	2.2				
Intersection Summary												
HCM 6th Ctrl Delay			23.4									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes, Volumes, Timings
 1: Oleander Ave & Weatherbee Rd

2025 Background Traffic Conditions
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	7	85	15	21	54	58	16	290	31	78	348	6
Future Volume (vph)	7	85	15	21	54	58	16	290	31	78	348	6
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	7%	7%	7%
Adj. Flow (vph)	8	100	18	25	64	68	19	341	36	92	409	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	126	0	0	157	0	0	396	0	0	508	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	10.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	85	15	21	54	58	16	290	31	78	348	6
Future Vol, veh/h	7	85	15	21	54	58	16	290	31	78	348	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	7	7	7
Mvmt Flow	8	100	18	25	64	68	19	341	36	92	409	7

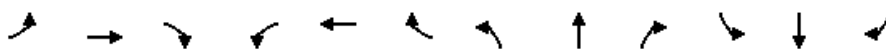
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1060	1012	413	1053	997	359	416	0	0	377	0	0
Stage 1	597	597	-	397	397	-	-	-	-	-	-	-
Stage 2	463	415	-	656	600	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.17	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.263	-	-
Pot Cap-1 Maneuver	200	237	635	202	242	681	1132	-	-	1155	-	-
Stage 1	486	488	-	625	600	-	-	-	-	-	-	-
Stage 2	575	589	-	451	487	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	126	208	635	112	212	681	1132	-	-	1155	-	-
Mov Cap-2 Maneuver	126	208	-	112	212	-	-	-	-	-	-	-
Stage 1	476	437	-	612	587	-	-	-	-	-	-	-
Stage 2	452	577	-	303	436	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	41.5	40.1	0.4	1.5
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1132	-	-	219	252	1155	-	-
HCM Lane V/C Ratio	0.017	-	-	0.575	0.621	0.079	-	-
HCM Control Delay (s)	8.2	0	-	41.5	40.1	8.4	0	-
HCM Lane LOS	A	A	-	E	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	3.2	3.7	0.3	-	-

Lanes, Volumes, Timings
2: Oleander Ave & Bell Ave

2025 Background Traffic Conditions
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	83	0	108	5	4	7	79	395	3	2	338	73
Future Volume (vph)	83	0	108	5	4	7	79	395	3	2	338	73
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	4%	4%	13%	13%	13%	3%	3%	3%	6%	6%	6%
Adj. Flow (vph)	93	0	121	6	4	8	89	444	3	2	380	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	214	0	0	18	0	0	536	0	0	464	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	8.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	83	0	108	5	4	7	79	395	3	2	338	73
Future Vol, veh/h	83	0	108	5	4	7	79	395	3	2	338	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	4	4	4	13	13	13	3	3	3	6	6	6
Mvmt Flow	93	0	121	6	4	8	89	444	3	2	380	82

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1055	1050	421	1110	1090	446	462	0	0	447	0	0
Stage 1	425	425	-	624	624	-	-	-	-	-	-	-
Stage 2	630	625	-	486	466	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.23	6.63	6.33	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.23	5.63	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.23	5.63	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.617	4.117	3.417	2.227	-	-	2.254	-	-
Pot Cap-1 Maneuver	202	225	628	178	206	590	1094	-	-	1092	-	-
Stage 1	603	583	-	455	461	-	-	-	-	-	-	-
Stage 2	466	474	-	543	544	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	179	200	628	132	183	590	1094	-	-	1092	-	-
Mov Cap-2 Maneuver	179	200	-	132	183	-	-	-	-	-	-	-
Stage 1	538	582	-	406	411	-	-	-	-	-	-	-
Stage 2	406	423	-	437	543	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	42.2		22.6		1.4		0	
HCM LOS	E		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1094	-	-	300	223	1092	-	-
HCM Lane V/C Ratio	0.081	-	-	0.715	0.081	0.002	-	-
HCM Control Delay (s)	8.6	0	-	42.2	22.6	8.3	0	-
HCM Lane LOS	A	A	-	E	C	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	5.1	0.3	0	-	-

Lanes, Volumes, Timings
 3: Oleander Ave & Farmers Market Rd

2025 Background Traffic Conditions
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	0	0	0	57	0	45	0	422	60	29	357	0
Future Volume (vph)	0	0	0	57	0	45	0	422	60	29	357	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	10%	10%	10%	3%	3%	3%	6%	6%	6%
Adj. Flow (vph)	0	0	0	63	0	49	0	464	66	32	392	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	112	0	0	530	0	0	424	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	57	0	45	0	422	60	29	357	0
Future Vol, veh/h	0	0	0	57	0	45	0	422	60	29	357	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	10	10	10	3	3	3	6	6	6
Mvmt Flow	0	0	0	63	0	49	0	464	66	32	392	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	978	986	392	953	953	497	392	0	0	530	0	0
Stage 1	456	456	-	497	497	-	-	-	-	-	-	-
Stage 2	522	530	-	456	456	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.2	6.6	6.3	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.59	4.09	3.39	2.227	-	-	2.254	-	-
Pot Cap-1 Maneuver	232	250	661	231	251	557	1161	-	-	1017	-	-
Stage 1	588	572	-	540	532	-	-	-	-	-	-	-
Stage 2	542	530	-	569	555	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	205	240	661	224	241	557	1161	-	-	1017	-	-
Mov Cap-2 Maneuver	205	240	-	224	241	-	-	-	-	-	-	-
Stage 1	588	549	-	540	532	-	-	-	-	-	-	-
Stage 2	494	530	-	546	533	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	23.6	0	0.7
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1161	-	-	-	304	1017	-	-
HCM Lane V/C Ratio	-	-	-	-	0.369	0.031	-	-
HCM Control Delay (s)	0	-	-	0	23.6	8.7	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	1.6	0.1	-	-

Lanes, Volumes, Timings
4: Oleander Ave & Edwards Rd

2025 Background Traffic Conditions
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	246	211	19	320	9	211	346	29	27	293	108
Future Volume (vph)	83	246	211	19	320	9	211	346	29	27	293	108
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	86	256	220	20	333	9	220	360	30	28	305	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	86	476	0	20	342	0	220	390	0	28	418	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	3	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0		8.0	10.0		8.0	10.0	
Minimum Split (s)	13.0	17.0		13.0	17.0		15.0	17.0		15.0	17.0	
Total Split (s)	15.0	30.0		15.0	30.0		15.0	30.0		15.0	30.0	
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.26	0.47		0.07	0.53		0.64	0.52		0.06	0.83	
Control Delay	19.5	14.9		17.3	32.2		25.9	25.2		13.6	42.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.5	14.9		17.3	32.2		25.9	25.2		13.6	42.2	
Queue Length 50th (ft)	29	46		6	83		65	127		7	188	
Queue Length 95th (ft)	59	108		20	124		#152	#339		23	#371	
Internal Link Dist (ft)		2737			3439			4912			1451	
Turn Bay Length (ft)	295			350			150					
Base Capacity (vph)	339	1208		321	1065		344	746		433	563	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.25	0.39		0.06	0.32		0.64	0.52		0.06	0.74	

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 76.3

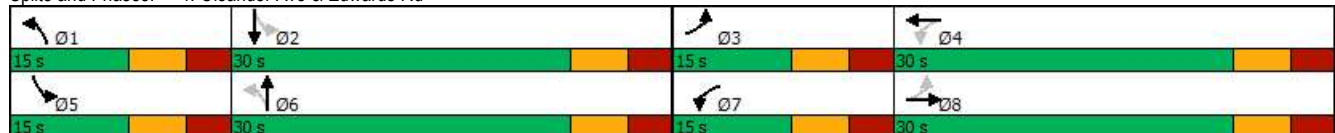
Natural Cycle: 70

Control Type: Actuated-Uncoordinated

95th percentile volume exceeds capacity, queue may be longer.






















Queue shown is maximum after two cycles.

Splits and Phases: 4: Oleander Ave & Edwards Rd



HCM 6th Signalized Intersection Summary
4: Oleander Ave & Edwards Rd

2025 Background Traffic Conditions
Timing Plan: PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	246	211	19	320	9	211	346	29	27	293	108
Future Volume (veh/h)	83	246	211	19	320	9	211	346	29	27	293	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1826	1826	1826	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	86	256	0	20	333	0	220	360	30	28	305	112
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	3	3	3
Cap, veh/h	284	665		291	526		345	566	47	339	349	128
Arrive On Green	0.07	0.19	0.00	0.03	0.15	0.00	0.11	0.33	0.33	0.05	0.27	0.27
Sat Flow, veh/h	1725	3532	0	1739	3561	0	1767	1689	141	1767	1295	475
Grp Volume(v), veh/h	86	256	0	20	333	0	220	0	390	28	0	417
Grp Sat Flow(s),veh/h/ln	1725	1721	0	1739	1735	0	1767	0	1830	1767	0	1770
Q Serve(g_s), s	2.9	4.6	0.0	0.7	6.4	0.0	6.2	0.0	12.7	0.8	0.0	15.9
Cycle Q Clear(g_c), s	2.9	4.6	0.0	0.7	6.4	0.0	6.2	0.0	12.7	0.8	0.0	15.9
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.08	1.00		0.27
Lane Grp Cap(c), veh/h	284	665		291	526		345	0	613	339	0	477
V/C Ratio(X)	0.30	0.38		0.07	0.63		0.64	0.00	0.64	0.08	0.00	0.87
Avail Cap(c_a), veh/h	360	1120		440	1130		345	0	613	455	0	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.9	24.8	0.0	24.1	28.1	0.0	17.6	0.0	19.9	17.2	0.0	24.7
Incr Delay (d2), s/veh	0.6	0.5	0.0	0.1	1.8	0.0	3.9	0.0	2.2	0.1	0.0	12.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.8	0.0	0.3	2.6	0.0	2.6	0.0	5.3	0.3	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	25.3	0.0	24.2	29.9	0.0	21.5	0.0	22.0	17.3	0.0	36.9
LnGrp LOS	C	C		C	C		C	A	C	B	A	D
Approach Vol, veh/h		342	A		353	A		610			445	
Approach Delay, s/veh		24.9			29.6			21.9			35.7	
Approach LOS		C			C			C			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	26.0	11.9	17.7	10.4	30.7	8.9	20.7				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	8.0	23.0	8.0	23.0	8.0	23.0	8.0	23.0				
Max Q Clear Time (g_c+I1), s	8.2	17.9	4.9	8.4	2.8	14.7	2.7	6.6				
Green Ext Time (p_c), s	0.0	1.1	0.0	2.3	0.0	1.4	0.0	1.8				
Intersection Summary												
HCM 6th Ctrl Delay			27.5									
HCM 6th LOS			C									
Notes												
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes, Volumes, Timings
1: Oleander Ave & Weatherbee Rd

2025 Build Traffic Conditions
Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	7	86	16	18	84	54	5	287	37	58	263	4
Future Volume (vph)	7	86	16	18	84	54	5	287	37	58	263	4
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	7%	7%	7%	8%	8%	8%
Adj. Flow (vph)	8	92	17	19	90	58	5	309	40	62	283	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	167	0	0	354	0	0	349	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	86	16	18	84	54	5	287	37	58	263	4
Future Vol, veh/h	7	86	16	18	84	54	5	287	37	58	263	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	2	2	2	7	7	7	8	8	8
Mvmt Flow	8	92	17	19	90	58	5	309	40	62	283	4

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	822	768	285	803	750	329	287	0	0	349	0	0
Stage 1	409	409	-	339	339	-	-	-	-	-	-	-
Stage 2	413	359	-	464	411	-	-	-	-	-	-	-
Critical Hdwy	7.11	6.51	6.21	7.12	6.52	6.22	4.17	-	-	4.18	-	-
Critical Hdwy Stg 1	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.11	5.51	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.509	4.009	3.309	3.518	4.018	3.318	2.263	-	-	2.272	-	-
Pot Cap-1 Maneuver	294	333	756	302	340	712	1247	-	-	1177	-	-
Stage 1	621	598	-	676	640	-	-	-	-	-	-	-
Stage 2	618	629	-	578	595	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	200	310	756	216	317	712	1247	-	-	1177	-	-
Mov Cap-2 Maneuver	200	310	-	216	317	-	-	-	-	-	-	-
Stage 1	618	560	-	673	637	-	-	-	-	-	-	-
Stage 2	485	626	-	442	558	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22	22.7	0.1	1.5
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1247	-	-	327	368	1177	-	-
HCM Lane V/C Ratio	0.004	-	-	0.358	0.456	0.053	-	-
HCM Control Delay (s)	7.9	0	-	22	22.7	8.2	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	1.6	2.3	0.2	-	-

Lanes, Volumes, Timings
2: Oleander Ave & Bell Ave

2025 Build Traffic Conditions
Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	88	9	93	0	0	7	58	296	6	9	348	75
Future Volume (vph)	88	9	93	0	0	7	58	296	6	9	348	75
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	9%	9%	9%	43%	43%	43%	7%	7%	7%	9%	9%	9%
Adj. Flow (vph)	95	10	100	0	0	8	62	318	6	10	374	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	205	0	0	8	0	0	386	0	0	465	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	6.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	88	9	93	0	0	7	58	296	6	9	348	75
Future Vol, veh/h	88	9	93	0	0	7	58	296	6	9	348	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	9	9	9	43	43	43	7	7	7	9	9	9
Mvmt Flow	95	10	100	0	0	8	62	318	6	10	374	81
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	884	883	415	935	920	321	455	0	0	324	0	0
Stage 1	435	435	-	445	445	-	-	-	-	-	-	-
Stage 2	449	448	-	490	475	-	-	-	-	-	-	-
Critical Hdwy	7.19	6.59	6.29	7.53	6.93	6.63	4.17	-	-	4.19	-	-
Critical Hdwy Stg 1	6.19	5.59	-	6.53	5.93	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.19	5.59	-	6.53	5.93	-	-	-	-	-	-	-
Follow-up Hdwy	3.581	4.081	3.381	3.887	4.387	3.687	2.263	-	-	2.281	-	-
Pot Cap-1 Maneuver	259	277	623	208	232	634	1080	-	-	1197	-	-
Stage 1	586	569	-	520	511	-	-	-	-	-	-	-
Stage 2	576	561	-	490	494	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	240	255	623	159	213	634	1080	-	-	1197	-	-
Mov Cap-2 Maneuver	240	255	-	159	213	-	-	-	-	-	-	-
Stage 1	545	563	-	484	475	-	-	-	-	-	-	-
Stage 2	529	522	-	400	489	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	29.5		10.7		1.4			0.2				
HCM LOS	D		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1080	-	-	345	634	1197	-	-				
HCM Lane V/C Ratio	0.058	-	-	0.592	0.012	0.008	-	-				
HCM Control Delay (s)	8.5	0	-	29.5	10.7	8	0	-				
HCM Lane LOS	A	A	-	D	B	A	A	-				
HCM 95th %tile Q(veh)	0.2	-	-	3.6	0	0	-	-				

Lanes, Volumes, Timings
 3: Oleander Ave & Farmers Market Rd

2025 Build Traffic Conditions
 Timing Plan: AM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	0	0	0	57	0	34	0	330	63	18	382	0
Future Volume (vph)	0	0	0	57	0	34	0	330	63	18	382	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	0%	13%	13%	13%	6%	6%	6%	9%	9%	9%
Adj. Flow (vph)	0	0	0	61	0	37	0	355	68	19	411	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	98	0	0	423	0	0	430	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	57	0	34	0	330	63	18	382	0
Future Vol, veh/h	0	0	0	57	0	34	0	330	63	18	382	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	13	13	13	6	6	6	9	9	9
Mvmt Flow	0	0	0	61	0	37	0	355	68	19	411	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	857	872	411	838	838	389	411	0	0	423	0	0
Stage 1	449	449	-	389	389	-	-	-	-	-	-	-
Stage 2	408	423	-	449	449	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.23	6.63	6.33	4.16	-	-	4.19	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.23	5.63	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.23	5.63	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.617	4.117	3.417	2.254	-	-	2.281	-	-
Pot Cap-1 Maneuver	280	291	645	274	290	636	1127	-	-	1100	-	-
Stage 1	593	576	-	613	590	-	-	-	-	-	-	-
Stage 2	624	591	-	569	554	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	260	285	645	269	284	636	1127	-	-	1100	-	-
Mov Cap-2 Maneuver	260	285	-	269	284	-	-	-	-	-	-	-
Stage 1	593	563	-	613	590	-	-	-	-	-	-	-
Stage 2	588	591	-	556	542	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	19.6	0	0.4
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1127	-	-	-	343	1100	-	-
HCM Lane V/C Ratio	-	-	-	-	0.285	0.018	-	-
HCM Control Delay (s)	0	-	-	0	19.6	8.3	0	-
HCM Lane LOS	A	-	-	A	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	1.2	0.1	-	-

Lanes, Volumes, Timings
4: Oleander Ave & Edwards Rd

2025 Build Traffic Conditions
Timing Plan: AM Peak Hour

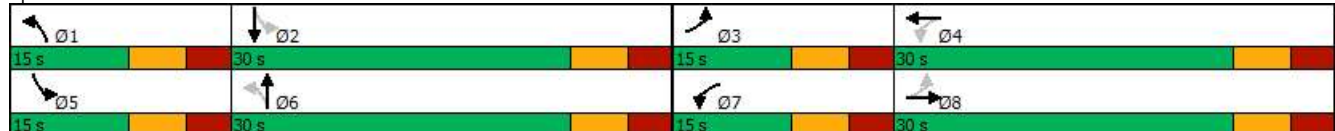


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	299	196	19	174	14	193	241	31	32	264	76
Future Volume (vph)	49	299	196	19	174	14	193	241	31	32	264	76
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	3%	3%	3%	4%	4%	4%
Adj. Flow (vph)	51	308	202	20	179	14	199	248	32	33	272	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	510	0	20	193	0	199	280	0	33	350	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	3	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0		8.0	10.0		8.0	10.0	
Minimum Split (s)	13.0	17.0		13.0	17.0		15.0	17.0		15.0	17.0	
Total Split (s)	15.0	30.0		15.0	30.0		15.0	30.0		15.0	30.0	
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.14	0.56		0.07	0.28		0.50	0.38		0.07	0.76	
Control Delay	17.4	19.1		16.8	25.7		19.8	22.0		14.1	37.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.4	19.1		16.8	25.7		19.8	22.0		14.1	37.4	
Queue Length 50th (ft)	16	60		6	40		51	73		8	137	
Queue Length 95th (ft)	39	138		20	72		#123	218		28	#302	
Internal Link Dist (ft)		2737			3439			4912			1451	
Turn Bay Length (ft)	295			350			150					
Base Capacity (vph)	367	1197		302	1138		398	745		479	615	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.14	0.43		0.07	0.17		0.50	0.38		0.07	0.57	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 70.7
 Natural Cycle: 65
 Control Type: Actuated-Uncoordinated
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 4: Oleander Ave & Edwards Rd



HCM 6th Signalized Intersection Summary
4: Oleander Ave & Edwards Rd

2025 Build Traffic Conditions
Timing Plan: AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔	↔		↔	↔		↔	↔		↔	↔	
Traffic Volume (veh/h)	49	299	196	19	174	14	193	241	31	32	264	76
Future Volume (veh/h)	49	299	196	19	174	14	193	241	31	32	264	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1856	1856	1856	1841	1841	1841
Adj Flow Rate, veh/h	51	308	0	20	179	0	199	248	32	33	272	78
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	8	8	8	8	8	8	3	3	3	4	4	4
Cap, veh/h	328	615		260	522		375	489	63	399	329	94
Arrive On Green	0.06	0.18	0.00	0.03	0.15	0.00	0.12	0.30	0.30	0.06	0.24	0.24
Sat Flow, veh/h	1697	3474	0	1697	3474	0	1767	1610	208	1753	1375	394
Grp Volume(v), veh/h	51	308	0	20	179	0	199	0	280	33	0	350
Grp Sat Flow(s),veh/h/ln	1697	1692	0	1697	1692	0	1767	0	1818	1753	0	1770
Q Serve(g_s), s	1.6	5.3	0.0	0.6	3.1	0.0	5.3	0.0	8.2	0.9	0.0	12.2
Cycle Q Clear(g_c), s	1.6	5.3	0.0	0.6	3.1	0.0	5.3	0.0	8.2	0.9	0.0	12.2
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.11	1.00		0.22
Lane Grp Cap(c), veh/h	328	615		260	522		375	0	552	399	0	423
V/C Ratio(X)	0.16	0.50		0.08	0.34		0.53	0.00	0.51	0.08	0.00	0.83
Avail Cap(c_a), veh/h	443	1200		422	1200		381	0	644	518	0	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.0	23.9	0.0	22.1	24.5	0.0	16.4	0.0	18.6	16.6	0.0	23.4
Incr Delay (d2), s/veh	0.2	0.9	0.0	0.1	0.6	0.0	1.3	0.0	0.7	0.1	0.0	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.0	0.0	0.2	1.2	0.0	2.0	0.0	3.2	0.3	0.0	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	24.8	0.0	22.2	25.1	0.0	17.8	0.0	19.3	16.7	0.0	29.3
LnGrp LOS	C	C		C	C		B	A	B	B	A	C
Approach Vol, veh/h		359	A		199	A		479			383	
Approach Delay, s/veh		24.3			24.8			18.7			28.2	
Approach LOS		C			C			B			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.8	22.5	10.6	17.0	10.6	26.7	8.8	18.8				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	8.0	23.0	8.0	23.0	8.0	23.0	8.0	23.0				
Max Q Clear Time (g_c+I1), s	7.3	14.2	3.6	5.1	2.9	10.2	2.6	7.3				
Green Ext Time (p_c), s	0.0	1.3	0.0	1.3	0.0	1.2	0.0	2.2				

Intersection Summary												
HCM 6th Ctrl Delay				23.5								
HCM 6th LOS				C								

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	10	7	10	349	437	12
Future Volume (vph)	10	7	10	349	437	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	7%	7%	9%	9%
Adj. Flow (vph)	11	8	11	379	475	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	0	0	390	488	0
Sign Control	Stop			Free	Free	

Intersection Summary

Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑		↓
Traffic Vol, veh/h	10	7	10	349	437	12
Future Vol, veh/h	10	7	10	349	437	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	7	7	9	9
Mvmt Flow	11	8	11	379	475	13

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	883	482	488	0	0
Stage 1	482	-	-	-	-
Stage 2	401	-	-	-	-
Critical Hdwy	6.42	6.22	4.17	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.263	-	-
Pot Cap-1 Maneuver	316	584	1050	-	-
Stage 1	621	-	-	-	-
Stage 2	676	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	312	584	1050	-	-
Mov Cap-2 Maneuver	312	-	-	-	-
Stage 1	613	-	-	-	-
Stage 2	676	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.8	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1050	-	386	-	-
HCM Lane V/C Ratio	0.01	-	0.048	-	-
HCM Control Delay (s)	8.5	0	14.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lanes, Volumes, Timings
 1: Oleander Ave & Weatherbee Rd

2025 Build Traffic Conditions
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	7	85	15	21	54	58	16	290	31	78	348	6
Future Volume (vph)	7	85	15	21	54	58	16	290	31	78	348	6
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	7%	7%	7%
Adj. Flow (vph)	8	100	18	25	64	68	19	341	36	92	409	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	126	0	0	157	0	0	396	0	0	508	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	10.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	85	15	21	54	58	16	290	31	78	348	6
Future Vol, veh/h	7	85	15	21	54	58	16	290	31	78	348	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	7	7	7
Mvmt Flow	8	100	18	25	64	68	19	341	36	92	409	7

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1060	1012	413	1053	997	359	416	0	0	377	0	0
Stage 1	597	597	-	397	397	-	-	-	-	-	-	-
Stage 2	463	415	-	656	600	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.14	6.54	6.24	4.14	-	-	4.17	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.536	4.036	3.336	2.236	-	-	2.263	-	-
Pot Cap-1 Maneuver	200	237	635	202	242	681	1132	-	-	1155	-	-
Stage 1	486	488	-	625	600	-	-	-	-	-	-	-
Stage 2	575	589	-	451	487	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	126	208	635	112	212	681	1132	-	-	1155	-	-
Mov Cap-2 Maneuver	126	208	-	112	212	-	-	-	-	-	-	-
Stage 1	476	437	-	612	587	-	-	-	-	-	-	-
Stage 2	452	577	-	303	436	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	41.5	40.1	0.4	1.5
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1132	-	-	219	252	1155	-	-
HCM Lane V/C Ratio	0.017	-	-	0.575	0.621	0.079	-	-
HCM Control Delay (s)	8.2	0	-	41.5	40.1	8.4	0	-
HCM Lane LOS	A	A	-	E	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	3.2	3.7	0.3	-	-

Lanes, Volumes, Timings
2: Oleander Ave & Bell Ave

2025 Build Traffic Conditions
Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	83	0	109	5	4	7	80	409	3	2	351	73
Future Volume (vph)	83	0	109	5	4	7	80	409	3	2	351	73
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	4%	4%	4%	13%	13%	13%	3%	3%	3%	6%	6%	6%
Adj. Flow (vph)	93	0	122	6	4	8	90	460	3	2	394	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	215	0	0	18	0	0	553	0	0	478	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	83	0	109	5	4	7	80	409	3	2	351	73
Future Vol, veh/h	83	0	109	5	4	7	80	409	3	2	351	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	4	4	4	13	13	13	3	3	3	6	6	6
Mvmt Flow	93	0	122	6	4	8	90	460	3	2	394	82
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1087	1082	435	1142	1122	462	476	0	0	463	0	0
Stage 1	439	439	-	642	642	-	-	-	-	-	-	-
Stage 2	648	643	-	500	480	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.23	6.63	6.33	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.23	5.63	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.23	5.63	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.617	4.117	3.417	2.227	-	-	2.254	-	-
Pot Cap-1 Maneuver	192	216	617	169	197	578	1081	-	-	1078	-	-
Stage 1	593	575	-	445	452	-	-	-	-	-	-	-
Stage 2	456	465	-	533	536	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	169	191	617	124	174	578	1081	-	-	1078	-	-
Mov Cap-2 Maneuver	169	191	-	124	174	-	-	-	-	-	-	-
Stage 1	527	573	-	395	401	-	-	-	-	-	-	-
Stage 2	395	413	-	426	534	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	47.1		23.5		1.4			0				
HCM LOS	E		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1081	-	-	288	212	1078	-	-				
HCM Lane V/C Ratio	0.083	-	-	0.749	0.085	0.002	-	-				
HCM Control Delay (s)	8.6	0	-	47.1	23.5	8.3	0	-				
HCM Lane LOS	A	A	-	E	C	A	A	-				
HCM 95th %tile Q(veh)	0.3	-	-	5.5	0.3	0	-	-				

Lanes, Volumes, Timings
 3: Oleander Ave & Farmers Market Rd

2025 Build Traffic Conditions
 Timing Plan: PM Peak Hour



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (vph)	0	0	0	59	0	45	0	434	62	29	377	0
Future Volume (vph)	0	0	0	59	0	45	0	434	62	29	377	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	10%	10%	10%	3%	3%	3%	6%	6%	6%
Adj. Flow (vph)	0	0	0	65	0	49	0	477	68	32	414	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	114	0	0	545	0	0	446	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Control Type: Unsignalized

Intersection												
Int Delay, s/veh	2.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	59	0	45	0	434	62	29	377	0
Future Vol, veh/h	0	0	0	59	0	45	0	434	62	29	377	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	10	10	10	3	3	3	6	6	6
Mvmt Flow	0	0	0	65	0	49	0	477	68	32	414	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1014	1023	414	989	989	511	414	0	0	545	0	0
Stage 1	478	478	-	511	511	-	-	-	-	-	-	-
Stage 2	536	545	-	478	478	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.2	6.6	6.3	4.13	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.59	4.09	3.39	2.227	-	-	2.254	-	-
Pot Cap-1 Maneuver	219	238	643	218	239	547	1140	-	-	1004	-	-
Stage 1	572	559	-	531	524	-	-	-	-	-	-	-
Stage 2	532	522	-	553	542	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	193	228	643	211	229	547	1140	-	-	1004	-	-
Mov Cap-2 Maneuver	193	228	-	211	229	-	-	-	-	-	-	-
Stage 1	572	536	-	531	524	-	-	-	-	-	-	-
Stage 2	484	522	-	530	520	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	25.6	0	0.6
HCM LOS	A	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1140	-	-	-	287	1004	-	-
HCM Lane V/C Ratio	-	-	-	-	0.398	0.032	-	-
HCM Control Delay (s)	0	-	-	0	25.6	8.7	0	-
HCM Lane LOS	A	-	-	A	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	1.8	0.1	-	-

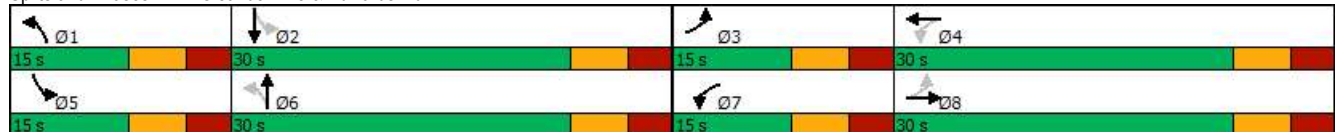


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	246	216	19	320	9	216	353	29	27	299	108
Future Volume (vph)	83	246	216	19	320	9	216	353	29	27	299	108
Peak Hour Factor	0.96	0.96	0.25	0.25	0.96	0.96	0.96	0.96	0.96	0.25	0.96	0.96
Heavy Vehicles (%)	6%	6%	6%	5%	5%	5%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	86	256	864	76	333	9	225	368	30	108	311	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	86	1120	0	76	342	0	225	398	0	108	424	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Detector Phase	3	8		7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		6.0	10.0		8.0	10.0		8.0	10.0	
Minimum Split (s)	13.0	17.0		13.0	17.0		15.0	17.0		15.0	17.0	
Total Split (s)	15.0	30.0		15.0	30.0		15.0	30.0		15.0	30.0	
Total Split (%)	16.7%	33.3%		16.7%	33.3%		16.7%	33.3%		16.7%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	Min		None	Min	
v/c Ratio	0.22	1.15dr		0.33	0.37		0.83	0.73		0.34	0.91	
Control Delay	17.8	40.5		20.4	27.8		46.9	39.4		19.4	56.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.8	40.5		20.4	27.8		46.9	39.4		19.4	56.6	
Queue Length 50th (ft)	29	~220		25	83		82	214		37	224	
Queue Length 95th (ft)	58	#370		14	123		#194	#371		18	#400	
Internal Link Dist (ft)		2737			3439			4912			1451	
Turn Bay Length (ft)	295			350			150					
Base Capacity (vph)	400	1154		239	931		271	546		318	495	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.21	0.97		0.32	0.37		0.83	0.73		0.34	0.86	

Intersection Summary

Cycle Length: 90
 Actuated Cycle Length: 85.7
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: Oleander Ave & Edwards Rd



HCM 6th Signalized Intersection Summary
4: Oleander Ave & Edwards Rd

2025 Build Traffic Conditions
Timing Plan: PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	246	216	19	320	9	216	353	29	27	299	108
Future Volume (veh/h)	83	246	216	19	320	9	216	353	29	27	299	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1826	1826	1826	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	86	256	0	76	333	0	225	368	30	108	311	112
Peak Hour Factor	0.96	0.96	0.25	0.25	0.96	0.96	0.96	0.96	0.96	0.25	0.96	0.96
Percent Heavy Veh, %	6	6	6	5	5	5	3	3	3	3	3	3
Cap, veh/h	283	533		311	525		343	483	39	362	354	128
Arrive On Green	0.07	0.15	0.00	0.07	0.15	0.00	0.11	0.29	0.29	0.10	0.27	0.27
Sat Flow, veh/h	1725	3532	0	1739	3561	0	1767	1693	138	1767	1302	469
Grp Volume(v), veh/h	86	256	0	76	333	0	225	0	398	108	0	423
Grp Sat Flow(s),veh/h/ln	1725	1721	0	1739	1735	0	1767	0	1831	1767	0	1771
Q Serve(g_s), s	2.9	4.8	0.0	2.5	6.4	0.0	6.4	0.0	14.1	2.9	0.0	16.2
Cycle Q Clear(g_c), s	2.9	4.8	0.0	2.5	6.4	0.0	6.4	0.0	14.1	2.9	0.0	16.2
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.08	1.00		0.26
Lane Grp Cap(c), veh/h	283	533		311	525		343	0	523	362	0	482
V/C Ratio(X)	0.30	0.48		0.24	0.63		0.66	0.00	0.76	0.30	0.00	0.88
Avail Cap(c_a), veh/h	358	1116		393	1125		343	0	594	386	0	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.0	27.4	0.0	22.9	28.3	0.0	17.7	0.0	23.1	16.3	0.0	24.7
Incr Delay (d2), s/veh	0.6	1.0	0.0	0.4	1.8	0.0	4.5	0.0	5.1	0.5	0.0	12.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	0.0	1.0	2.6	0.0	2.7	0.0	6.3	1.1	0.0	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	28.3	0.0	23.3	30.1	0.0	22.2	0.0	28.2	16.7	0.0	37.5
LnGrp LOS	C	C		C	C		C	A	C	B	A	D
Approach Vol, veh/h		342	A		409	A		623			531	
Approach Delay, s/veh		27.1			28.8			26.1			33.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	26.3	11.9	17.7	14.0	27.2	11.7	18.0				
Change Period (Y+Rc), s	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Max Green Setting (Gmax), s	8.0	23.0	8.0	23.0	8.0	23.0	8.0	23.0				
Max Q Clear Time (g_c+I1), s	8.4	18.2	4.9	8.4	4.9	16.1	4.5	6.8				
Green Ext Time (p_c), s	0.0	1.1	0.0	2.3	0.1	1.3	0.0	1.8				

Intersection Summary												
HCM 6th Ctrl Delay			28.9									
HCM 6th LOS			C									

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	25	18	15	364	470	20
Future Volume (vph)	25	18	15	364	470	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	4%	4%	6%	6%
Adj. Flow (vph)	27	20	16	396	511	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	47	0	0	412	533	0
Sign Control	Stop			Free	Free	

Intersection Summary

Control Type: Unsignalized

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑		↓
Traffic Vol, veh/h	25	18	15	364	470	20
Future Vol, veh/h	25	18	15	364	470	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	4	4	6	6
Mvmt Flow	27	20	16	396	511	22

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	950	522	533	0	0
Stage 1	522	-	-	-	-
Stage 2	428	-	-	-	-
Critical Hdwy	6.42	6.22	4.14	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.236	-	-
Pot Cap-1 Maneuver	289	555	1025	-	-
Stage 1	595	-	-	-	-
Stage 2	657	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	283	555	1025	-	-
Mov Cap-2 Maneuver	283	-	-	-	-
Stage 1	583	-	-	-	-
Stage 2	657	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.6	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1025	-	356	-	-
HCM Lane V/C Ratio	0.016	-	0.131	-	-
HCM Control Delay (s)	8.6	0	16.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

APPENDIX J
Excerpts from
Traffic Impact Studies Within Study Area



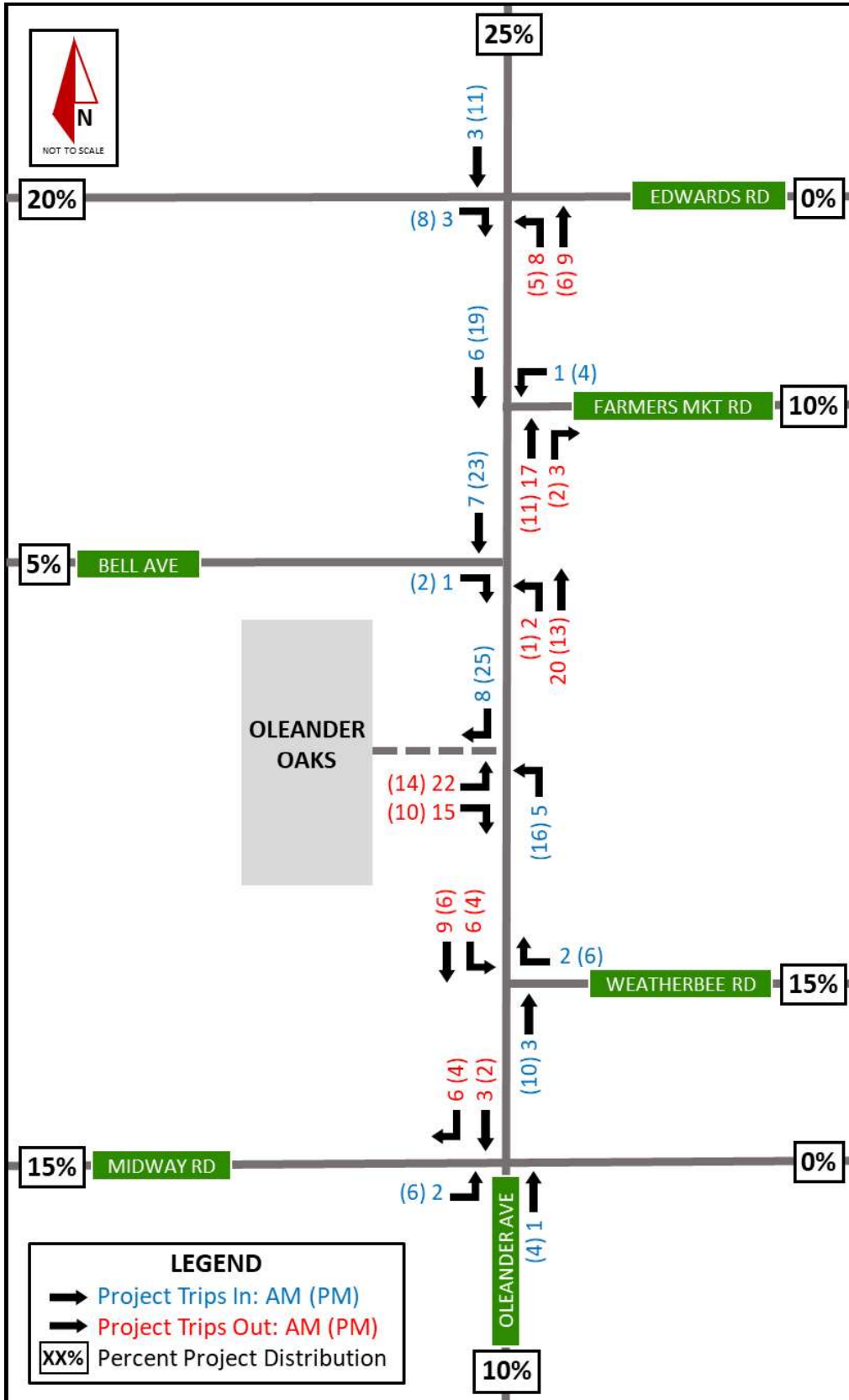
OLEANDER OAKS (Fort Pierce, FL)

Traffic Impact Study

Revised September 2021

Kimley»»Horn

Figure 2: Project Trip Assignment





AMERICAN SILICONE (Fort Pierce, FL)

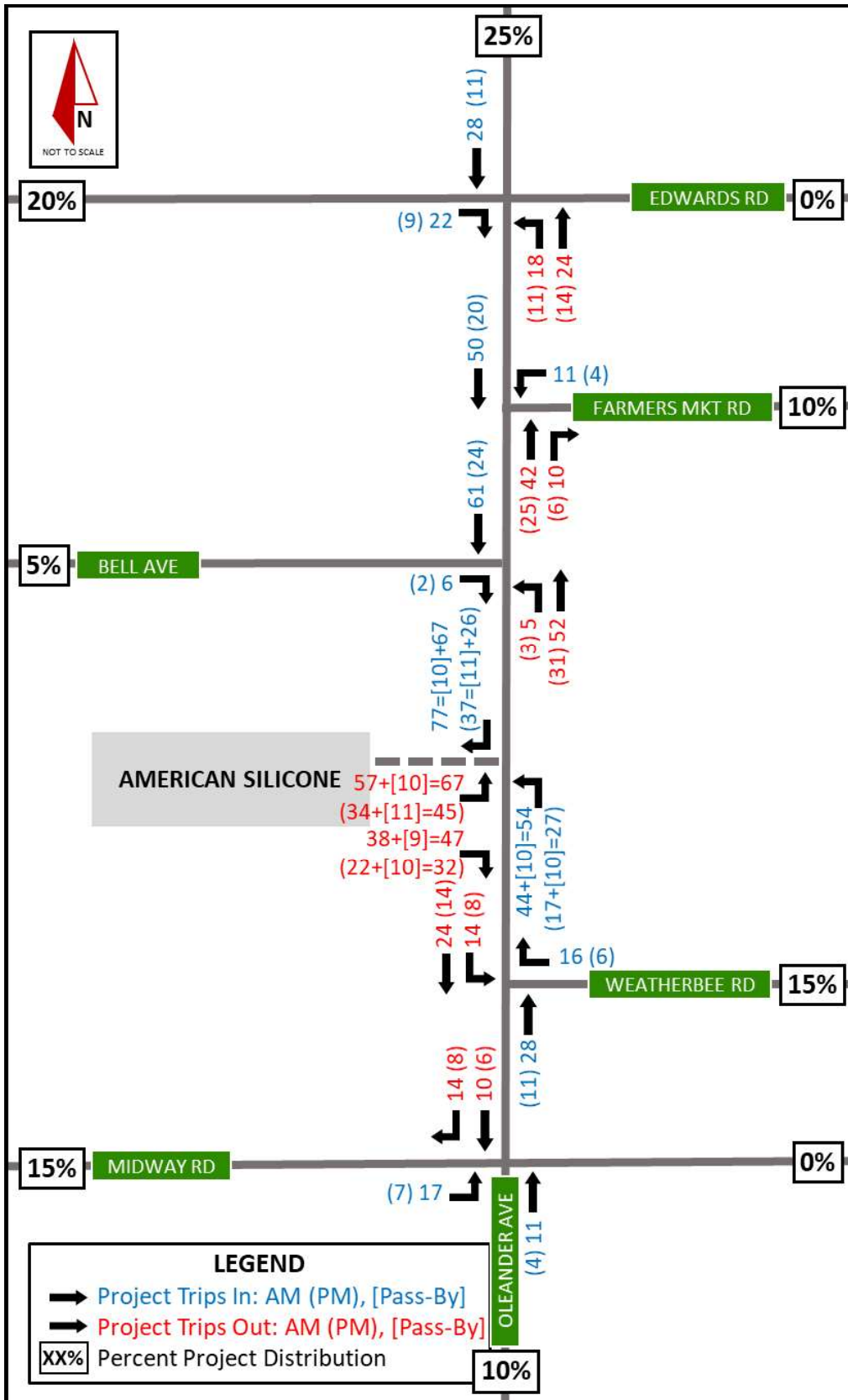
Traffic Impact Report

September 2021

Kimley»»Horn

Decorative graphic elements in the bottom right corner consisting of overlapping geometric shapes: a grey triangle, a red rounded rectangle, and a dark blue rounded rectangle.

Figure 2: Project Trip Assignment



APPENDIX K
NCHRP Report 457 Outputs

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

2-lane roadway (English)

INPUT

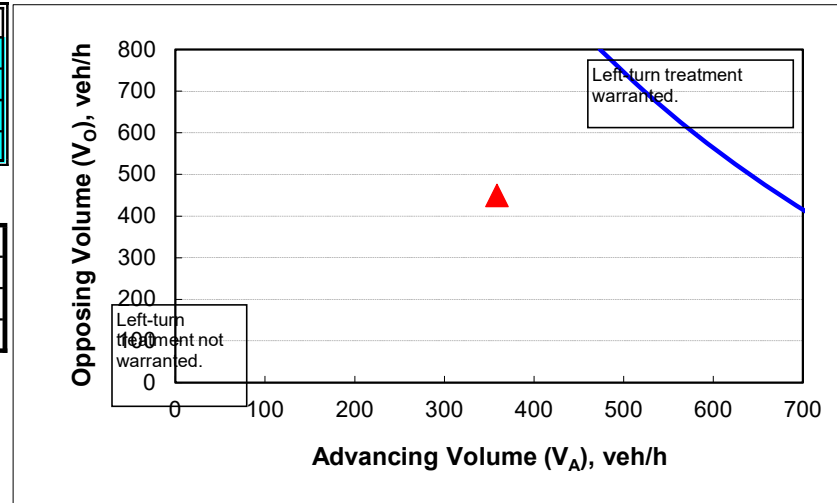
Variable	Value
85 th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	359
Opposing volume (V_O), veh/h:	449

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	676
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	

CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9



Northbound Left-Turn Lane
 PM Peak Hour

Figure 2 - 5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

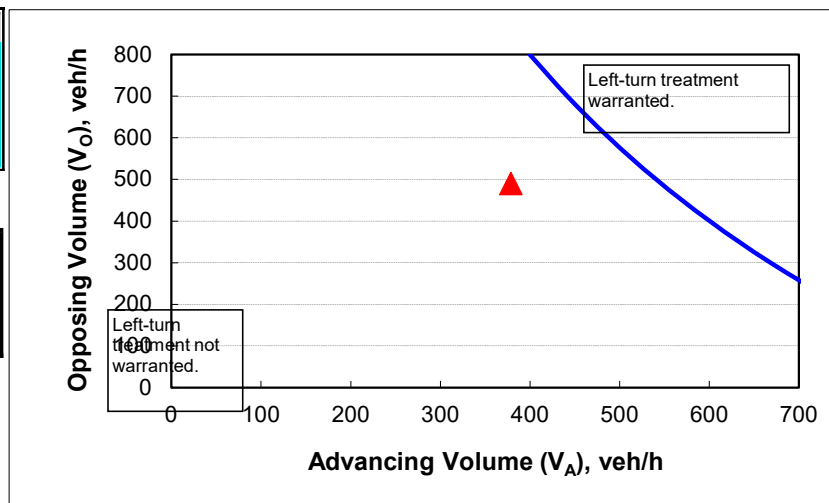
2-lane roadway (English)

INPUT

Variable	Value
85 th percentile speed, mph:	35
Percent of left-turns in advancing volume (V_A), %:	4%
Advancing volume (V_A), veh/h:	379
Opposing volume (V_O), veh/h:	490

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	546
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Southbound Right-Turn Lane
AM Peak Hour

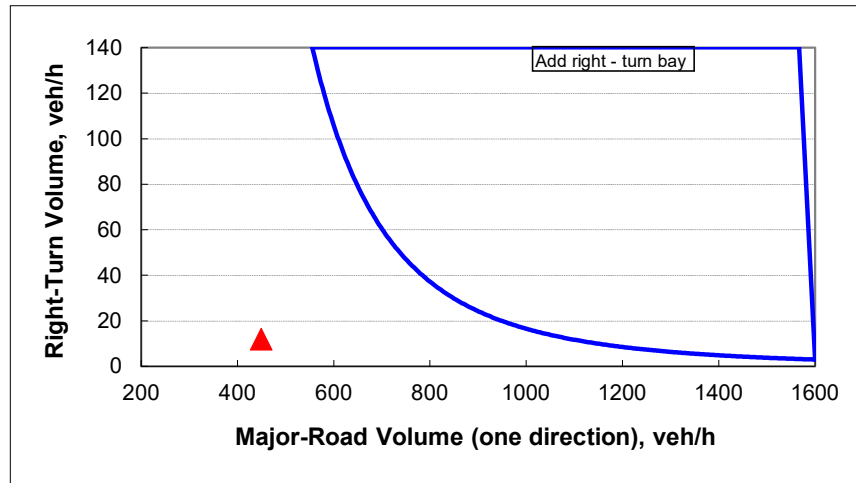
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	35
Major-road volume (one direction), veh/h:	449
Right-turn volume, veh/h:	12

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	304
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



Southbound Right-Turn Lane
PM Peak Hour

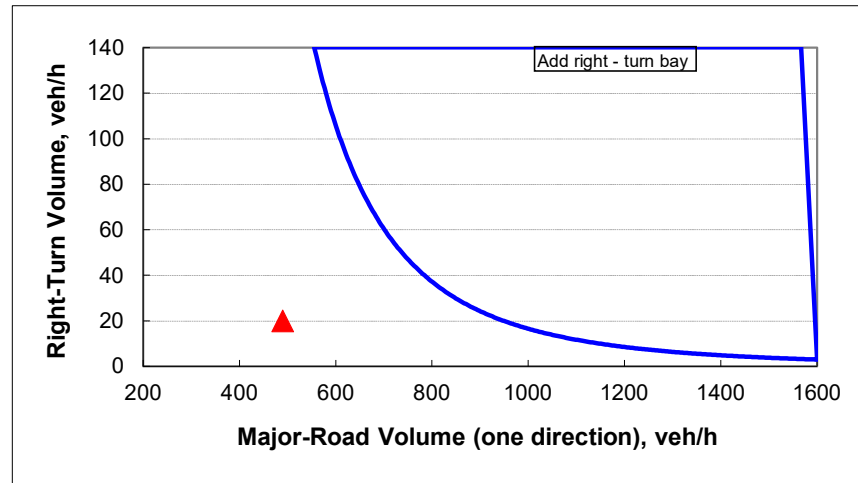
Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

INPUT

Roadway geometry:	2-lane roadway
Variable	Value
Major-road speed, mph:	35
Major-road volume (one direction), veh/h:	490
Right-turn volume, veh/h:	20

OUTPUT

Variable	Value
Limiting right-turn volume, veh/h:	221
Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:	
Do NOT add right-turn bay.	



**TAYLOR LAND PLANNING, LLC
ENVIRONMENTAL CONSULTANT**

ENVIRONMENTAL ASSESSMENT

4001 OLEANDER AVE.,
FORT PIERCE, FL 34982
2433-144-0001-000-6
DATE 08/15/2022

PREPARED FOR:

JOHNSON GROUP GLOBAL

Prepared By:

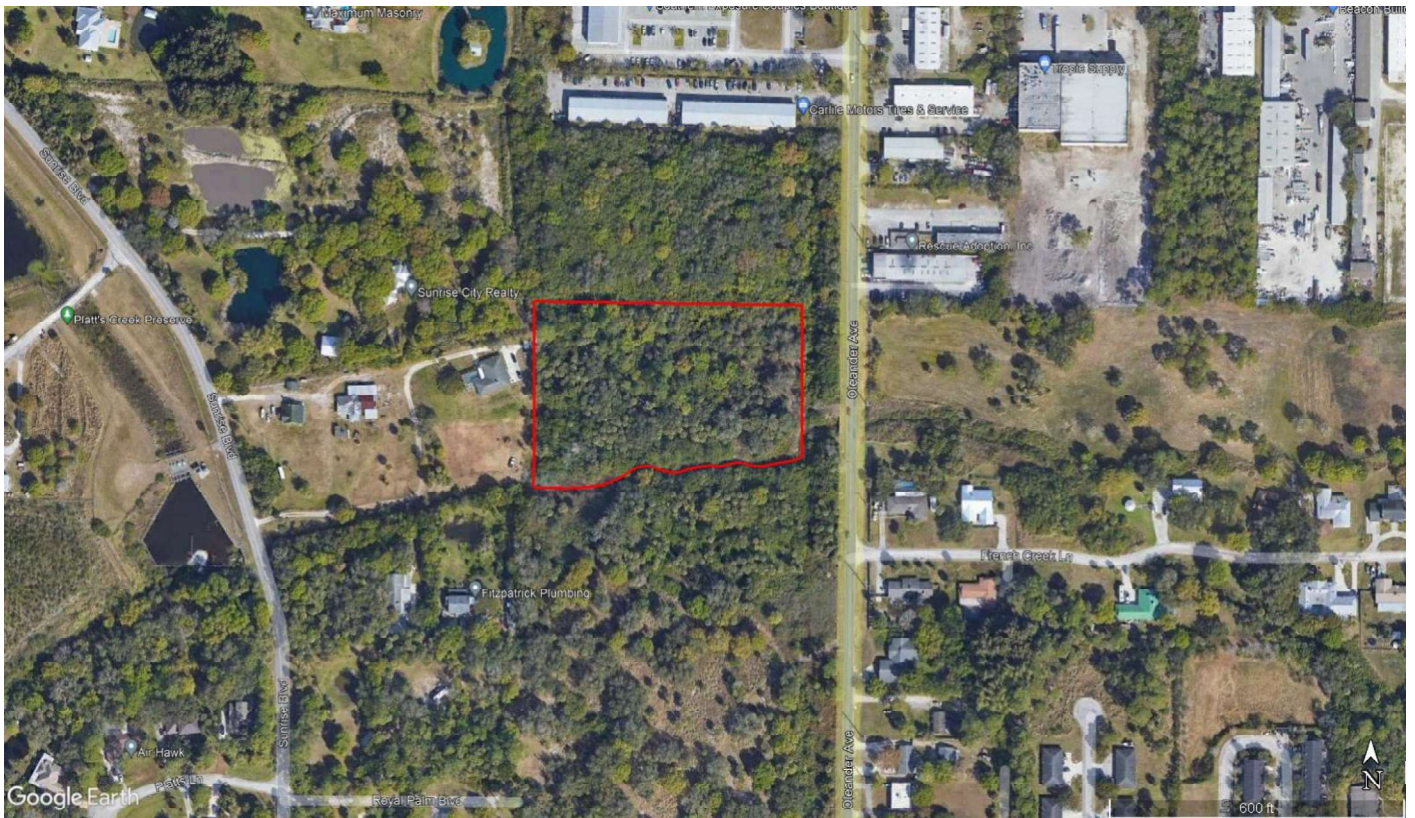
ELLA TAYLOR
10300 SE 57TH DR.,
OKEECHOBEE, FL 34974
(772) 418 – 5800

I - INTRODUCTION

This environmental assessment includes graphics and maps to demonstrate the location of the site and existing site conditions. The assessment also includes details of the site characteristics including soils composition, wetland and upland habitat, wildlife, site impacts, preserve areas and boundaries of significant environmental areas as well as other environmental characteristics of the site.

II – SITE LOCATION

The site is located at 4001 Oleander Avenue in Fort Pierce, Florida. The site is located within the C-3 (General Commercial) Zoning District within the City of Fort Pierce. The site is currently vacant. The site is approximately 4.24 acres in size. Please see the location of the subject site below.



*Location Map – 4001 Oleander Avenue (2021
Aerial Imagery)*

III – SOILS

Refer to page 4 through 6 for soil survey. The following soils were found to be present on the site:

#2 – Ankona and Farmton sands, 0 to 2 percent slopes; The Ankona series consists of very deep, very poorly and poorly drained, very slowly or slowly permeable soils on broad flats and in depressional areas of central and southern Florida. They formed in sandy and loamy marine sediments. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 2 percent. The Farmton series consists of very deep, poorly drained soils that formed in sandy and loamy marine sediments. Most areas are in native woodland. A few areas are planted to tame pasture or used for urban development. The vegetation consists of longleaf pine, slash pine, saw palmetto, waxmyrtle, gallberry, fetterbush, creeping bluestem, chalky bluestem, lopsided Indiangrass, low panicums and pineland threeawn. Depressional areas are dominated by marsh vegetation consisting of maidencane, cutgrass, sand cordgrass, and St. Johns wort. A water table is within depths of 6 to 18 inches for 1 to 4 months and at depths of 18 to 40 inches for 6 months or more in most years. Depressional areas are covered with standing water for 6 to 9 months in most years.

Farmton soils are on flatwoods and low broad flats on marine terraces. Slopes are linear and range from 0 to 2 percent. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches. Under natural conditions Farmton soils are used for water quality and wildlife habitat. Potential native vegetation consists of longleaf pine and slash pine. The understory is dominated by saw palmetto, waxmyrtle, gallberry, fetterbush, creeping bluestem, chalky bluestem and pineland threeawn. Depth to seasonal high water table: 6 to 12 inches of the surface for 6 to 9 months during most years, and within 12 to 24 inches inches most of the rest of the year.

#47 – Susanna and Wauchula sands, 0 to 2 percent slopes; The Susanna series consists of very deep, poorly drained, very slowly permeable soils on broad flats of central and southern Florida. They formed in sandy and loamy marine sediments. Near the type location, the mean annual temperature is about 73 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 2 percent. Some areas of Susanna soils are planted to citrus and improved pasture grasses. Other areas are used for community development. Natural vegetation consists of open forest of longleaf pine and slash pine with ground cover of saw palmetto, running oak, pineland threeawn, inkberry, and fetterbush. A water table is within depths of 10 inches for 1 to 4 months and within a depth of 40 inches for about 6 months in most years. It is perched above the spodic horizon early in the summer rainy season and after heavy rainfall in other seasons. During prolonged dry seasons, the water table recedes to below a depth of 40 inches.

The Wauchula series consists of very deep, very poorly or poorly drained, moderately slow or slowly permeable soils on flatwoods on the lower coastal plains. They formed in sandy and loamy marine sediments. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 5 percent. Many areas of this soil have been cleared and are used for tame pasture or range. Some areas are used for citrus and vegetable crops where water control is adequate. The natural vegetation consists of longleaf

pine, slash pine, saw palmetto, with an understory of inkberry, fetter, southern bayberry, and pineland threeawn. Water table is at depths of 6 to 18 inches for 1 to 4 months during most years. It is at depths of about 10 to 40 inches for periods as long as about 6 months, but during the driest season it recedes to depths of more than 40 inches. Depressional areas are covered with standing water for periods of 6 to 9 months or more in most years.

IV – HABITATS

The site is comprised of native, exotic and invasive species. During the field investigation the following species were identified: Cabbage palm (*Sabal Palmetto*), Wax Myrtle (*Myrica*), Oak (*Quercus sp.*), Slash pine (*Pinus Ellioti*), Wax myrtle (*Myrica Cerifera*), Gallberry (*Ilex Glabra*), Chalky bluestem (*Andropogon virginicus*), Switch Grass (*Panicum virgatum*) and Muscadine (*Vitis Rotundifolia*) among others. The exotics include Brazillian Pepper (*Schinus terebinthifolia*), Air Potato (*Dioscorea bulbifera*), Strawberry Guava (*Psidium Cattleyanum*), Java Plum (*Syzygium cumini*), Climbing Fern (*Lygodium*) and Non-native Fern (*Tracheophyta sp.*) among others.

IV. Wetlands

It is in the opinion of Ella Taylor that jurisdictional wetlands do exist on this parcel. A wetland consists of three components: Hydric Soils, Wetland Plants, and Hydrologic Patterns. Adjacent to the easterly property boundary exists a manmade drainage right-of-way. This ditch exhibits wetland characteristics. Additionally, the southern boundary consists of a small riverine body that exhibits wetland characteristics. National Wetlands Inventory determines this wetland to be a freshwater, manmade wetland. Development considerations for this wetland would require setbacks from development of any type.

Refer to exhibit A in the appendix for the wetland areas.

V. Upland Habitat

SFWMD Land Cover and Land Use data identifies the parcel as a Upland Mixed Coniferous/Hardwood (Code 4340). The parcel is currently vacant and vegetated with a mix of exotic and native plants and trees. It is in the opinion of Ella Taylor that the site is primarily upland habitat. Habitat preservation may be required. See exhibit B for the land use map and exhibit C for the historical aerials of the site.

VI. C. Wildlife

During the field investigation a habitat survey was conducted in accordance with the Florida Fish and Wildlife Conservation Commission (FWCC) Gopher Tortoise Permitting Guidelines (revised January 2017). During this field investigation no State Protected Species were found.

V. CONCLUSION

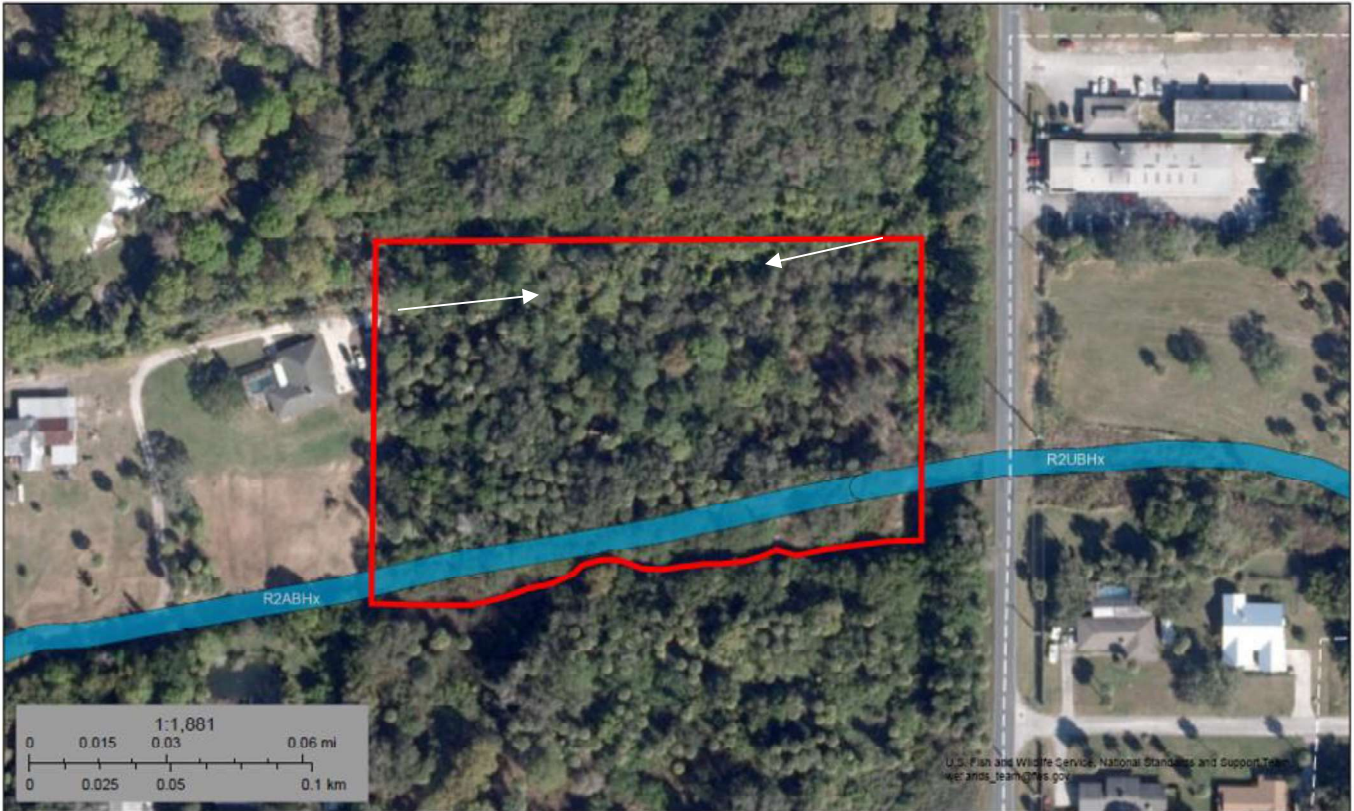
The site is currently vacant with a mixture of native and exotic plant species. Wetlands exist on the Eastern and Southern boundaries of the site. Significant upland habitat exists has the habitat is comprised of over a 50% mix of native vegetation. No protected wildlife species were identified. Please refer to exhibit D for images of the site obtained during the field investigation.

APPENDIX

Exhibit A – Wetland Areas



4001 Oleander



U.S. Fish and Wildlife Service, National Standards and Support Team
wetlands.fws.gov

August 13, 2022

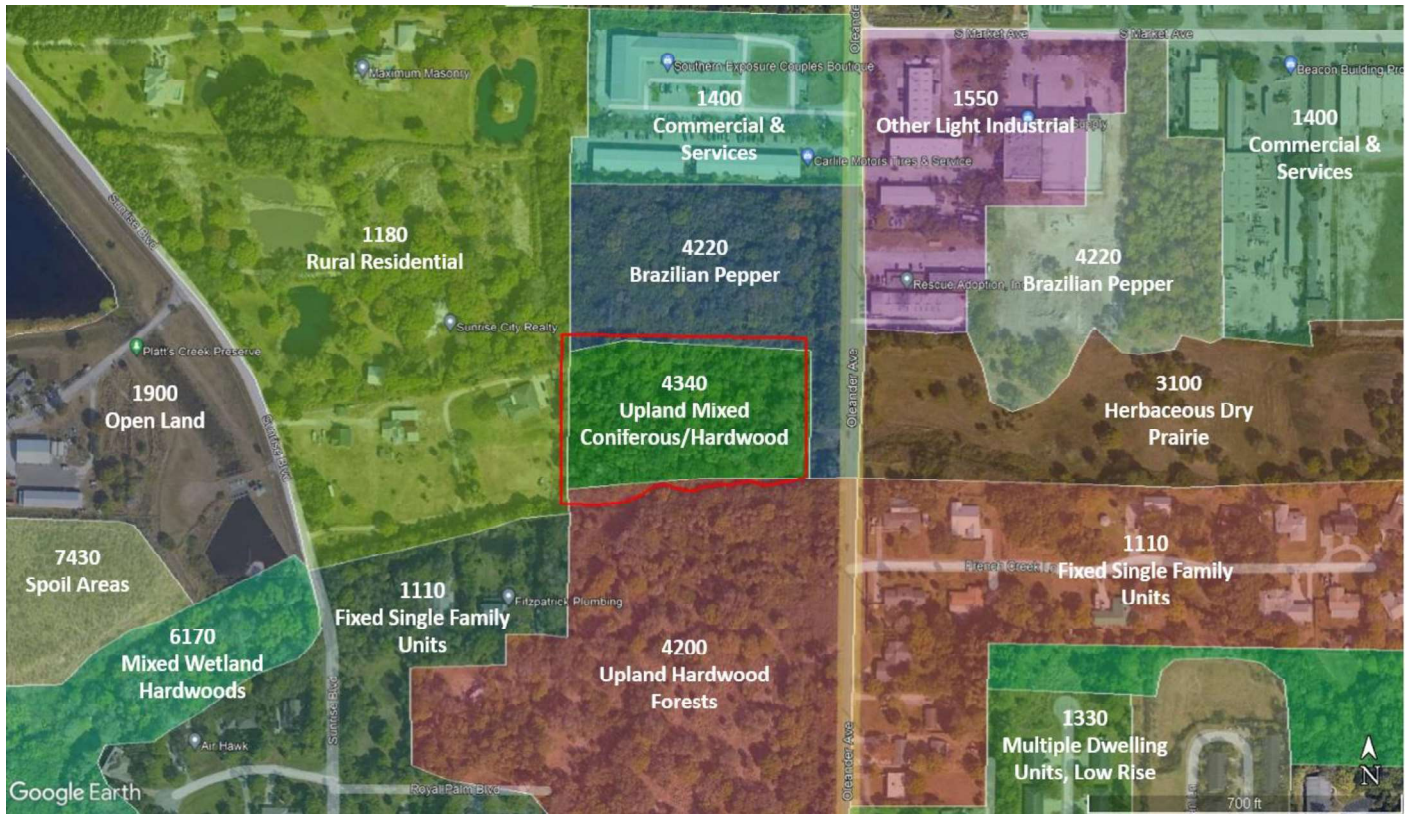
Wetlands

- | | | |
|--------------------------------|-----------------------------------|----------|
| Estuarine and Marine Deepwater | Freshwater Emergent Wetland | Lake |
| Estuarine and Marine Wetland | Freshwater Forested/Shrub Wetland | Other |
| | Freshwater Pond | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
 This page was produced by the NWI mapper

Exhibit B – Land Cover Classification



SFWMD Land Use / Land Cover Map

CODES

4220 – Brazilian Pepper
4340 – Upland Mixed Coniferous/Hardwood

LEVELS

1000 – Urban and Built Up
2000 – Agriculture
3000 – Upland Non-forested
4000 – Upland Forests
5000 – Water
6000 – Wetland
7000 – Barren Land
8000 – Transportation

Exhibit C – Historical Imagery



2009



2012



2016



2021

Exhibit D – Site Photos









