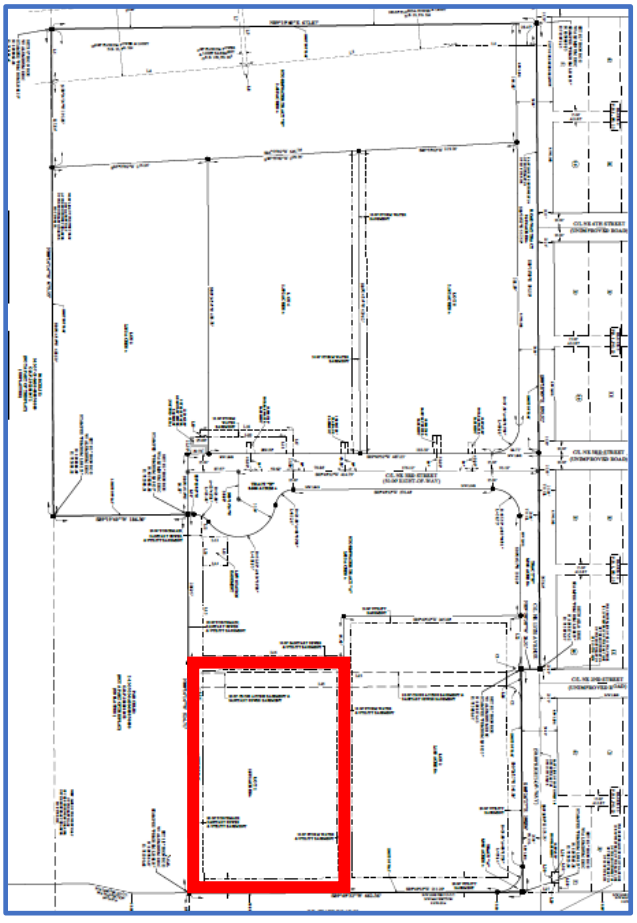
23-007-TRC

Site Plan Review Staff Report



Applicant| **Park Street Okeechobee, LLC**

Parcel Identification| **2-15-37-35-0A00-00009-0000, 2-15-37-35-0A00-00009-A000, 2-15-37-35-0A00-00010-0000**

Prepared for The City of Okeechobee

MORRIS DEPEW

General Information

Owner: William R. Grigsby, Jr.
Applicant: Park Street Okeechobee, LLC
Primary Contact: John Herbert IV, PE, johnny@americancivilengineering.com, (407)-376-1777
Parcel Identification: 2-15-37-35-0A00-00009-0000, 2-15-37-35-0A00-00009-A000, 2-15-37-35-0A00-00010-0000

Note: For the legal description of the project or other information relating this application, please refer to the application submittal package which is available by request at City Hall and is posted on the City's website prior to the advertised public meeting at: https://www.cityofokeechobee.com/agendas.html

Future Land Use, Zoning, and Existing Use of Subject Property

	Existing	Proposed
Future Land Use	Commercial	Commercial
Zoning	Heavy Commercial	Heavy Commercial
Use of Property	Vacant	Automated Carwash
Acreage	1.581 Acres (Replat, Lot 1)	1.581 Acres

Future Land Use, Zoning, and Existing Use of Surrounding Properties

	Future Land Use	**Zoning**	**Existing Use**
North	Commercial	Heavy Commercial (CHV)	Vacant
East	Commercial	Heavy Commercial (CHV)	Vacant, proposed Culver's restaurant
South	Commercial	Heavy Commercial (CHV)	SR-70, post office, service commercial
West	Commercial	Heavy Commercial (CHV)	Gas station/convenience store

General Description

The request for consideration by the City's Technical Review Committee is an application for site plan approval of a car wash facility. A special exception application (23-002-SE) has also been submitted for approval of the car wash use in the CHV district. The subject site is Lot 1 of the recently approved Park Street Commerce Park plat (23-003-TRC). Please see application 23-003-TRC for more information related to the replat and associated infrastructure plans. The site plan includes:

- 3 vehicle entry lanes, each with a menu board for customers to select car wash options and make payment
- a 4,596 sq/ft automated carwash building
- 5 spaces intended for employees
- 19 vacuum spaces

The applicant is requesting that the TRC approve a parking reduction as part of the site plan approval. The LDC requires 31 parking spaces for the 4,596. Staff analysis of the submitted application and plans is provided below. Areas of deficiency or concern are highlighted in yellow.

Adequacy of Public Facilities

Potable Water and Sewer: OUA has provided a letter indicating the water and sewer plants have available remaining capacity and that any extensions or upgrades necessary due to the designs or demands of the proposed project will be at the owner's expense.

Traffic Generation: A Traffic Impact Study has been provided within the submittal package, completed for an automated car wash. The Traffic Study, which utilized ITE 11 land use code 948 and Gross Floor Area to determine the average daily trips, indicates an estimated PM peak of 33 trips, and an average 375 daily trips generated by the car wash.

Access and Internal Circulation: The site plan indicates that two access points are proposed.

- Access is provided by a cross-access easement on the eastern property boundary, providing through-access to the adjacent property, which connects to proposed NE 13th Ave.
- Direct access to SR-70 is proposed.

One item of note is that one of the vehicle entry lanes is proposed at only 8.8 ft wide. The other two lanes are 9' and 10.2' wide. While 8.8' is a fairly narrow lane, it is not a city code compliance issue and the travel speed should be low as vehicles approach the menu boards.

Additionally, the applicant has provided a queuing analysis with the special exception application. The analysis demonstrates that the site contains sufficient vehicle stacking capacity to accommodate peak demand without causing vehicle stacking to exceed the boundaries of the site.

Service Vehicle Access and Egress:

A. Fire Truck
Sufficiency of fire truck access and egress to be addressed by the Fire Department.

B. Loading Zone
No Loading zones are required, and none are proposed.

C. Dumpster Location and/or Trash Collection

The site plan depicts a dumpster within a 10'x12' enclosure with direct access via the cross access easement/roadway on the north side of the site. Sufficiency of the dumpster enclosure and location will be addressed by Okeechobee Public Works dept.

Consistency and Compatibility with Adjacent Uses

The subject property is located in an area of the City with existing commercial uses along SR-70 which is considered one of the City's commercial corridors. The site is located with a recently platted commercial park where other commercial uses are anticipated. The proposed carwash provides a consumer service along SR-70, a Major Arterial roadway. The proposed use is consistent with the comprehensive plan and the zoning code, contingent on approval of the concurrent Special Exception Application, and is compatible with surrounding uses.

Compliance with Land Development Code

Regulation	Requirement	Provided
Permitted Special Exception Uses §90-283	Car wash is not an outright permitted use in the CHV district. However, it may be allowable special exception use.	Approval of the proposed site plan is contingent on the approval of a special exception for a car wash.
Minimum Lot Area §90-196(1)	6,250 sf for all uses	1.581 acres (68,868.4 sq/ft).
Minimum Lot Width §90-285(1)	50 ft	216 ft
Min front yard setback §90-285(2)(a)	20 ft to buildings; 10 ft to parking and driveway	In compliance
Minimum Required Side Setbacks §90-285(2)(a)	8 ft; 20ft abutting residential zoning district	In compliance
Minimum Required Rear Yard §90-285(2)(a)	10'; 20' abutting a residential zoning district.	In compliance
Max lot coverage §90-285(3)	50%	8% proposed.
Max impervious surface §90-285(3)	85%	60% proposed. In compliance
Max height §90-285(4)	45 ft	26 ft
Parking spaces location §90-511(a)	Required off-street parking and loading spaces shall be located on the same parcel as the primary use, unless approved by TRC upon submittal of written agreement to ensure continued availability	In compliance

Min parking space dimensions §90-511(b)	9' by 20'	All spaces meet minimum 9' x 20' dimensions.
Loading Space Requirements §90-511(c)	Minimum 10' wide by 30' long with 14' vertical clearance	No loading spaces required, none proposed
Min parking access width §90-511(d)(2)	a. Parking spaces between 75° and 90° to the driveway: 24' b. Parking spaces angled from 60° up to but not including 75° to the driveway: 20' c. Parking spaces any other angle to the driveway: 16'	Parking aisles 24' wide for 90 degree parking and two-way access.
Paving §90-511(e)(1)	Each parking and loading space shall be paved	Access from SR-70 and cross access paved with asphalt. Remainder of site paved with concrete
Parking and loading space layout §90-511(e)(2)	Each parking space shall be designed to permit access without moving another vehicle.	In compliance
Parking and loading space layout §90-511(e)(3)	Buildings, parking and loading areas, landscaping and open spaces shall be designed so that pedestrians moving between parking areas and buildings are not unreasonably exposed to vehicular traffic hazards.	In compliance
Parking and loading space layout §90-511(e)(4)	Paved pedestrian walks shall be provided along the lines of the most intense use, particularly between building entrances to streets, parking areas, and adjacent buildings.	In compliance
Parking and loading space layout §90-511(e)(6)	For new construction, no parking space accessed via a driveway from a public road shall be located closer than 20 feet from the right-of-way line of said public road.	In compliance
Min number of parking spaces §90-512(2)	1 space per 150 sq/ft of floor area 4,596 / 150 = 31	19 vacuum spaces and 5 employee spaces proposed for total of 24 spaces Applicant is requesting parking reduction per 90-483
Parking Reduction Requests §90-483	Applicants that submit site plans for review by the technical review committee may request approval of parking reduction concurrently with site plan approval	Applicant has provided examples of other car washes throughout the state, identifying number of spaces at each site. No other information (i.e. facility dimensions or operational

	Applicants shall demonstrate that the parking reduction request is appropriate, justified and in the public interest CHV zoning districts the number of parking spaces shall not be reduced by more than 20 percent 31 x 0.2 = 6 31 – 6 = 25	metrics) are provided. Additionally, the requested reduction exceeds the amount allowed per city code. The applicant is proposing 24 spaces, though the minimum that may be permitted (after reduction) is 25.
Min number of ADA parking spaces FL Accessibility Code §208.2	1 ADA space required for 25 parking spaces	In compliance
Min ADA parking space dimensions FL Accessibility Code §502	12’ by 20’ w/ a 5’ wide access aisle	14’ by 20’ w/ a 5.5’ wide access aisle
Off-street loading space requirement regulations; Commercial, Industrial §90-513(2)	1 for 5,000 to 25,000 square feet floor area *No loading space required for proposed 4,596 sq/ft structure*	No off-street loading space provided or required.
Required Landscaping §90-532	At least 1 tree and 3 shrubs shall be planted for every 3,000 sq/ft of lot area, excluding areas of existing vegetation which are preserved.	23 trees and 69 shrubs required. 27 trees and 118 shrubs proposed. In compliance
All vehicular use areas containing eight or more parking spaces, or containing an area greater than 2,400 square feet, shall provide perimeter and interior landscaping as follows: (90-533)		
Landscaping Requirements for Parking and Vehicular Use Areas §90-533(1)	At least 18 square feet of landscaped area for each required parking space. 31 x 18 = 558	In compliance
Landscaping Requirements for Parking and Vehicular Use Areas §90-533(2)	At least one tree for each 72 square feet of required landscaped area. *558 ÷ 72 = 8*	In compliance
Landscaping Requirements for Parking and Vehicular Use Areas §90-533(3)	Shade trees shall be planted at no more than 20 feet on centers	In compliance

Landscaping Requirements for Parking and Vehicular Use Areas §90-533(4)	A minimum two feet of landscaping shall be required between vehicular use areas and on-site buildings and structures, except at points of ingress and egress.	8.4' buffer provided
Landscaping Requirements for Parking and Vehicular Use Areas §90-533(5)	The minimum dimension for any required landscaped area within a parking or vehicular use area shall be four feet except for that adjacent to on-site buildings and structures.	In compliance
Landscaping Requirements for Parking and Vehicular Use Areas §90-533(6)	A landscaped island, minimum five feet by 15 feet and containing at least one tree, shall be required for every ten parking spaces with a maximum of 12 uninterrupted parking spaces in a row.	15 uninterrupted spaces proposed.
Landscaping Requirements for Parking and Vehicular Use Areas §90-533(7)	The remainder of a parking landscape area shall be landscaped with grass, ground cover, or other landscape material.	Bahia sod proposed for all disturbed areas
Landscape buffer areas §90-534(1)	Minimum width of buffer along street frontage shall be ten feet and on other property lines, two feet.	In compliance
Landscape buffer areas §90-534(2)	At least 1 tree and 3 shrubs for each 300 sq/ft of required landscaped buffer *216 linear ft of north property line requires 432 sf of landscaped area with 2 trees and 5 shrubs* *295 linear ft of non-driveway east property line requires 590 sf of landscaped area with 2 trees and 6 shrubs* *192 linear ft of non-driveway frontage on SR70 requires 1,920 sf of landscaped area with 7 trees and 19 shrubs* *319 linear ft of west property line requires 638 sf of landscaped area with 2 trees and 7 shrubs*	 4 trees and 6 bushes 4 trees and 23 bushes 7 trees and 24 bushes 6 trees and 6 bushes
Landscape buffer areas §90-534(3)	Trees may be planted in clusters, but shall not exceed 50' on centers abutting the street	In compliance

Landscape buffer areas §90-534(4)	The remainder of a landscape buffer shall be landscaped with grass, ground cover, or other landscape material.	Bahia sod proposed for all disturbed areas
Landscape design and plan §90-538(a)	Proposed development, vehicular and pedestrian circulation systems, and site drainage shall be integrated into the landscaping plan.	In compliance
Landscape design and plan §90-538(b)	Existing native vegetation shall be preserved where feasible, and may be used in calculations to meet these landscaping requirements.	Native vegetation is not preserved on the proposed landscape plan.
Species diversification §90-538(c)	When more than ten trees are required to be planted, two or more species shall be used.	4 tree species proposed.
Tree spacing from utility structures §90-538(d)	Trees and shrubs shall not be planted in a location where at their maturity they would interfere with utility services	In compliance
Landscape design and plan §90-538(e)	Trees should maximize the shading of pedestrian walks and parking spaces.	In compliance
Landscape design and plan §90-538(f)	Landscaping ground covers should be used to aid soil stabilization and prevent erosion.	Bahia sod proposed for all disturbed areas
Landscape design and plan §90-538(g)	Landscaping shall be protected from vehicular encroachment by means of curbs, wheel stops, walks or similar barriers.	In compliance
Drought tolerance §90-540(b)	At least 75 percent of the total number of plants required shall be state native very drought tolerant species as listed in the South Florida Water Management District Xeriscape Plant Guide. However, when a landscape irrigation system is installed, at least 75 percent or the total number of plants required shall be state native moderate or very drought tolerant species.	In compliance
Min tree size §90-540(c)	Trees shall be at least ten feet high and two inches in diameter measured four feet above ground level at the time of planting.	In compliance
Utility Corridor Requirements §90-543(b)	No tree shall be planted where it could, at mature height, conflict with overhead utility lines. Larger trees (trees with a mature height of 30 feet	In compliance

	or more) shall be planted no closer than a horizontal distance of 30 feet from the nearest overhead utility line. Medium trees (trees with a height of 20 to 30 feet) shall be offset at least 20 feet horizontally from the nearest overhead utility line. Small trees (trees with a mature height of less than 20 feet) shall not be required to meet a minimum offset, except that no tree, regardless of size shall be planted within five feet of any existing or proposed utility implement.	
Sidewalks **§ 78-36**	Sidewalks shall be provided along each right-of-way. Pedestrian access shall be provided from the development to the ROW facilities.	The site plan indicates a proposed pedestrian walkway connecting the subject property to the existing sidewalk, which is in the SR-70 ROW.

Recommendation

Based on the foregoing analysis, we recommend approval with the following conditions:

1. Plans must be consistent with final plat approval and all conditions of that approval.
2. Provide at least 25 parking spaces, which is the minimum that may be permitted after granting of parking reduction request.
3. Provide a landscape island consistent with 90-533(6).
4. Provide an additional bush within the eastern landscape perimeter buffer.
5. Revise landscape plan to depict all proposed plantings in appropriate locations. (current landscape plan depicts a tree in parking space)
6. Approval of this site plan is contingent on approval of special exception request 23-002-SE.
7. Approval of this site plan is contingent upon obtaining all necessary approvals related to the proposed SR-70 access point.
8. No building permit may be issued until all conditions of approval of 23-003-TRC have been met.

Submitted by:

Ben Smith, AICP
Director of Planning
November 8, 2023

Okeechobee Technical Review Committee Hearing: November 16, 2023

Supplemental Exhibits

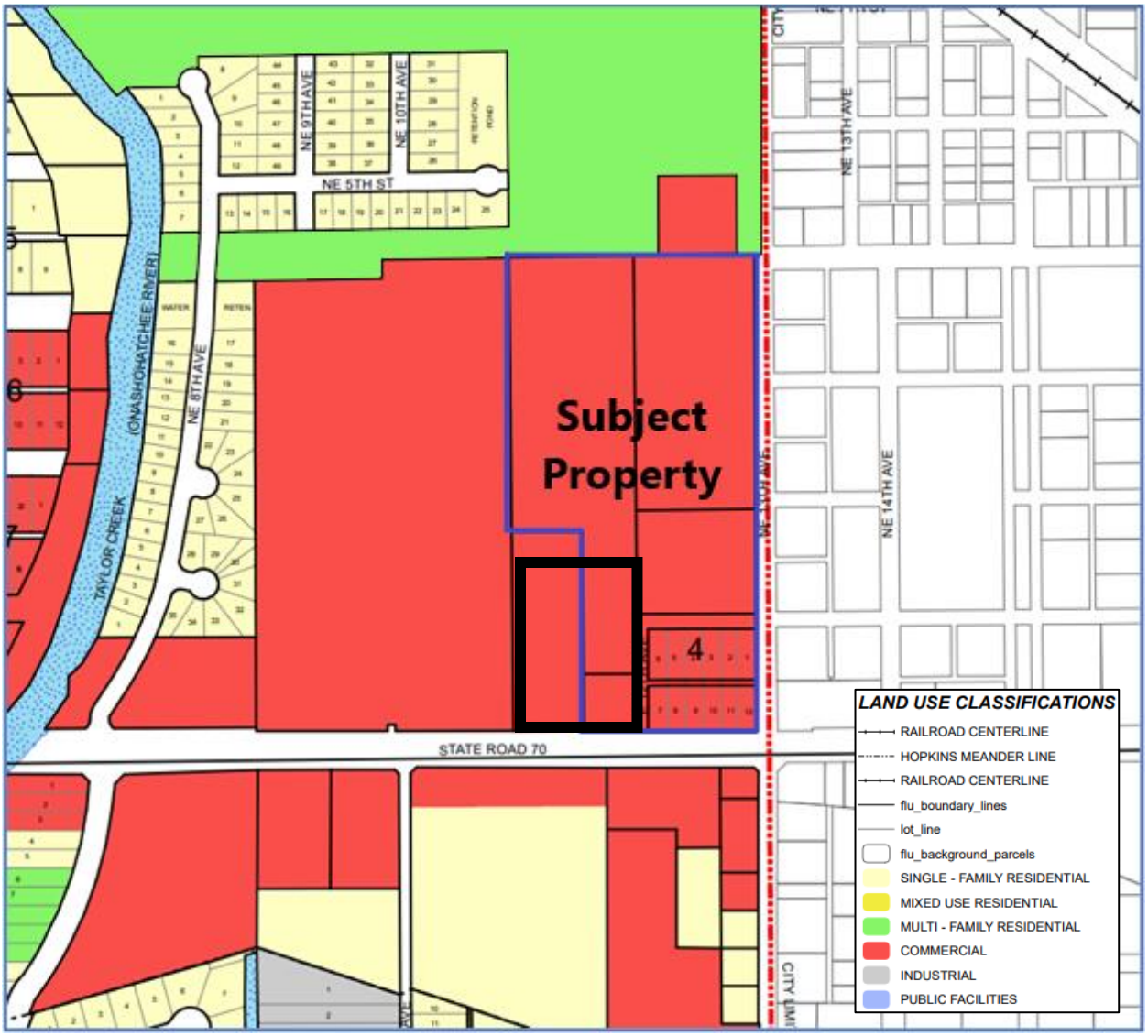


Exhibit A: Future Land Use Map

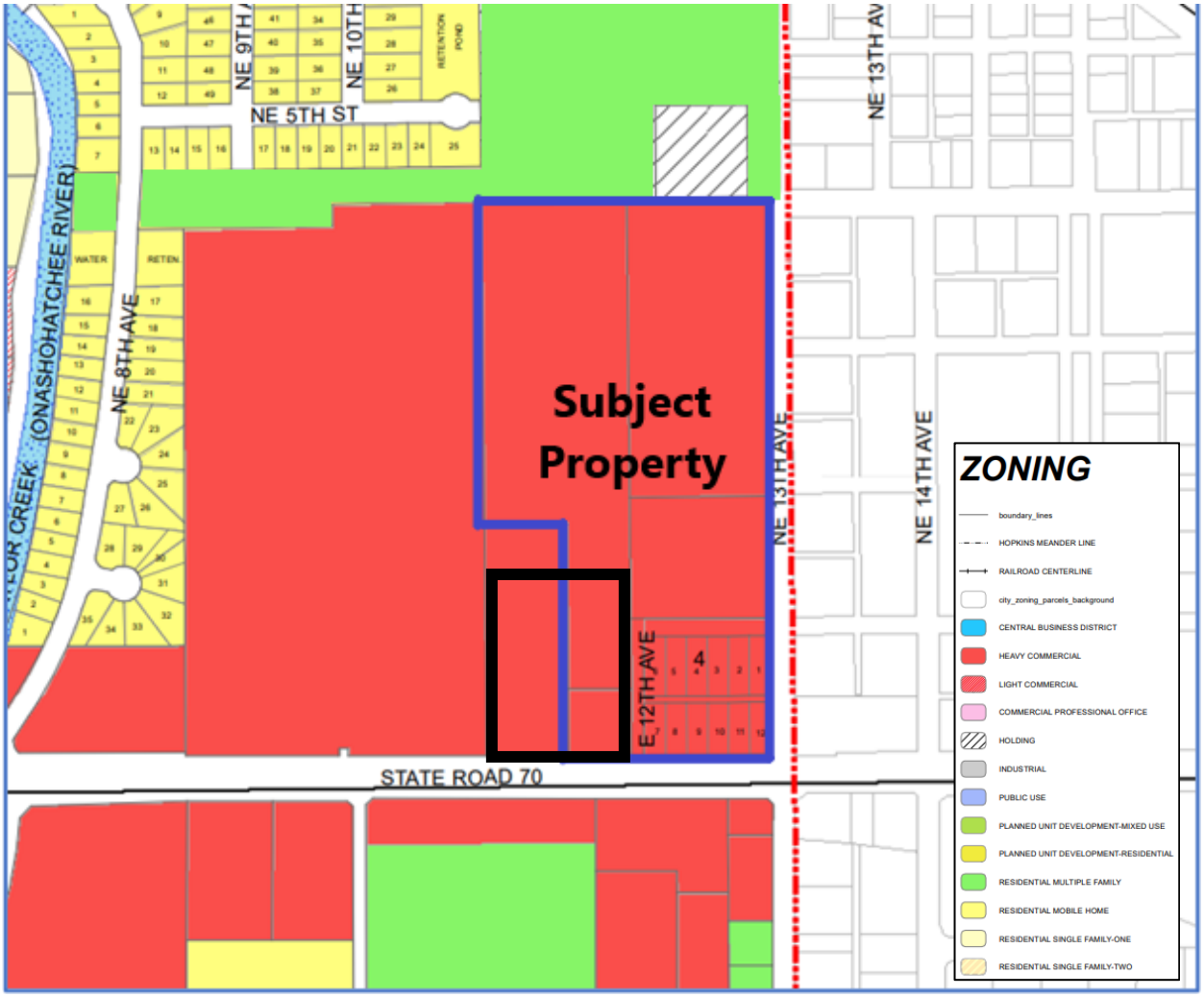


Exhibit B: Zoning Map

Exhibit C: Existing Land Use Map

CITY OF OKEECHOBEE

Application for Site Plan Review

City of Okeechobee
General Services Department
55 S.E. 3rd Avenue, Room 101
Okeechobee, Florida 34974
Phone: (863) 763-3372, ext. 9820
Fax: (863)763-1686
E-mail: pburnette@cityofokeechobee.com

Date Received	
Application No.	23-007-TRC
Fee Paid:	3/9/23
Receipt No.	59212
Hearing Date:	11-16-23

	APPLICANT INFORMATION
1	Name of property owner(s): William R. Grigsby, Jr.
2	Owner mailing address: 10282 Payne Road, Sebring, Florida 33875
3	Name of applicant(s) if other than owner: Park Street Okeechobee, LLC
4	Applicant mailing address: 603 East Fort King Street, Ocala, Florida 34471
5	Name of contact person (state relationship): Johnny Herbert IV, PE (Civil Engineer)
6	Contact person daytime phone(s) and email address: (407) 376-1777 - johnny@americancivilengineering.com
7	Engineer: Name, address and phone number: American Civil Engineering Co. c/o Johnny Herbert IV, PE - 207 N. Moss Road, Suite #211, Winter Springs, Florida 32708 - (407) 376-1777
8	Surveyor: Name, address and phone number: BSM & Associates, Inc. c/o Richard Barnes, 80 SE 31st Lane, Okeechobee, Florida 34974, (863) 484-8324
	PROPERTY and PROJECT INFORMATION
9	Property address/directions to property: Located directly across from 1000 State Road 70 East in Okeechobee, Florida
10	Parcel Identification Number 2-15-37-35-0A00-00009-A000, 2-15-37-35-0A00-00009-0000 and 2-15-37-35-0A00-00010-0000
11	Current Future Land Use designation: Commercial (all, portion) 3-15-37-35-0210-00010-0010 (portion)
12	Current Zoning district: Heavy Commercial
13	Describe the project including all proposed uses, type of construction and conceptual building layout, how the business or use is expected to operate on the site, including but not limited to: number of employees expected; hours of operation; location, extent and type of any outdoor storage or sales, etc., and fire flow layout. Use additional page if necessary. Site plan application request for approval of a commercial carwash with automated service tunnel and 19 self-service vacuums.
14	Describe existing improvements on property (for example, the number and type of buildings, dwelling units, occupied or vacant, etc.). Use additional page if necessary. Proposed 4,600 sqft. automated car wash facility with self-service vacuum spaces. Stormwater and utilities designed under master development of Park Street Commerce Center.
15	Total land area in square feet (if less than two acres): 1.58 acres or acres: 66,646+/- sqft.
16	Is proposed use different from existing or prior use ☑ Yes) ☐ No)

17	Number and description of phases: Phase I: Construction of the car wash.
18	Source of potable water: OUA. Existing 12" watermain, north SR 70.
19	Method of sewage disposal: Proposed lift station into county manhole south of SR 70 as part of Park Street Commerce Center.

	ATTACHMENTS REQUIRED FOR ALL APPLICATIONS
20	Applicant's statement of interest in property
21	One (1) copy of last recorded warranty deed
22	Notarized letter of consent from property owner (if applicant is different from property owner)
23	**Three (3) CERTIFIED BOUNDARY and TOPOGRAPHIC** surveys, (one to be no larger than 11 x 17; scale not less than one inch to 20 feet; North point) containing: a. Date of survey, surveyor's name, address and phone number b. Legal description of property pertaining to the application c. Computation of total acreage to nearest tenth of an acre d. Location sketch of subject property, and surrounding area within one-half mile radius
24	Two (2) sets of aerials of the site.
25	Two (2) copies of sealed site plan drawings (see attached checklist for details of items to be included)
26	Two (2) copies of drawing indicating facades for all buildings, including architectural elevations.
27	Two (2) copies of landscape plan, including a separate table indicating the number of trees and shrubs by type and showing both the official and common name of each type of tree and shrub.
28	Two (2) copies of photometric lighting plan (see Code of Ordinances & LDR's Section 78-71 (A) (5)).
29	Two (2) copies of sealed drainage calculations.
30	Attach a Traffic Impact Study prepared by a professional transportation planner or transportation engineer, if the rezoning or proposed use will generate 100 or more peak hour vehicle trip ends using the trip generation factors for the most similar use as contained in the Institute of Transportation Engineers most recent edition of Trip Generation. The TIA must identify the number of net new external trips, pass-bay calculations, internal capture calculations, a.m. and p.m. peak hour trips and level of service on all adjacent roadway links with and without the project.
31	USB flash drive of application
32	Nonrefundable application fee: $1,000.00 plus $30.00 per acre. **NOTE: Resolution No. 98-11 Schedule of Land Development Regulation Fees and Charges - When the cost for advertising, publishing and mailing notices of public hearings exceeds the established fee, or when a professional consultant is hired to advise the City on the application, the applicant shall pay the actual costs.**

NOTE: **Submissions will be reviewed by the General Services Coordinator and City Planner for all necessary documentation. The Applicant will be notified at least 10 days prior to the TRC meeting whether or not additional information is required to proceed or if the review will be rescheduled to the next TRC meeting.**

Confirmation of Information Accuracy

I hereby certify that the information in this application is correct. The information included in this application is for use by the City of Okeechobee in processing my request. False or misleading information may be punishable by a fine of up to $500.00 and imprisonment of up to 30 days and may result in the summary denial of this application.

Signature | Adam Ramsay (Printed Name) | 8/14/23 (Date)

For questions relating to this application packet, call the General Services Dept. at (863) 763-3372, Ext. 9820

CITY OF OKEECHOBEE

Application for Site Plan Review

City of Okeechobee
Checklist for Site Plan Review

		REQUIRED INFORMATION
1		Completed application (1)
2		Map showing location of site (may be on the cover sheet of site plan)
3		Two (2) copies of sealed site plan drawings prepared at a scale no smaller than one inch equals 60 feet, or in the case of small projects, the largest scale that can accommodate the entire site and all areas within 50 feet of the project boundary, and the scale, legend, and author block all on one 24" by 36" sheet. The site plan drawings shall include the location of all existing and proposed improvements, including, but not limited to:
	3.1	Water courses, water bodies, floodplains, wetlands, important natural features and wildlife areas, soil types, protected trees and vegetation or environmentally sensitive areas
	3.2	Streets, sidewalks, property lines and rights-of-way
	3.3	Utility lines/facilities, fire hydrants, septic tanks and drainfields
	3.4	Bridges, culverts and stormwater management facilities
	3.5	Buildings and structures and their distances from boundaries of the property, streets, and other structures
	3.6	Setback lines and required yards
	3.7	Ingress and egress to the site and buildings
	3.8	Vehicular use areas including off-street parking and loading areas
	3.9	On-site recreation and open space
	3.10	Landscaping, screens, buffers, walls, and fences,
	3.11	Method of solid waste collection and locations of and access to dumpsters
	3.12	Lighting and signs
4		Drawing notes and tabulations showing the following information shall be included along with the plan:
	4.1	Name, address and phone number of the owner
	4.2	Name, address and phone number of any agent, architect, engineer and planner
	4.3	Compete legal description of the property
	4.4	Future land use designation, current zoning and existing land use of the property and all abutting properties
	4.5	Total acreage of the property (square footage if less than two acres)
	4.6	Total # of dwelling units, by bedroom size; square footage of nonresidential uses by type of use (and/or seating, etc. as necessary to indicate the intensity)
	4.7	Number of off-street parking spaces provided (including handicapped spaces) and loading spaces and the calculation of, and basis for, the number of such spaces required by the Land Development Regulations
	4.8	Impervious surface calculations showing: the square footage and as a% of the total site for existing impervious surfaces, additional proposed impervious surfaces and the resulting proposed total impervious surfaces

Detail by Entity Name

Florida Limited Liability Company

PARK STREET OKEECHOBEE, LLC

Filing Information

Document Number	L22000487870
FEI/EIN Number	92-3774303
Date Filed	11/14/2022
State	FL
Status	ACTIVE

Principal Address

603 EAST FORT KING STREET
OCALA, FL 34471

Mailing Address

603 EAST FORT KING STREET
OCALA, FL 34471

Registered Agent Name & Address

RAMSAY, ADAM
603 EAST FORT KING STREET
OCALA, FL 34471

Authorized Person(s) Detail

Name & Address

Title MGR

RAMSAY, ADAM P
603 EAST FORT KING STREET
OCALA, FL 34471

Annual Reports

Report Year	Filed Date
2023	04/28/2023

Document Images

04/28/2023 -- ANNUAL REPORT	View image in PDF format
11/14/2022 -- Florida Limited Liability	View image in PDF format

SITE PLANS OF:

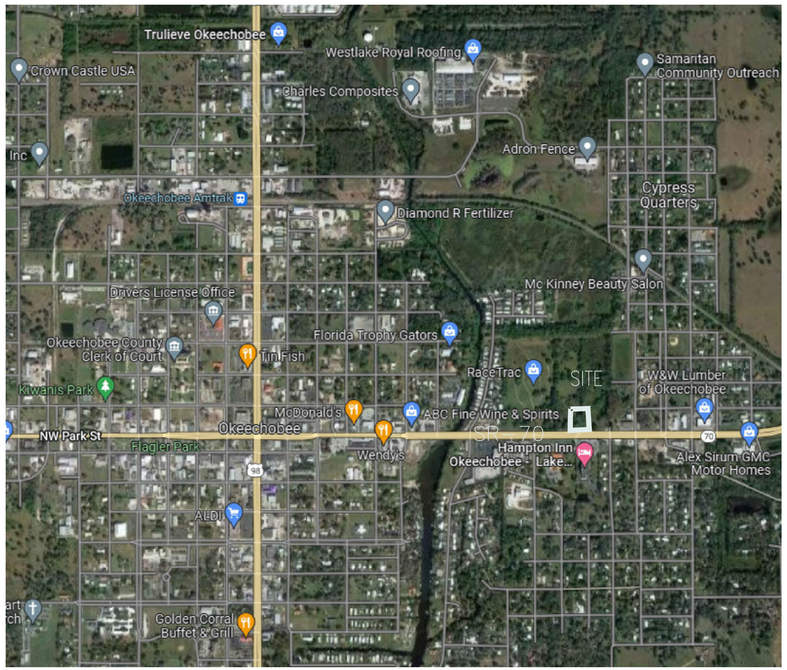
PARK STREET CARWASH

LOCATED IN SECTION 15; TOWNSHIP 37 SOUTH; RANGE 35 EAST
PARCEL ID: 2-15-37-35-0A00-00009-A000;
2-15-37-35-0A00-00009-0000;2-15-37-35-0A00-00010-0000;

LEGAL DESCRIPTION

LOT 1, PARK STREET COMMERCE CENTER , ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK
??, PAGE ??, OF THE PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA.

(Plat created by 1.23-0030TRC under city review)



NORTH

VICINITY MAP

N.T.S.

UTILITY COMPANIES

SANITARY SEWER:	OKEECHOBEE UTILITY AUTHORITY (863) 763-9460
WATER DISTRIBUTION:	OKEECHOBEE UTILITY AUTHORITY (863) 763-9460
ELECTRICAL POWER:	FPL (863) 763-6441
TELEPHONE:	CENTURY LINK (855) 263-9576
FIRE:	OKEECHOBEE FIRE DEPARTMENT (863) 763-4423
GARBAGE:	WASTE MANAGEMENT (866) 909-4458

PROJECT DIRECTORY

OWNER: WILLIAM R. GRIGSBY, JR
10282 PAYNE ROAD
SEBRING, FLORIDA 33875

DEVELOPER: K2 OKEECHOBEE,LLC
5305 GRAVES ROAD
CINCINNATI, OHIO 452143

ENGINEER: AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211
WINTER SPRINGS, FLORIDA 32708
JOHNNY HERBERT IV, P.E., JOHNNY@AMERICANCIVILENGINEERING.COM
CELL 407-376-1777 , OFFICE 407-327-7700,

SURVEYOR: BSM & ASSOCIATES, INC.
80 SE 31ST LANE
OKEECHOBEE, FLORIDA 34974
RICHARD BARNES III, RICKY.BARNES@BSMSURVEY.COM
(863) 484-8324 OFFICE

PLANS ISSUED FOR: DATE

OKEECHOBEE. SITE PLAN REVIEW	10/20/2023

INDEX OF SHEETS

ENGINEER OF RECORD
JOHN J. HERBERT IV, P.E.
LIC # 84698

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708
(407) 327-7700

PLAN DATE: 10/22/2023

CERT. OF AUTHORIZATION NO. 8729

SEC. A GENERAL CONSTRUCTION NOTES:

1. THE FOLLOWING GENERAL NOTES APPLY TO ALL CONSTRUCTION AS DEPICTED ON THE SITE CONSTRUCTION PLANS.
2. ALL PROPOSED SITE CONSTRUCTION SHALL BE PURSUANT TO INFORMATION SHOWN ON THESE PLANS AS APPROVED BY THE GOVERNING AUTHORITIES.
3. ALL CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE STATE, FEDERAL AND LOCAL CODES. ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT THEIR EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER. IT WILL BE THE RESPONSIBILITY OF OF THE CONTRACTOR TO INSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL CONDITIONS CONTAINED THERE IN.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE PRIOR TO BIDDING AND ACCEPTING THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DEMOLITION OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED WITH THE NEW FACILITIES. SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE PROEJCT ENGINEER AND REQUESTING A CLARIFICATION OF THE PLANS PRIOR TO DEMOLITION.
5. ANY PROPOSED FIELD CHANGES WHICH SUBSTANTIALLY DEVIATE FROM THIS PLAN SHALL BE APPROVED BY THE GOVERNING AUTHORITIES AND THE ENGINEER PRIOR TO THE CHANGE TO MADE IN THE FIELD.
6. ALL WORK AND MATERIALS FURNISHED SHALL BE IN REASONABLE CONFORMITY WITH THE LINES, GRADES, GRADING SECTIONS, CROSS SECTIONS, DIMENSIONS, MATERIAL REQUIREMENTS AND TESTING REQUIREMENTS THAT ARE SPECIFIED IN THE CONTRACT, PLANS OR SPECIFICATIONS.
7. ANY DISCREPANCY BETWEEN THE CONSTRUCTION INFORMATION SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ENGINEER'S ATTENTION. FAILURE TO DO SO AND TO CONTINUE CONSTRUCTION WITHOUT WRITTEN NOTIFICATION SHALL MAKE THE CONTRACTOR COMPLETELY LIABLE FOR WHATEVER ACTIONS AND/OR ERRORS THAT MAY SUBSEQUENTLY ARISE.
8. ALL IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH INFORMATION SHOWN ON THESE PLANS. ANY CONFLICTS WHICH RESULT IN CHANGES TO THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING PRIOR FOR REVIEW AND APPROVAL PRIOR TO FIELD CHANGES. MINOR ADJUSTMENTS CAUSED BY VARYING FIELD CONDITIONS, INCLUDING CHANGES AND DEPTHS OF BERMS AND SWALES MAY BE MADE WITH THE APPROVAL OF THE ENGINEER IF THE BASIC DESIGN INTENT IS MET.
9. THE INTENT AND/OR INTERPRETATION OF THESE CONSTRUCTION PLANS IF REQUIRED, SHALL BE MADE BY THE ENGINEER OF RECORD. ANY NEED BY THE CONTRACTOR FOR FOR INTERPRETATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER UPON DISCOVERY. NO A.D.A. TRAVEL ROUTES SHALL EXCEED A 5% SLOPE. NO A.D.A. PARKING SPACE SHALL EXCEED A 2% SLOPE IN ANY DIRECTION. DRIVEWAYS CONNECTING TO EXISTING ROADS/STREETS TO PROPOSED SITE PAVING AREAS SHALL NOT EXCEED AN 8% SLOPE. VERTICAL CURVES SHALL HAVE A LENGTH OF 20 FT. MIN. AT CREST AND SAG LOCATIONS.
10. ALL HORIZONTAL LAYOUT FOR SITE CONSTRUCTION SHALL BE BASED ON THE APPROVED PLAN AND/OR PLAT, AND PERFORMED BY QUALIFIED PERSONNEL.
11. ALL ELEVATIONS REFER TO THE DATUM AS INDICATED ON THE SURVEY (BY OTHERS).
12. THE CONTRACTOR SHALL TAKE CARE DURING THE CONSTRUCTION TO AVOID DISTURBING ANY EXISTING SURVEY MONUMENTS. ANY MONUMENT DISTURBED BY THE CONTRACTOR SHALL BE RESET AT THE CONTRACTOR'S EXPENSE BY THE PROJECT SURVEYOR.
13. THE CONTRACTOR SHALL HIRE A PROFESSIONAL TESTING LABORATORY AS NECESSARY TO PERFORM ALL TESTS REQUIRED BY THIS CONSTRUCTION.
14. THE CONTRACTOR SHALL NOTIFY AMERICAN CIVIL ENGINEERING COMPANY 24 HOURS IN ADVANCE PRIOR TO ANY TESTING AND SUPPLY THE ENGINEER WITH REQUIRED TEST RESULTS.
15. THE DESIGN AND ENGINEERING OF THIS PROJECT IS BASED ON INFORMATION SUPPLIED BY OTHERS. EASEMENTS OR OTHER ENCUMBRANCES, WHICH MAY EXIST AND NOT SHOW ON THE SURVEY ARE NOT THE RESPONSIBILITY OF THE ENGINEER.
16. EXITING SOILS CONDITIONS WHICH DIFFER FROM THE SOILS REPORT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AT TIME OF DISCOVERY.
17. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS CONTROLLING POLLUTION OF THE ENVIRONMENT AND EROSION/SEDIMENT CONTROL.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE BUFFER AND RETENTION AND DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE OWNER. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.
19. ANY FUEL STORAGE AREAS SHALL HAVE PRIOR OWNERS APPROVAL AND APPROPRIATE MEASURES SHALL BE TAKEN TO INSURE PROTECTION OF GROUNDWATER AND SOIL RESOURCES.
20. SITE WORK PERFORMED ON THIS PROEJCT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHEN AND WHERE NECESSARY WITH OTHER CONTRACTORS AND UTILITY COMPANIES.
21. THE INFORMATION ON THESE CONSTRUCTION PLANS ARE SUBJECT TO APPROVAL BY THE CITY, COUNTY, STATE AND FEDERAL AGENCIES. ALL WORK SHALL BE PURSUANT TO APPROVED PLANS AND ISSUED PERMITS.
22. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.
23. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT GUARANTEED AND AND SHALL BE INVESTIGATED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO INSTALLATION OF UNDERGROUND PIPES, FOOTERS OR EXCAVATION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY OF LOCATION OF EXISTING UTILITIES SHOWN OR NOT SHOWN SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE ALL NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS OF THESE UTILITIES WITH THE OWNER OF THE UTILITY.
24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COST WHICH MAY OCCUR DUE TO TO ANY DAMAGES CAUSED BY THE CONTRACTOR TO EXISTING UTILITY STRUCTURES OR PROPERTY. THE CONTRACTOR SHALL COVER THE ENTIRE COSTS OF ALL REPAIRS AND/OR REPLACEMENT.
25. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS AFFECTED UTILITY COMPANIES IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION, BY CALLING "SUNSHINE" AT 1-800-432-4770 OR 811. THE CONTRACTOR IS IS RESPONSIBLE FOR CONTACTING ALL UTILITIES NOT INCLUDED IN THE "SUNSHINE" PROGRAM.
26. CHAPTER 77-153 OF THE FLORIDA STATUTES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATING. MAPS SHOW ONLY THE APPROXIMATE LOCATION OF GAS MAINS AND DO NOT SHOW SERVICE LINES. THE ONLY SAFE AND CORRECT WAY TO LOCATE EITHER MAINS OR SERVICE LINES IS BY AN ON-SITE INSPECTION BY THE THE RESPECTIVE GAS COMPANY PERSONNEL. THEREFORE, EXCAVATORS ARE INSTRUCTED TO CONTACT THE RESPECTIVE GAS COMPANY TWO WORKING DAYS BEFORE ENTERING A CONSTRUCTION AREA.
27. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITY COMPANIES OF THE PROPOSED START OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO WATER, SEWER, ELECTRIC POWER, TELEPHONE, GAS AND CABLE TV COMPANIES. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDERGROUND CONDUITS (INCLUDING IRRIGATION) PRIOR TO SUB-BASE CONSTRUCTION.
28. UPON NOTICE FROM THE CONTRACTOR THAT CONSTRUCTION IS COMPLETE AND READY FOR ACCEPTANCE, THE ENGINEER SHALL MAKE FINAL INSPECTION AND NOTIFY THE CONTRACTOR AND OWNER OF ANY INCOMPLETE AND/OR DEFECTIVE WORK. THE CONTRACTOR SHALL CORRECT ALL SUCH ITEMS TO THE SATISFACTION OF THE ENGINEER AND OWNER. ALL REGULATORY AND GOVERNMENTAL AGENCIES WHICH REQUIRE FINAL INSPECTIONS SHALL HAVE BEEN CONTACTED BY THE CONTRACTOR AND HAVE INSPECTED AND APPROVED THE PROJECT PRIOR TO ACCEPTANCE BY THE OWNER.
29. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE. THE PLANS SHALL BE KEPT IN GOOD ORDER
30. THE CONTRACTOR SHALL PROVIDE COMPLETE "AS-BUILT" INFORMATION TO THE ENGINEER RELATIVE TO THE LOCATION OF ALL WATER LINES, WATER SERVICES, VALVES, SEWER LINES, SEWER SERVICES, STORM LINES, INVERTS OF STRUCTURES, FINAL RETENTION AREAS, FINISH PAVEMENT GRADES AND CONSTRUCTION BENCH MARKS FOR VERIFICATION. THE "AS-BUILT" RECORDS SHALL BE KEPT AT THE JOB SITE AND UPDATED AS THE PROJECT PROGRESSES. ONE (1) SET OF AS-BUILT PLANS ARE TO BE PROVIDED TO THE ENGINEER.
31. ENGINEER TO PROVIDE RECORD DRAWINGS AND CERTIFICATIONS TO THE ISSUED PERMITS.

48 HOURS BEFORE DIGGING
CALL TOLL FREE
811
SUNSHINE STATE ONE CALL
OF FLORIDA, INC.

SEC. B EARTHWORK:

1. EXISTING TOPOGRAPHY AND CONTOURS ARE BASED ON THE SURVEY (BY OTHERS).
2. A GEOTECHNICAL SOILS REPORT HAS BEEN PREPARED FOR THIS PROJECT. CONFLICT BETWEEN INFORMATION WITHIN THE REPORT AND THESE CONSTRUCTION PLANS SHALL BE REPORTED TO THE ENGINEER UPON DISCOVERY. THE CONTRACTOR SHALL REVIEW THE SOILS REPORT PRIOR TO BIDDING.
3. THE CONTRACTOR SHALL READ AND ADHERE TO ALL RECOMMENDATIONS CONTAINED IN THE SOILS REPORT.
4. EXISTING TREES, PLANTS AND SHRUBS WHICH ARE MARKED OR DESIGNATED AS PART OF THE LANDSCAPING SHALL BE CAREFULLY PROTECTED DURING CONSTRUCTION. WHERE TREES, PLANTS OR SHRUBS ARE ADJACENT TO THE CONSTRUCTION CARE SHALL BE TAKEN TO PROTECT AND RESTORE THE ORIGINAL CONDITIONS OF THE VEGETATION.
5. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE AND PROPER SOIL EROSION CONTROL MEASURES, AS NECESSARY.
6. ALL SITE CLEARING AND GRUBBING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 110 OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
7. ALL EXCAVATION AND EMBANKMENT SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 120 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. LATEST EDITION.
8. ALL FILL AREAS GREATER THAN 12 INCHES IN HEIGHT SHALL BE COMPACTED IN 12 INCH LIFTS (MEASURE PRIOR TO COMPACTION) TO 98% MAXIMUM DENSITY PER A.A.S.H.T.O. T-180.
9. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED UNLESS OTHERWISE NOTED ON THESE PLANS. ALL GRASSING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 570 OF FLORIDA DEPARTMENT OF TRANSPIRATION SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
10. ALL DESIGNATED AREAS TO BE SODDED PER THE PLANS, SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 575 OF THE F.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
11. THE CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS OR MEDIANS.
12. FINISH FLOOR ELEVATIONS ARE TYPICALLY 6 INCHES ABOVE DESIGN FINISHED GRADE AT OUTSIDE PERIMETER OF BUILDINGS EXCEPT AT ENTRIES AND WHERE OTHERWISE SHOWN ON THE GRADING PLAN.
13. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CONTROL DUST, MUD AND EROSION DURING CONSTRUCTION AND SHALL PROTECT ALL ADJACENT PROPERTIES AND RIGHTS-OF-WAY FROM DAMAGE BY EROSION, SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED DUST.
14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXISTING SITE AND SOIL CONDITIONS AND DETERMINE IF ANY OFF-SITE MATERIALS WILL NEED TO BE IMPORTED TO ACHIEVE THE GRADES SPECIFIED ON THE PLANS.
15. ALL EXCESS FILL FROM THE SITE SHALL BE STOCKPILED BY THE CONTRACTOR, IN A LOCATION DETERMINED BY THE OWNER OR THE OWNER'S REPRESENTATIVE AND THE ENGINEER.
16. ALL AREAS INDICATED SHALL BE COMPLETELY CLEAR OF ALL TIMBER, BRUSH, STUMPS ROOTS, GRASS, WEEDS, RUBBISH, AND ALL OTHER DEBRIS AND OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE GROUND.
17. PRIOR TO BID PREPARATION, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE OVERALL SITE CONDITIONS AND PERFORM ADDITIONAL INVESTIGATIONS AS DETERMINED NECESSARY TO UNDERSTAND THE LIMIT AND DEPTH OF EXPECTED ORGANIC SILT PEAT AREAS, ADEQUACY OF EXISTING MATERIALS AS FILL, DEWATERING REQUIREMENTS, CLEAN FILL REQUIRED FROM OFF-SITE AND MATERIALS TO BE DISPOSED OF OFF-SITE, ALL OF WHICH WILL AFFECT PRICING. ANY DELAY, INCONVENIENCE OR EXPENSE CAUSED TO THE CONTRACTOR DUE TO INADEQUATE INVESTIGATION OF EXISTING CONDITIONS SHALL BE INCIDENTAL TO THE CONTRACT, AND NO EXTRA COMPENSATION WILL BE ALLOWED. THE MATERIALS ANTICIPATED TO BE ENCOUNTERED DURING CONSTRUCTION MAY REQUIRE DRYING PRIOR TO USE AS BACKFILL, AND THE CONTRACTOR MAY HAVE TO IMPORT MATERIALS, AT NO EXTRA COST, FROM OFF-SITE TO MEET THE REQUIREMENTS FOR COMPACTION AND PROPER FILL.

SEC. C DRAINAGE:

1. ALL DRAINAGE RELATED CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH SOUTH FLORIDA WATER MANAGEMENT DISTRICT PERMIT ISSUED FOR THIS PROJECT.
2. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
3. THE ABOVE F.D.O.T. CONSTRUCTION DETAILS ARE HEREBY INCORPORATED THESE PLANS BY REFERENCE.
4. PIPE LENGTHS SHOWN REPRESENT SCALED DIMENSIONS BETWEEN CENTERLINES OF DRAINAGE STRUCTURES AND FROM END OF HEADWALLS AND MITERED END SECTIONS. BIDDERS SHALL ADJUST FOR PIPE LENGTHS WHEN BIDDING MITERED END SECTIONS.
5. ALL STORMWATER DRAINAGE PIPES SHALL BE REINFORCED CONCRETE PIPE (ASTM C-76, CLASS III) OR ADS HP-STORM UNLESS NOTED OTHERWISE.

SEC. D PAVING:

1. ALL PAVEMENT CONSTRUCTION SHALL BE IN ACCORDANCE WITH F.D.O.T. CURRENT CONSTRUCTION SPECIFICATIONS.
2. ALL PAVING SURFACES IN INTERSECTIONS AND ADJACENT SECTIONS SHALL BE GRADED TO DRAIN POSITIVELY IN THE DIRECTION SHOWN BY THE FLOW ARROWS ON THE PLANS AND TO PROVIDE A SMOOTHLY TRANSITIONED DRIVING SURFACE FOR VEHICLES WITH NO SHARP BREAKS IN GRADE, AND NO UNUSUALLY STEEP OR REVERSE CROSS SLOPES. APPROACHES TO INTERSECTIONS AND ENTRANCE AND EXIT GRADES TO INTERSECTIONS WILL HAVE TO BE ADJUSTED IN THE FIELD TO INSURE A SMOOTH AND UNIFORM CONNECTION. IN THESE AREAS, IT MAY ALSO BECOME ADVISABLE TO MAKE MINOR FIELD ADJUSTMENTS IN PAVEMENT GRADES TO ACCOMPLISH GRADE TRANSITIONS.
3. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. THE CONTRACTOR IS TO COORDINATE WITH THE ENGINEER PRIOR TO ANY ELEVATION CHANGES.
4. PRIOR TO CONSTRUCTING CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE ENGINEER FOR APPROVAL.
5. THE CONTRACTOR IS TO PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT MATERIAL AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
6. ALL ON-SITE PAVEMENT MARKINGS SHALL BE MADE WITH NON-THERMOPLASTIC PAINT TO FDOT STANDARD SPECIFICATIONS. PARKING STALL STRIPING TO BE 4" WIDE.
7. THE CONTRACTOR IS TO INSTALL EXTRA BASE MATERIAL WHEN THE DISTANCE BETWEEN THE PAVEMENT ELEVATION AND THE TOP OF THE PIPE OR BELL IS LESS THAN 12 INCHES. SEE "EXTRA BASE FOR CROSS CULVERTS UNDER FLEXIBLE PAVEMENT DETAIL."
8. CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS. CONCRETE FOR CURBS SHALL BE DEPARTMENT OF TRANSPORTATION CLASS "I" CONCRETE WITH A 28-DAY COMPRESSION STRENGTH OF 3000 PSI. ALL CURBS SHALL HAVE SAW CUT CONTRACTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 10'-0" ON CENTER. CONSTRUCTION OF CURBS SHALL BE IN CONFORMANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 520 AND DETAILS PROVIDED ON THE CONSTRUCTION PLANS.
9. PAVEMENT MARKINGS AND SIGNAGE SHALL BE PROVIDED AS SHOWN ON THE CONSTRUCTION PLANS AND SHALL MEET THE REQUIREMENTS OF THE OWNER/OPERATOR. SIGNAGE SHALL BE IN CONFORMANCE WITH MUTCD (LATEST EDITION). A 14 DAY PAVEMENT CURING TIME WILL BE PROVIDED PRIOR TO APPLICATION OF THE PAVEMENT MARKINGS. REFLECTIVE PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT INDEX NO. 17352.
10. A MINIMUM OF 2-WAY TRAFFIC SHALL BE MAINTAINED IN THE WORK SITE AREA. ALL CONSTRUCTION WARNING SIGNAGE SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION AND BE MAINTAINED THROUGHOUT CONSTRUCTION. ACCESS SHALL BE CONTINUOUSLY MAINTAINED FOR ALL PROPERTY OWNERS SURROUNDING THE WORK AREA. LIGHTED WARNING DEVICES ARE TO BE OPERATIONAL PRIOR TO DUSK EACH NIGHT DURING CONSTRUCTION.

SEC. E EROSION CONTROL:

1. APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, EXCAVATION, FILLING OR OTHER LAND DISTURBING ACTIVITIES, EXCEPT THOSE OPERATIONS NEEDED TO INSTALL SUCH MEASURES OR UNDERGROUND UTILITIES INSTALLATIONS.
2. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING DRAINAGE SYSTEM AND ADJACENT WATER BODIES AND WETLANDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL PERMIT CONDITIONS RELATED TO SUCH MEASURES. METHODS MAY INCLUDE BUT ARE NOT LIMITED TO, FLOATING SILT BARRIERS, SEDIMENTATION BASINS, SEDIMENT CHECK DAMS, SILT FENCES, SYNTHETIC BAILS. THE MEASURES SHOWN ON THESE PLANS SHALL BE CONSIDERED MINIMUM AND SHALL NOT DEVIATE THE CONTRACTOR FROM THE RESPONSIBILITY TO IMPLEMENT ANY MEASURES NECESSARY TO PROVIDE PROTECTION, EROSION, SEDIMENTATION AND TURBIDITY.
3. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE F.D.O.T. MANUAL FOR EROSION CONTROL (LATEST ED.)
4. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND NEEDED REPAIRS OR MAINTENANCE SHALL BE COMPLETED BEFORE WORK STOPS FOR THE DAY.
5. TEMPORARY SEDIMENT TRAPS ARE ACCEPTABLE IF THE INLET IS PROPERLY SCREENED WITH SYNTHETIC BALES AND LOW ENOUGH IN ELEVATION FOR FOR RUNOFF TO ENTER THE STRUCTURE.
6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONTINUOUSLY MAINTAINED BY THE CONTRACTOR DURING THE CONSTRUCTION PHASE OF THIS PROJECT UNTIL ACCEPTED BY THE OWNER.
7. FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION CONTROL PRACTICES COULD RESULT IN CONSTRUCTION BEING SUSPENDED BY THE ENGINEER.
8. SEDIMENT BARRIERS SHALL MEET D.O.T STANDARDS.
9. EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION BY THE ENGINEER OF RECORD.
10. ALL SEEDING FOR TEMPORARY STABILIZATION SHALL BE DONE AS EACH AREA IS MADE READY. CONSTRUCTION SEQUENCE TO MINIMIZE EROSION AND SEDIMENTATION AT STORM-WATER DISCHARGE POINTS:

A. CONTRACTOR TO INSTALL FDOT TYPE III SILT FENCES AT SITE DISCHARGE POINTS.
B. CONTRACTOR TO CONSTRUCT POND AND CONNECTING DRAINAGE AND OUTFALL PIPES AT INITIAL STAGES OF CONSTRUCTION.
C. ALL GRADING OPERATIONS SHALL BE PERFORMED WITHOUT DELAY, PAUSE OR SUSPENDED (CONTINUOUS OPERATION) UNTIL PROPOSED GRADES ARE MET. ALL EXPOSED EARTH SHALL BE SEEDED AND MULCHED OR SODDED SOON AFTER AFTER GRADING IS COMPLETED.

11. EROSION CONTROL PLAN - ANY MODIFICATIONS TO THIS PLAN MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. THE MODIFICATIONS MUST BE APPROVED BY THE ENGINEER OF RECORD AND IF SIGNIFICANT, THE PERMITTING AGENCY. NO CONTRACT DELAYS WILL BE ALLOWED FOR SUCH MODIFICATIONS OR APPROVALS.
12. OUTFALL PROTECTION - PROJECT PIPE OR DITCH DISCHARGES INTO OFF-SITE OUTFALLS SHALL BE INSPECTED DAILY FOR POSSIBLE SEDIMENT BUILDUP OR EROSION. OUTFALLS SHALL BE PROTECTED THROUGH USE OF ENVIRONMENTAL CONTROL FEATURES AS NECESSARY TO CONTAIN ANY SEDIMENT ENTERING THE IMMEDIATE AREA OF THE PROJECT. ANY SEDIMENT BUILDUP OR TRANSPORT OFF-SITE SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMEDY. THE CONTRACTOR SHALL USE APPROPRIATE MEASURES AS DIRECTED BY THE PROJECT ENGINEER FOR OUTFALL PROTECTION.
13. SLOPE PROTECTION - ANY DISTURBED OR REWORKED SLOPES 3:1 OR GREATER IN SLOPE SHALL BE ADEQUATELY PROTECTED FROM EROSION THROUGH THE USE OF TEMPORARY SODDING UNTIL PERMANENTLY STABILIZED. SUCH SLOPES SHALL NOT BE LEFT UNPROTECTED MORE THAN 24 HOURS OR PRIOR TO ANTICIPATED RAINFALL EVENTS.
14. SYNTHETIC HAY BALES - SHALL BE PLACED AT THE BASE OF ANY SLOPE WHERE A RAINFALL EVENT COULD ERODE A SLOPE AND TRANSPORT SEDIMENTS OFF SITE. BALES SHALL BE DOUBLE STAKED IN ACCORDANCE WITH FDOT STANDARDS. IF EROSION DEPOSITS REACH THE NEAR THE TOP OF EXISTING BALES THEN SEDIMENTS SHOULD BE REMOVED, ANY DAMAGED OR INEFFECTIVE BALES ARE TO BE REPLACED. THE EXACT LOCATION OF BALE INSTALLATIONS SHALL BE AS DIRECTED BY THE CONSTRUCTION SUPERINTENDENT.
15. A. BACK OF SIDEWALK OR MEDIAN INLETS - THESE SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE INLET TOP SHALL NOT BE HIGHER THAN INLET TOP. SOCK PIPE SHALL BE INSTALLED AROUND INLET TOP. A SECOND ROW OF SOCK PIPE SHALL BE PLACED AROUND INLET APPROXIMATELY 4 " OUTSIDE FIRST ROW. BETWEEN ROWS THERE SHALL BE A DEPRESSIONS TO ACT AS A SEDIMENT BASIN. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH A SINGLE LINE OF SOCK PIPE TO PREVENT SEDIMENT INTAKE FROM OTHER AREAS.

    B. CURB INTAKES - THESE INLETS SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL THE PROJECT IS COMPLETE. A SILT FENCE (TYPE III) SHALL BE PLACED AROUND THE OF THE BACK INLET IMMEDIATELY ADJACENT TO THE EDGE OF THE THE INLET. ALL EXPOSED SLOPED MATERIAL ADJACENT TO THE INLET SHALL BE BE COVERED WITH EROSION CONTROL SOD TO MINIMIZE SEDIMENT ENTERING THE NEW INLET.
16. STOCKPILED MATERIALS SHALL NOT BE LEFT IN EROSION PRONE AREAS TO NEXT TO A KNOWN WETLAND.
17. DAILY INSPECTION OF ALL EROSION CONTROL MEASURES AND CONDITIONS OF ADJACENT PROPERTIES SHALL BE PERFORMED BY THE CONTRACTOR. ANY AREAS OF CONCERN SHALL BE NOTED AND CORRECTED. ANY SIGNIFICANT EROSION AREAS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD.

SEC. F DRY POND & SWALE RETENTION AREAS:

1. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL SYSTEMS FOR CONFORMANCE WITH THE SITE CONSTRUCTIONS PLANS AND FIELD CHANGES. BANKS AND SLOPES OF RETENTION PONDS SHALL ALSO BE CHECKED AFTER RAINFALL EVENTS FOR EROSION PROBLEMS.
2. THE CONTRACTOR SHALL REPAIR ALL EROSION AND SEDIMENT CONTROL SYSTEMS AS REQUIRED FOR CONTINUED FUNCTION. RE-GRADE IF REQUIRED, TO MAINTAIN DESIGN CONFIGURATION. ADD SOD AND SILT FENCES AS REQUIRED TO PREVENT SOIL AND SILT FROM EXITING THE SITE.
3. MOW RETENTION AREAS REGULARLY TO MAINTAIN WEED OVERGROWTH AND PROMOTE TURF GROWTH.
4. INSPECT RETENTION AREAS PERIODICALLY FOR ACCUMULATION OF DEBRIS AND TRASH. PROPERLY DISPOSE OF ALL DEBRIS AND TRASH IN RETENTION AREAS AND CONVEYANCE SWALES.
5. INSPECT RETENTION AREA BOTTOMS FOR DEPOSITS OF SAND AND/OR SILT AND REMOVE.
6. PERCOLATION PERFORMANCE SHALL BE EVALUATED YEARLY FOR EACH DRY RETENTION AREA. THE RETENTION AREAS SHALL PERCOLATE THE DESIGN WATER QUALITY VOLUME WITHIN 72 HOURS OF THE END OF RAINFALL EVENT. BOTTOM MAINTENANCE SHALL BE PERFORMED AS REQUIRED BY EXERCISING THE FOLLOWING PROCEDURE:

    A. REMOVE 4 TO 6 INCHES OF RETENTION AREA BOTTOM MATERIAL AND SCARIFY.

    B. REPLACE EXCAVATED MATERIAL WITH CLEAN SAND MATERIAL TO DESIGN GRADE AND SEED AND MULCH OR COVER WITH NON-MUCK GROWN SOD.

SEC. G WORKS IN PUBLIC RIGHT-OF-WAY:

1. ALL LOCAL, STATE AND FEDERAL ORDINANCES, POLICIES AND/OR OTHER REGULATIONS REGARDING TRAFFIC AND PEDESTRIAN TEMPORARY BARRICADES, LIGHTS, SIGNALS, SIGNAGE ETC., SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SAFE AND CONVENIENT MEANS OF ACCESS AND EGRESS TO ALL PARTS OF THE PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR.
2. PRIOR TO COMMENCING WORK THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL BARRICADES, WARNING SIGNS, AND MARKINGS FOR HAZARDS AND THE CONTROL OF TRAFFIC IN REASONABLE CONFORMITY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS OR AS DIRECTED BY F.D.OT. AND LOCAL TRAFFIC ENGINEER SUCH AS TO EFFECTIVELY PREVENT ACCIDENTS IN ALL PLACES WHERE THE WORK CAUSES OBSTRUCTIONS TO THE NORMAL TRAFFIC OR CONSTITUTES IN ANY WAY A HAZARD TO THE PUBLIC.
3. THE CONTRACTOR SHALL CONTROL HIS OPERATIONS AND THOSE OF HIS SUBCONTRACTORS AND ALL SUPPLIERS TO ASSURE THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC. THE CONTRACTOR SHALL MAINTAIN FREE AND UNOBSTRUCTED MOVEMENT OF VEHICULAR TRAFFIC AND SHALL LIMIT HIS OPERATIONS FOR THE SAFETY AND CONVENIENCE OF THE TRAVELING PUBLIC. UNDER ALL CIRCUMSTANCES, SAFETY SHALL BE THE MOST IMPORTANT CONSIDERATION.
4. THE CONTRACTOR SHALL COMPLY WITH ALL LEGAL LOAD RESTRICTIONS IN THE HAULING OF MATERIALS IN PUBLIC ROADS BEYOND THE LIMITS OF THE WORK. A SPECIAL PERMIT WILL NOT RELIEVE THE CONTRACTOR OF LIABILITY FOR THE DAMAGE WHICH MAY RESULT FROM THE MOVING OF MATERIAL AND EQUIPMENT.
5. ALL STRIPING SHALL BE THERMOPLASTIC AND SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATIONS AND SUPPLEMENTS.
6. REFLECTIVE PAVEMENT MARKERS SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATIONS AND SUPPLEMENTS.
7. ALL SIGNS WITHIN FDOT RIGHT-OF-WAY SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATIONS AND SUPPLEMENTS.
8. REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH CURRENT FDOT STANDARDS.
9. STRIPING WITHIN FDOT RIGHT-OF-WAY SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17346.
10. SIGNS WITHIN FDOT RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 11860 AND SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17302.
11. SIGNING AND STRIPING WITHIN FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
12. ALL WORK PERFORMED WITHIN THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL CONFORM TO:
    A.) FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION.
    B.) FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS FOR STREETS AND HIGHWAYS ON STATE MAINTAINED SYSTEMS. (AKA: STANDARD INDEX) COMPLIANCE WITH ALL APPLICABLE FDOT INDEXES IS REQUIRED.
13. THE MAINTENANCE OF TRAFFIC IS TO BE PER APPLICABLE FDOT INDEX DESIGN.

SEC. H SAFETY:

1. DURING THE CONSTRUCTION AND/ OR MAINTENANCE OF THIS PROJECT. ALL SAFETY REGULATIONS ARE TO BE ENFORCED BY THE CONTRACTOR. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY CURRENT OSHA STANDARDS.
2. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF THE STATE OF FLORIDA MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS.
3. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

SEC. L DEMOLITION:

1, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND LICENSES FOR PERFORMING THE DEMOLITION WORK AND SHALL FURNISH A COPY OF SAME TO THE ENGINEER PRIOR TO COMMENCING THE WORK. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE PERMITS.
2. THE CONTRACTOR SHALL MODIFY ALL UTILITY COMPANIES OR LOCAL AUTHORITIES FURNISHING GAS, WATER, ELECTRICAL, TELEPHONE, OR UTILITY/SEWER SERVICE. SO THEY CAN REMOVE, RELOCATE, DISCONNECT, CAP OR PLUG THEIR EQUIPMENT IN ORDER TO FACILITATE DEMOLITION.
3. THE CONTRACTOR SHALL PROTECT ALL UTILITIES AND OTHER IMPROVEMENTS SHOWN ON THESE PLANS AND ALL OTHER UTILITIES AND OTHER IMPROVEMENT NOT SHOWN. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR REPAIRS OF UTILITIES AND OTHER IMPROVEMENTS DAMAGED DURING CONSTRUCTION AND SHALL MAINTAIN SUFFICIENT PROTECTION TO ALL UTILITIES REQUIRED TO PROTECT THEM FROM DAMAGE AND TO PROTECT THE PUBLIC DURING CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL TREES, STRUCTURES, AND UTILITIES NOT MARKED FOR REMOVAL OR DEMOLITION AND SHALL PROMPTLY REPAIR ANY DAMAGE AS DIRECTED BY THE ENGINEER AT NO COST TO THE OWNER.
5. THE CONTRACTOR TO REMOVE ALL BUILDING STRUCTURES MARKED FOR DEMOLITION WHICH INCLUDES ALL FOOTERS ASSOCIATED WITH THE STRUCTURE, SEPTIC SYSTEMS AND WATER LINES TO THE METER LOCATION, LATERALS TO THE RIGHT-OF-WAY LINE (CAP PRIOR TO BACKFILLING THE TRENCH), AND ALL UNDERGROUND ELECTRICAL WIRING NOT ASSOCIATED WITH THE APPROPRIATE POWER COMPANY.
6. THE CONTRACTOR SHALL REMOVE ALL PAVING MARKED FOR DEMOLITION WHICH INCLUDES ALL ASPHALT, CONCRETE, BASE, GRAVEL, BRICK AND SIDEWALK.
7. THE CONTRACTOR SHALL REMOVE ALL TREES MARKED FOR REMOVAL WHICH INCLUDES THE ROOTS ASSOCIATED WITH THE TREE. THE TREES NOT MARKED FOR REMOVAL SHALL BE PROTECTED IN ACCORDANCE WITH THE TREE PROTECTION DETAILS.
8. THE CONTRACTOR IS TO REMOVE ALL UNSALVAGEABLE MATERIALS AND YARD WASTE FROM THE SITE IMMEDIATELY AND DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
9. THE CONTRACTOR SHALL SAW-CUT A SMOOTH STRAIGHT EDGE ON ANY PAVEMENT PROPOSED FOR DEMOLITION PRIOR TO ITS REMOVAL TO ENSURE THAT THE EDGE OF THE INTERFACE BETWEEN OLD AND NEW PAVEMENT IS STRAIGHT, UNIFORM AND EVEN IN ELEVATION.

SEC. I UNDERGROUND UTILITIES:

1. THE ENGINEER RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER, RETEST AND/OR PERFORM ANY ACTION NECESSARY TO ENSURE THAT THE IMPROVEMENTS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL COORDINATE ALL BACKFILL OPERATIONS WITH THE PROJECT SOILS ENGINEER AND SUBMIT TEST REPORTS TO ENGINEER PRIOR TO BEGINNING WORK ON THE NEXT ITEM OF WORK, I.E. SUBGRADE PRIOR TO CURB.
3. THE CONTRACTOR SHALL RECOGNIZE AND ABIDE BY ALL OSHA EXCAVATION SAFETY STANDARDS, INCLUDING THE FLORIDA TRENCH SAFETY ACT (90-96, LAWS OF FLORIDA). ANY MATERIAL, CONSTRUCTION METHODS, OR MATERIAL COST TO COMPLY WITH THESE LAWS SHALL BE INCIDENTAL TO THE CONTRACT.
4. FLORIDA LAW (533.851) REQUIRES THAT PERSONS MAKING EXCAVATIONS IN PUBLIC OR PRIVATE STREETS, ALLEYS, RIGHT-OF-WAY OR UTILITY EASEMENTS WITH HAND TOOLS OR POWER EQUIPMENT MUST FIRST OBTAIN INFORMATION ON THE THE LOCATION OF UNDERGROUND GAS PIPE LINES. THE CONTRACTOR SHALL NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOUR AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATION.
5. ALL WORK SHALL SHALL BE OPEN TO AND SUBJECT TO INSPECTION.
6. THE CONTRACTOR SHALL COORDINATE THE INSTALLATIONS OF UTILITY CONDUITS (SLEEVES) UNDER PAVED AREAS WITH EACH UTILITY COMPANY PRIOR TO BASE INSTALLATION.
7. ALL DEWATERING COSTS ASSOCIATED WITH THE INSTALLATION AND CONSTRUCTION OF THE UNDERGROUND UTILITIES; STORMWATER PIPES AND MANHOLES; SANITARY SEWER MAINS, FORCE MAINS, MANHOLES, AND LIFT STATIONS; AND STORMWATER MANAGEMENT SYSTEMS SHALL BE INCLUDED AS PART OF THE CONSTRUCTION BID COSTS.

SEC. J SANITARY SEWER SYSTEM:

1. ALL SEWER COLLECTION SYSTEM RELATED ITEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH **LOCAL** STANDARDS, THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND HEALTH DEPT. REQUIREMENTS.
2. IF UNSUITABLE MATERIAL IN THE VICINITY OF SANITARY SEWER LINES ARE FOUND DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHO WILL DIRECT THE CONTRACTOR TO REMOVE THE UNSUITABLE MATERIAL AND PREPARE THE TRENCH AND INSTALL THE SEWER LINES IN ACCORDANCE WITH ASTM D-2321.
3. ALL SANITARY SEWER MAINS AND LATERALS WITH IN THE R.O.W. SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
4. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW WORK TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING CONNECTION POINT AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.
5. ALL SANITARY SEWER COVERS SHALL BE TRAFFIC RATED FOR H-20 LOADING.
6. THE CONTRACTOR SHALL PROVIDE CERTIFIED UTILITY RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE RECORD DRAWINGS SHALL SHOW FINAL GRADES AND LOCATIONS ON ALL SANITARY SEWER MAINS AND SERVICES. THE CONTRACTOR SHALL PROVIDE ONE (1) COPY OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER.
7. THE CONTRACTOR SHALL PERFORM AN INFILTRATION/EXFILTRATION TEST ON ALL GRAVITY SEWER IN ACCORDANCE WITH THE REGULATION AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE TESTING COMPANY. COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.
8. ALL FORCEMAINS SHALL BE SUBJECT TO A HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S RESPONSIBILITY.

SEC. K WATER DISTRIBUTION:

1. ALL WATER DISTRIBUTION SYSTEM RELATED ITEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL UTILITIES PROVIDER REQUIREMENTS, FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION, AND HEALTH DEPT. REQUIREMENTS.
2. ALL MATERIALS FURNISHED BY THE CONTRACTOR UNDER THIS SECTION SHALL BE NEW, HIGH GRADE AND FREE FROM DEFECTS.
3. PRESSURE AND LEAKAGE TESTS FOR NEWLY-INSTALLED WATER DISTRIBUTION SYSTEM PRESSURE PIPES AND APPURTENANCES SHALL BE PERFORMED IN CONFORMANCE WITH F.D.E.P AND LOCAL UTILITIES PROVIDER.
4. ALL WATER LINES SHALL BE INSTALLED IN A DRY TRENCH.
5. PRESSURE AND LEAKAGE TESTS FOR NEWLY-INSTALLED WATER DISTRIBUTION SYSTEM PRESSURE PIPES AND APPURTENANCES SHALL BE PERFORMED IN CONFORMANCE WITH CITY, COUNTY AND FDOT STANDARDS. POTABLE WATER TEST PRESSURES SHALL BE 150 PSI; DURATION OF TESTS IS TO BE 2 HOURS. TESTS TO BE CONDUCTED PURSUANT TO AWWA C605.
6. DISINFECT POTABLE WATER MAINS IN ACCORDANCE WITH AWWA C651 STANDARD PROCEDURES FOR DISINFECTING WATER MAINS.
7. ALL PVC PIPE MUST BEAR THE NSF LOGO FOR POTABLE WATER USE.
8. PRIOR TO THE CONNECTION TO ANY EXISTING MAIN, THE PROPOSED WATER MAIN SHALL BE DISINFECTED, HAVE ENGINEER APPROVED PRESSURE TESTING AND HAVE FDEP CLEARANCE. REFER TO FDEP PERMIT FOR ANY ADDITIONAL REQUIREMENTS.
9. THE WATERMAINS SHALL BE INSTALLED AS NOTED ON THE PLANS. WHERE APPLICABLE, A SEPARATION BETWEEN WATERMAINS, SEWER, RE-USE OR STORM PIPES SHALL MEET OR EXCEED THE REQUIREMENTS OF F.D.E.P.

LEGEND

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

MADE IN USA

REVISIONS

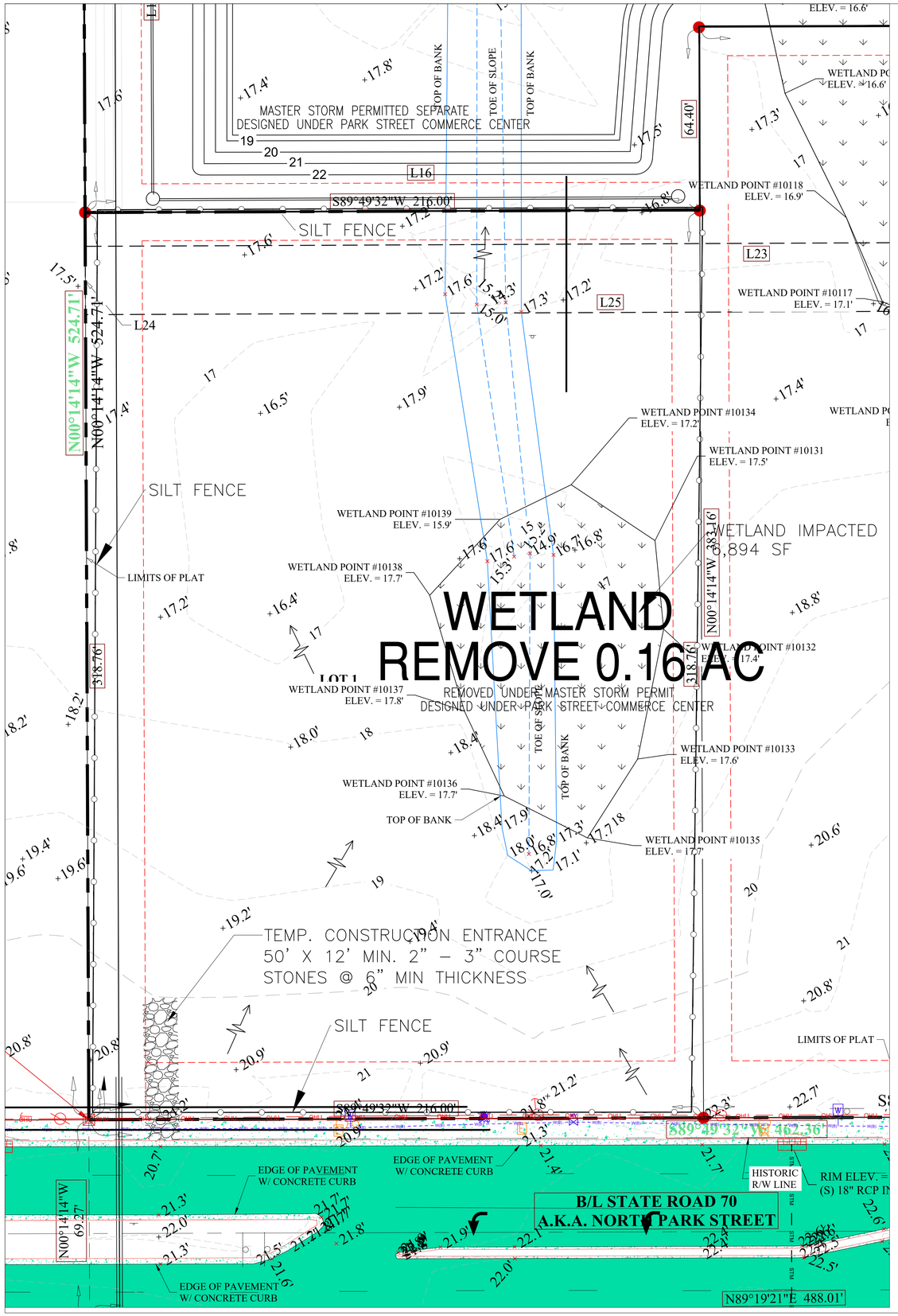
DATE

AMERICAN CIVIL
ENGINEERING CO.
207 N. MOSS RD., SUITE 211; WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization
number 8729

GENERAL NOTES
PARK STREET
CARWASH
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
GENERAL NOTES
PROJECT NO. 22640
C2.0



SWPPP NOTES:

1. SITE DESCRIPTION: PROPOSED CARWASH AND PARKING

1.A. NATURE OF CONSTRUCTION ACTIVITY:
CONSTRUCTION OF PROPOSED DEVELOPMENT AND DRY POND
GRADING, UNDERGROUND UTILITIES, AND LANDSCAPING PER APPROVED SITE PLANS.

1.B. SEQUENCE OF SOIL DISTURBANCE:

1. PREPARE SITE AND INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. INSTALL PERIMETER SEDIMENT AND EROSION CONTROLS INCLUDING SILT FENCE AS SHOWN ON THE SWPPP PLAN.
3. DEMO NATURAL FEATURES AND REMOVE ENCOUNTERED MUCK
4. INSTALL ROAD, STORM SEWER AND UTILITIES.
5. STABILIZE SITE WITH SEED OR SOD WHERE APPLICABLE.

1.C. AREA ESTIMATE:

TOTAL SITE AREA:	1.581	ACRES
DISTURBED SITE AREA:	1.581	ACRES
WETLANDS REMOVED:	0.158	ACRES (6,894 SF)

1.D. SOILS:
THE SOILS AS REPORTED IN THE USDA NRCS SOIL SURVEY REPORT FOR OKEECHOBEE COUNTY IS:
#6 MANATEE LOAMY FINE SAND – HYDRAULIC GROUP B/D
#11 IMMOKALEE FINE SAND – HYDRAULIC GROUP B/D

1.E. DRAINAGE AREA FOR EXISTING DISCHARGE POINT: 1.581 ACRES
DRAINAGE AREA FOR PROPOSED DISCHARGE POINT: 1.581 ACRES

1.F. LATITUDE AND LONGITUDE OF EXISTING DISCHARGE POINT:
DISCHARGE POINT LAT: 27° 14' 43" N
DISCHARGE POINT LONG: 80° 49' 02" W

1.G. LATITUDE AND LONGITUDE OF PROPOSED DISCHARGE POINT:
DISCHARGE POINT LAT: 27° 14' 43" N
DISCHARGE POINT LONG: 80° 49' 00" W
DISCHARGES TO EXISTING INLET

2. CONTROLS

2.A. EROSION AND SEDIMENT CONTROLS:

2.A.1 STABILIZATION PRACTICES:

1) TEMPORARY SEEDING SHALL BE RYE GRASS APPLIED AT MANUFACTURER'S RECOMMENDATIONS TO ANY DISTURBED AREAS THAT ARE INACTIVE FOR MORE THAN 7 DAYS.
2) MULCHING PRACTICES AND SOD SHALL BE APPLIED TO PARKING LOT ISLANDS.
3) FILTER FABRIC SHALL BE PLACED UNDER THE ROCK ENTRANCE/EXIT.

2.A.2 STRUCTURAL PRACTICES:

1. PRIOR TO CLEARING, A SILT FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF THE SITE.
2. DURING THE CLEARING, GRUBBING, AND SITE GRADING STAGES, AREAS TO BE DISTURBED MORE THAN 21 DAYS SHALL BE STABILIZED WITH RYE GRASS APPLIED PER THE MANUFACTURE'S SPECIFICATIONS. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 4,000 POUNDS OF STRAW PER ACRE. A ROCK CONSTRUCTION ACCESS ROAD SHALL BE CONSTRUCTED TO MINIMIZE THE EFFECTS OF TRUCK TRAFFIC AND SEDIMENTATION TRACKING BOTH ON AND OFF THE SITE. ONLY ONE CONSTRUCTION ENTRANCE IS PROPOSED. TEMPORARY BARRICADES SHALL BE INSTALLED AT THE EXISTING CURB CUT ALONG EAST GATE DRIVE TO PREVENT TRAFFIC FLOW.
3. AFTER ALL INITIAL SITE GRADING WORK, ALL PROPOSED INLETS/OUTFALLS, ONCE INSTALLED, SHALL BE PROTECTED FROM EROSION AND SEDIMENT RUNOFF BY THE USE OF THE INLET PROTECTION DESIGNATED ON THE SITE MAP. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE STABILIZED WITH SEED OR SOD AS INDICATED ON THE SITE MAP NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. SEEDING SHALL BE THE SAME AS IN TEMPORARY SEEDING.
4. ALL INSTALLATION SHALL BE COMMENCED AS DEPICTED ON THE SITE MAPS AND EROSION CONTROL DETAIL SHEET.

2.B. PERMANENT STORMWATER MANAGEMENT CONTROLS:

1. EXISTING PERMANENT STORMWATER DETENTION POND HAS BEEN DESIGNED TO TREAT AND ATTENUATE THE REQUIRED VOLUME GENERATED BY THE SITE LAYOUT.
2. CATCH BASINS AND STORM SEWER SYSTEM TO BE INSTALLED ON-SITE TO PROVIDE POSITIVE DRAINAGE OF THE ENTIRE SITE TO THE STORMWATER POND.

2.C. CONTROLS FOR OTHER POLLUTANTS

1. WASTE DISPOSAL: ALL WASTE WILL BE DISPOSED OF IN AN APPROPRIATE LEGAL MANOR, AND COMPLY WITH THE CITY OF ORLANDO ORDINANCES FOR WASTE DISPOSAL AND COMMERCIAL SITE DEVELOPMENT.
2. VEHICLE TRACKING: OFF SITE VEHICLE TRACKING OF SEDIMENTS AND DUST GENERATION WILL BE MINIMIZED VIA A ROCK CONSTRUCTION ENTRANCE, DAILY SWEEPING AND THE USE OF WATER TO KEEP DUST DOWN.
3. FERTILIZERS, HERBICIDES, AND PESTICIDES: FERTILIZERS AND PESTICIDES WILL BE USED AT A MINIMUM AND IN ACCORDANCE WITH THE MANUFACTURER'S SUGGESTED APPLICATION RATES. THE FERTILIZERS AND PESTICIDES SHALL BE STORED IN A COVERED SHED.
4. TOXIC SUBSTANCES: ALL PAINTS AND OTHER CHEMICALS WILL BE STORED IN A LOCKED COVERED SHED.
5. OTHER: PORT-O-LETS WILL BE PLACED AWAY FROM THE STORM SEWER SYSTEMS AND STORM INLETS. NO VEHICLE MAINTENANCE SHALL BE CONDUCTED ON-SITE. A WASHDOWN AREA SHALL BE DESIGNATED AT ALL TIMES AND WILL NOT BE LOCATED IN ANY AREA THAT WILL ALLOW FOR THE DISCHARGE OF POLLUTED RUNOFF. A SMALL VEGETATED BERM SHALL BE PLACED AROUND THE WASHDOWN AREA.

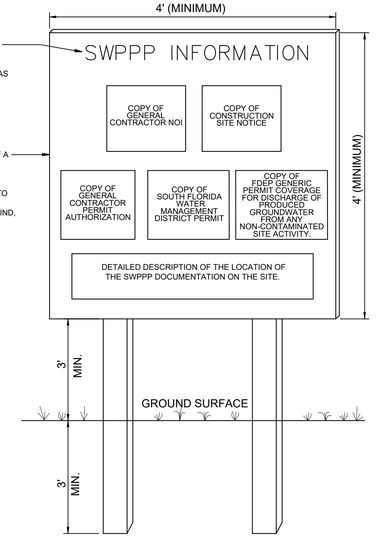
3. MAINTENANCE:

1. SILT FENCE SHALL BE INSPECTED AT LEAST WEEKLY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
2. MAINTENANCE SHALL BE PERFORMED ON THE ROCK ENTRANCE WHEN ANY VOID SPACES ARE FULL OF SEDIMENT.
3. INLETS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAIN EVENT AND ANY REPAIRS SHALL BE PERFORMED IMMEDIATELY.
4. BARE AREAS OF THE SITE THAT WERE PREVIOUSLY SEEDED SHALL BE RE-SEEDED PER MANUFACTURES' INSTRUCTIONS.
5. MULCH AND SOD THAT HAS BEEN WASHED OUT SHALL BE REPLACED IMMEDIATELY.

ALL MEASURES ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. CONTROLS ARE TO BE REPLACED OR REPAIRED IF IN A SUBSTANDARD CONDITION. ALL MAINTENANCE MODIFICATIONS ARE TO BE NOTED, ON PLANS, AS THEY OCCUR.

4. INSPECTIONS:

A QUALIFIED INSPECTOR SHALL INSPECT ALL POINTS OF DISCHARGE INTO SURFACE WATERS OF THE STATE OR AND MS4; DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED; AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; STRUCTURAL CONTROLS; AND, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AT LEAST ONCE EVERY CALENDAR DAY AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.50 INCHES OR GREATER. A REPORT SUMMARIZING THE SCOPE OF THE INSPECTION SHALL BE MADE AND RETAINED IN THE CONSTRUCTION TRAILER AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN.



NOTES:

1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
3) CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

SWPPP INFORMATION SIGN

NTS

5. NON-STORMWATER DISCHARGES:

IT IS ANTICIPATED THAT THE FOLLOWING NON-STORMWATER DISCHARGES MAY OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

1. WATER FROM LINE FLUSHINGS
2. PAVEMENT WASH WATER (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED)
3. SITE WATERING, TO ALLEVIATE FUGATIVE DUST
4. ROUTINE EXTERNAL BUILDING WASHDOWN WHICH DOES NOT USE DETERGENTS
5. IRRIGATION DRAINAGE

IF SAID DISCHARGES DO OCCUR, THEY WILL BE DIRECTED TO THE TEMPORARY SEDIMENT BASIN PRIOR TO DISCHARGE.

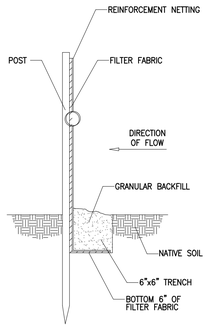
6. CONTRACTOR/SUBCONTRACTOR CERTIFICATION:

ALL CONTRACTOR(S) AND SUBCONTRACTOR(S) IDENTIFIED ABOVE MUST SIGN THE FOLLOWING CERTIFICATION:

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER."

EROSION CONTROL NOTES:

1. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
2. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 14 DAYS OF FINAL GRADING.
3. SHOULD CONSTRUCTION STOP FOR LONGER THAN 7 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED.
4. MAINTENANCE OF EROSION CONTROL MEASURES SHALL OCCUR AFTER EACH RAIN AND AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT IS 0.50 INCHES OR GREATER.
5. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
6. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
7. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ONSITE INSPECTION.
8. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES.
9. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE END SHALL BE COVERED WITH FILTER FABRIC.
10. CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
11. NO PERSON SHALL CAUSE, LET, SUFFER, ALLOW, OR PERMIT THE EMISSIONS OF UNCONFINED PARTICULATE MATTER FROM ANY ACTIVITY, INCLUDING VEHICULAR MOVEMENT; TRANSPORTATION OF MATERIALS; CONSTRUCTION, ALTERATION, DEMOLITION OR WRECKING; OR INDUSTRIALLY RELATED ACTIVITIES, SUCH AS LOADING, UNLOADING, STORING, OR HANDLING; WITHOUT TAKING REASONABLE PRECAUTIONS TO PREVENT SUCH EMISSIONS INCLUDING BUT NOT LIMITED TO APPLICATION OF WATER, DUST SUPPRESSANTS, PLANTING OF VEGETATION, POINT OF ACTIVITY CONTROLS (HOODS, FILTERS, ETC) AND OTHER MEASURES
12. USE CAUTION TO PREVENT EROSION DURING CONSTRUCTION ALONG THE BOUNDARY OF THE PROPERTY AND INTO ALL DRAINAGE FACILITIES AND DITCHES. CONSTRUCTION WILL REQUIRE BEST MANAGEMENT PRACTICES (BMPS) FOR EROSION CONTROL. MINIMIZE THE EXTENT OF AREA EXPOSED AT ONE TIME, APPLY PERIMETER CONTROLS WHERE NECESSARY, AND PERFORM MAINTENANCE CHECKS EVERY SEVEN (7) DAYS AND AFTER EVERY 1/2 INCH RAIN. THE CONSTRUCTION ENTRY AREA SHALL BE DESIGNED TO PREVENT TRUCKS FROM TRACKING SOIL ONTO LOCAL ROADS AND THE AFFECTED STORM DRAINAGE SYSTEM SHALL BE PROTECTED . THIS MAY REQUIRE PERIODIC STREET SWEEPING.
13. SOLID WASTE DISPOSAL – ANY MISCELLANEOUS GARBAGE, HAZARDOUS WASTE, YARD WASTE (INCLUDING EXCESS FERTILIZERS, HERBICIDES AND PESTICIDES), AND CONSTRUCTION OR DEMOLITION DEBRIS SHALL BE DISPOSED OF OFF –SITE ACCORDING TO THE SOLID WASTE AND HAZARDOUS WASTE REGULATIONS. RECYCLING OF MATERIALS IS ENCOURAGED IF APPLICABLE. CALL THE ORANGE COUNTY SOLID WASTE HOTLINE AT 407-836-6601 FOR INFORMATION



SILT BARRIER DETAIL

NOT TO SCALE

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

MADE IN USA

DATE	REVISIONS

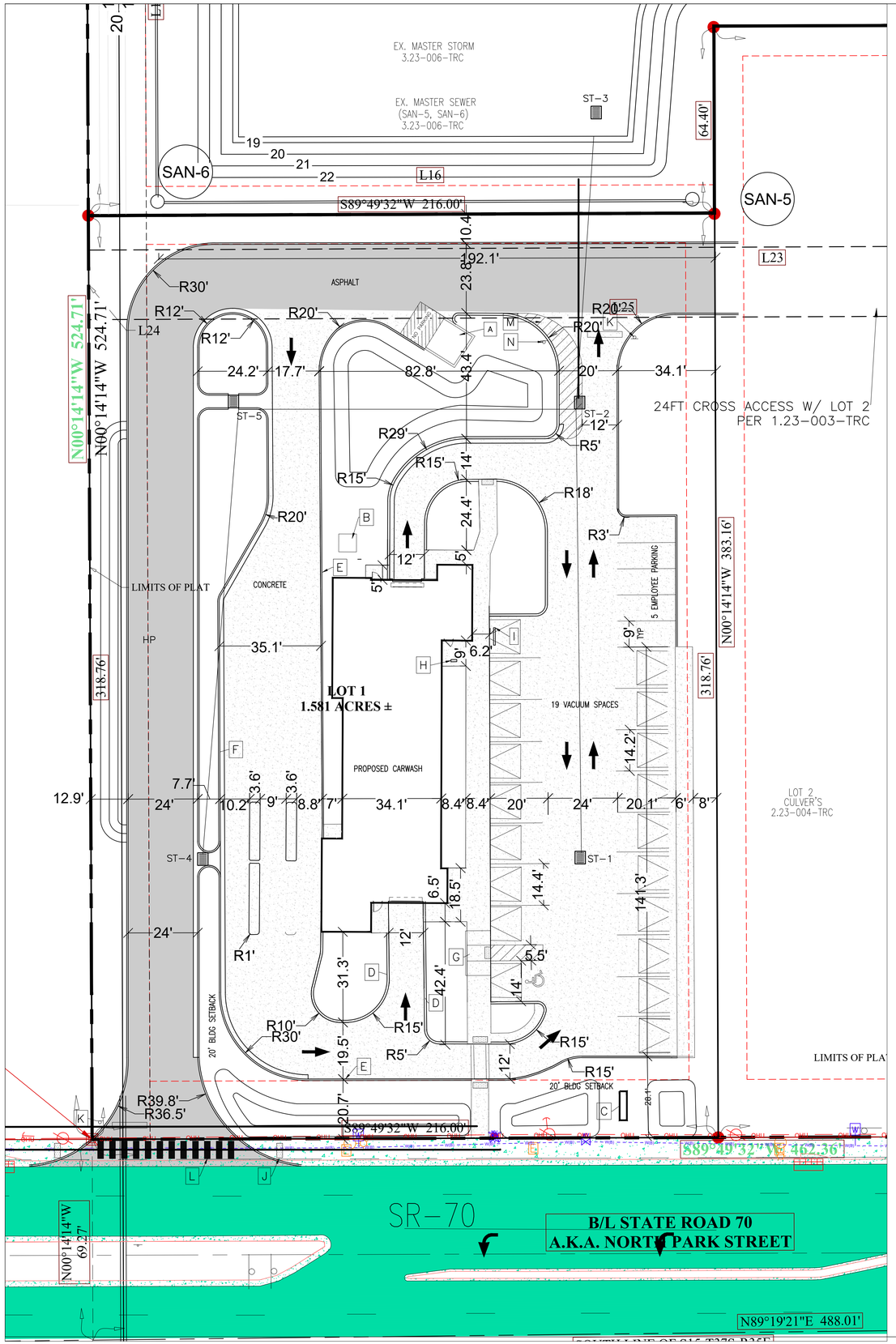
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 8729

SWPP PLAN
PARK STREET CARWASH
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
SWPP PLAN
PROJECT NO. 22640

C3.0



DEVELOPMENT INFORMATION

1.	PROJECT NAME:	PARK STREET CARWASH
2.	TAX ID NUMBER:	PENDING REPLAT 1.23-003-TRC
3.	TOTAL DEVELOPMENT AREA:	1.581 AC
5.	EXISTING USE:	VACANT
6.	PROPOSED USE:	COMMERCIAL CARWASH
7.	EXISTING LAND USE:	COMMERCIAL
8.	EXISTING ZONING:	COMMERCIAL HEAVY DISTRICT (CHV)
9.	MAX. BUILDING HEIGHT:	45 ft.

10. 8" WATER UTILITY AND LIFT STATION CONNECTING TO GRAVITY SEWER SERVICE SERVED BT OKCHOBEE UTILITY AUTHORITY
11. THIS PROJECT WILL BE CONSTRUCTED IN ONE PHASE.
12. ON-SITE SOILS CONSISTS OF #6 MANATEE LOAMY FINE SAND & #11 IMMOKALEE FINE SAND – HYDRAULIC GROUP B/D
13. DRAINAGE DESIGN TO MEET CITY OF OKCHOBEE AND SFWMD REQUIREMENTS.
14. THE PARKING LOT SHALL BE LANDSCAPED AS REQUIRED IN 90-538
15. FREESTANDING MONUMENT SIGN ALLOWED PER 90-571 OF COUNTY CODE, 64 SF FACE, 8 FT HEIGHT

REQUIRED BUILDING SETBACKS

FRONT SETBACK BLDG	20 FT
FRONT SETBACK OTHER	10 FT
SIDE SETBACK	8 FT
REAR SETBACK	10 FT.

PARKING ANALYSIS:

REQUEST PARKING MODIFICATION IN ACCORDANCE WITH SEC. 90-483, REDUCING PARKING FROM 31 TO 24 SPACES

PARKING SPACE DIMENSIONS 9' x 20'
VACUUM SPACE DIMENSIONS 14.4' x 20'

CARWASH: EMPLOYEE PARKING EQUAL TO LARGEST SHIFT (3), PROVIDED 5 SPACES
VACUUM SPACES 19 SPACES

IMPERVIOUS AREA TABLE

AREA	AREA (SF)	AREA (AC)	% TOTAL SITE
BUILDING	4,596	0.106	8%
PAVEMENT	11,275	0.258	16%
CONCRETE	25,090	0.576	36%
PERVIOUS	27,922	0.641	40%
TOTAL IMPERVIOUS	40,946	0.940	60%
TOTAL SITE	68,868	1.581	100%

ADJACENT ZONING / LAND USE

NORTH	COMMERCIAL HEAVY CHV /	COM COMMERCIAL
SOUTH	COMMERCIAL HEAVY CHV /	COM COMMERCIAL
EAST	COMMERCIAL HEAVY CHV /	COM COMMERCIAL
WEST	COMMERCIAL HEAVY CHV /	COM COMMERCIAL

OPEN SPACE CALCULATION:

OPEN SPACE REQUIRED

TOTAL SITE

TOTAL SITE AREA:	1.581 AC
% OF OPEN SPACE REQUIRED:	20 %
OPEN SPACE REQUIRED:	0.316 AC
OPEN SPACE PROVIDED:	0.641 AC 40%

SITE ITEMS

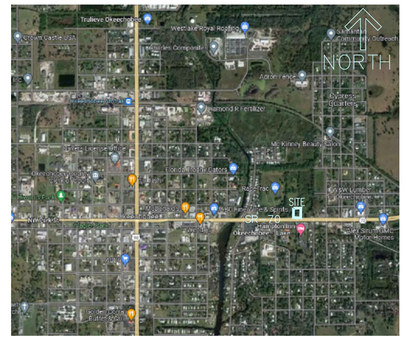
A) CMU BLOCK DUMPSTER ENCLOSURE 10' X 12'
B) TRANSFORMER PAD (3 PHASE, 480V 1000A)
C) SITE SIGN SEE ARCHITECT PLANS
D) TYPE B CURB MOUNTABLE
E) TYPE D CURB RAISED
F) TYPE F CURB W/ GUTTER
G) ADA RAMP FDOT INDEX 522-002 CR-C
H) BICYCLE RACK (C9.0)
I) WHEEL STOP
J) ADA DETECTABLE WARNING, FDOT INDEX 522-002
K) STOP SIGN (R1-1) & 30" WHITE STOP BAR
L) CROSSWALK SPECIAL EMPHASIS FDOT INDEX 711-001 (PAINTED)
M) SPECIAL EMPHASIS PAINTED STRIPES
N) "DO NOT ENTER" SIGN

COVERED VACUUM SPACE

North

0' 10' 20' 40'

SCALE: 1 INCH = 20 FEET



VICINITY MAP N.T.S.

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

MADE IN USA

DATE REVISIONS

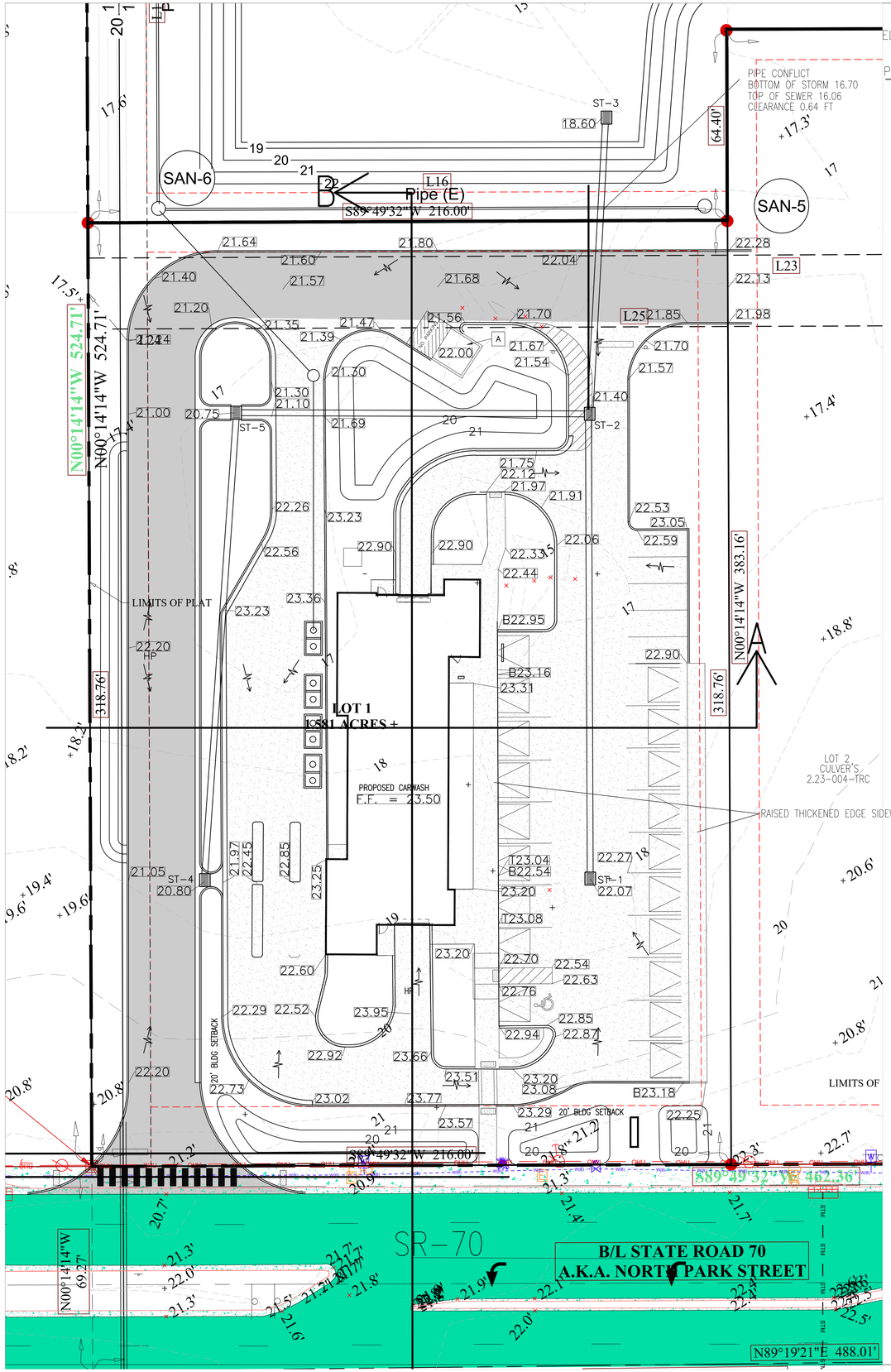
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 8729

SITE PLAN
PARK STREET CARWASH
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
SITE PLAN
PROJECT NO. 22640

C4.0



ELEVATIONS BASED ON NAVD 88, BASE ELEVATIONS PROVIDED BY BSM & ASSOCIATES

PAVING SPECIFICATIONS – ASPHALT SURFACE/CONC. FINES BASE:

SPECIFICATIONS FOR THE PARKING AREA AND DRIVES ARE AS FOLLOWS:

SURFACE COURSE:

A). 1.50" FDOT ASPHALT CONCRETE TYPE 9.5, COMPACTED TO A MIN. OF 95% OF THE MARSHALL DESIGN DENSITY. AFTER PLACEMENT AND FIELD COMPACTION, THE WEARING SURFACE SHOULD BE CORED TO EVALUATE MATERIAL THICKNESS AND TO PERFORM LABORATORY DENSITIES. CORES SHOULD BE TAKEN AT A FREQUENCY OF ONE (1) CORE PER 10,000 SF OF PLACED PAVEMENT.

BASE REQUIREMENTS:

A). 8" PLACED RECYCLED CRUSHED CONCRETE FINES COMPACTED TO A MINIMUN DENSITY OF 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY

SUB-BASE REQUIREMENTS: FOR CRUSHED CONCRETE FINES BASE

A). 12" STABILIZED SUBGRADE TO HAVE A MIN. FBV=75 AND BE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE. LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE.

PAVING SPECIFICATIONS –CONCRETE

PAVEMENT:

SPECIFICATIONS FOR THE PARKING AREA AND DRIVES ARE AS FOLLOWS:

6" OF 4000 PSI CONCRETE WITH FIBER MESH (AUTOMOTIVE AREAS)
(LIGHT BROOM FINISH & SAW CUT 3/4" CONTROL JOINTS AT 10' GRIDS)
PORTLAND CEMENT TYPE I

BASE REQUIREMENTS: (NONE)

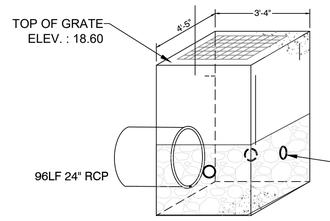
SUB-BASE REQUIREMENTS FOR: CONCRETE PAVEMENT

A). COMPACT TO 98% OF THE MODIFIED PROCTOR MAX. DENSITY ACCORDING TO AASHTO T-180 FOR TOP 12". REPAIR ALL RUTS

NOTE: ALL MATERIALS AND CONSTRUCTION METHODS TO MEET CURRENT FDOT STANDARDS AND SPECIFICATIONS.

GRADING NOTES

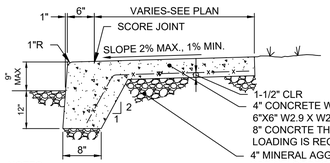
1. ALL MATERIALS AND CONSTRUCTION METHODS TO MEET CURRENT FDOT STANDARDS AND SPECIFICATIONS.
2. STABILIZE ALL DISTURBED AREAS
3. STORM DRAIN INLET LABELS– ADD A NOTE TO THE DRAINAGE PLAN SHEET, DRAINAGE DETAIL SHEET OR SITE DATA NOTES:
"ALL STORM DRAIN INLETS CONSTRUCTED AS PART OF NEW DEVELOPMENT PROJECTS IN ORANGE COUNTY SHALL HAVE METAL MEDALLION INLET MARKERS INSTALLED. TEXT ON THE MARKER SHALL BE EVENLY SPACED AND READ 'NO DUMPING, ONLY RAIN IN THE DRAIN'. MARKERS MUST BE COMMERCIAL GRADE STAINLESS STEEL, ALUMINUM, BRASS OR BRONZE AND EITHER STAMPED FROM SHEET METAL OR CAST METAL MARKER COLOR MUST BE NON–REFLECTIVE BLUE OR GREEN. AQUATIC CREATURE OR SYMBOL SHOWN ON MARKER SHALL BE CONSISTENT THROUGHOUT THE SUBDIVISION. MARKERS MUST BE AFFIXED TO A CLEAN, PREPARED SURFACE WITH ADHESIVES, FASTENERS, OR HEAT AS RECOMMENDED BY THE MANUFACTURER. MARKERS SHALL BE ALIGNED WITH THE CENTER OF DRAINAGE INLETS AT THE TOP OF THE CURB. LETTERING MUST BE BETWEEN 0.4 – 0.5 INCHES AND THE TOTAL DIAMETER OF THE MARKER BETWEEN 3.75 – 4.25 INCHES."



MODIFIED TYPE 'D' INLET OUTFALL STRUCTURE (ST-3)
NTS

STORM STRUCTURE TABLE

	TOP	CONNECTIONS	TYPE
ST-1	22.07	OUT 18.57 24" RCP NORTH 153LF @ 0.30% TO ST-2	FDOT TYPE-D
ST-2	21.40	IN 18.11 24" RCP SOUTH IN 16.82 24" RCP WEST OUT 16.80 24" RCP NORTH 96LF @ 0.15% TO ST-3	FDOT TYPE-D
ST-3	18.60	IN 16.65 24" RCP SOUTH	FDOT TYPE-D
ST-4	20.80	OUT 17.40 18" RCP NORTH 154LF @ 0.23% TO ST-5	FDOT TYPE-D
ST-5	20.75	IN 17.05 18" RCP SOUTH OUT 17.00 24" RCP EAST 116LF @ 0.15% TO ST-2	FDOT TYPE-D



NOTES:
1. USE 4000 PSI CONCRETE AND GRADE 60 STEEL.
2. PROVIDE CONTROL JOINTS 5' APART AND EXPANSION JOINTS 25' APART, AND WHERE SIDEWALKS ABUT RIGID MATERIALS.

SIDEWALK WITH TURN-DOWN CURB
NO SCALE

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190
MADE IN USA

REVISIONS | DATE

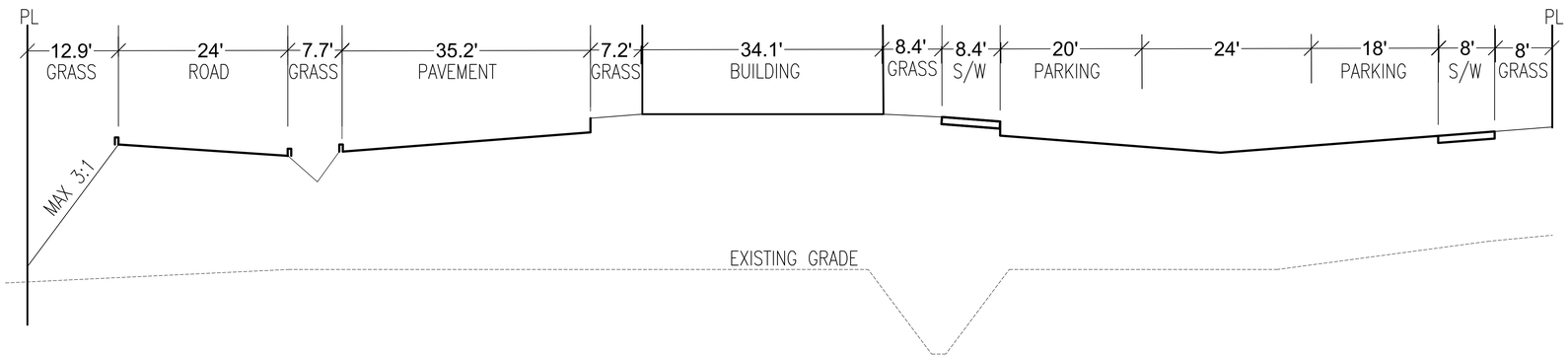
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 8729

GRADING PLAN
PARK STREET CARWASH
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

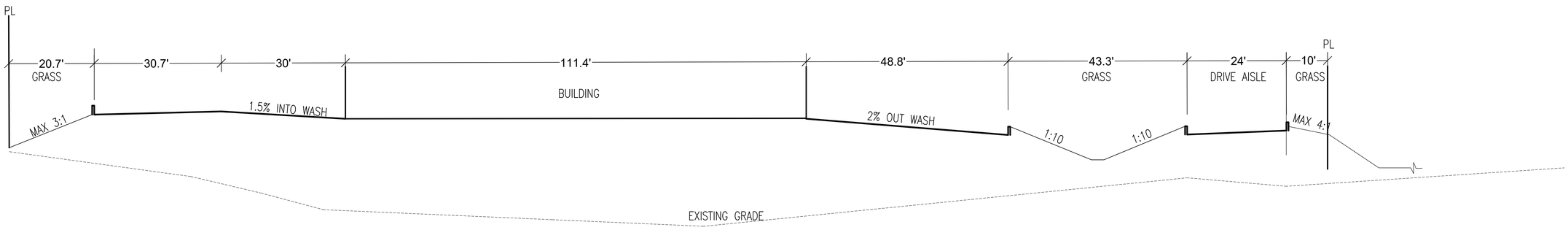
JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
GRADING PLAN
PROJECT NO. 22640

C5.0



SECTION A



SECTION B

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

MADE IN USA

DATE REVISIONS

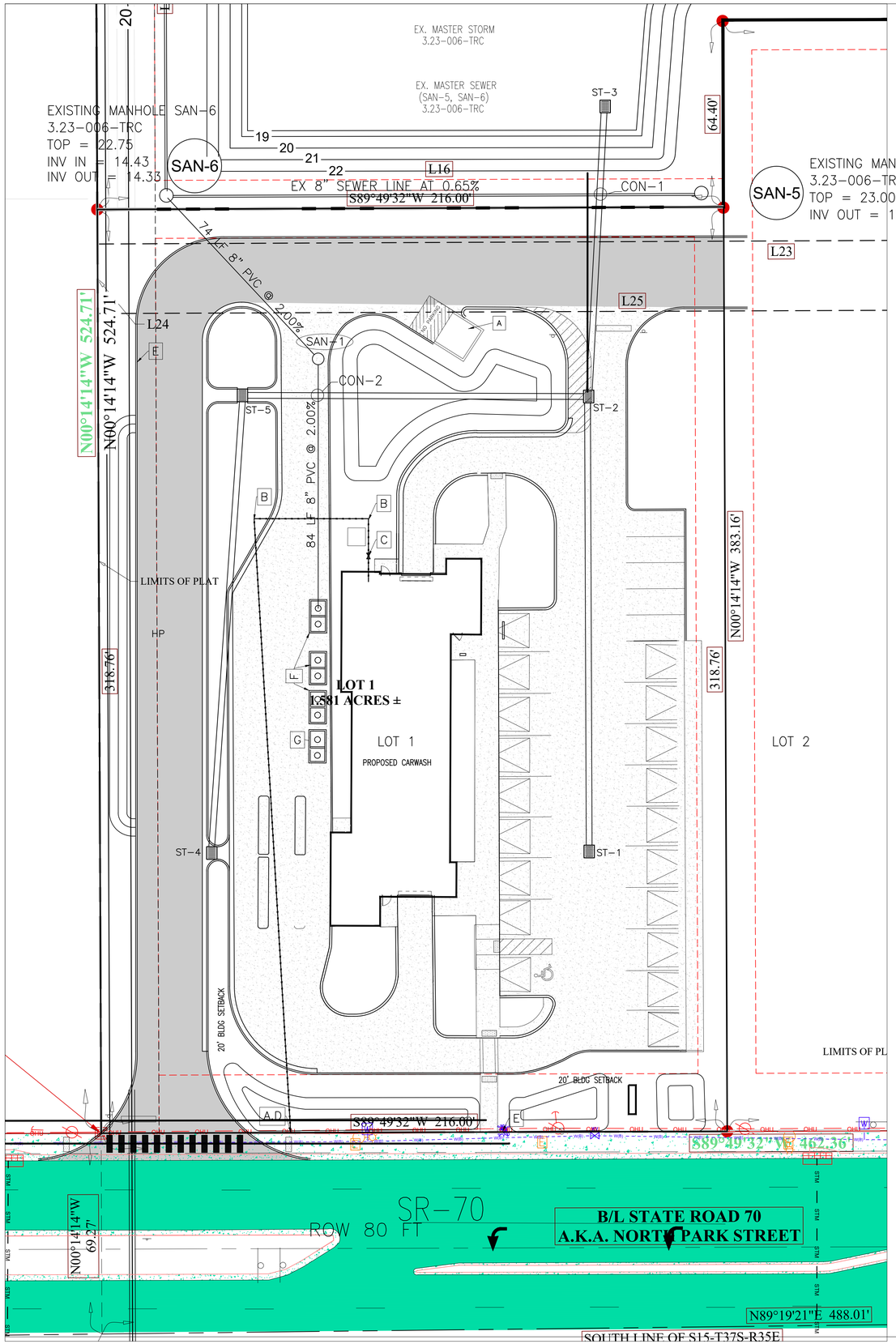
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 8729

CROSS SECTIONS
PARK STREET COMMERCE CENTER
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
CROSS SECTIONS
PROJECT NO. 22640

C6.0



North

SCALE: 1 INCH = 30 FEET

UTILITY KEY

A) 2" DOMESTIC METER BY OUA & 2" RPZ BY CONTRACTOR
B) 2" 90° BEND
C) PROPOSED 2" GATE VALVE
D) SAMPLE POINT WATER
E) EXISTING FIRE HYDRANT
F) SETTLEMENT TANK
G) OIL-WATER SEPARATOR

SEWER STRUCTURE TABLE

	TOP	CONNECTIONS	TYPE
SAN-1	23.16	IN 17.31 8" PVC SDR-26 SOUTH OUT 17.21 8" PVC SDR-26 NORTHEAST 74LF @ 2.00% TO EX-SAN	4' DIA MANHOLE TYP.
EX-SAN	18.03	IN 14.13 8" PVC SDR-26 SOUTHWEST OUT 14.03 8" PVC NORTH (EXISTING)	4' DIA MANHOLE TYP.

PIPE CONFLICT
CON-1
STORM PIPE 0.64 FT OVER SANITARY
SANITARY PIPE TOP = 16.06, BOTTOM 15.39
STORM PIPE TOP = 18.70, BOTTOM 16.70

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

MADE IN USA

REVISIONS | DATE

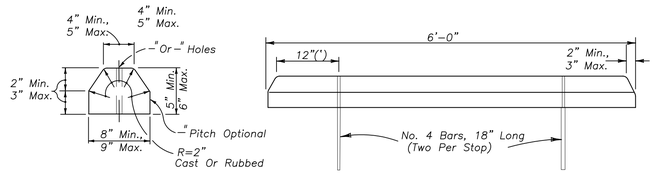
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 8729

UTILITY PLAN
PARK STREET CARWASH
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

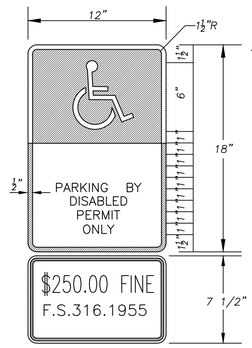
10/22/2023
UTILITY PLAN
PROJECT NO. 22640

C7.0



CONCRETE WHEEL STOP

NTS

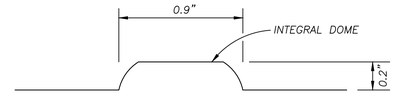


NOTE: (HANDICAP SIGN ONLY)

1. ALL LETTERS SHALL BE BLACK AND 1" IN HEIGHT. LETTERS ARE TO BE SERIES "B" OR "C", PER MUTCD.
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK BORDER.
4. ONE SIGN REQUIRED FOR EACH PARKING SPACE.
5. HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORMED TRAFFIC CONTROL DEVICES (MUTCD)

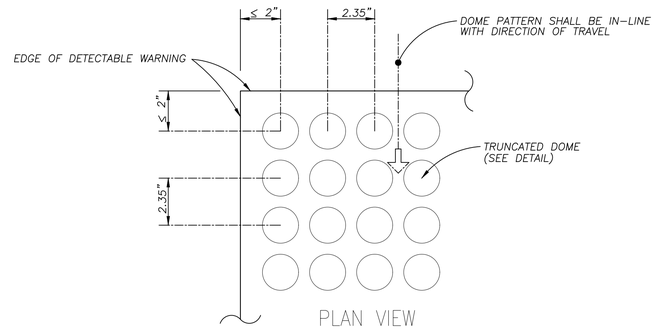
TYPICAL RESERVED PARKING SIGNAGE

NTS



TRUNCATED DOME

NTS

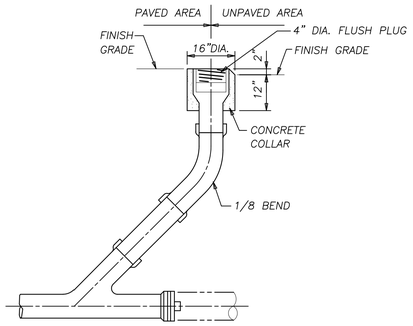


PLAN VIEW

ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 mm) FROM THE BACK OF CURB.

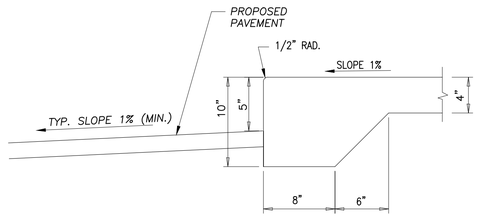
CURB RAMP DETECTABLE WARNING

FDOT INDEX 304 NTS



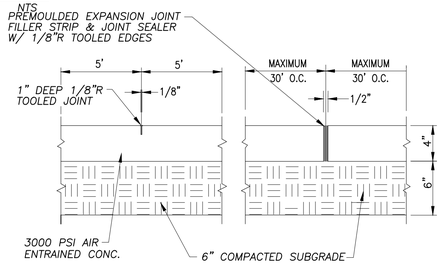
TYPICAL STORM DRAIN CLEANOUT DETAIL

NTS



SIDEWALK/PAVEMENT STEP-UP DETAIL

N.T.S.

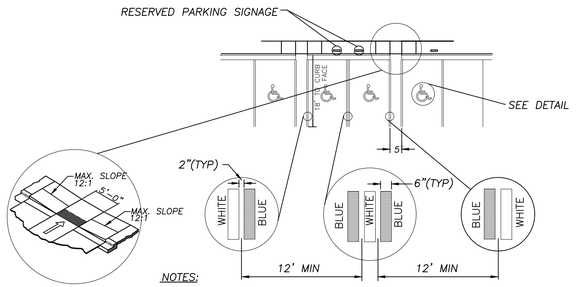


CONCRETE SIDEWALK DETAIL

N.T.S.

NOTES:

1. A THICKENED EDGE SHALL BE PROVIDED BETWEEN SIDEWALK AND DRIVEWAYS OR PARKING LOT.
2. SLOPE CONC. SIDEWALKS AWAY FROM BUILDINGS TO PROVIDE POSITIVE DRAINAGE.
3. PROVIDE 1% CROSS SLOPE ON CONC. WALKS TYP.
4. PROVIDE CONTROL JOINTS @ INTERVALS EQUAL TO SIDEWALK WIDTH (W).
5. PROVIDE PREMOLDED EXPANSION JOINT WHERE CONC. WALK ABUTS BLDG., POLES, AND OTHER CONC. WALKS.

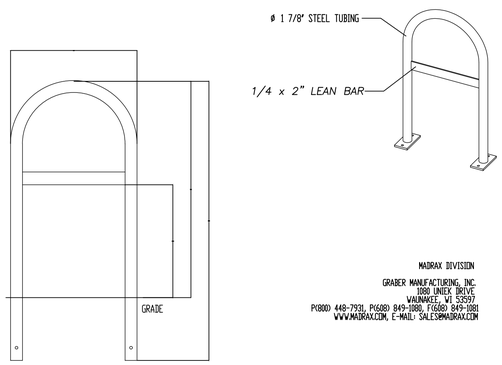


NOTES:

1. EACH SUCH PARKING SPACE SHALL BE CONSPICUOUSLY OUTLINED IN BLUE PAINT, AND SHALL BE POSTED AND MAINTAINED WITH A PERMANENT, ABOVE GRADE SIGN BEARING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY, OR THE CAPTION "PARKING BY DISABLED PERMIT ONLY." OR BEARING BOTH SUCH SYMBOL AND CAPTION. SUCH SIGNS SHALL NOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. ALL HANDICAPPED PARKING SPACES MUST BE SIGNED AND MARKED IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE DEPARTMENT OF TRANSPORTATION.
2. FL DOT RECOMMENDS MEASURING PARKING SPACE WIDTH FROM CENTER TO CENTER BETWEEN BLUE AND WHITE STRIPES.

HANDICAP PARKING STRIPING FOR MULTIPLE SPACES

NTS

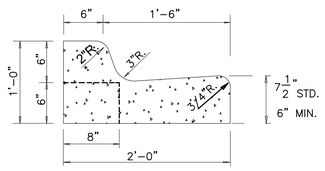


MADRAX DIVISION
GRABER MANUFACTURING, INC.
1080 UNIEK DRIVE
WAUNAKEE, WI 53597
P(800) 448-7931, P(608) 849-1080, F(608) 849-1081
WWW.MADRAX.COM, E-MAIL: SALES@MADRAX.COM

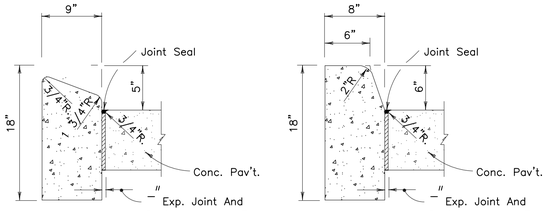
PRODUCT: U190-LB-IG(SF)
DESCRIPTION 'U' BIKE RACK WITH LEAN BAR
2 BIKE, SURFACE OR IN GROUND MOUNT
DATE: 10-4-18
ENG: SMC

CONFIDENTIAL DRAWING AND INFORMATION IS NOT TO BE COPIED OR DISCLOSED TO OTHERS WITHOUT THE CONSENT OF GRABER MANUFACTURING, INC. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. CONSULTANT TO SELECT COLOR (FINISH). SEE MANUFACTURER'S SPECIFICATIONS.
3. SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.



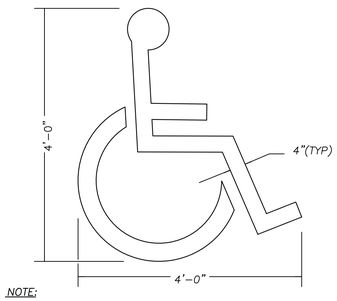
TYPE F



TYPE B TYPE D

CURB DETAILS

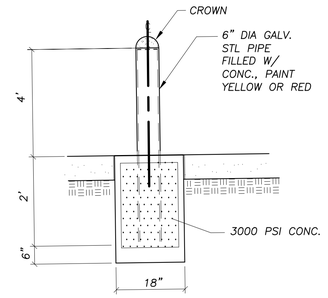
FDOT INDEX 520-001



NOTE:

THIS SYMBOL TO BE WHITE D.O.T. THERMOPLASTIC

TYPICAL PAVEMENT SYMBOL FOR HANDICAPPED PARKING



BOLLARD POST DETAIL

NOTE: ALL INFORMATION CONTAINED HEREIN IS PROPERTY OF AMERICAN CIVIL ENGINEERING CO., ALL RIGHTS RESERVED. COPY RIGHT 2022.

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

DATE REVISIONS

MADE IN USA

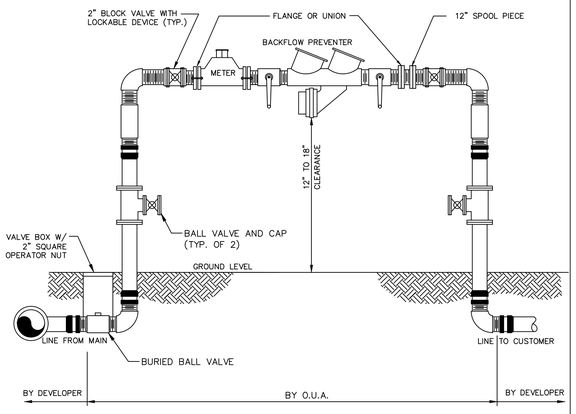
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 8729

DETAIL SHEET I
PARK STREET COMMERCE CENTER
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
DETAIL SHEET I
PROJECT NO. 22640

C8.0

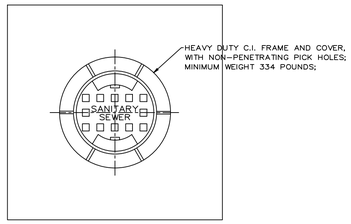


NOTES:

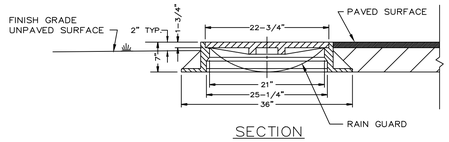
1. ALL PIPING IS METER SIZE.
2. ALL PIPING IS BRASS WITH THREADED FITTINGS.
3. THIS DETAIL IS ALSO APPLICABLE TO 5/8" x 3/4" AND 1" SERVICE WHERE A BACKFLOW PREVENTION DEVICE IS REQUIRED, EXCEPT THAT METER WILL BE INSTALLED IN METER BOX.
4. METERS AND BACKFLOW PREVENTERS ARE TO BE PURCHASED FROM OUA.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	1 1/2 " AND 2" METER/BACKFLOW ASSEMBLY (ABOVE GROUND)	PAGE No D3



PLAN



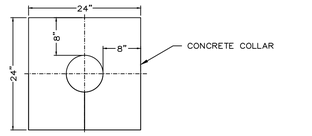
SECTION

NOTES:

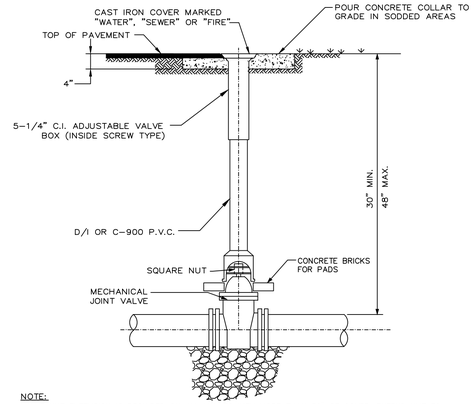
1. A WATER-TIGHT MANHOLE "RAIN GUARD" INSERT SHALL BE INSTALLED IN ALL MANHOLES.
2. A 3'X3'X6" CONCRETE COLLAR SHALL BE INSTALLED WHERE MANHOLE IS INSTALLED IN UNPAVED AREAS
3. "SANITARY SEWER" FOR WASTEWATER APPLICATIONS.
4. "WATER" FOR WATER APPLICATIONS.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	STANDARD MANHOLE FRAME AND COVER	PAGE No D25



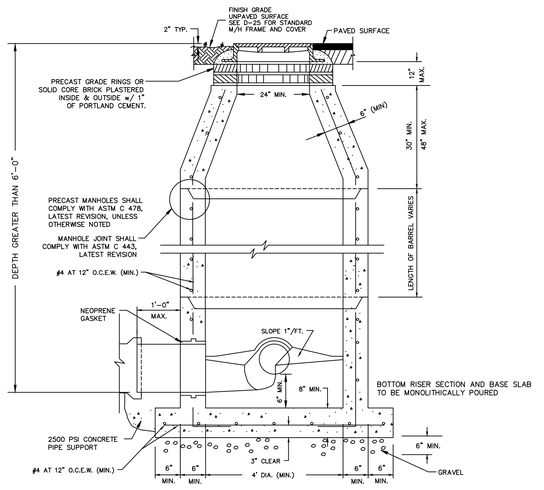
PLAN



NOTE:
VALVE NUT EXTENSION IS REQUIRED ON ALL VALVES WITH MORE THAN 36" OF COVER. EXTEND NUT TO WITHIN 18" OF VALVE BOX RIM. PROVIDE SOLID BRICK PAD FOR VALVE BOX TO SIT ON.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	TYPICAL VALVE SETTING	PAGE No D12



NOTES:

1. PRECAST CONCRETE TYPE II 4000 P.S.I.
2. "RAMNEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT INSIDE AND OUTSIDE.
3. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
4. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM (SEE DETAIL).
5. LIFT HOLES ARE PERMITTED AND SHALL BE SEALED AFTER PLACEMENT OF RISER.
6. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
7. APPROVED RUBBER BOOTS MUST BE USED WITH PVC PIPE.
8. INSIDE DROPS SHALL NOT EXCEED 2.0 FEET.
9. COAT INTERIOR & EXTERIOR WITH 2 COATS COAL TAR EPOXY, OR PRO-TECH COATING, 8 mil. MIN. DRY FILM THICKNESS EACH COAT OR OUA APPROVED EQUAL.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	STANDARD MANHOLE (CONCENTRIC CONE)	PAGE No D27

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPES	HORIZONTAL SEPERATION	CROSSING (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIM WATER (2)	WATER MAIN 3 FT. MINIMUM	WATER MAIN 12 INCHES IS THE MINIMUM EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 3 FT. MINIMUM WATER MAIN
VACUUM SANITARY SEWER	WATER MAIN 10 FT. PREFERRED 3 FT. MINIMUM	WATER MAIN 12 INCHES PREFERRED 6 INCHES MINIMUM	ALTERNATE 3 FT. MINIMUM WATER MAIN
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCEMAIN RECLAIM WATER (4)	WATER MAIN 10 FT. PREFERRED 6 FT. MINIMUM (3)	WATER MAIN 12 INCHES IS THE MINIMUM EXCEPT FOR GRAVITY SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 6 FT. MINIMUM WATER MAIN
ON-SITE SEWAGE TREATMENT & DISPOSAL	10 FT. MINIMUM	---	---

FAC RULE 62-555.314 NOTES:

1. WATERMAIN TO CROSS OVER CONFLICT PIPES WHEREVER POSSIBLE, MAINTAINING 30 INCHES COVER AND 6 INCHES SEPARATION AS MINIMUMS. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MIN. SEPARATION IS 12 INCHES.
2. RECLAIMED WATER REGULATED UNDER PART III OF CHAPER 62-610, F.A.C.
3. 3 FT FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
4. RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

NOTES:

A. THESE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW PRESSURE PIPE TO CROSS ABOVE CONFLICT PIPE WITH 6 INCHES VERTICAL SEPARATION AND MAINTAIN 30 INCHES COVER TO FINISHED GRADE.

B. FITTINGS SHALL BE RESTRAINED WITH MECHANICAL RESTRAINTS (MEGALUG). IN ACCORDANCE WITH OUA STANDARD DETAILS.

C. THE DEFLECTION TYPE CROSSING IS PREFERRED.

D. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.

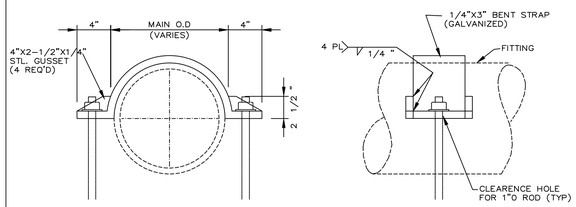
E. MECHANICALLY RESTRAIN ALL FITTINGS, AS PER MANUFACTURERS RECOMMENDATION AND OUA STANDARD DETAILS.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	WATER MAIN – SANITARY SEWER CONFLICT	PAGE No D16

PIPE DIA. "D"	VERTICAL CREST											
	DEGREE OF BEND											
	11 1/4°			22 1/2°			45°			90°		
	"W"	"L"	"H"	"W"	"L"	"H"	"W"	"L"	"H"	"W"	"L"	"H"
6"	36"	16"	18"	36"	24"	24"	48"	28"	30"	54"	36"	36"
8"	48"	20"	20"	48"	30"	24"	54"	36"	36"	60"	46"	48"
12"	54"	24"	30"	54"	36"	40"	66"	48"	48"	72"	60"	60"
24"	72"	48"	48"	76"	60"	66"	96"	72"	84"	–	–	–

PIPE DIA. "D"	VERTICAL SAG											
	DEGREE OF BEND											
	11 1/4°			22 1/2°			45°			90°		
	"W"	"L"	–	"W"	"L"	–	"W"	"L"	–	"W"	"L"	–
6"	6"	36"	–	6"	36"	–	18"	36"	–	24"	36"	–
8"	8"	36"	–	12"	36"	–	24"	36"	–	36"	36"	–
12"	18"	36"	–	30"	36"	–	42"	42"	–	54"	48"	–
16"	36"	36"	–	48"	48"	–	60"	60"	–	72"	72"	–
24"	48"	42"	–	60"	54"	–	78"	78"	–	96"	96"	–
36"	60"	54"	–	84"	78"	–	96"	96"	–	120"	120"	–



STRAP DETAIL

NOTES:

1. GUSSETS REQ'D FOR 16"Ø AND LARGER MAINS.
2. STRAPS WITH GUSSET TO BE GALVANIZED AFTER WELDING.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	GRAVITY BLOCKS FOR PRESSURE PIPING	PAGE No D14A

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190
MADE IN USA

DATE | REVISIONS

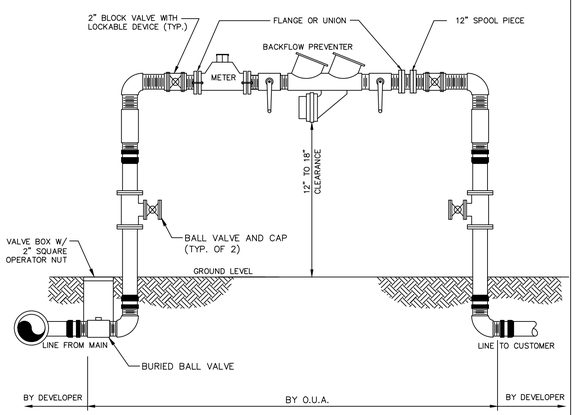
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 8729

UTILITY DETAILS I
PARK STREET COMMERCE CENTER
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
UTILITY DETAILS I
PROJECT NO. 22640

C9.0

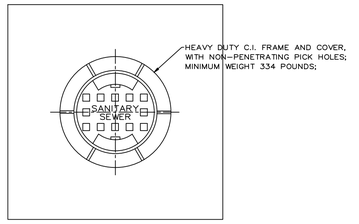


NOTES:

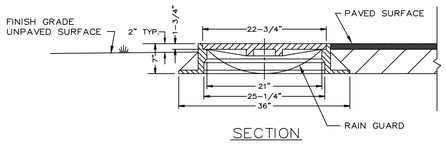
1. ALL PIPING IS METER SIZE.
2. ALL PIPING IS BRASS WITH THREADED FITTINGS.
3. THIS DETAIL IS ALSO APPLICABLE TO 5/8" x 3/4" AND 1" SERVICE WHERE A BACKFLOW PREVENTION DEVICE IS REQUIRED, EXCEPT THAT METER WILL BE INSTALLED IN METER BOX.
4. METERS AND BACKFLOW PREVENTERS ARE TO BE PURCHASED FROM OUA.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	1 1/2 " AND 2" METER/BACKFLOW ASSEMBLY (ABOVE GROUND)	PAGE No D3



PLAN



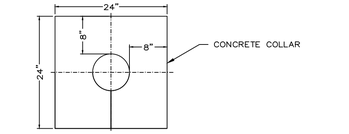
SECTION

NOTES:

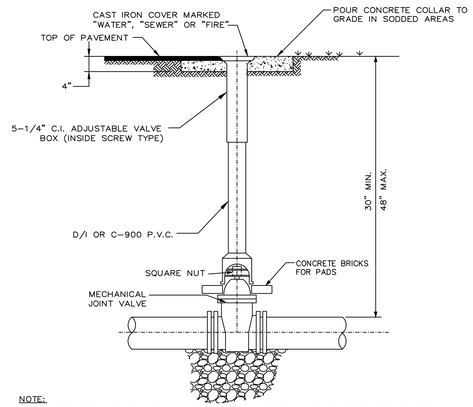
1. A WATER-TIGHT MANHOLE "RAIN GUARD" INSERT SHALL BE INSTALLED IN ALL MANHOLES.
2. A 3'X3'X6" CONCRETE COLLAR SHALL BE INSTALLED WHERE MANHOLE IS INSTALLED IN UNPAVED AREAS
3. "SANITARY SEWER" FOR WASTEWATER APPLICATIONS.
4. "WATER" FOR WATER APPLICATIONS.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	STANDARD MANHOLE FRAME AND COVER	PAGE No D25



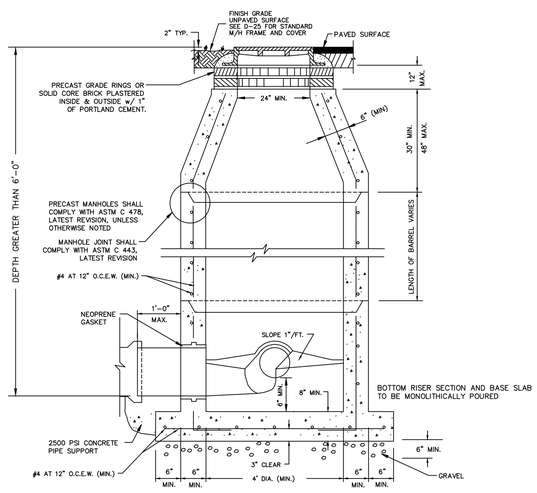
PLAN



NOTE:
VALVE NUT EXTENSION IS REQUIRED ON ALL VALVES WITH MORE THAN 36" OF COVER. EXTEND NUT TO WITHIN 18" OF VALVE BOX RIM. PROVIDE SOLID BRICK PAD FOR VALVE BOX TO SIT ON.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	TYPICAL VALVE SETTING	PAGE No D12



NOTES:

1. PRECAST CONCRETE TYPE II 4000 P.S.I.
2. "RAMNEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT INSIDE AND OUTSIDE.
3. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
4. FLOW CHANNELS SHALL BE CONSTRUCTED TO DIRECT INFLUENT INTO FLOW STREAM (SEE DETAIL).
5. LIFT HOLES ARE PERMITTED AND SHALL BE SEALED AFTER PLACEMENT OF RISER.
6. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED.
7. APPROVED RUBBER BOOTS MUST BE USED WITH PVC PIPE.
8. INSIDE DROPS SHALL NOT EXCEED 2.0 FEET.
9. COAT INTERIOR & EXTERIOR WITH 2 COATS COAL TAR EPOXY, OR PRO-TECH COATING, 8 mil. MIN. DRY FILM THICKNESS EACH COAT OR OUA APPROVED EQUAL.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	STANDARD MANHOLE (CONCENTRIC CONE)	PAGE No D27

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPES	HORIZONTAL SEPERATION	CROSSING (1)	JOINT SPACING @ CROSSINGS (FULL JOINT CENTERED)
STORM SEWER, STORMWATER FORCE MAIN, RECLAIM WATER (2)	WATER MAIN 3 FT. MINIMUM	WATER MAIN 12 INCHES IS THE MINIMUM EXCEPT FOR STORM SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 3 FT. MINIMUM WATER MAIN
VACUUM SANITARY SEWER	WATER MAIN 10 FT. PREFERRED 3 FT. MINIMUM	WATER MAIN 12 INCHES PREFERRED 6 INCHES MINIMUM	ALTERNATE 3 FT. MINIMUM WATER MAIN
GRAVITY OR PRESSURE SANITARY SEWER, SANITARY SEWER FORCEMAIN RECLAIM WATER (4)	WATER MAIN 10 FT. PREFERRED 6 FT. MINIMUM (3)	WATER MAIN 12 INCHES IS THE MINIMUM EXCEPT FOR GRAVITY SEWER, THEN 6 INCHES IS THE MINIMUM AND 12 INCHES IS PREFERRED	ALTERNATE 6 FT. MINIMUM WATER MAIN
ON-SITE SEWAGE TREATMENT & DISPOSAL	10 FT. MINIMUM	---	---

FAC RULE 62-555.314 NOTES:

1. WATERMAIN TO CROSS OVER CONFLICT PIPES WHEREVER POSSIBLE, MAINTAINING 30 INCHES COVER AND 6 INCHES SEPARATION AS MINIMUMS. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MIN. SEPARATION IS 12 INCHES.
2. RECLAIMED WATER REGULATED UNDER PART III OF CHAPER 62-610, F.A.C.
3. 3 FT FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
4. RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

NOTES:

A. THESE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW PRESSURE PIPE TO CROSS ABOVE CONFLICT PIPE WITH 6 INCHES VERTICAL SEPARATION AND MAINTAIN 30 INCHES COVER TO FINISHED GRADE.

B. FITTINGS SHALL BE RESTRAINED WITH MECHANICAL RESTRAINTS (MEGALUG). IN ACCORDANCE WITH OUA STANDARD DETAILS.

C. THE DEFLECTION TYPE CROSSING IS PREFERRED.

D. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.

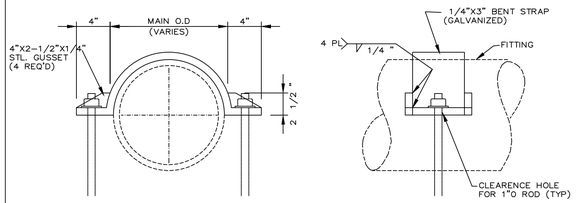
E. MECHANICALLY RESTRAIN ALL FITTINGS, AS PER MANUFACTURERS RECOMMENDATION AND OUA STANDARD DETAILS.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	WATER MAIN – SANITARY SEWER CONFLICT	PAGE No D16

PIPE DIA. "D"	VERTICAL CREST											
	DEGREE OF BEND											
	11 1/4°			22 1/2°			45°			90°		
	"W"	"L"	"H"	"W"	"L"	"H"	"W"	"L"	"H"	"W"	"L"	"H"
6"	36"	16"	18"	36"	24"	24"	48"	28"	30"	54"	36"	36"
8"	48"	20"	20"	48"	30"	24"	54"	36"	36"	60"	46"	48"
12"	54"	24"	30"	54"	36"	40"	66"	48"	48"	72"	60"	60"
24"	72"	48"	48"	76"	60"	66"	96"	72"	84"	–	–	–

PIPE DIA. "D"	VERTICAL SAG											
	DEGREE OF BEND											
	11 1/4°			22 1/2°			45°			90°		
	"W"	"L"	–	"W"	"L"	–	"W"	"L"	–	"W"	"L"	–
6"	6"	36"	–	6"	36"	–	18"	36"	–	24"	36"	–
8"	8"	36"	–	12"	36"	–	24"	36"	–	36"	36"	–
12"	18"	36"	–	30"	36"	–	42"	42"	–	54"	48"	–
16"	36"	36"	–	48"	48"	–	60"	60"	–	72"	72"	–
24"	48"	42"	–	60"	54"	–	78"	78"	–	96"	96"	–
36"	60"	54"	–	84"	78"	–	96"	96"	–	120"	120"	–



STRAP DETAIL

NOTES:

1. GUSSETS REQ'D FOR 16"Ø AND LARGER MAINS.
2. STRAPS WITH GUSSET TO BE GALVANIZED AFTER WELDING.

OKEECHOBEE UTILITY AUTHORITY CONSTRUCTION STANDARDS & DETAILS

REVISION OCT. 2015	GRAVITY BLOCKS FOR PRESSURE PIPING	PAGE No D14A

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

DATE | REVISIONS

MADE IN USA

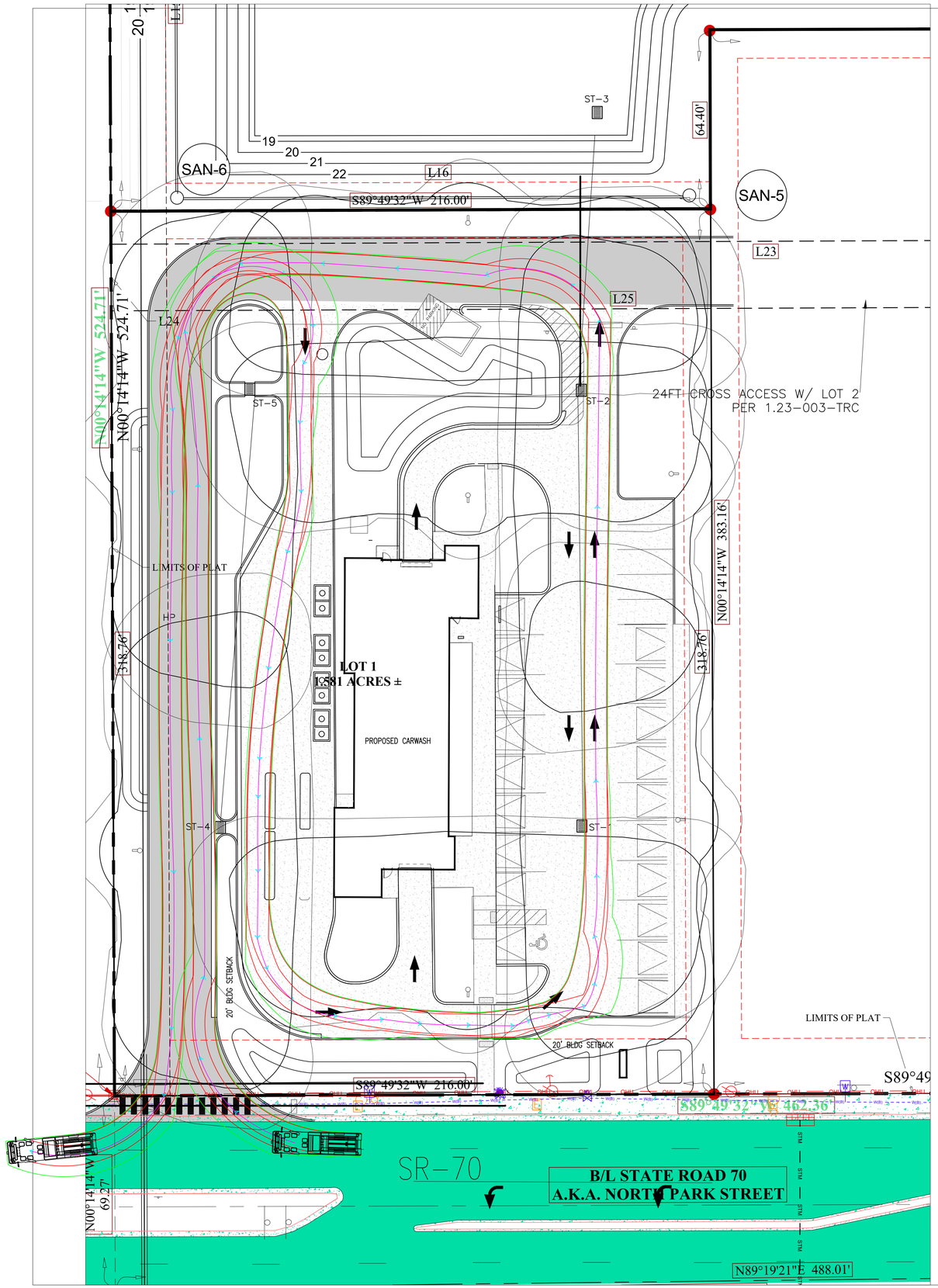
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 8729

UTILITY DETAILS II
PARK STREET COMMERCE CENTER
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
UTILITY DETAILS II
PROJECT NO. 22640

C10.0



FIRE DEPARTMENT NOTES

FIRE DEPARTMENT ACCESS ROADS PROVIDED AT THE START OF A PROJECT AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. (NFPA 1,16.4).

A WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ACCUMULATES. THIS APPLIES TO BOTH COMMERCIAL AND RESIDENTIAL DEVELOPMENTS. (NFPA 1, 16.4.3.1.1).

WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK. (NFPA 16.4.3.1.3)

FIRE FLOW TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 291, RECOMMENDED PRACTICE FOR FIRE FLOW TESTING

A 36" CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60" (1524mm) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 2.5" NFPA 1, 18.5.7.

HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACES 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1, CHAPTER 18.5.10 (2018).

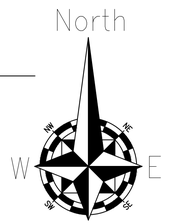
DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ON TO THE SITE, ACCESS ROADS AND A SUITABLE TEMPORARY OR PERMANENT SUPPLY OF WATER ACCEPTABLE TO THE FIRE DEPARTMENT SHALL BE PROVIDED AND MAINTAINED, NFPA 1 (7TH 2018 EDITION).

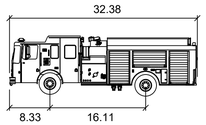
PHOTOMETRIC

QTY	ARRANGEMENT	DESCRIPTION	TOTAL WATTS
7	SINGLE	166W GALLEON	996W

Galleon LED

Round Concrete





PFD Pumper Pierce Velocity

	Feet
Width	: 8.53
Track	: 8.01
Lock to Lock Time	: 6.0 s
Steering Angle	: 45.0 deg

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

MADE IN USA

REVISIONS
DATE

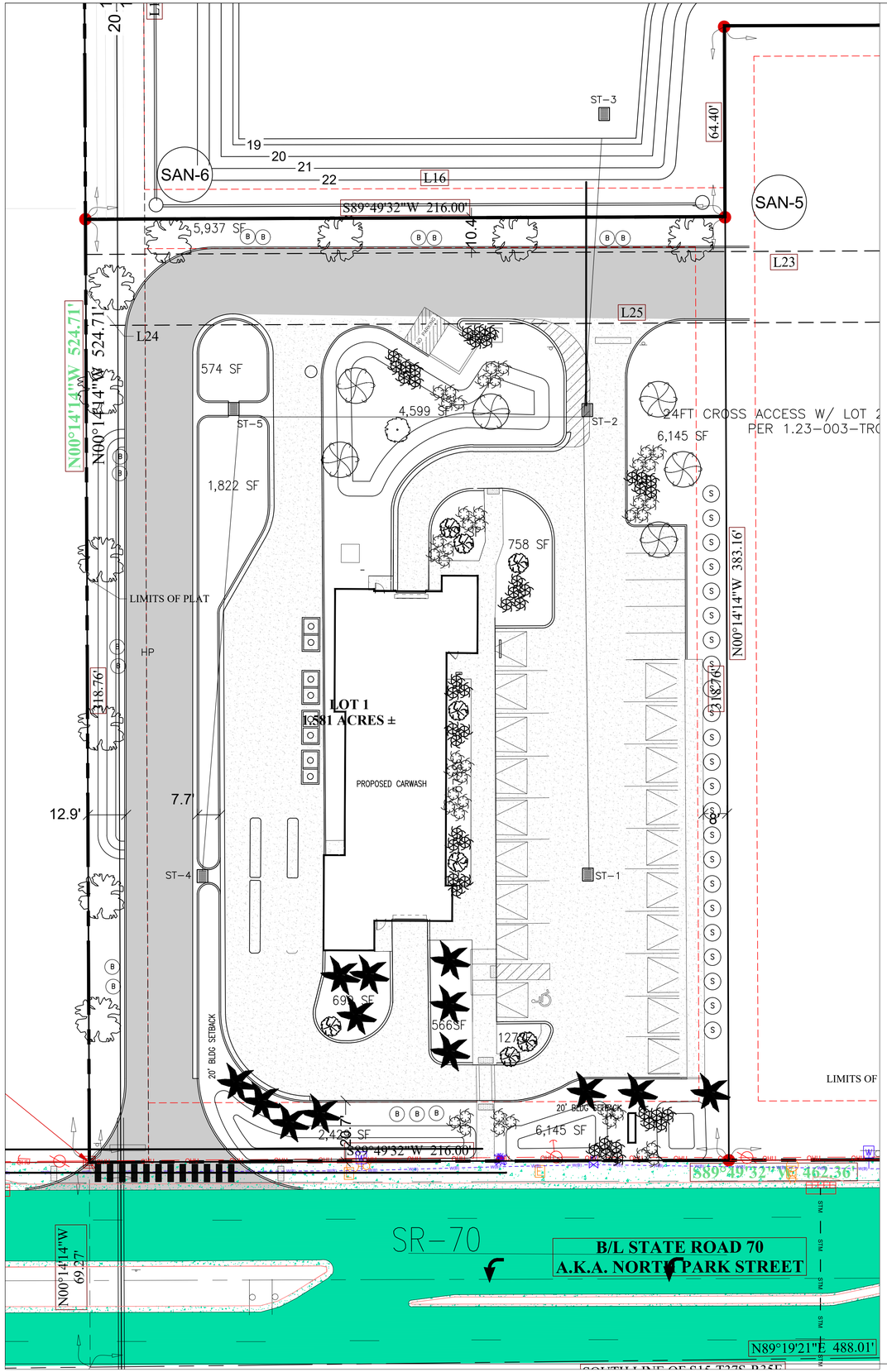
AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 8729

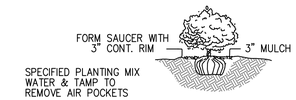
FIRE PLAN
PARK STREET COMMERCE CENTER
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

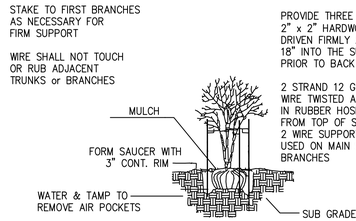
10/22/2023
FIRE PLAN
PROJECT NO. 22640

C11.0





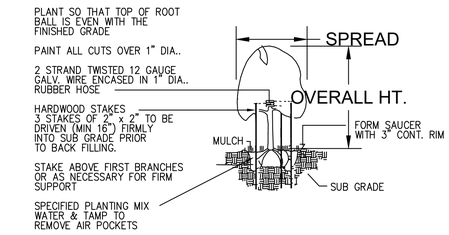
SHRUB PLANTING DETAIL



MULTI-TRUNK TREE STAKING

GROUND COVER

SOD ALL DISTURBED AREAS WITH BAHIA



SINGLE TREE TRUNK STAKING

LANDSCAPE CHART:

SYMBOL KEY	QUANTITY	COMMON NAME:	TREE TYPE	BOTANICAL NAME:	SIZE:	WATER ZONE:
	10	FLORIDA MAPLE	CANOPY	ACER FLORIDANUM	4" DBH, 14' MIN. HEIGHT GRADE #1	LOW
	1	ROYAL POINCIANA	CANOPY	DELONIX REGIA	MIN. 2" DBH, 12' MIN. HEIGHT GRADE #1	LOW
	44	WHITE MUHLY GRASS	N/A	MUHLENBERGIA CAPILLARIS "WHITE CLOUD"	3-4 GAL. 36" HIGH, 36" O/C.	LOW
	43	PINK MUHLY GRASS	N/A	MUHLENBERGIA CAPILLARIS "ROSE MUHLY"	3-4 GAL. 36" HIGH, 36" O/C.	LOW
	8	FIREBUSH	N/A	HAMELIA PATENS	7 GAL. 36" HIGH, 36" O/C.	LOW
	6	PINK TRUMPET TREE	MEDIUM	TABEBUIA HETEROPHYLA	4" DBH, 12' MIN. HEIGHT GRADE #1	LOW
	13	BISMARK PALM	PALM	BISMARKIA NOBILIS "SILVER SELECT"	HEAVY 12'+ GRADE #1	LOW
S	23	SWEET VIBURNUM	N/A	VIBURNUM ODORATISSIMUM	3-4 GAL. 36" HIGH, 36" O/C.	LOW
B	15	BOTTLEBRUSH	N/A	CALLISTEMON SPP.	3-4 GAL. 36" HIGH, 36" O/C.	LOW

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

MADE IN USA

DATE REVISIONS

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization number 6729

LANDSCAPE PLAN
PARK STREET CARWASH
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
LANDSCAPE PLAN
PROJECT NO. 22640

LS1.0

PART 1 – GENERAL

1.01 WORK DESCRIPTION

A. THE WORK IN THIS SECTION CONSISTS OF FURNISHING, PLANTING, WATERING, FERTILIZING, MAINTAINING AND MULCHING ALL PLANTS AND LAWN AREA OF SPECIES, SIZE AND QUANTITY AS INDICATED ON THE LANDSCAPE PLANS OR AS DIRECTED BY SEMINOL COUNTY.

1.02 DELIVERY, STORAGE AND HANDLING

A. PLANT TRANSPORTATION, STORAGE AND HANDLING SHALL COMPLY WITH ALL FEDERAL AND AND STATE REGULATIONS. STORAGE OF ANY MATERIAL ON SITE SHALL BE COORDINATED WITH THE OWNER.

1.03 GUARANTEE

A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTING WORK FOR A PERIOD OF 12 MONTHS AND ALL SOD FOR 6 MONTHS AFTER THE DATE OF PROVISIONAL ACCEPTANCE. DURING THIS PERIOD THE LANDSCAPE CONTRACTOR SHALL CONTINUE THE OBSERVATION OF PLANTS AND GUARANTEED WORK. THE CONTRACTOR SHALL SUBMIT MONTHLY OBSERVATION REPORTS TO THE OWNER WITH A COPY TO THE LANDSCAPE ARCHITECT DURING THE GUARANTEE PERIOD. THE PURPOSE OF THESE REPORTS IS TO STATE ANY MAINTENANCE DEFICIENCIES OBSERVED. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO REPORT THESE TO PROTECT HIS GUARANTEE. FAILURE TO SUBMIT REPORTS ELIMINATES ANY CLAIMS THAT THE GUARANTEE IS NOT VALID DUE TO IMPROPER MAINTENANCE BY THE OWNER.

B. REPLACEMENT OF DEFLECTED PLANTS: ANY DEAD PLANTS, PLANTS SHOWING INDICATIONS OF LACK OF HEALTH AND VIGOR, OR PLANTS WHICH DO NOT EXHIBIT THE CHARACTERISTICS TO MEET SPECIFICATIONS SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR WITHIN TWO WEEKS OF WRITTEN NOTICE FROM THE OWNER OR LANDSCAPE ARCHITECT. THE REPLACEMENT PLANTS SHALL BE FURNISHED AND INSTALLED AT NO ADDITIONAL COST TO THE OWNER AND SHALL BE GUARANTEED FOR SIX (6) MONTHS FROM THE DATE OF INSTALLATION. ALL REPLACEMENTS SHALL MEET ORIGINAL SPECIFICATIONS.

C. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER AND LANDSCAPE ARCHITECT IN WRITING, TEN DAYS PRIOR TO THE END OF THE GUARANTEE PERIOD. THE GUARANTEE SHALL BE EXTENDED UNTIL SUCH WRITTEN NOTIFICATION IS RECEIVED.

1.04 JOB CONDITIONS

A. PROTECTION: THE LANDSCAPE CONTRACTOR SHALL PROTECT ALL MATERIALS AND WORK AGAINST INJURY FROM ANY CAUSES. LANDSCAPE CONTRACTOR SHALL PROVIDE AND MAINTAIN ANY NECESSARY SAFEGUARDS FOR THE PROTECTION OF THE PUBLIC. HE SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE OR INJURY TO PERSON OR PROPERTY WHICH MAY OCCUR AS A RESULT OF HIS NEGLIGENCE IN THE EXECUTION OF THE WORK.

B. EXISTING CONDITIONS:

1. THE LANDSCAPE CONTRACTOR SHALL EXERCISE CARE IN DIGGING AND OTHER WORK SO AS NOT TO DAMAGE EXISTING WORK INCLUDING OVERHEAD OR UNDERGROUND PIPES, CABLES AND UTILITY LINES OF ANY KIND. SHOULD THE OVERHEAD OR UNDERGROUND OBSTRUCTIONS INTERFERE WITH PLANTING, THE LANDSCAPE ARCHITECT SHALL BE CONSULTED AND WILL ADJUST THE LOCATION OF PLANTS TO CLEAR SUCH OBSTRUCTIONS. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMMEDIATE REPAIR OF ANY DAMAGE CAUSED BY HIS WORK.

2. SHOULD ANY OBJECTIONABLE MATERIALS SUCH AS OLD CONCRETE, BRICKS OR OTHER DEBRIS BE ENCOUNTERED DURING PLANTING OPERATIONS, THEY SHALL BE REMOVED FROM THE SITE BY THE LANDSCAPE CONTRACTOR.

1.05 QUALITY CONTROL

A. THE LANDSCAPE ARCHITECT SHALL HAVE THE RIGHT AT ANY STAGE OF THE OPERATIONS TO REJECT ANY AND ALL WORK AND MATERIALS WHICH IN HIS/HER OPINION DO NOT MEET WITH THE REQUIREMENTS OF THESE SPECIFICATIONS.

B. ALL PLANTING SHALL BE PERFORMED BY THE PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED PLANTING FOREMAN. ANYTHING PLANTED TOO HIGH OR TOO LOW OR WITHOUT FERTILIZER OR WATER RINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

C. ALL WORK SHALL COMPLY WITH APPLICABLE CODE AND REGULATIONS.

D. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE COORDINATION WITH THE OTHER TRADES TO PREVENT CONFLICTS.

1.06 QUANTITIES

A. IN THE EVENT OF A DIFFERENT BETWEEN QUANTITIES LISTED IN THE PLANT LIST AND THOSE SHOWN ON THE PLANS, THE PLANS SHALL CONTROL THE QUANTITIES. THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO ISSUANCE OF CONTRACT.

PART 2 – PRODUCTS

2.01 MATERIALS

A. GENERAL:

1. NOMENCLATURE: ALL TREES, SHRUBS AND PLANTS SHALL BE TRUE TO NAME AS ESTABLISHED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE PUBLICATION:"STANDARD PLANT NAMES." THE DESIGNATED AUTHORITY FOR THE IDENTIFICATION OF ALL MATERIAL SHALL BE THE TWO PUBLICATIONS OF L.H. HORTUS III AND MANUAL OF CULTIVATED PLANTS AND ALL SPECIMENS SHALL BE TRUE TO TYPE, NAME ETC.

2. GRADE STANDARDS AND QUALITY: ALL PLANTS SHALL BE NURSERY GROWN AND SHALL COMPLY WITH ALL REQUIRED INSPECTION , GRADING, STANDARDS AND PLANT REGULATIONS AS SET FORTH IN THE FLORIDA DEPARTMENT OF AGRICULTURE, "GRADES AND STANDARDS FOR NURSERY PLANTS", PART 1 AND 2 (INCLUDING REVISIONS).
   A. THE MINIMUM GRADE FOR ALL TREES AND SHRUBS SHALL BE FLORIDA NO. 1 UNLESS OTHERWISE INDICATED AND ALL PLANTS SHALL BE HEALTHY, VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED (WHEN IN LEAF). THEY SHALL HAVE HEALTHY, WELL DEVELOPED ROOT SYSTEMS AND SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS, OR LARVAE AND THEIR EFFECTS.

3. MEASUREMENTS: AFTER PRUNING AND SHAPING, THE MINIMUM ACCEPTABLE SIZE OF ALL PLANTS MEASURED WITH BRANCHES IN NORMAL POSITIONS SHALL CONFORM TO THE SPECIFIED SIZES AS SHOWN ON THE PLANS. SIZES SPECIFIED ARE MINIMUM STANDARDS. PLANTS SHALL EQUAL TO OR LARGER THAN ALL CATEGORIES (HEIGHT, SPREAD, CALIPER) OF SIZE SPECIFICATIONS. SUBSTANTIAL DEVIATIONS FROM THESE MEASUREMENTS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT. CALIPER OF TREE TRUNKS SHALL BE MEASURED 4 FOOT ABOVE THE ROOT BALL.

4. PLANT PROTECTION: PLANTS SHALL BE PROTECTED UPON ARRIVAL AT THE SITE BY BEING THOROUGHLY WATERED, KEPT MOIST AND PROPERLY MAINTAINED UNTIL PLANTED.

B. PLANT MATERIALS: PLANTS FOR LANDSCAPING SHALL BE CLASSIFIED UNDER THE FOLLOWING DESIGNATIONS, WITH REFERENCE TO METHOD OF CULTIVATION, ROOT SYSTEM STATUS, ETC.

1. BALLED AND BURLAPPED: PLANTS SO CLASSIFIED SHALL BE DUG WITH FIRM NATURAL ROOT BALLS OF EARTH, OF SUFFICIENT DIAMETER AND DEPTH TO INCLUDE MOST OF THE FIBROUS ROOTS. THE ROOT BALL OF THESE PLANTS SHALL BE PROPERLY WRAPPED WITH BURLAP SACK MATERIAL AND REMAIN PROTECTED AND WET UNTIL THEY ARE PLANTED. THE PLANT SHALL BE HANDLED ONLY BY THE EARTHBALL AND NOT BY THE PLANT ITSELF. ALL BALLED AND BURLAPPED PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY UPON DELIVERY SHALL BE SET ON THE GROUND AND SHALL BE WELL PROTECTED WITH SOIL, WET MOSS OR OTHER ACCEPTABLE MATERIAL. THE PLANT SHALL BE SET WITH THE BURLAP COVER INTACT WITH THE BURLAP SHOWING, UNTIL INSPECTION. AT FINAL INSPECTION THE BURLAP WILL BE CUT AWAY TO GROUND LEVEL AND THEN COMPLETELY COVERED WITH SOIL. FAILURE TO CUT AWAY OR LAY BACK BURLAP AFTER PLANTING MAY CONSTITUTE REJECTION OF PLANT MATERIAL.

2. CONTAINER GROWN PLANTS:
   A. CONTAINER GROWN PLANTS SHALL HAVE BEEN GROWN IN A CONTAINER LARGE ENOUGH AND FOR SUFFICIENT TIME TO ENABLE THE ROOT SYSTEM TO HAVE DEVELOPED ENOUGH TO HOLD THE SOIL TOGETHER FIRM AND WHOLE. NO PLANTS SHALL BE LOOSE IN THE CONTAINER. PLANTS WHICH HAVE BECOME POT BOUND OR FOR WHICH THE TOP SYSTEM IS TOO LARGE FOR THE SIZE OF THE CONTAINER WILL NOT BE ACCEPTABLE.

   B. ALL CONTAINERS SHALL BE CUT AND OPENED FULLY, IN A MANNER THAT WILL NOT DAMAGE THE ROOT SYSTEM. CONTAINER GROWN PLANTS SHALL NOT BE REMOVED FROM THE CONTAINER UNTIL IMMEDIATELY BEFORE PLANTING.

3. BARE ROOT PLANTS: NO BARE ROOT PLANTS SHALL BE USED.

C. PLANTING MATERIALS:

1. TOP SOIL/BACK FILL:
   A. TOPSOIL SHALL BE FRIABLE LOAM TYPICAL OF LOCAL CULTIVATED TOPSOIL, CONTAINING AT LEAST 10% DECAYED ORGANIC MATTER (HUMUS). IT SHALL BE TAKEN FROM A WELL DRAINED SITE. IT SHALL BE REASONABLY FREE OF WEEDS, SUB SOILS, STONES, CLODS, STICKS, ROOTS AND OTHER OBJECTIONABLE EXTRANEOUS MATTER OR DEBRIS. IT SHALL NOT CONTAIN TOXIC MATERIALS AND SHALL HAVE AN ACIDITY RANGE OF pH 5.0–7.0. TOP SOIL FROM NUT GRASS INFESTED AREAS WILL NOT BE ACCEPTABLE.

   B. ANY NECESSARY SOIL TESTING SHALL BE THE LANDSCAPE CONTRACTORS RESPONSIBILITY.

   C. SOIL PREPARATION: PRIOR TO PLACING MIX AND BACK FILL OR COMMENCING WITH PLANTING, ANY OR ALL AREAS THAT HAVE BEEN PREVIOUSLY COMPACTED FOR OTHER CONSTRUCTION PURPOSES ARE TO BE ROTOTILLED AND TREATED WITH PRE–EMERGENT HERBICIDE.

2. FERTILIZER: FERTILIZER SHALL BE A COMPLETE FERTILIZER OF WHICH 50% OF THE THE ELEMENTS SHALL BE DERIVED FROM ORGANIC SOURCES. OSMOCOTE SLOW RELEASE 9 MONTH FORMULA OR EQUAL SHALL BE PLACED ACCORDING TO DIRECTIONS BELOW EACH PLANT. IT SHALL CONTAIN THE FOLLOWING MINIMUM PERCENTAGES BY WEIGHT:

A.	NITROGEN	N–18%
B.	PHOSPHORUS	P–6%
C.	POTASSIUM	K–12%

   D. OTHER ANALYSIS AS MAY BE APPROVED BY THE LANDSCAPE ARCHITECT.
   E. IN ADDITION THE RECOMMENDED MICRO NUTRIENTS MUST BE PRESENTING THE GUARANTEED ANALYSIS

3. PLANTING MIXTURE: PLANTING MIXTURE SHALL CONSIST OF APPROXIMATELY FOUR PARTS OF ACCEPTABLE NATURAL TOPSOIL AND ONE PART PULVERIZED PEAT OR STERILIZED MANURE. ACCORDING TO DIRECTIONS COMMERCIAL FERTILIZER HAVING AN ANALYSIS OF 18 6 12, SHALL BE ADDED TO THE BOTTOM OF EACH PLANTING HOLE.
   A. AZALEA MIXTURE MUST BE USED FOR PLANTS WHICH PREFER LOW pH. THE NUTRIENT PERCENTAGES–MIRACID 30 10 10. PLANTS WHICH PREFER LOW pH ARE AZALEAS, BLUEBERRIES, CAMELLIAS, DOGWOOD, FERNS, FIR, GARDENIAS, HAWTHORN, HOLLY, HYDRANGEA, JUNIPER, LAUREL, MAGNOLIA, OAKS, ORCHID, PINE, RHODODENDRON AND PHOTINEAS.

   B. ACCEPTABLE ARTIFICIALLY PREPARED PLANTING COMPOST MATERIAL APPROVED BY THE LANDSCAPE ARCHITECT WILL BE PERMITTED, IN LIEU OF THE PULVERIZED PEAT OR STERILIZED MANURE, IN THE PREPARED NATURAL TOPSOIL MIXTURE FOR USE AS BACK FILL MATERIAL.

4. MULCH: WOOD MULCH SHALL BE SHREDDED CYPRESS, PINE BARK, PINE NEEDLES, OR OAK LEAVES CLEAN, AND FREE OF WEEDS, MOSS, STICKS OR OTHER DEBRIS.

5. WATER: SUITABLE WATER AND WATERING EQUIPMENT FOR THE IRRIGATION OF THE NEW PLANTINGS DURING THE PROGRESS OF INSTALLATION AND THE GUARANTEE PERIOD SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR. ARRANGEMENTS MAY BE MADE WITH THE OWNER, IF THE PERMANENT IRRIGATION SYSTEM HAS BEEN INSTALLED AND IS OPERABLE.

PART 3 – EXECUTION

3.01 PREPARATION

A. UNDERGROUND OBSTRUCTIONS:

1. UPON REQUEST FROM THE LANDSCAPE CONTRACTOR, THE OWNER SHALL PROVIDE PANS SHOWING THE LOCATION OF UNDERGROUND UTILITIES AND/OR WILL ASSIST THE LANDSCAPE CONTRACTOR IN SECURING UNDERGROUND LOCATIONS FROM THE OTHER PUBLIC UTILITY COMPANIES, SUCH AS TELEPHONE, CABLE AND ELECTRICITY ETC.

2. IN THE EVENT THAT ROCK, UNDERGROUND CONSTRUCTION WORK, UTILITY LINES OR OBSTRUCTIONS OUT OF THE ORDINARY ARE ENCOUNTERED IN ANY PLANT PIT EXCAVATION, ALTERNATIVE LOCATIONS SHALL BE SELECTED BY THE LANDSCAPE ARCHITECT. WHERE LOCATIONS CANNOT BE CHANGED AND THE OBSTRUCTION MAY BE REMOVED THE OBSTRUCTION SHALL BE REMOVED TO A DEPTH OF 3' BELOW GRADE AND NO LESS THAN 6" BELOW BOTTOM OF THE ROOT BALL WHEN PLANT IS PROPERLY INSTALLED AT THE REQUIRED GRADE.

B. EXCAVATION OF PLANTING BEDS AND/OR PLANT HOLES:

1. WHERE EXCAVATION ENCOUNTERS MATERIALS WHICH ARE UNSUITABLE FOR PLANT GROWTH, ALL OF THE UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH PLANTING MIXTURE.

2. WHERE EXCAVATION ENCOUNTERS MATERIALS WHICH ARE SUITABLE FOR PLANT GROWTH, THE PLANT HOLE EXCAVATION SHALL BE CYLINDRICAL IN SHAPE, WITH THE SIDES VERTICAL. PLANTS SHALL BE CENTERED IN THE HOLES WITH THE TRUNK VERTICAL, (NOT NECESSARILY PERPENDICULAR TO GRADE), LOCATION AS SHOWN IN DETAIL. BOTTOMS OF THE HOLES SHALL BE LOOSENED AND BACK FILLED AT LEAST 6" DEEPER THAT THE REQUIRED DEPTH OF EXCAVATION. FERTILIZER IS TO BE PLACED AT THE BOTTOM OF EACH HOLE TO ENSURE DEEP ROOTING.

C. PROTECTION OF EXISTING TREES: THE CONTRACTOR SHALL PROTECT EXISTING TREES FROM DAMAGE. WHERE DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REMOVE DAMAGED TREE AND REPLACE IT WITH THE APPROPRIATE KIND AND SIZE RECOMMENDED BY THE LANDSCAPE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER.

D. GRADES: IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO FINISH (FINE) GRADE ALL LANDSCAPE AREAS ELIMINATING ALL SURFACE IRREGULARITIES, DEPRESSIONS, STICKS, STONES AND OTHER DEBRIS TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT. AFTER THE GRADE HAS BEEN ESTABLISHED AND COMPACTED TO THE REQUIRED DEPTH, NO SOD SHALL BE LAID UNTIL THE GRADE HAS BEEN APPROVED.

3.02 PLANTING

A. SETTING OF PLANTS:

1. WHEN LOWERED INTO THE HOLE THE PLANT SHALL REST ON A PREPARED HOLE BOTTOM SUCH THAT THE ROOTS ARE LEVEL WITH OR SLIGHTLY ABOVE THE LEVEL OF THEIR PREVIOUS GROWTH AND SO ORIENTED SUCH AS TO PRESENT THE BEST APPEARANCE. THE CONTRACTOR, WHEN SETTING PLANTS IN HOLES, SHALL MAKE ALLOWANCES FOR ANY ANTICIPATED SETTLING OF THE PLANTS.

2. THE BACK FILL SHALL BE MADE WITH PREPARED TOPSOIL AS SPECIFIED IN SECTION 3.1 AND SHALL BE FIRMLY PACKED AND WATERED IN, SO THAT NO AIR POCKETS REMAIN. THE QUANTITY OF WATER APPLIED IMMEDIATELY UPON PLANTING SHALL BE SUFFICIENT TO THOROUGHLY MOISTEN ALL OF THE BACK FILLED EARTH. PLANTS SHALL BE KEPT IN A MOISTENED CONDITION FOR THE INITIAL TWO WEEKS AFTER PLANTING.

B. STAKING AND GUYING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL PLANTS IN A PLUMB, UPRIGHT POSITION UNTIL THE END OF THE GUARANTEE PERIOD. STAKING SHALL BE THE OPTION OF THE CONTRACTOR, ALTHOUGH ALL DAMAGED PLANTS RESULTING FROM THE LACK OF PROPER STAKING AND GUYING SHALL BE REPLACED BY THE LANDSCAPE CONTRACTOR AT NO EXPENSE TO THE OWNER. ALL TREE GUY WIRES SHALL BE FLAGGED WITH YELLOW SAFETY RIBBON.

C. PRUNING:

1. ALL BROKEN OR DAMAGED ROOTS SHALL BE CUT OFF SMOOTHLY AND THE TOPS OF ALL TREES SHALL BE PRUNED IN A MANNER COMPLYING WITH STANDARD HORTICULTURAL PRACTICE. AT THE TIME PRUNING IS COMPLETED, ALL REMAINING WOOD SHALL BE ALIVE. ALL CUT SURFACES OF ONE (1) INCH OR MORE IN DIAMETER, ABOVE THE GROUND, SHALL BE TREATED WITH AN APPROVED COMMERCIAL TREE PAINT. FINE PRUNING FOR TREE SHAPE AND APPEARANCE SHALL BE DONE PRIOR TO FINAL ACCEPTANCE.

2. AT THE END OF THE GUARANTEE PERIOD AT LEAST 95% OF THE WOOD REMAINING SHALL BE ALIVE.

D. MULCHING: WITH IN ONE WEEK AFTER PLANTING MULCH MATERIAL SHALL BE UNIFORMLY APPLIED TO A MINIMUM LOOSE THICKNESS OF 3 INCHES OVER THE ENTIRE AREA OF THE BACK FILLED HOLE OR BED. DO NOT LET MULCH CONTACT DIRECTLY THE CROWN OF THE STEMS OR TRUNK. THE MULCH SHALL BE MAINTAINED CONTINUOUSLY IN PLACE UNTIL THE TIME OF FINAL INSPECTION. MULCHING OF ANNUAL BEDS TO BE EXCHANGED MORE THAN TWO TIMES PER YEAR SHALL NOT BE MULCHED BUT AMENDED WITH PEAT AND TREATED WITH A PRE–EMERGENT HERBICIDE. ALL FREE STANDING TREES SHALL HAVE A 3' DIAMETER RING OF MULCH.

E. WATERING: THE LANDSCAPE CONTRACTOR SHALL CONTINUE WATERING FOR AS LONG AS IS NECESSARY TO PROPERLY ESTABLISH THE NEW PLANTINGS. CARE SHALL BE TAKEN TO PREVENT STAINING OF NEW CONSTRUCTION AREAS, WHERE TEMPORARY WELL WATER IS USED.

F. PEST CONTROL: PRIOR TO FINAL ACCEPTANCE IN 6 MONTHS, ANY OCCURRENCE OF SCALES, BORERS, FOLIAR FEEDERS, APHIDS, MITES, LEAF SPOT, DIEBACK, NEMATODES AND FUNGI, SHALL BE TREATED IMMEDIATELY WITH APPROPRIATE PESTICIDE, OR FUNGICIDE, BY THE LANDSCAPE CONTRACTOR.

G. FERTILIZER: ALL LAWNS SHALL RECEIVE FERTILIZER EVERY THREE MONTHS DURING THE PLANTING AND GUARANTEE PERIOD WITH 50% ORGANIC 16 4 8. ALL PLANTS TO BE FERTILIZED WITH OSMOCOTE 9 MONTH 18 6 12.

3.03 BERMING

A. FILL DIRT: FILL DIRT SHALL BE LOCALLY OBTAINED MATERIAL FROM NATURALLY DRAINED SOURCES, FREE FROM STONES LARGER THAN 1 INCH DIAMETER AND OTHER MATERIALS HARMFUL TO SUCCESSFUL DRAINAGE AND PLANT GROWTH. SOIL SHALL BE WELL MIXED. A MAXIMUM OF 25% MUCK OR CLAY COMPOSITION WILL BE ACCEPTABLE, PROVIDED THE LANDSCAPE CONTRACTOR CONDUCT A PERCOLATION TEST WHICH PROVES THAT STANDING WATER WILL DRAIN WITHIN A 10 HOUR PERIOD.

B. GRADING: GRADE AREAS INDICATED WITH UNIFORM LEVELS OR SLOPES WITH NO MORE THAN 3:1 MAXIMUM SLOPE. BERMS SHALL BE GENTLY ROLLING AND PARABOLIC.

C. REPAIR: GRADES WHICH ARE UNDER THE LANDSCAPE ARCHITECTS SCOPE, WHICH HAVE SETTLED, ERODED, RUTTED OR ARE OTHERWISE DAMAGED WILL BE REPAIRED AND REESTABLISHED BY THE LANDSCAPE CONTRACTOR.

3.04 SODDING

A. THE SOD SHALL BE OF FIRM TOUGH TEXTURE HAVING A COMPACT GROWTH OF GRASS WITH GOOD ROOT DEVELOPMENT. IT SHALL CONTAIN NO BERMUDA GRASS, WEEDS OR ANY OTHER OBJECTIONABLE VEGETATION. THE SOIL EMBEDDED IN THE SOD SHALL BE GOOD CLEAN EARTH FREE FROM STONES AND DEBRIS. THE SOD SHALL BE FREE FROM FUNGUS, INSECTS, GRUBS AND OTHER DISEASES. SOD AREAS ARE TO BE RAKED SMOOTH AND WATERED PRIOR TO SOD INSTALLATION. ADJACENT TO SIDEWALKS AND CURBS REDUCE GRADE 1" TO ALLOW FOR GRASS BUILD UP.

B. SOLID SOD SHALL BE LAID WITH TIGHTLY ABUTTING JOINTS AND TAMPERED OR ROLLED EVEN. IT SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO CREATE A NEAT CLEAN EDGE OF SOD ADJACENT TO ALL PAVING AND SHRUB AREAS.

C. AFTER THE SOD IS LAID, A TOP DRESSING OF CLEAN SAND WILL BE EVENLY APPLIED TO THE JOINTS WHICH NEED FILLING.

D. IN ORDER TO PREVENT SLIPPAGE, AND TO PREVENT WASH OUT OF STRAIGHT SEAMS, SOD WILL BE PEGGED ON SLOPES AND PLACED IN A STAGGERED FASHION.

E. ALL SOD AREAS WILL BE TREATED WITH A FERTILIZER CONTAINING THE RATIO 16 4 8 WHICH IS 50% ORGANIC WITH MICRO NUTRIENTS, AT A RATE OF 10 LB/1000 S.F. THIS SHALL BE DONE ONCE AT THE BEGINNING AND AGAIN AT THE END OF THE 3 MONTH SOD GUARANTEE PERIOD.

3.05 FIELD QUALITY CONTROL

A. MAINTENANCE PRIOR TO FINAL ACCEPTANCE:

1. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL CONTINUE UNTIL FINAL ACCEPTANCE AT THE END OF THE GUARANTEE PERIOD. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED AND OTHERWISE MAINTAINED AND PROTECTED FOR THE PERIOD OF TIME STATED ABOVE. SOD SHALL BE MOWED ON A REGULAR BASIS, ONCE PER WEEK IN THE SUMMER (MAY–OCT) AND ONCE A MONTH IN THE WINTER. A SEPARATE CONTRACT FOR THIS CAN BE LET BY THE OWNER, BUT IT IS THE CONTRACTORS RESPONSIBILITY TO MAKE SURE THE MATERIALS ARE PROPERLY MAINTAINED.

2. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE POSITION. PLANTING SAUCERS MUST BE CONTINUOUSLY MAINTAINED.

3. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT. UPON COMPLETION OF PLANTING THE LANDSCAPE CONTRACTOR SHALL REMOVE FROM THE SITE EXCESS SOIL AND DEBRIS, AND REPAIR ANY DAMAGE TO STRUCTURES, ETC. RESULTING FROM PLANTING OPERATIONS. IN A MOISTENED CONDITION FOR THE INITIAL TWO WEEKS AFTER PLANTING.

4. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR PROTECTION AGAINST MECHANICAL DAMAGE INCLUDING PROTECTION FROM VEHICLES, BY POSTING OF APPROVED WARNING SIGNS AND/OR BARRICADES, AS MIGHT BE NECESSARY. HE SHALL REPAIR, RESTORE OR REPLACE ANY PLANTS OR PLANTING AREAS WHICH MAY BECOME DAMAGED AS A RESULT OF ANY NEGLIGENCE BY HIM IN COMPLYING WITH THESE REQUIREMENTS. AS A SPECIFIC REQUIREMENT OF THESE CONDITIONS, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT ALL PLANTS AT THE TIME OF FINAL INSPECTION EXHIBIT THE CHARACTERISTICS AND QUALIFICATION REQUIRED FOR THE GRADE OF PLANT AS ORIGINALLY SPECIFIED.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL WATERING REQUIRED IF IRRIGATION PROVES TO BE INADEQUATE FOR FRESHLY PLANTED MATERIAL.

6. EXCEPT AS OTHERWISE SPECIFIED THE LANDSCAPE CONTRACTOR WORK SHALL CONFORM TO ACCEPTED HORTICULTURAL PRACTICES.

B. PROVISIONAL ACCEPTANCE:

1. UPON COMPLETION OF ALL WORK INCLUDING MAINTENANCE, THE LANDSCAPE CONTRACTOR SHALL ARRANGE FOR A PROVISIONAL INSPECTION. THE LANDSCAPE WORK MAY BE REVIEWED FOR ACCEPTANCE IN PARTS, PROVIDED THE WORK OF ONE UNIT OR AREA PART IS OF SUBSTANTIAL SIZE.

2. THE DATE OF PROVISIONAL ACCEPTANCE SHALL MARK THE BEGINNING OF THE GUARANTEE PERIOD. THIS DATE MUST BE SPECIFIED BY WRITTEN NOTIFICATION TO THE LANDSCAPE ARCHITECT AND THE OWNER.

C. FINAL ACCEPTANCE INSPECTION:

1. AT THE END OF THE GUARANTEE PERIOD, INSPECTION OF PLANTS WILL BE MADE BY THE LANDSCAPE ARCHITECT/OR OWNER. WRITTEN NOTICE IS TO BE SUBMITTED TO THE LANDSCAPE ARCHITECT/OR OWNER BY THE CONTRACTOR AT LEAST TEN DAYS BEFORE THE ANTICIPATED INSPECTION DATE.

2. ALL DEFECTS DISCOVERED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER, WITH IN TWO WEEKS OF THIS INSPECTION OR THE CONTINGENT FINAL ACCEPTANCE OF THE GUARANTEE INSPECTION SHALL BE VOID AND A NEW FINAL GUARANTEE INSPECTION SCHEDULED.

3.06 ADJUSTMENT AND CLEANING

A. CLEANING UP THE SITE: UPON COMPLETION OF ANY PORTION OF THE LANDSCAPE PROJECT THE LANDSCAPE CONTRACTOR MUST THOROUGHLY CLEAN UP THE PROJECT SITE. IN ADDITION TO REMOVING ALL EQUIPMENT, UNUSED MATERIALS, DELETERIOUS MATERIAL AND SURPLUS MATERIAL, THE LANDSCAPE CONTRACTOR SHALL FINE GRADE ALL DISTURBED AREAS AND THE AREAS ADJACENT TO THE NEW PLANTINGS TO PROVIDE A NEAT AND UNIFORM SITE, SPECIFICALLY, THE SOD AREAS ADJACENT MUST BE AS REQUIRED. ALL DAMAGED OR ALTERED EXISTING STRUCTURES, AS A RESULT OF THE LANDSCAPE WORK SHALL BE CORRECTED BEFORE PROVISIONAL ACCEPTANCE IS GRANTED AND GUARANTEE PERIOD BEGINS.

B. ADDITIONAL PLANT MATERIAL: ADDITIONAL PLANT MATERIAL REQUIRED DUE TO A DISCREPANCY IN THE PLANT LIST, THE PLANS OR CHANGES IN THE SITE SHALL BE PROVIDED AT THE SAME RATE AS ORIGINALLY SPECIFIED IN THE BID. ANY DEVIATIONS FROM THE PLANS PROVIDED SHALL REQUIRE A CHANGE ORDER SIGNED BY THE LANDSCAPE ARCHITECT, PRIOR TO THE WORK.

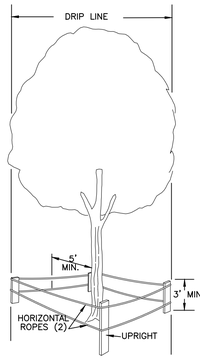
3.07 TRANSPLANTING OPERATIONS

THE LANDSCAPE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO MINIMIZE SHOCK OF ROOT PRUNING AND TRANSPLANTING IN ACCORDANCE WITH NURSERY TRADE PROCEDURES INCLUDING THE FOLLOWING WHERE TIME IS AVAILABLE.

A. PHASE ONE – INITIAL REMOVAL
1. ROOT PRUNE ONE THIRD OF BALL AT A TIME A MINIMUM OF 6 WEEKS BEFORE REMOVAL.
2. THIN OUT INTERIOR CROWN OF DICOTS IN A MANOR, TO COMPENSATE FOR ROOT LOSS, LEAVING THE SHAPE OF THE CANOPY INTACT.
3. LEAVE MONOCOT LEAVES ALONE ALLOWING PLANT TO BALANCE ITSELF PROTECT GROWING POINT AS NECESSARY.
4. AFTER ROOT PRUNING BACK FILL WITH GOOD ORGANIC ROOTING MEDIUM FERTILIZE WITH ORGANIC FERTILIZER TO PROMOTE ROOT GROWTH. FULLY PROTECT PLANTS FROM DAMAGE BY SUN, WIND, DROUGHT, WATER AND OTHER INJURIOUS CONDITIONS DURING TEMPORARY STORAGE.
5. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE STORED PLANTS UNTIL THEIR REUSE. HE SHALL NOTIFY THE OWNER IN WRITING OF ANY CONDITIONS BEYOND HIS CONTROL, WHICH ARE ADVERSELY AFFECTING THE STORED PLANTS.

B. PHASE TWO – STORAGE UNTIL REPLANTING SEE AREA DESIGNATED ON PLANS OR PROVIDE OFF SITE TEMPORARY STORAGE.

1. PROVIDE TEMPORARY IRRIGATION FOR THIS HOLDING AREA. MULCH TO REDUCE WEEDS, DISCOURAGE FOOT TRAFFIC AND ITS COMPACTING EFFECT, CONSERVE MOISTURE AND MINIMIZE TEMPERATURE FLUCTUATIONS.
2. BRACE TRUNK AND LEAVE IN PLACE UNTIL TREES ARE WIND FIRM.
3. WRAP TRUNKS AND STRUCTURAL BRANCHES OF THIN BARKED TREES TO PROTECT AGAINST SUN SCALD AND DEHYDRATION. RETAIN THIS PROTECTION THROUGH THE COLD SEASON.
4. FEED WITH DILUTED SOLUTION OF NPK IN SOLUBLE FORM WITH A SOIL NEEDLE PROVIDING WATER, AIR, NUTRIENTS AND A BREAKING UP OF CLODS.
5. WHERE FOLIAGE IS RETARDED SPRAY IT WITH ONE OF THE SOLUBLE AREA TYPES OF FOLIAR FEEDERS.
6. AT TIME OF REPLANTING TO FILL AIR POCKETS AND TO KEEP ROOTS, ESPECIALLY FEEDER ROOTS ,MOIST, LIVE AND HEALTHY, USE SOIL NEEDLE FOR WATERING NEW TRANSPLANTS. DIRECT FINE SPRAY AT FOLIAGE TO HELP HARDEN OFF NEW LEAVES.



SPECIFICATIONS FOR WOOD BARRIER

1. MINIMUM RADIUS TO BE PROTECTED IS ENTIRE DRIPLINE
2. MINIMUM 3' IN HEIGHT
3. UPRIGHTS– THE EQUIVALENT OF 2"x4" LUMBER ON 6' MINIMUM CENTERS
4. HORIZONTAL– THE EQUIVALENT OF TWO COURSES OF 1/2" ROPING WITH YELLOW PLASTIC TAPE FLAGGING
5. BARRIERS TO BE ERECTED AROUND TREES TO REMAIN BEFORE CONSTRUCTION OR NEARBY TREES ARE REMOVED
6. BARRIERS TO REMAIN IN PLACE UNTIL ALL PAVING, CONSTRUCTION AND HEAVY EQUIPMENT IS OUT OF AREA

NOTE:
BARRIER MUST BE ERECTED PRIOR TO CONSTRUCTION

TREE PROTECTION DETAIL

LANDSCAPE AND IRRIGATION INSTALLATION

PLANTS INSTALLED SHALL CONFORM TO OR EXCEED THE MINIMUM STANDARDS FOR FLORIDA NUMBER ONE AS PROVIDED IN THE MOST CURRENT EDITION OF 'GRADES AND STANDARDS FOR NURSERY PLANTS', PREPARED BY THE STATE OF FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. AS NOTED, ACCEPTED STANDARD MAY BE USED IF IT EQUALS OR EXCEEDS THE QUALITY OF FLORIDA NUMBER ONE.

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: J.W.H.
PROJECT NO. 22190

MADE IN USA

DATE
REVISIONS

AMERICAN CIVIL
ENGINEERING CO.
207 N. MOSS RD., SUITE 211; WINTER SPRINGS, FLA 32708
(407) 327-7700
cert. of authorization
number 8729

LANDSCAPE DETAILS
PARK STREET
CARWASH
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84698

10/22/2023
LANDSCAPE DETAILS
PROJECT NO. 22640
LS2.0

PARK STREET OKEECHOBEE, LLC

603 East Fort King Street
Ocala, Florida 34471

VIA EMAIL

August 11, 2023

City of Okeechobee / General Services Department
Attention: Patty Burnette
55 S.E. 3rd Avenue, Room 101
Okeechobee, Florida 34974

Re: Park Street Commerce Center – Statement of Interest in Property

Dear Ms. Burnette:

On behalf of Park Street Okeechobee, LLC ("**Applicant**"), this letter constitutes Applicant's Statement of Interest in the following property (collectively, the "**Property**"):

- Parcel #1: 2-15-37-35-0A00-00011-0000
- Parcel #2: 2-15-37-35-0A00-00009-0000 Portion of Lot 1
- Parcel #3: 2-15-37-35-0A00-00009-A000 ALL
- Parcel #4: 2-15-37-35-0A00-00010-0000
- Parcel #5: 3-15-37-35-0210-00010-0010

Applicant is purchasing the Property via that certain vacant land contract between Applicant (as successor-by-assignment to WGT, Inc.) and William R. Grigsby, Jr. ("**Seller**") dated September 2, 2022 (the "**Contract**"). Applicant intends to develop the Property into a commercial real estate project to be commonly known as the Park Street Commerce Center ("**Project**") consisting of five separate parcels (as more particularly described in Applicant's site plan and other related documents) with portions of shared common area infrastructure, including without limitation, roadways, drainage, lift station, utility lines, project signs, entrance features, outfall pipe, sewer connection, and all other real and personal property (or interest therein) intended by Applicant for the common use and enjoyment of all lot owners within the Project (collectively, "**Common Area Infrastructure**").

The Common Area Infrastructure will be governed by that certain Declaration of Covenants, Conditions, Easements, and Restrictions for Park Street Commerce Center ("**Declaration**") of which Applicant (or its assignee) shall be the "**Declarant**" under the Declaration. The Declaration shall include, without limitation, provisions addressing the design, permitting, construction, maintenance, and repair of the Common Area Infrastructure, and provisions for sharing of the costs thereof by the lot owners of parcels within the Project. All easements, water management system, and other rights related to the Common Area Infrastructure will be incorporated into the Declaration. Notwithstanding the foregoing, Applicant intends to dedicate certain items constituting the Common Area Infrastructure such as the roadways, lift station, sewer connection, and outfall pipe to the City of Okeechobee ("**City**"), the County of Okeechobee ("County"), and/or other governmental authorities, respectively.

Applicant is hereby submitting Applicant's master site plan and preliminary plat for the Project in order for Applicant to obtain approval of said site plan, including multiple individual lot site plans and related special exception applications pertinent to Applicant or as jointly submitted by Applicant and a third-party future owner / user of a specific lot within the Project ("**Co-Applicant,**" and as further described below, if applicable), and plat from all governing authorities, including approval of the vacation of any existing recorded plat ("**Site Plan Approval**"). Subject to Applicant obtaining Site Plan Approval, Applicant will enter into a development agreement with the City which shall grant Applicant all rights necessary to develop the Project. More specifically, Applicant desires to enter into separate development agreements with the City for the following lots within the Project in order to develop said lot for the uses described below:

- Lot 1: Express Car Wash Facility

- Lot 2: Culver's Restaurant with Drive-Thru

Applicant sincerely looks forward to working with the City to develop this exciting project and making a large investment in the City's future and that of its residents, local businesses, and others in the surrounding community. Please direct all questions regarding the Project to Scott Winch at swinch@kinghux.com and/or (386) 527-6729.

Very truly yours,

PARK STREET OKEECHOBEE, LLC

By: _____
Adam Ramsay, Manager

Cc: Gary Ritter, City Administrator *(via email)*

Prepared By and Return to
John D. Cassels, Jr. Esq.
Cassels & McCall
P.O. Box 968
Okeechobee, Florida 34973

Parcel ID Numbers:
2-15-37-35-0A00-00009-A000
2-15-37-35-0A00-00009-0000
2-15-37-35-0A00-00011-0000
2-15-37-35-0A00-00010-0000
3-15-37-35-0210-00010-0110
3-15-37-35-0210-00010-0080
3-15-37-35-0210-00010-0040
3-16-37-35-0210-00010-0010

FILE NUM 2006011065
OR BK 00603 PG 1345
SHARON ROBERTSON, CLERK OF CIRCUIT COURT
OKEECHOBEE COUNTY, FL
RECORDED 06/20/2006 04:34:38 PM
RECORDING FEES 18.50
DEED DOC 18,433.80
RECORDED BY R Parrish
Pgs 1345 - 1346; (2pgs)

WARRANTY DEED

THIS WARRANTY DEED made this 20th day of June, 2006, between **GREAT LAKES HOLDINGS, LLC, a Florida limited liability company,** whose mailing address is 410 SE 2nd Avenue, Okeechobee, FL 34974, hereinafter called the **GRANTOR,** to **WILLIAM R. GRIGSBY, JR.,** whose mailing address 518 Bear Road, Lake Placid, FL 33852, hereinafter called the **GRANTEE:**

(Wherever used herein, the terms "Grantors" and "Grantees" 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 $10.00 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 OKEECHOBEE County, Florida, to-wit:

PARCEL 1 (PER O.R.B. 527, PGS. 869-870):

THE WEST HALF (W ½) OF THE EAST HALF (E ½) OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) LYING NORTH OF STATE ROAD NO. 70 (FORT PIERCE ROAD), IN SECTION 15, TOWNSHIP 37 SOUTH, RANGE 35 EAST, LESS THE FOLLOWING:

BEGINNING AT THE SOUTHWEST CORNER OF THE EAST HALF (E ½) OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SAID SECTION 15, RUN NORTH 594 FEET, EAST 186.3 FEET, SOUTH 594 FEET; WEST 186.3 FEET TO THE POINT OF BEGINNING.

ALSO LESS THE NORTH 50 FEET WHICH IS RESERVED FOR ROAD PURPOSES.

ALSO LESS: A STRIP OF LAND 7 FEET WIDE SITUATE ADJACENT TO AND NORTHERLY OF THE EXISTING 66 FOOT RIGHT OF WAY OF STATE ROAD 70, LYING, WITHIN THE WEST ½ OF THE EAST ½ OF SW 1/4 OF SE 1/4, SECTION 15, TOWNSHIP 37 SOUTH, RANGE 35 EAST, LESS THE WEST 186.3 FEET THEREOF; CONTAINING .02 OF AN ACRE, MORE OR LESS.

PARCEL 2 (PER O.R.B. 528, PGS. 1342-1343):

ALL OF LOTS 1 THROUGH 12, INCLUSIVE, LYING NORTH OF NORTH PARK STREET (A/K/A S.R. 70 F/K/A FORT PIERCE ROAD) AS NOW CONSTRUCTED, IN BLOCK 4, PRICE ADDITION TO OKEECHOBEE CITY, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 17, PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA.

PARCEL 3 (PER O.R.B. 528, PGS. 1342-1343):

COMMENCE AT THE NORTHEAST CORNER OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER OF SECTION 15, TOWNSHIP 37 SOUTH, RANGE 35 EAST, THENCE RUN SOUTH 00°18'26" EAST ALONG THE EASTERLY LINE THEREOF, 668.71 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 00°18'26" EAST, 276.28 FEET TO THE NORTHEAST CORNER OF PRICE ADDITION TO OKEECHOBEE CITY ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 17; THENCE RUN SOUTH 89°50'34" WEST, ALONG THE NORTHERLY LINE THEREOF, 336.76 FEET TO THE NORTHWEST CORNER OF SAID PRICE ADDITION; THENCE RUN NORTH 00°17'46" WEST, ALONG THE WEST LINE OF THE EAST ONE-HALF OF THE EAST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER OF SAID SECTION 15, A DISTANCE OF 273.38 FEET; THENCE RUN NORTH 89°20'47" EAST AND PARALLEL WITH THE NORTHERLY LINE OF PREVIOUSLY MENTIONED SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER, A DISTANCE OF 336.71 FEET TO THE POINT OF BEGINNING.

[3593-68289.WPD]

PARCEL 4 (PER O.R.B. 528, PGS. 1342-1343):

THE ALLEY IN BLOCK 4, PRICE ADDITION TO OKEECHOBEE CITY, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 17, PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA, LYING BETWEEN LOTS 1-6 AND 7-12.

PARCEL 5 (PER O.R.B 528, PGS 1342-1343:

THE STREET KNOWN AS NORTHEAST 2ND STREET (F/K/A CENTER STREET) AS IT RUNS EAST FROM NORTHEAST 12TH AVENUE TO NORTHEAST 13TH AVENUE, PARTICULARLY LOCATED NORTH OF BLOCK 4, PRICE ADDITION TO OKEECHOBEE CITY, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 17, PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA.

PARCEL 6 (PER O.R.B 554, PG 338):

ALL THAT PART OF THE NORTH 668.71 FEET OF THE E ½ OF THE E ½ OF SW 1/4 OF SE 1/4 OF SECTION 15, TOWNSHIP 37 SOUTH, RANGE 35 EAST, LESS AND EXCEPT THE NORTH 50 FEET THEREOF.

Subject to those easements in favor of Florida Power and Light recorded in O.R. Book 109, Page 983 and O.R. Book 23, Page 524 and matters contained on the Plat of Price Addition to Okeechobee City recorded in Plat Book 2, Page 17, all being in the Public Records of Okeechobee County, Florida.

and said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

* Singular and plural are interchangeable as context requires.

IN WITNESS WHEREOF, the said **GRANTOR** have executed this Deed the day and year first above written.

Signed, Sealed and Delivered in our presence:

Karin Ammons
(Signature)
Karin Ammons
(Print Name)

(Signature)
John J Costello, Jr
(Print Name)

GREAT LAKES HOLDINGS, LLC, a Florida limited liability company

BY: _____
D. Robert Willson, Managing member

STATE OF FLORIDA
COUNTY OF OKEECHOBEE

Signed and sworn to (or affirmed) before me this 20th day of June, 2006, by D. ROBERT WILLSON, as Managing Member of GREAT LAKES HOLDINGS, LLC, a Florida limited liability company, who is personally known to me.

Karin Ammons
NOTARY PUBLIC
Print Name: Karin Ammons

Karin Ammons
My Commission DD211896
Expires July 11, 2007

[3593-68289.WPD]

CITY OF OKEECHOBEE
55 SE 3RD AVENUE
OKEECHOBEE, FL 34974
TELE: 863-763-3372 FAX: 863-763-1686

LAND USE POWER OF ATTORNEY

Name of Property Owners: WILLIAM R. GRIGSBY, JR.

Mailing Address: 10282 Payne Road, Sebring, Florida 33875

Home Telephone: N/A **Work:** **Cell:**

Property Address:
Those certain 5 parcels of land referenced below totaling approximately 16.2 acres and located in close proximity to 975 NE Park Street, Okeechobee, Florida 34972

Parcel ID Number:
Parcel #1: 2-15-37-35-0A00-00011-0000, Parcel #2: 2-15-37-35-0A00-00009-0000, Parcel #3: 2-15-37-35-0A00-00009-A000, Parcel #4: 2-15-37-35-0A00-00010-0000, and Parcel #5: 3-15-37-35-0210-00010-0010.

Name of Applicant:
Park Street Okeechobee, LLC and its successors and assigns

Home Telephone: (321) 704 - 2840 **Work:** **Cell:**

The undersigned, being the record title owner(s) of the real property described above, do hereby grant unto the applicant stated above the full right and power of attorney to make application to the City of Okeechobee to change the land use of said property. This land use change may include rezoning of the property, the granting of special exception or variances, and appeals of decisions of the Planning Department. It is understood that conditions, limitations and restrictions may be place upon the use or operation of the property. Misstatements upon application or in any hearing may result in the termination of any special exception or variance and a proceeding to rezone the property to the original classification. This power of attorney may be terminated only by a written and notarized statement of such termination effective upon receipt by the Planning Department.

IN WITNESS WHEREOF THE UNDERSIGNED HAVE SET THEIR HAND AND SEALS THIS 13 DAY OF February 2023.

OWNER

WITNESS

OWNER

WITNESS

STATE OF FLORIDA
COUNTY OF Highlands

The foregoing instrument was acknowledged before me by means of ✓ physical presence or __ online notarization, this 13 day of Feb, 2023, by William R. Grigsby, Jr. (Name of Person),

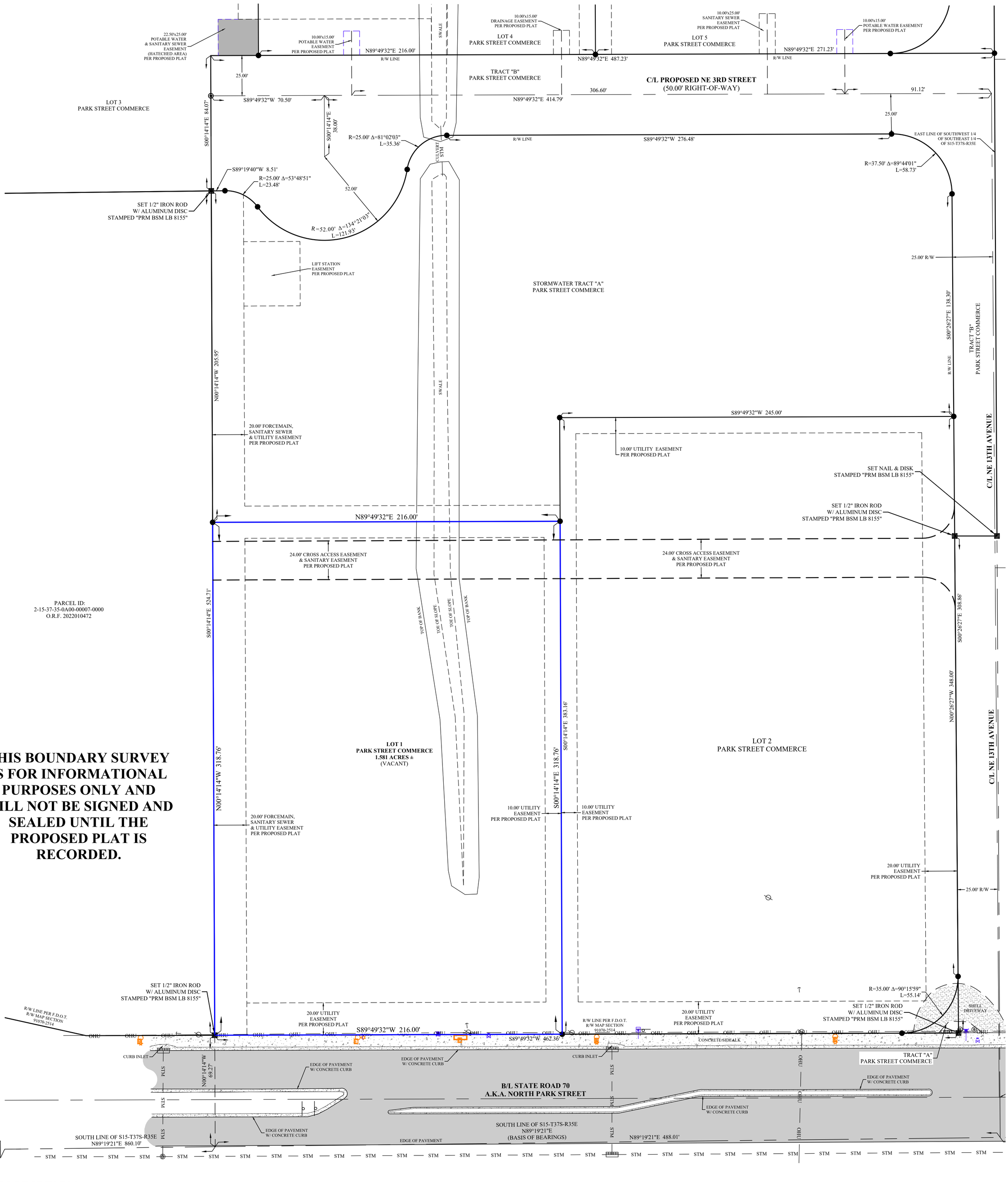
who is personally known to me or produced Florida I.D. as identification.

Notary Public State of Florida
George D Stickle
My Commission HH 044464
Expires 09/20/2024

NOTARY PUBLIC SIGNATURE

BOUNDARY SURVEY

LOCATED IN SECTION 15; TOWNSHIP 37 SOUTH; RANGE 35 EAST



LEGAL DESCRIPTION:

LOT 1, PARK STREET COMMERCE CENTER , ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK ??, PAGE ??, OF THE PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA.

SURVEYOR'S NOTES:

1. THE SURVEY DATE IS OCTOBER 5, 2023.
2. THIS IS A **BOUNDARY SURVEY**, AS DEFINED IN CHAPTER 5J-17.050(11) 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 SOUTH RIGHT OF WAY LINE OF, SAID LINE BEARS NORTH 89°49'32" EAST AND ALL OTHER BEARINGS ARE RELATIVE THERETO.
6. THE COORDINATE SYSTEM UTILIZED HEREON IS 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.
7. 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.
8. ADJOINING PROPERTY INFORMATION WAS OBTAINED FROM OKEECHOBEE COUNTY PROPERTY APPRAISER OFFICE AND PER UNRECORDED PLAT.
9. SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X PER FEMA MAP NUMBER 12093C, PANEL NUMBER 0480C, WITH AN EFFECTIVE DATE OF 07/16/15.

LEGEND:

S	SECTION OR SOUTH	C/L	CENTERLINE
T	TOWNSHIP	R/W	RIGHT-OF-WAY
R	RANGE OR RADIUS	ID	IDENTIFICATION
N:	NORTHING	O.R.B.	OFFICIAL RECORD BOOK
E:	EASTING	O.R.F.	OFFICIAL RECORD FILE
ELEV.	ELEVATION	PG.	PAGE
F.D.O.T.	FLORIDA DEPARTMENT OF TRANSPORTATION	L	ARC LENGTH
		OHU	OVERHEAD UTILITY LINE
F	FIELD	FND	FOUND
P	PLAT	C.C.R.	CERTIFIED CORNER RECORD
D	DEED		PROPERTY LINE
A.K.A.	ALSO KNOWN AS		UTILITY POLE
●	SET 1/2" IRON ROD & CAP STAMPED "BSM LB 8155"		SINGLE SUPPORT SIGN
			DELINEATOR POST
Ⓓ	STORM WATER MANHOLE	B/L	BASELINE
	FIRE HYDRANT	W/	WITH
WV	WATER VALVE		LIGHT POLE
	CURB INLET		GUY ANCHOR
Ⓢ	SANITARY MANHOLE	T	TELEPHONE PEDESTAL
W	WATER METER	E	ELECTRIC JUNCTION BOX
	ELECTRIC SERVICE BOX	Ⓑ	BOLLARD
		Δ	DEGREE OF CURVATURE

GRAPHIC SCALE

0 30 60 Feet

1 INCH = 30 FT.
(INTENDED DISPLAY SCALE 24"X36")

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) PARK STREET OKEECHOBEE, LLC.

FOR THE FIRM:
BSM & ASSOCIATES, INC.

_____DATE_____
RICHARD E. BARNES III
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA LICENSE NO. 7074

BOUNDARY SURVEY
HIGHWAY 70 EAST
OKEECHOBEE, FLORIDA 34972

CAD G:\My Drive\BSM & ASSOCIATES, INC\2022\22-445 ALTA TOPO & PLAT - KINGS CONDOR PARTNERS\LOT 1 & LOT 2 SURVEYS\					
REF G:\My Drive\BSM & ASSOCIATES, INC\2022\22-445 ALTA TOPO & PLAT - KINGS CONDOR PARTNERS\LOT 1 & LOT 2 SURVEYS\MGO1					
FLD JF, DF	FB./PG. RJ #1/20-22		10/17/23	UPDATED BOUNDARY SURVEY PER REVISED PLAT	TJL
OFF EGB		DATE 10/05/23	8/17/23	UPDATED BOUNDARY SURVEY PER REVISED PLAT	TJL
CKD REB	SHEET 1 OF 1	DWG 22-445 BND LOT 1	DATE:	REVISIONS:	BY:

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

Park Street Commerce Center

Master Storm System

Storm Report by

AMERICAN CIVIL ENGINEERING CO.

JOHN J. HERBERT, IV
LICENSE
No. 84698
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

John J Herbert IV, PE #84698

5/24/2023

American Civil Engineering Co.

Stormwater Summary

Park Street Commerce Center

5/24/2023

SJRWMD #:

Basin Size: 16.65 AC (Total Site)

Special Basin Criteria: Lake Okeechobee (+50% treatment over standard SFWMD criteria)

Wetlands: #56-00002-M Bluefield Ranch Mitigation Bank

Hydraulic Soils: Manatee #6 Type B/D (77%), Immokalee #11 Type B/D (23%)

Impervious Area: 0.05 AC existing, 6.80 AC Total Impervious Area

Treatment Volume Required: 1.5 " over basin or 2.5" x % impervious plus 50%

Peak Design Storm: 100 Yr – 72 hr

Pre vs Post Discharge: S-133 Basin 15.6 cfs/SM for 25YR-72HR storm or 0.36 cfs, proposed 0 cfs

Pond Volume: Dry Pond 4.938 AF (22 Top, 17.60 Bottom) , Wet Pond 4.07 AF (20 Top, 15 NWL)

Pond Recovery: 72 hours

Seasonal High Groundwater Elevation: 14.50 elv. (See Geotech Report)

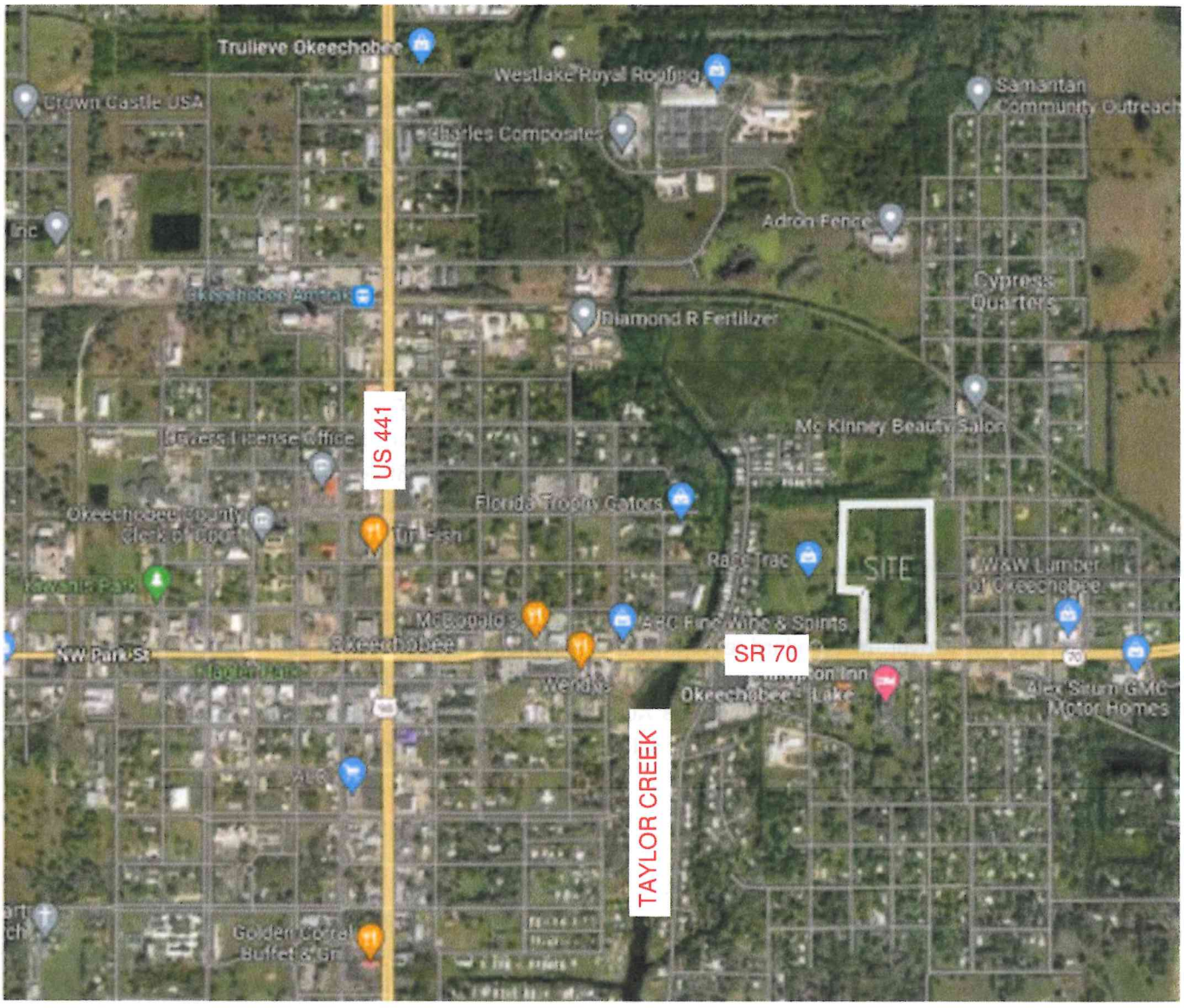
FEMA: Zone X (12093C0480C - 7/16/2016)

Slopes: 4:1 Dry pond

Maintenance Berm: 10 ft

Fencing: No fence proposed

American Civil Engineering Co.



American Civil Engineering Co.

Site Location / Existing Conditions:

The project is 16.65 acres in size and located on 1000 East S.R.70 in the City of Okeechobee, Florida. The site is currently undeveloped apart from an unoccupied house in the back northeast corner. A man-made drainage swale has been cut through the center of the site emptying into Taylor Creek in the north. Several isolated wetlands are present on the property. Topography of the site flows from higher elevations in the east to lower elevations in the west, ultimately discharging north into the creek. During geotechnical investigations organic muck layers were discovered in portions of the site (approx. 27%) that correlated with higher water tables relative to the borings without muck.

Proposed Conditions:

Project proposes four individual commercial lots and city-controlled roadway created with master stormwater. Lot 1 (1 AC impervious) is proposed carwash, Lot 2 (1.5 AC impervious) is Culver's restaurant, Lot 3 & 4 have no current planned development but are still allotted 1.75 AC of impervious area each in the master system. The proposed roadway is allotted 0.80 AC of impervious in the same shared system.

Water Quality:

The site requires nutrient loading be met for Lake Okeechobee basin and includes 50% additional treatment volume over the standard requirements. SFWMD criteria of 1" over basin or 2.5" over percent impervious area (less roofs & wet ponds). The system is designed to exceed the required 2.13 AC-FT of dry retention over the basin providing 3.58 AC-Ft before discharging into the wet pond. All required treatment is met within the dry pond, additional treatment is provided in the wet pond further surpassing the requirements.

Water Quantity:

Rainfall tables used from SFWMD regarding the 10 year – 1 day (5"), 25 year – 3 day (9") and 100 year – 3 day (10") storm events were used to set the final elevations of roads and buildings via ICPR routing simulation. The proposed storm system maintains the 100 Year storm event with additional freeboard. No outfall is proposed.

	Dry Pond (elv)	Wet Pond (elv)
No Outfall – 100 YR – 72 Hour storm :	21.57	18.95
No Outfall – 25 YR – 72 Hour storm :	21.30	18.09
No Outfall – 10 YR – 24 Hour storm :	19.76	15.53

Min Road Elevation = 19.76 provided min. road elv = 20.56

American Civil Engineering Co.

Water Discharge:

No discharge is proposed, all storm events held within proposed storm system.

System Recovery:

Drawdown of the storm pond was performed using a 3-day recovery via groundwater with percolation rates at half rate given in geotech report. The dry pond holds 3.58 AC-FT at elevation 20.95 before discharging into the wet pond at the rear of the site for attenuation. The required treatment volume of 2.13 AC-FT recovers within the required 72 hour simulation with total recovery in 72 hour window equaling recovers 2.32 AC-FT

Operation & Maintenance:

Lots 1 – 4 will be owned and operated by separate entities. The proposed roadway, storm easement and rear pond will be owned and operated by City of Okeechobee.

Dry Pond Stage / Storage				
Stage (ft)	Area (sf)	Area (ac)	Volume (ac-ft)	Notes
17.6	37,464	0.860	0.000	
18.0	41,429	0.951	0.362	
19.0	45,499	1.045	1.360	
20.0	49,670	1.140	2.452	
21.0	54,134	1.243	3.644	
22.0	58,598	1.345	4.938	
Rear Dry Pond				TOP
Wier Elevation				
Design Wier Elevation =			20.95	ft
Treatment Volume Provided =			**3.584**	**ac-ft**

Wet Pond Stage / Storage				
Stage (ft)	Area (sf)	Area (ac)	Volume (ac-ft)	Notes
6.0	7,866	0.181	0.000	
7.0	8,677	0.199	0.190	
8.0	9,534	0.219	0.399	
9.0	10,440	0.240	0.628	
10.0	11,401	0.262	0.879	
11.0	12,423	0.285	1.152	
12.0	13,519	0.310	1.450	
13.0	28,332	0.650	1.931	
14.0	33,541	0.770	2.641	
15.0	38,878	0.893	0.000	Waterline (2.641 AF vol)
16.0	44,343	1.018	0.955	
17.0	49,929	1.146	0.000	
18.0	55,619	1.277	1.212	
19.0	61,409	1.410	2.555	
20.0	70,882	1.627	4.073	TOP
Wier Elevation				
No Outfall on Pond				

Development Drainage Basin A					
Basin	Area (AC)	% impervious	Cover	CN	Imperv (AC)
Commerical	13.940	49%	Impervious	98	6.800
			Drained Pervious (Type B Soil)	40	
			Roof		
			Sub-Total CN	68	
Totals	*13.940*	*49%*		68	6.800

Development Drainage Basin B					
Basin	Area (AC)	%Water	Cover	CN	Imperv (AC)
Wet Pond / FPL	2.71	33%	Water	100	0.000
			Pervious (Type B Soil)	60	
Totals	*2.71*	*33%*		73	0.000
Total Site	16.65	41%			6.800

Time of Concentration

Assume Minimum 15 minimum for all basins

Treatment Volumes

Basin Area	16.65 AC	
Impervious Area	41%	6.80 AC

1 1" over the development

1" x16.65 AC

1.420 AC-FT

Add 50%

2.09 AC-FT

2 2.5" over % impervious area

2.5" x 41% x 16.65 AC 6.8 AC total Impervious

1.42" AC-FT

Add 50%

2.130 AC-FT

Impervious Area Accounted

Lot 1	1.00 AC
Lot 2	1.50 AC
Lot 3	1.75 AC
Lot 4	1.75 AC
Roadway	0.80 AC
Total	6.80 AC

American Civil Engineering Co.

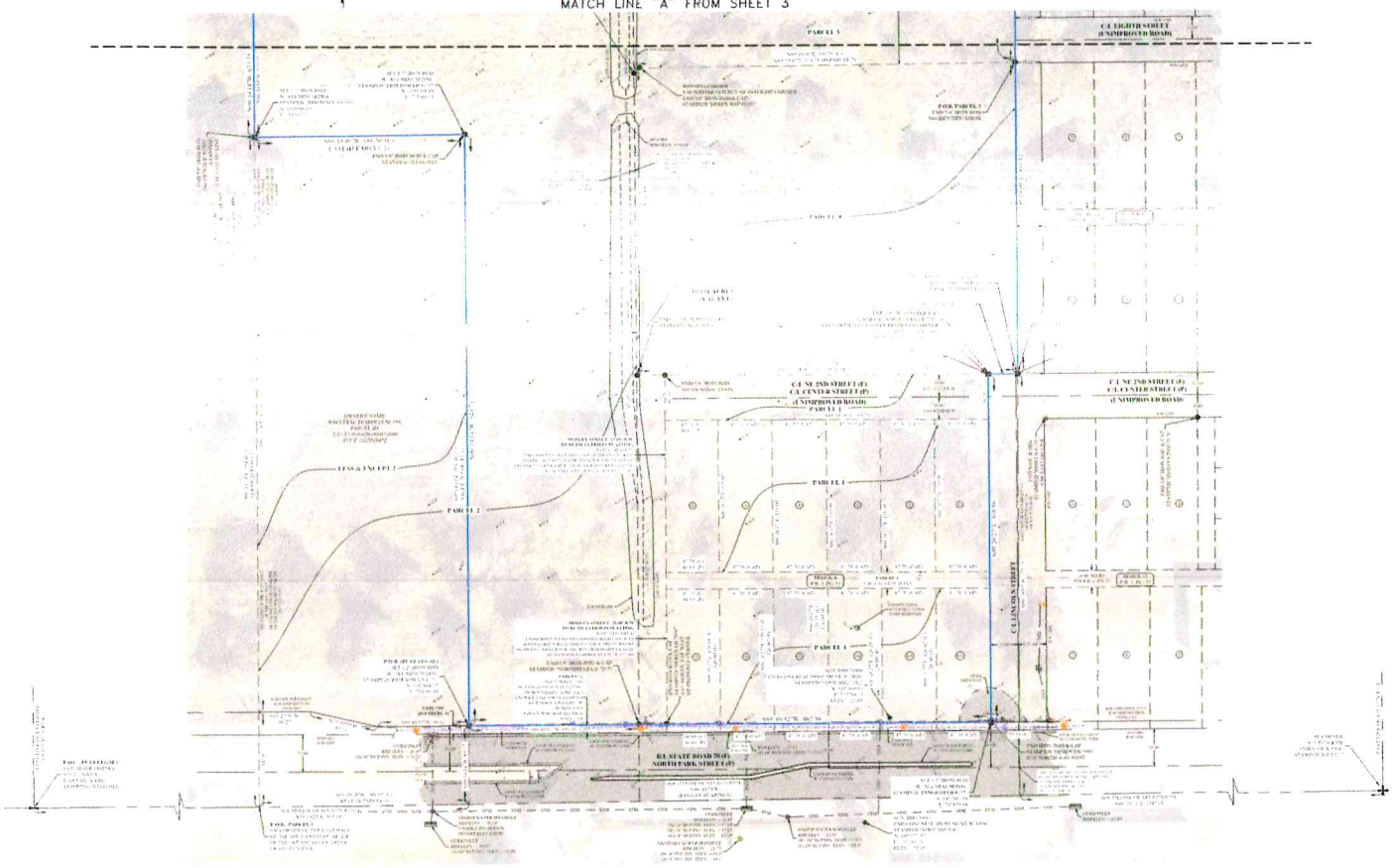
PRE-BASIN MAP

BOUNDARY & TOPOGRAPHIC SURVEY
TO ALTA/NSPS
LAND TITLE STANDARDS

LOCATED IN SECTION 15; TOWNSHIP 37 SOUTH; RANGE 35 EAST

GRAPHIC SCALE

MATCH LINE "A" FROM SHEET 3

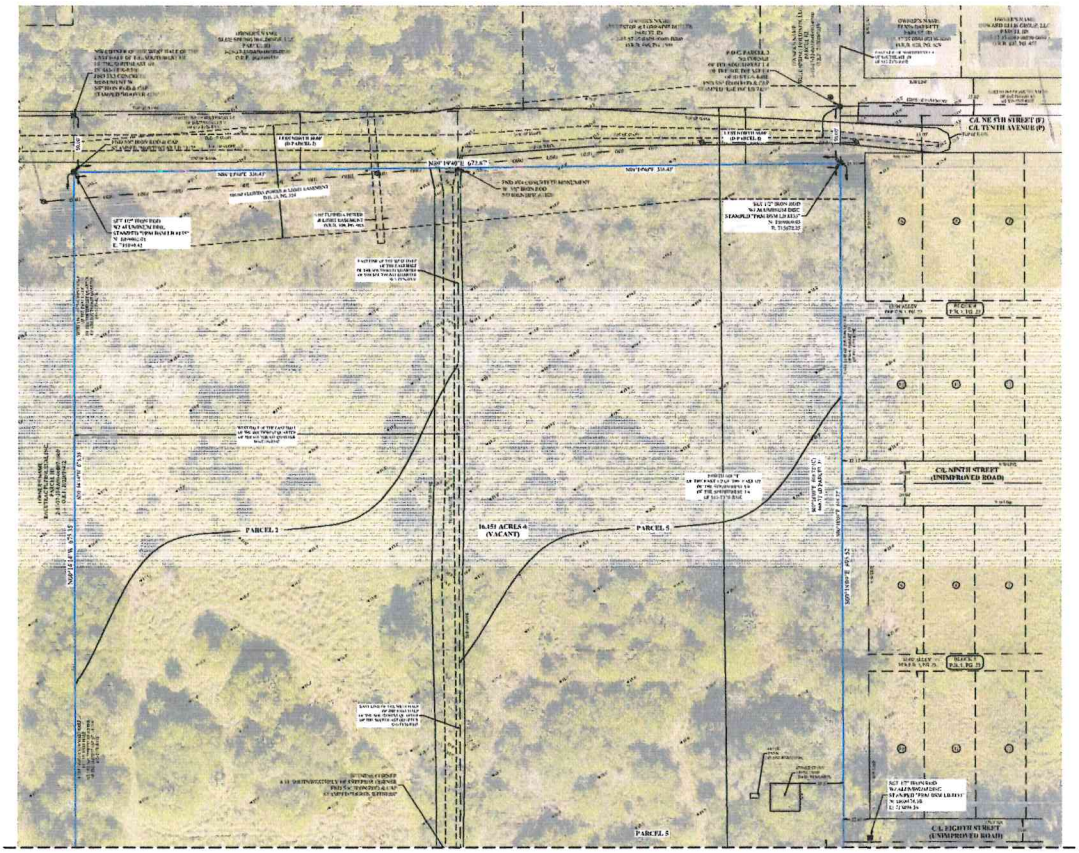


BSM & ASSOCIATES
LAND SURVEYING SERVICES

BOUNDARY & TOPOGRAPHIC SURVEY
HWY 70 EAST
OKEECHOBEE, FLORIDA 34972

BOUNDARY & TOPOGRAPHIC SURVEY
TO ALTA/NSPS
LAND TITLE STANDARDS

LOCATED IN SECTION 15; TOWNSHIP 37 SOUTH; RANGE 35 EAST



GRAPHIC SCALE

1 INCH = 40 FT
(INTENDED DISPLAY SCALE)

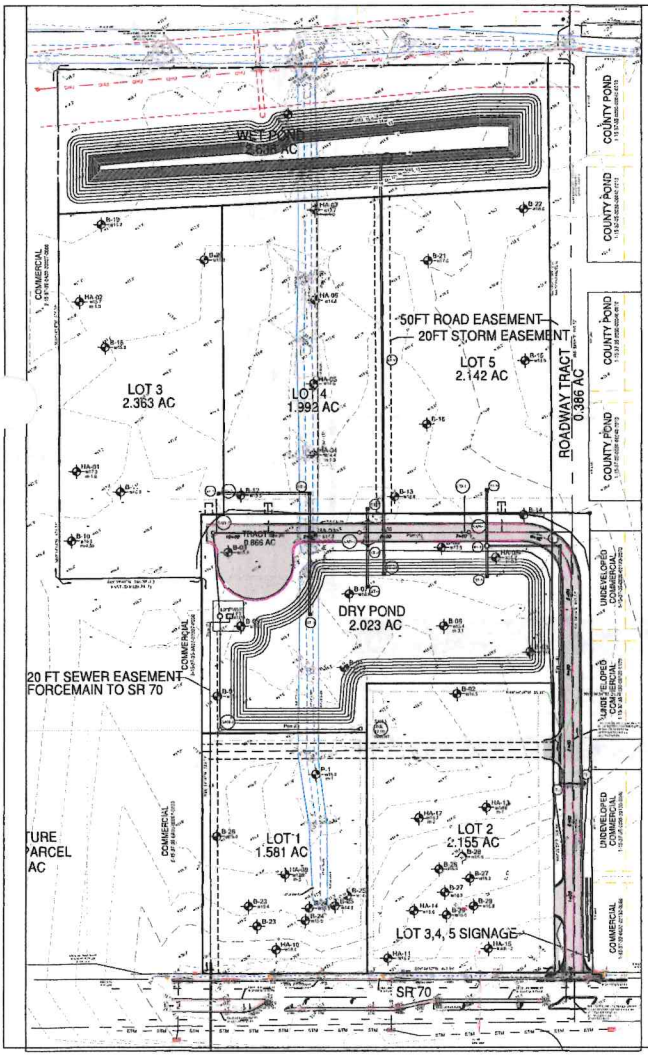
MATCH LINE "A" FROM SHEET 2

BSM & ASSOCIATES
LAND SURVEYING SERVICES

BOUNDARY & TOPOGRAPHIC SURVEY
HWY 70 EAST

American Civil Engineering Co.

POST-BASIN MAP



ELEVATIONS BASED ON NAVD 88, BASE ELEVATIONS PROVIDED BY BSM & ASSOCIATES

PAVING SPECIFICATIONS – ASPHALT SURFACE/CONC. FINES BASE:

SPECIFICATIONS FOR THE PARKING AREA AND DRIVES ARE AS FOLLOWS:

SURFACE COURSE:

A). 1.50" FDOT ASPHALT CONCRETE TYPE S-3, COMPACTED TO A MIN. OF 95% OF THE MARSHALL DESIGN DENSITY. AFTER PLACEMENT AND FIELD COMPACTION, THE WEARING SURFACE SHOULD BE CORED TO EVALUATE MATERIAL THICKNESS AND TO PERFORM LABORATORY DENSITIES. CORES SHOULD BE TAKEN AT A FREQUENCY OF ONE (1) CORE PER 10,000 SF OF PLACED PAVEMENT.

BASE REQUIREMENTS:

A). 6" PLACED RECYCLED CRUSHED CONCRETE FINES COMPACTED TO A MINIMUM DENSITY OF 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY

SUB-BASE REQUIREMENTS: FOR CRUSHED CONCRETE FINES BASE

A). 12" STABILIZED SUBGRADE TO HAVE A MIN. FBV=75 AND BE COMPACTED TO AT LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE. LEAST 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE.

GRADING NOTES

1. ALL MATERIALS AND CONSTRUCTION METHODS TO MEET CURRENT FDOT STANDARDS AND SPECIFICATIONS.
2. STABILIZE ALL DISTURBED AREAS

Structure Table	
Structure Name	Structure Details
ST-1 FDOT P-2 curb inlet	RIM = 21.17 SUMP = 17.17 Pipe - (1) INV OUT = 18.17
ST-3 4' dia manhole	RIM = 22.43 SUMP = 17.62 Pipe - (2) INV IN = 17.63 Pipe - (3) INV OUT = 17.62
ST-2 FDOT P-2 curb inlet	RIM = 21.17 SUMP = 18.10 Pipe - (1) INV IN = 18.11 Pipe - (2) INV OUT = 18.10
ST-10 FDOT Type-D outfall inlet	RIM = 20.95 SUMP = 18.25 Pipe - (9) INV OUT = 18.25
ST-4 FDOT P-2 curb inlet	RIM = 20.56 SUMP = 17.10 Pipe - (3) INV IN = 17.11 Pipe - (5) INV IN = 17.20 Pipe - (4) INV OUT = 17.10
ST-5 FDOT P-2 curb inlet	RIM = 20.56 SUMP = 17.02 Pipe - (4) INV IN = 17.03 Pipe - (5) INV OUT = 17.02
ST-11 FDOT Type-D inlet	RIM = 19.34 SUMP = 16.59 Pipe - (5) INV IN = 16.59 Pipe - (8) INV OUT = 16.59
STx FDOT Type-D inlet	RIM = 19.25 SUMP = 15.25 Pipe - (10) INV OUT = 15.25
ST-12 FDOT Type D inlet	RIM = 18.91 SUMP = 16.16 Pipe - (8) INV IN = 16.16 Pipe - (6) INV OUT = 15.16
ST-8 FDOT Type-D inlet	RIM = 18.75 SUMP = 16.00 Pipe - (6) INV IN = 16.00 Pipe - (7) INV OUT = 16.00
ST-9 M.E.S.	RIM = 18.18 Pipe - (7) INV IN = 15.85
ST-x M.E.S.	RIM = 16.79 Pipe - (10) INV IN = 15.00
ST-13 M.E.S.	RIM = 15.64 Pipe - (11) INV IN = 14.14
ST-14 M.E.S.	RIM = 15.50 Pipe - (11) INV IN = 14.00

Pipe Table			
Pipe Name	Size	Length	Slope
Pipe - (1)	18"	30.41	0.20%
Pipe - (2)	24"	314.63	0.15%
Pipe - (3)	24"	252.75	0.20%
Pipe - (4)	24"	33.54	0.21%
Pipe - (5)	24"	213.08	0.20%
Pipe - (6)	24"	79.00	0.20%
Pipe - (7)	24"	72.34	0.21%
Pipe - (8)	24"	212.89	0.20%
Pipe - (9)	24"	20.59	5.10%
Pipe - (10)	18"	41.94	0.60%
Pipe - (11)	18"	71	0.20%

Pipe material FDOT concrete or ADS HP Storm

AMERICAN CIVIL ENGINEERING CO.

GRADING PLAN

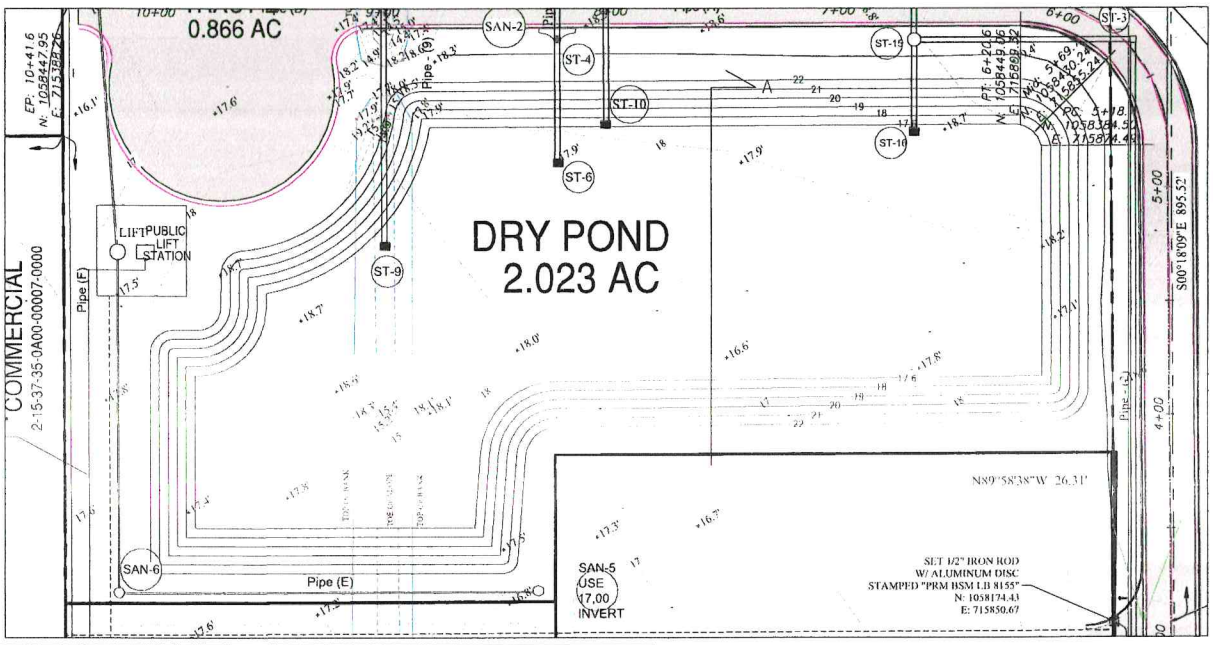
PARK STREET COMMERCE CENTER

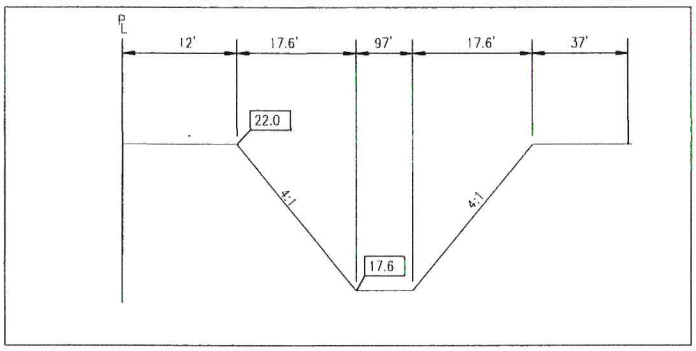
6/12/2023

GRADING PLAN

PROJECT NO. 2249

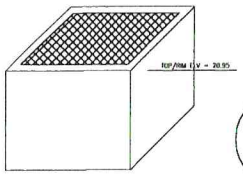
C5.0





SECTION A

Dry Pond Stage / Storage				
Stage (ft)	Area (sf)	Area (ac)	Volume (ac-ft)	Notes
17.6	37,464	0.860	0.000	
18.0	41,329	0.951	0.367	
19.0	45,999	1.045	1.369	
20.0	49,670	1.140	2.457	
21.0	54,134	1.243	1.644	
22.0	58,598	1.345	4.958	
Rear Dry Pond				TOP
Weir Elevation				
Design Weir Elevation =		20.95	ft	
Treatment Volume Provided =		**3.504**	**ac-ft**	



ST-10

FDOT TYPE-D INLET (P.I.S.)

AMERICAN CIVIL ENGINEERING CO.

DRY STORM POND PLAN

PARK STREET COMMERCE CENTER

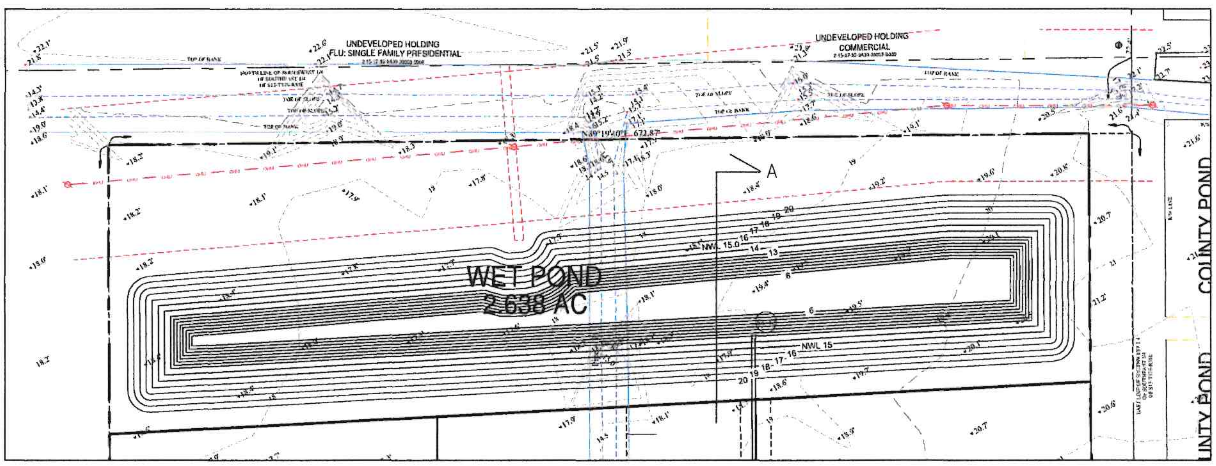
1000 STATE ROAD 73 E, OKEECHOBEE, FLORIDA 34972

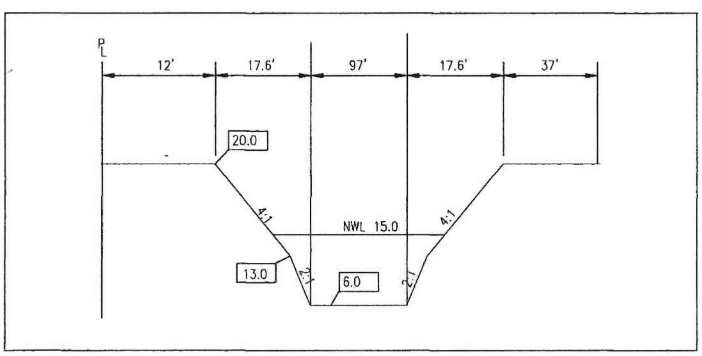
6/12/2023

DRY STORM POND PLAN

PROJECT NO 2048

C14.0





SECTION A

Wet Pond Stage / Storage				
Stage (ft)	Area (sf)	Area (ac)	Volume (ac-ft)	Notes
6.0	7,866	0.181	0.000	
7.0	8,677	0.199	0.190	
8.0	9,534	0.219	0.399	
9.0	10,440	0.240	0.628	
10.0	11,401	0.262	0.879	
11.0	12,423	0.285	1.152	
12.0	13,519	0.310	1.450	
13.0	28,332	0.650	1.931	
14.0	33,541	0.770	2.641	
15.0	38,878	0.893	0.000	Waterline (2.641 AF vol)
16.0	44,343	1.018	0.955	
17.0	49,929	1.146	0.000	
18.0	55,619	1.277	1.212	
19.0	61,409	1.410	2.555	
20.0	70,882	1.627	4.073	TOP

Wier Elevation	
No Outfall on Pond	

AMERICAN CIVIL ENGINEERING CO.

WET STORM POND PLAN
PARK STREET
COMMERCE CENTER

WET STORM POND P

C15.0

American Civil Engineering Co.

FEMA MAP

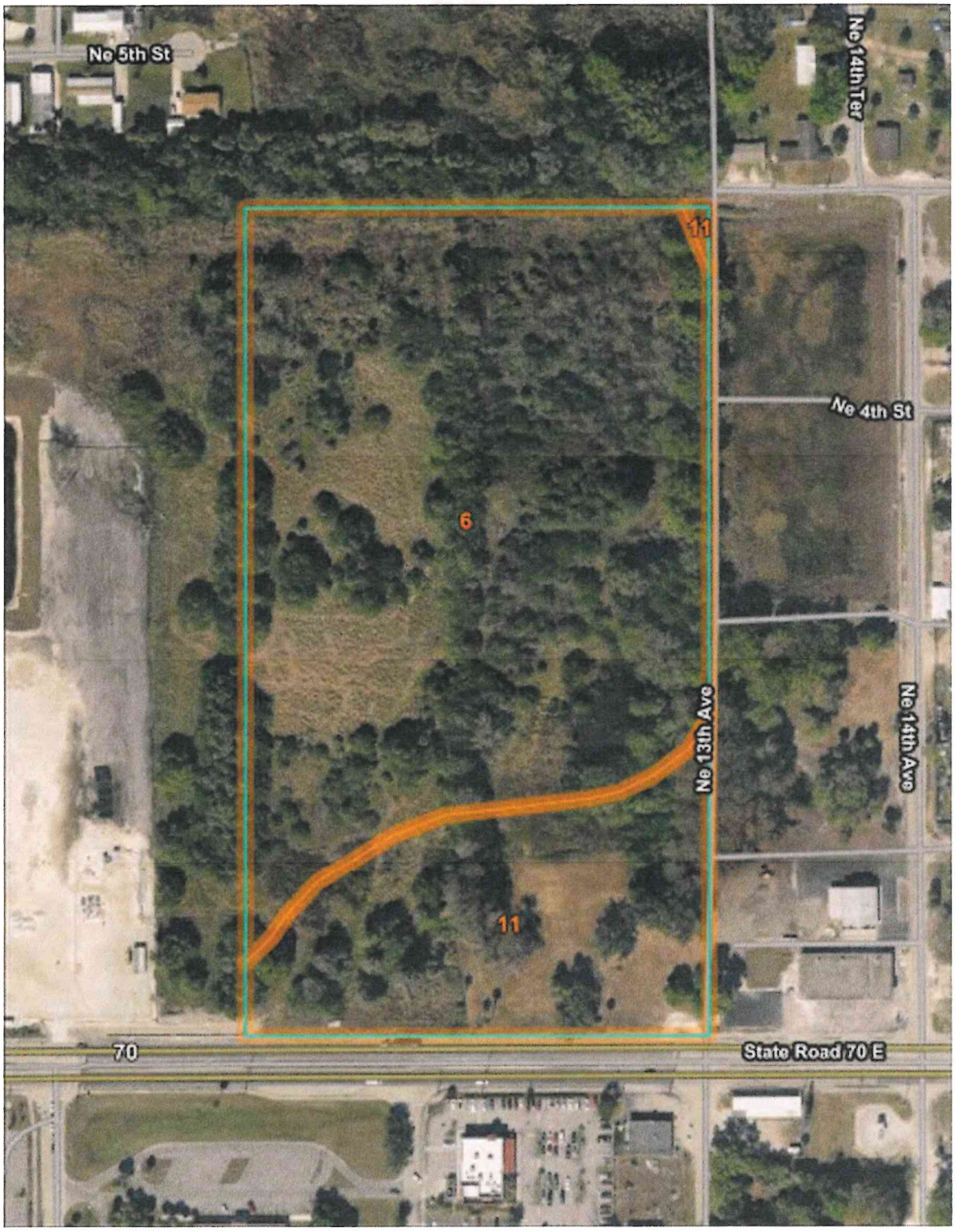
DWLRQDO)ORRG+D]DUG'DWD)6WWH

FEMA

+HHG

American Civil Engineering Co.

SOIL MAP



USDA SOILS SURVEY

6—Manatee loamy fine sand, frequently ponded, 0 to 1 percent slopes

11—Immokalee fine sand, 0 to 2 percent slopes

PROJECT: 1000 State Road 70, Okeechobee, Florida

American Civil Engineering Co.

ICPR

Node Max Conditions [Recover]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Groundwater	Recover	14.50	14.50	0.0000	4.06	0.00	0
Recover	Recover	23.00	20.95	-0.0010	0.00	4.06	53921

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
POST WET POND	100YR-72HR	20.00	18.95	0.0010	15.34	0.00	64129
Post Dry Pond	100YR-72HR	22.00	21.57	0.0010	47.00	10.97	56689
Pre- Node	100YR-72HR	20.00	14.00	0.0000	27.00	0.00	0
POST WET POND	10YR-24HR	20.00	15.53	0.0003	5.46	0.00	42298
Post Dry Pond	10YR-24HR	22.00	19.76	0.0010	23.63	0.00	48646
Pre- Node	10YR-24HR	20.00	14.00	0.0000	7.23	0.00	0
POST WET POND	25YR-72HR	20.00	18.09	0.0010	8.46	0.00	58643
Post Dry Pond	25YR-72HR	22.00	21.30	0.0010	40.69	6.65	55482
Pre- Node	25YR-72HR	20.00	14.00	0.0000	22.73	0.00	0

Simple Basin: POST-BASIN DRY

Scenario:	Scenario1
Node:	Post Dry Pond
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	13.9400 ac
Curve Number:	68.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Scenario:	Scenario1
Node:	POST WET POND
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	15.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	2.7120 ac
Curve Number:	72.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: PRE-BASIN

Scenario:	Scenario1
Node:	Pre- Node
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	45.0000 min
Max Allowable Q:	0.00 cfs

Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	16.6500 ac
Curve Number:	58.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: Groundwater

Scenario:	Recover
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	14.50 ft
Warning Stage:	14.50 ft
Boundary Stage:	

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	14.50
0	0	0	72.0000	14.50

Comment:

Node: Recover

Scenario:	Recover
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	20.95 ft
Warning Stage:	23.00 ft

Stage [ft]	Area [ac]	Area [ft2]
17.60	0.8600	37462
18.00	0.9510	41426
19.00	1.0450	45520
20.00	1.1400	49658
21.00	1.2430	54145
22.00	1.3450	58588

Comment:

Node: POST WET POND

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 15.00 ft
Warning Stage: 20.00 ft

Stage [ft]	Area [ac]	Area [ft2]
15.00	0.8930	38899
20.00	1.6270	70872

Comment:

Node: Post Dry Pond

Scenario: Scenario1
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 17.60 ft
Warning Stage: 22.00 ft

Stage [ft]	Area [ac]	Area [ft2]
17.60	0.8600	37462
18.00	0.9510	41426
19.00	1.0450	45520
20.00	1.1400	49658
21.00	1.2430	54145
22.00	1.3450	58588

Comment:

Node: Pre- Node

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 14.00 ft
Warning Stage: 20.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	14.00
0	0	0	72.0000	14.00

Comment:

Percolation Link: L-0110PERC

Scenario:	Recover	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Recover		
To Node:	Groundwater	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1152.00 ft
Flow Direction:	Both	Perimeter 2:	1602.00 ft
Aquifer Base Elevation:	5.00 ft	Perimeter 3:	2216.00 ft
Water Table Elevation:	14.50 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	100.00 ft
Horizontal Conductivity:	7.500 fpd	# of Cells P1 to P2:	50
Vertical Conductivity:	6.500 fpd	# of Cells P2 to P3:	50
Fillable Porosity:	0.250		
Layer Thickness:	3.10 ft		

Comment: 1/2 the perc rate for FS

Drop Structure Link: Dry to Wet

Scenario:	Scenario1	**Upstream Pipe**		**Downstream Pipe**	
From Node:	Post Dry Pond	Invert:	16.50 ft	Invert:	13.00 ft
To Node:	POST WET POND	Manning's N:	0.0120	Manning's N:	0.0120
Link Count:	1	**Geometry: Circular**		**Geometry: Circular**	
Flow Direction:	Both	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Solution:	Combine	**Bottom Clip**			
Increments:	0	Default:	0.00 ft	Default:	0.00 ft
Pipe Count:	1	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	538.00 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	0	**Top Clip**			
Entr Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy				

Pipe Comment:

Weir Component

Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	20.95 ft
Control Elevation:	20.95 ft
Max Depth:	2.00 ft
Max Width:	3.00 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600

Orifice Table:

Weir Comment:

Drop Structure Comment:

Simulation: Recover

Scenario: Recover
Run Date/Time: 5/24/2023 11:28:42 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:

Impervious Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	0.00 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100YR-72HR

Scenario: Scenario1
Run Date/Time: 5/24/2023 11:28:49 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~SFWMD-72
Rainfall Amount: 10.00 in
Storm Duration: 72.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 10YR-24HR

Scenario: Scenario1
Run Date/Time: 5/24/2023 11:28:59 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

Year	Month	Day	Hour [hr]

Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~SCSII-24
Rainfall Amount: 5.00 in
Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Simulation: 25YR-72HR

Scenario: Scenario1
Run Date/Time: 5/24/2023 11:29:01 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set:

Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

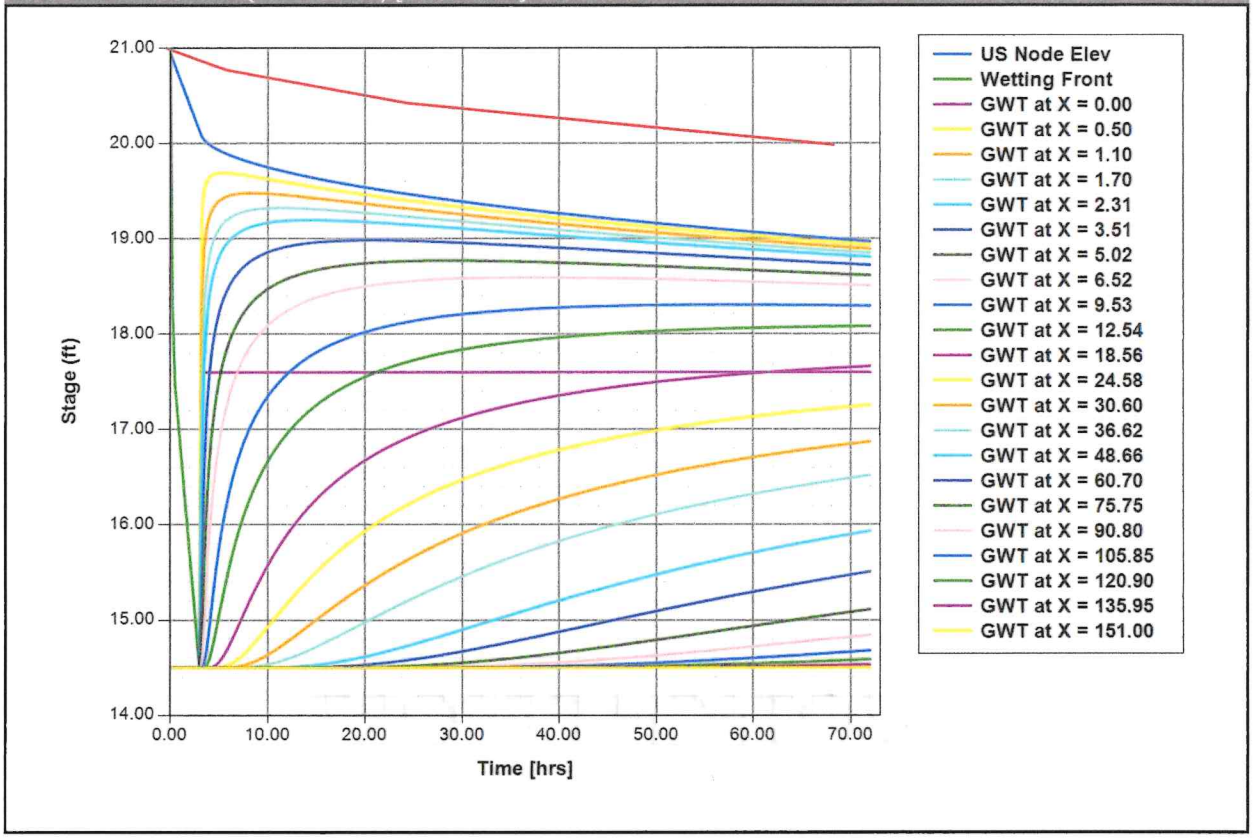
Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	9.00 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

American Civil Engineering Co.

RECOVERY

Perc Link: L-0110PERC (Sim: Recover) [L-0110PERC]



American Civil Engineering Co.

GEOTECH REPORT

Headquarters
11345 U.S. Highway 1
Sebastian, FL. 32958
Orlando
723 Progress Way
Sanford, FL. 32771

Mailing
P.O. Box 78-1377
Sebastian, FL. 32978
Phone: 772-589-0712
C.A. # 5693
KSMengineering.net

December 30, 2022

Workspace Collective
Adam Ramsay
603 E. Fort King Street
Ocala, FL 34471

Re: 1000 State Road 70
Okeechobee, Florida
KSM Project #: 2210339-b&p

Dear Mr. Ramsay:

As requested, KSM Engineering & Testing has performed a preliminary subsurface investigation at the referenced site. The purpose of this investigation was to determine the general nature of the subsurface conditions at the subject property and to offer preliminary guidance on the development of the property for its intended use. Presentation of the data gathered during the investigation, together with our geotechnical related opinions, are included in this report.

Scope of Work and Professional Service Agreement:

The scope of work and the agreement to perform a geotechnical exploration was provided by KSM's October 27, 2022, proposal to Workspace Collective, in care of Mr. Adam Ramsay. The agreement was signed by Mr. Ramsay on November 4, 2022 and was returned to KSM thereafter.

Summary of Findings and Conclusions:

The following is a summary of the principal findings and conclusions that are contained in this report, based on the results of KSM's subsurface exploration and analytical laboratory testing:

- Within the depth of exploration, the property was underlain by generally weak (very loose to loose) near surface layer of granular material with an organic content varying from less than 5%, which is the typically accepted limit before a soil is considered problematic for construction, to 10.9%. When inherently problematic soils were encountered they were typically at the surface with an estimated thickness of 1 foot however several borings encountered problematic soil deposits to depths ranging from 1 to 6 feet below grade. Below the organic layer deposits of loose to medium dense cohesionless fine sand underlain by loose to medium dense clayey/silty fine sand were discovered.
- The recorded depth to the surface of the groundwater body was very shallow and KSM

- The discovered subsurface conditions are expected to negatively impact the development of this property in that creation of a stable subgrade for support of the proposed dwellings and roadways will be difficult due to the combined effect of the expected shallow position of the groundwater surface, the excessive organic content and weak nature of the upper zones of soil. Specifically, we anticipate that the excavation and backfill of near surface organic deposits and the compaction of very loose subgrade soils may be difficult due to the shallow water table position. Consideration should also be given to scheduling the earthwork operations to be performed during the seasonally dry winter and spring months to decrease the amount of anticipated dewatering that will be required.
- The installation of buried utility lines (i.e., stormwater piping, water supply lines, power lines, and telecommunication lines) are likely to involve excavation of trenches below the groundwater surface. Accordingly, dewatering of the trench excavations is likely to be necessary to enable the installation to be performed in dry conditions.
- Given the existing weak nature of the subgrade soils, the foundations that support the new structures on this property should bear at elevations that are as shallow as practical, in order to contain the stress transmitted by the foundations within the compacted engineered fill soils that will be placed during the mass grading operations. Monolithic slab foundation systems are generally better suited to this situation than are conventional shallow spread footings and a separate slab-on-grade systems.

The nature and extent of earthwork methods that would best suit this property will depend to a great extent on the details of the proposed grading and drainage plan. The development of the land into a retail development would benefit from the raising the land surface above the existing landform, by installation of structural fill, in order to enable the streets and structures to be supported above the seasonal groundwater levels, upon engineered fill materials. This report offers preliminary recommendations that assume that the landform will be raised a height of not less than 5 feet above the existing land surface.

Site Description:

Location & Physiography – The project site was located in Okeechobee, Florida, on State Route (SR) 70. At the time of the investigation, the site was found to have a generally flat topography. Vegetation on the site consisted mostly of light ground surface cover vegetation and many trees.

Project Description:

The following information is based, in part, on our review of the Conceptual Sizing Plans for "Park Prime Retail (22.10.10)" and "Plan Park Street Commerce Center (12.14.22)" by American Civil Engineering Co. Due to the preliminary nature of this project, it is our understanding that the development site plan has not been finalized. Please contact KSM to provide the most recent plans, so we can make any adjustments and review this report accordingly.

Overall Development – It is our understanding that the proposed site may be developed with

for the purpose of stormwater management on the site. Typical pavement areas will consist of driveways and parking areas.

The Scope of KSM's Study Included:

1. Performed soil borings within the approximate limits of the proposed structures and pavement areas, as well as in the proposed pond locations.
2. Measured the encountered groundwater level at each boring.
3. Reviewed the soil samples and field soil boring logs (by a geotechnical engineer) in our laboratory and assigned analytical laboratory testing to selected samples.
4. Performed the assigned analytical laboratory tests on the selected soil samples.
5. Evaluated the discovered subsurface conditions with respect to the construction of the proposed structures and roadways.
6. Prepared this preliminary report to document the data that was gathered, to present our findings and to present our preliminary recommendations.

Site Investigation:

Limitations – The preliminary opinions and recommendations are based on the discovered subsurface conditions in the locations of the performed tests.

Subsurface Testing – KSM's site investigation program consisted of performing the following tests:

- Twenty-nine (29) Standard Penetration Test (SPT) Borings, terminated at approximate depths ranging from 10 to 15 feet below the existing ground surface, were performed within the limits of the site.
- Fifteen (15) Hand Auger (HA) Borings with corresponding Static Cone Penetrometer (SCP) Soundings, terminated at an approximate depth of 6 feet below the existing ground surface, were performed within the limits of the proposed pavement areas.
- Two (2) SPT borings, denoted as PB, terminated at an approximate depth of 20 feet below the existing ground surface, were performed within the limits of the proposed stormwater management areas.

SPT Borings – The SPT borings were performed in general accordance with procedures described in ASTM D1586.

HA Borings – The HA borings were performed using a bucket auger tool to advance the borehole and to return disturbed samples of the soils. The drilling was performed in general accordance with the procedures delineated in ASTM D1452.

SCP Soundings – Execution of a SCP sounding consists of pushing a thin steel shaft, with an

attached proving ring with a calibrated gauge. The value of the bearing pressure exerted by the cone point has been correlated with the relative soil density. The relationship of the SCP reading to the relative density is listed in the table below:

Static Cone Penetrometer	
Relative Density	**Static Penetrometer Reading**
Very Loose or Soft	<15
Loose	15-40
Medium Dense	40-70
Dense	>70

Soil Classification – The field soil boring logs and recovered soil samples were transported to KSM's office from the project site. Following the completion of the field exploration activities, visual and tactile examination of the soil samples was performed by a geotechnical engineer to identify the engineering classification of the soil samples that were obtained in the field exploration. The visual classification of the samples was performed in general accordance with the current United Soil Classification System (ASTM D2487).

General Subsurface Soil Classification Summary – The following table outlines the general subsurface conditions encountered during our investigation. Refer to the boring logs and location map for specific information regarding our interpretation of the field boring logs.

Generalized Soil Profile	
Approximate Depth Below Grade (Feet)	**Discovered Subsurface Conditions**
0 to 5	Variable near surface soil conditions include: • Very loose sand with organic material (problematic soil deposits) generally within 1 foot of the surface however some borings revealed problematic soil deposits to depths of 5 feet below grade; • Very loose to medium dense fine sand
6 to 15	Loose to medium-dense fine sand, slightly clayey/slightly silty sand, and clayey sand

Observed Groundwater Table – Following the completion of each soil boring, the groundwater was allowed to attain an equilibrium level and the approximate depth to the surface of the groundwater was measured from existing ground elevation and recorded in the field log. The typical observed water table was encountered at approximate depths ranging from at or above the existing grade to depths of 5.3 feet below existing grade. These values were recorded at the time of investigation, which took place between the dates of November 21, 2022, and December 15, 2022.

1000 State Road 70
Okeechobee, Florida
KSM Project #: 2210339-b&p

KSM ENGINEERING AND TESTING

Analytical Laboratory Testing:

Natural Moisture Content – Testing was performed in general accordance with procedures described in ASTM D2216-19.

Fines Content – Testing was performed in general accordance with procedures described in ASTM D1140-17.

Organic Content Tests – Testing was performed in general accordance with procedures described in ASTM D2974-20e1.

Analytical Laboratory Testing Results					
Boring	**Sample Depth (ft)**	**Soil Description**	**Moisture %**	**Fines %**	**Organic Content %**
B-1	2	Gray Clayey Sand	19%	24%	
B-3	13	Brown Clayey Sand	22%	29%	
B-9	6	Dark Gray Slightly Clayey Sand	26%	5.2%	
B-10	2	Dark Brown Sand with Organics	34%		
B-11	6	Light Gray Sand	24%	1.2%	
B-19	6	Gray Slightly Silty Sand	35%	5.5%	
B-19	13	Gray Clayey Sand	25%	23%	
B-22	2	Gray Sand	17%	3.1%	
B-24	2	Dark Gray Sand	34%	3.7%	
B-24	13	Brown Clayey Sand	2%	33%	
B-25	4	Brown Sand	31%	4.9%	
B-26	1	Dark Gray Sand with Traces of Roots	27%		
B-29	2	Brown Sand	22%	2.5%	
B-29	13	Brown Slightly Clayey Sand	29%	11%	
HA-2	1	Dark Gray Silty Sand with Organics	47%		7.9%
HA-9	1	Dark Gray Silty Sand with Organics	45%	12%	8.0%
HA-12	1	Dark Gray Sand, Slightly Silty with Organics	49%		10.9%

Analytical Laboratory Testing Results (Continued)					
Boring	**Sample Depth (ft)**	**Soil Description**	**Moisture %**	**Fines %**	**Organic Content %**
PB-1	3	Light Gray Slightly Silty Sand	27%	5.8%	
PB-1	5	Grayish Brown Sand	24%	3.7%	
PB-1	10	Grayish Brown Sand	25%	2.2%	
PB-1	12	Gray Slightly Clayey Sand	23%	9.8%	
PB-2	3	Light Gray Sand	25%	2.0%	
PB-2	5	Dark Gray Sand, Slightly Silty	24%	11%	
PB-2	7	Light Gray Sand	25%	0.6%	
PB-2	12	Gray Clayey Sand	22%	33%	
PB-2	16	Light Brown Clayey Sand	27%	19%	
PB-2	18	Light Gray Clayey Sand with Shell	13%	12%	

Engineering Evaluation:

Based on the information obtained from this site investigation, we are pleased to offer the following evaluation:

Limitations – Due to the preliminary nature of this project, KSM recommends that additional testing is performed within the development features once the final locations are known. The following information is preliminary and based on the initial conceptual site layout and may not correspond to the final design site layout.

Seasonal Groundwater Fluctuation – The following table indicates the recorded measurement taken from the existing grade to the encountered groundwater table for each test location along with our estimated depth normal wet season water table and normal dry season water table depths (below existing grade) for the test locations. The measurements were taken after the borings were performed and the groundwater table was allowed to stabilize.

Estimated Normal Season Groundwater Table Fluctuation			
Test Location (See Location Plan)	**Depth (feet,') Below Existing Grade**		
	Measured Encountered Groundwater Table	**Estimated Normal Wet Season Water Table**	**Estimated Normal Dry Season Water Table**
PB-1	1.0'	0.3'	3.3'
PB-2	2.4'	1.0'	4.0'

featured deeper groundwater surface depths were likely to have been drilled at locations where the land surface altitude was above boring locations that featured shallower groundwater surface depth measurements, or that the range and depth of the water table elevation may be affected by the proximity of man-made or natural drainage features. Accordingly, as part of the design phase geotechnical studies, KSM recommends that the land surface elevation of the borings be surveyed to determine the approximate altitude of the groundwater surface, at the time that the measurements were made. Using that data, KSM can provide a more precise estimate of seasonal groundwater levels.

Dewatering – Given the normal wet season groundwater surface level estimates, and assuming that KSM's estimates of the height of the fill stated in the "Project Description" section is accurate, it is KSM's preliminary opinion that the position of the groundwater table is unlikely to affect either the design or the installation of the shallow foundations that will support the dwellings constructed on this property. Conversely, KSM anticipates that the earthwork stage of site development will require the compaction and/or excavation of soils located below the groundwater surface. Additionally, excavations that are made to install buried utility lines could also require excavations below the groundwater surface. Accordingly, the earthwork contractor should recognize that temporary dewatering of excavations that penetrate below the prevailing groundwater surface will be necessary to allow the earthwork operations to be performed in dry conditions and plan his operations accordingly.

Analysis and Opinions: Fill Suitability – Based on the discovered soils in the locations of PB-1 and PB-2, KSM offers the following recommendations on the suitability of fill deposits that will be used to rough grade the property in preparation for the installation of the roadway and utility networks and for the construction of the individual dwellings.

- Fine sands deposits, which feature less than 5 percent "fines", are considered to be best suited as a structural fill source because they drain freely when excavated below the water table and are not as moisture sensitive as material that contains higher fines.

- The slightly clayey/silty fine sands containing between 5 and 12 percent fines, are suitable as structural fill, but may require extra effort to be properly moisture conditioned and compacted. These soil deposits drain fairly well but will require more effort than the fine sand deposits above to create optimum moisture conditions in order to avoid compaction issues. Thinner lifts not exceeding 6 inches in loose thickness may be required for placement and compaction of these soils.

- Clayey and/or silty fine sand deposits, (i.e., sand deposits that contain more than 12 percent fines, by weight) are typically not considered desirable for structural fill, due to their poor workability characteristics in comparison with sand deposits that feature fewer fines. Due to the moisture sensitive nature of these materials a substantial amount of time and effort would be required in order to improve their workability. The discovered clayey sand deposits may be more suitable for use as fill material in non-structural areas outside the building pad and within the pavement area footprint, and potentially as a stabilized subgrade component in the roadway pavement cross section. KSM recommends that the earthwork contractor use these materials

necessary to moisture condition and densify such soil deposits. Such efforts could include draining/drying of saturated soils before attempting compaction, reduction in the thickness of lifts that are compacted, and the use of non-vibratory compaction machinery.

- Soil deposits that featured organic contents greater than 5 percent should not be considered suitable soils for structural fill.

Borrow Source Suitability Opinions – KSM assumes that the soil that is excavated to create the stormwater management basin will be used as a source of fill in creating the landform of the developed property. Based on the results of the field investigation, together with the analytical laboratory testing of the selected soil samples, KSM offers the following opinions:

- From the surface to an approximate depth of 10 feet below existing grade – Deposits of fine sand and slightly clayey/silty sand were discovered. These granular, low fines content deposits can be considered suitable for structural fill.

- From a depth of approximately 10 to 15 feet below existing grade – Deposits of clayey/silty sand were discovered. We anticipate that most of the excavated soils within this depth interval will feature fines contents that exceed 12 percent. These soil deposits are expected to be moisture sensitive soils, given their elevated fines content and the estimated shallow position of the surface of the wet season groundwater table. To avoid compaction-related issues during construction, it is KSM's opinion that excavated soils with elevated fines content should not be considered suitable as structural fill for building pads or in pavement areas. In no case should these materials be used in areas that are expected to contain septic drain fields, due to their expected low internal permeability.

- From a depth of approximately 15 to 20 feet below existing grade – Deposits of fine sand with shell and slightly silty/clayey sand were encountered. These granular, low fines content deposits can be considered suitable for structural fill.

The contractor and civil engineer should coordinate to determine the appropriate methods for borrow source excavation. It is important to segregate the low-fines soil deposits from the near-surface clayey and silty sand deposits.

Preliminary Utility and Storm Sewer Opinions – Due to the expected very shallow seasonal depth to the surface of the groundwater, we believe that difficulties may arise when installing any utility that will require trenching and/or that will rely on gravity flow. Trench excavations that encounter very loose subsurface materials may require over-excavation, typically to a depth of 1 foot below the utility subgrade elevation, backfilled with ¾-inch stone compacted to produce a firm, unyielding surface. Any excavated materials with elevated fines content will likely prove to be problematic if intended to be used as backfill. Blending of the excavated material with dry, clean fine sand may be necessary, but due to the time and effort required to properly blend these materials, for ease of construction and scheduling considerations, it may

Analysis and Opinions : Preliminary Subgrade Opinions – Based on our experience in the area, the results of the borings, and KSM's understanding of the project, we believe that the current conditions of the near surface soils are problematic for development due to the high degree of variation between borings, elevated organic content, to the elevated fines content, to the very loose to loose condition of the near-surface soil deposits, and to the anticipated shallow depth to the groundwater table. Excavation of problematic soils and backfill of the exposed areas to create a stable platform for the expected fill deposits will require that temporary dewatering systems be installed to depress the groundwater level. Please note that estimating the vertical and horizontal limits of any problematic material was as part of our scope for this investigation. KSM recommends that a design level geotechnical investigation is performed on this site to aid in the development of design plans.

Preliminary Minimum Roadway Opinions – It is our preliminary opinion that the discovered subsurface conditions are generally problematic to support a roadway subgrade. It appears that prior to the installation of the proposed roadway section, improvement of the existing subgrade can be achieved using a proper excavation and backfilling techniques. Additionally, the cost of dewatering should be considered. Provided that the subgrade is properly prepared and that the building pads are properly installed, it is KSM's opinion that the improved subgrade can support the proposed roadway section.

The pavement should be designed for the anticipated axle weights, vehicle velocities, traffic mix and frequencies. Please refer to the following table for the minimum recommended pavement section.

A minimum of 16 inches of separation should be maintained between the bottom of the base and the high-season water table.

Minimum Pavement Section			
Pavement Type	Material	Layer Thickness (in)	
		Standard Duty	Heavy Duty
Flexible	Florida DOT Asphalt Type 3	1.5	2.5
	Base Course* (Min. LBR of 100) Cemented Coquina Rock	6	10
	Stabilized Subgrade* (Min. LBR of 40)	12	12

* Compacted to minimum 98 percent of its modified dry Proctor value (AASHTO T180)

Preliminary Foundation Opinions – In order for a shallow foundation to perform satisfactorily, it must be able to support the structural loads while limiting both total and differential settlement to tolerable values. It is our preliminary opinion that the discovered subsurface conditions are generally problematic to support a building pad subgrade. It appears that prior to the installation of the proposed buildings pads, improvement of the existing subgrade can be achieved using a proper excavation and backfilling techniques. Additionally, the cost of dewatering should be considered. Provided that the subgrade is properly prepared and that the building pads are properly installed, it is KSM's opinion that conventional shallow

For more precise building area site and roadway preparation recommendations, as well as recommendations pertaining to foundation design and settlement calculations, we recommend performing a design level investigation. KSM should be provided with the civil construction drawing set as well as the structural plans for review. Please see the section titled "Future Studies" for additional information.

Estimated Aquifer Parameters:

Limitations – Due to the preliminary nature of this project, KSM recommends that additional testing is performed within the proposed stormwater management features once the locations and elevations are better defined. The following information is preliminary and based on the initial stormwater management layout and may not correspond to the proposed stormwater management layout.

Factor of Safety – KSM has not applied a factor of safety to the estimated aquifer parameters within this report. The Engineer of Record is responsible for applying the appropriate factor(s) of safety to the estimated aquifer parameters contained within this report for use in their design. For any stratum where the estimated flow rate exceeds 10 inches per hour (20 feet per day), we recommend that a design flow rate equal to 10 in/hr (20 ft/day) is used.

In-Field Testing – At the test location, Usual Condition Test was performed in general conformance with the South Florida Water Management District described procedures for the 'Usual Open-Hole Test' method.

Estimated Aquifer Parameters – In-Field Testing	
Test Location	**Estimated Hydraulic Conductivity (CFS/SF- Ft Head)**
P-1	2.5×10^{-5}
P-2	7.6×10^{-5}

Laboratory Testing and Professional Judgement – Selected samples obtained from our site investigation were tested in our laboratory in general accordance with ASTM D2434, ASTM D1140-17 and ASTM C136.

Estimated Aquifer Parameters – Laboratory Testing			
Test Location	**Stratum Depth Range (ft)**	**Horizontal Saturated Flow Rate (in/hr)**	**Vertical Saturated Flow Rate (in/hr)**
P-1	0.8 – 1.8	1.9	0.9
	1.8 – 4.2	3.2	2.2 †
P-2	0.0 – 4.5	7.0	5.8

† Estimation: reduction of estimated horizontal saturated flow rate applied.

Restrictive Stratum – Based on the results of our soil borings and the laboratory testing, in boring PB-1 we encountered a stratum which we estimate exhibit restrictive flow rates relative to the overlying stratum, and are described below:

- Deposits of Dark Gray Silty Sand with Organics encountered at an approximate depth range from the surface to 0.8 feet below grade.

Future Studies:

Design Phase Geotechnical Explorations – KSM recommends that a design-phase geotechnical exploration be performed to determine whether individual structures are underlain by any organic soil deposits or inherently problematic soils and to generate the subsurface data that is necessary to provide site specific foundation design and earthwork recommendations. Upon request, KSM will provide a detailed scope of work and cost proposal to address these features, based on the preliminary plan documents.

Closure:

Based upon KSM's subsurface investigation at the above-mentioned project location, the reliance of the preliminary opinions and recommendations presented within this signed and sealed report is predicated on KSM being engaged to perform design-basis geotechnical explorations and testing. The opinions and recommendations given in this report are preliminary and should not be used to create final plan documents and specifications.

This report has been prepared in accordance with generally accepted soil and foundation engineering practices based on the results of the borings and the assumed loading conditions. No warranties, either expressed or implied, are intended or made. This report does not reflect any variations which may occur between the borings. If variations appear evident during construction, it will be necessary for you or your representative to engage KSM to perform any supplementary studies and to re-evaluate the recommendations made in this report.

Environmental conditions, wetland delineation, karst activity, water quality, and municipal requirements were not a part of this study.

KSM is pleased to have been of assistance to you on this phase of your project. When we may be of further service to you or should you have any questions, please contact us.

Respectfully,

Christopher LeBrun

Christopher S. LeBrun, E.I.
Geotechnical Engineer

CODY CLAWSON
LICENSE
No. 91598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

Cody C. Clawson, P.E.
Geotechnical Engineer

AMERICAN CIVIL ENGINEERING CO.

207 NORTH MOSS ROAD, SUITE 211 • WINTER SPRINGS, FLORIDA 32708
Telephone: (407) 327-7700 • www.americancivilengineering.com
Advancing Civilization Since 1990

Stormwater Letter

To: City of Okeechobee
General Services Department
55 S.E. 3rd Avenue, Room 101
Okeechobee, FL 34974

Regarding: Stormwater Carwash – Portion of Park Street Commerce Center

Storm water for the carwash is met as part of the co-submitted master storm report for the infrastructure of Park street Commerce Center. The master report allows for up to 1.00 AC, the site proposed at 0.94 AC meets this criteria and is fully accounted for in the master permit.

	Impervious Area Accounted
Lot 1	1.00 AC
Lot 2	1.50 AC
Lot 3	1.75 AC
Lot 4	1.75 AC
Roadway	0.80 AC
Total	6.80 AC

Please contact me directly on my cell phone 407-376-1777 regarding any questions.

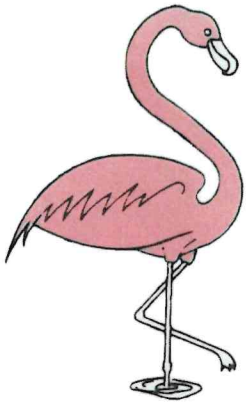
Thank you,

Johnny Herbert IV PE
Partner

PARK STREET COMMERCE CENTER
TRAFFIC STUDY

OKEECHOBEE COUNTY, FLORIDA

July 2023



BUCKHOLZ TRAFFIC

BUCKHOLZ TRAFFIC
3585 KORI ROAD
JACKSONVILLE, FLORIDA 32257
(904) 886-2171 jwbuckholz@aol.com

July 11, 2023

Mr. Johnny Herbert IV, P.E.
American Civil Engineering Company
207 N. Moss Road / #211
Winter Springs, Florida 32708

Re: **Park Street Commerce Center, Revised Traffic Study**

Dear Mr. Herbert:

Attached is the revised traffic study. If there are any questions or comments regarding this study, please contact me.

Sincerely,

Digitally signed by Jeffrey W. Buckholz
DN: cn=Jeffrey W. Buckholz, o=BUCKHOLZ TRAFFIC ENGINEERING, ou, email=jwbuckholz@aol.com, c=US
Date: 2023.07.11 12:45:31 -04'00'

Jeffrey W. Buckholz, P.E., PTOE
Principal

This item has been digitally signed and sealed by Jeffrey W. Buckholz, P.E. on the date indicated on the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

INTRODUCTION

This proposed mixed-use development will include a 4600 sf automated car wash, a 5000 sf fast food restaurant with drive-thru window, a 100 room hotel, 52 apartment units, and 10,000 sf of retail space. The fast food restaurant will open at 10 AM and the car wash will open at 9:00 AM. The development will be located in the northwest quadrant of the NE Park Street/SE 13th Avenue intersection in Okeechobee, Florida. A cul-de-sac road that extends 13th Avenue to the north will be installed on site property and access will be provided to the various land uses from this road. NE Park Street (SR 70) is a four lane divided urban major arterial with an FDOT access management classification of 7 and a posted speed limit of 35 mph. SE 13th Avenue is a two lane undivided local road with a posted speed limit of 25 mph.

Figure 1 shows the site location and surrounding road network while Appendix A contains the proposed site plan. The development is expected to be complete and fully occupied by the end of 2024. Consequently, 2024 was chosen as the design year for this study.

EXISTING TRAFFIC VOLUMES

Weekday peak period manual turning movement counts were conducted by Buckholz Traffic personnel at the intersection of NE Park Street with SE 13th Avenue and with the Hampton Inn driveway located west of SE 13th Avenue. These counts, which are provided in Appendix B, were conducted during the weekday AM peak period (6:45-8:45 AM) and the weekday PM peak period (3:45 – 6:00 PM) with school in session. The data was recorded at 15-minute intervals and includes a separate tabulation for trucks and pedestrians. Figure 2 graphically summarizes the AM and PM peak hour traffic counts.

Appendix C provides daily traffic volumes from two nearby FDOT traffic count stations on SR 70. The existing average daily traffic on NE Park Street in the vicinity of the site is about 29,000 vehicles per day.

TRIP GENERATION

Trip generation calculations were carried out using the 11th edition of ITE's Trip Generation Manual by referencing land use codes 948 (Automated Car Wash), 934 (Fast Food Restaurant with Drive-Thru Window), 312 (Business Hotel), 220 (Low Rise Multifamily Housing) and 822 (Strip Retail Plaza). Tables 1 through 5 contain the daily, AM peak hour, and PM peak hour trip generation calculations. During an average weekday the development is expected to generate 4424 trips (2212 entering and 2212 exiting) with 87 trips (36 entering and 51 exiting) occurring during the AM peak hour and 369 trips (193 entering and 176 exiting) occurring during the PM peak hour.

SITE TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

Weekday AM and PM peak hour site trips for this commercial development were directionally distributed based on engineering judgment after reviewing the trip distribution percentages used in the 2020 traffic study for the nearby RaceTrac commercial development. The results are provided in Figures 3 and 4.

FUTURE TRAFFIC VOLUMES

The expected weekday 2024 peak hour background (No Build) traffic volumes and total (Build) traffic volumes at intersections of interest are graphically depicted in Figures 5 through 8. The No Build traffic volumes were obtained by multiplying the existing traffic volumes by the appropriate FDOT seasonal adjustment factor (0.96) and then by an annual growth rate. A linear regression analysis of FDOT daily traffic counts in the area (see graphs C-1 and C-2 in Appendix C) indicates that daily traffic volumes have been increasing at an average annual rate of 1.5% over recent years. The 2024 Build traffic volumes were obtained by adding the traffic generated by the new development to the 2024 No Build traffic volumes.

TURN LANE EVALUATION

A formal analysis was made to determine if a right turn lane is warranted on westbound NE Park Street at the two new roadways: NE 13th Avenue and NE 12th Avenue. The methodology contained in NCHRP Report 279 was used to conduct this analysis. As is indicated in Figures 9 and 10, right turn volumes under expected 2024 Build conditions will be high enough to warrant an exclusive right turn lane at NE 13th Avenue but will not be high enough to warrant an exclusive right turn lane at NE 12th Avenue. However, NCHRP Report 420 - which requires 110 right turns per hour to warrant a right turn lane on a multi-lane roadway with a posted speed of 45 mph or less – does not support the installation of an exclusive right turn lane at either location.

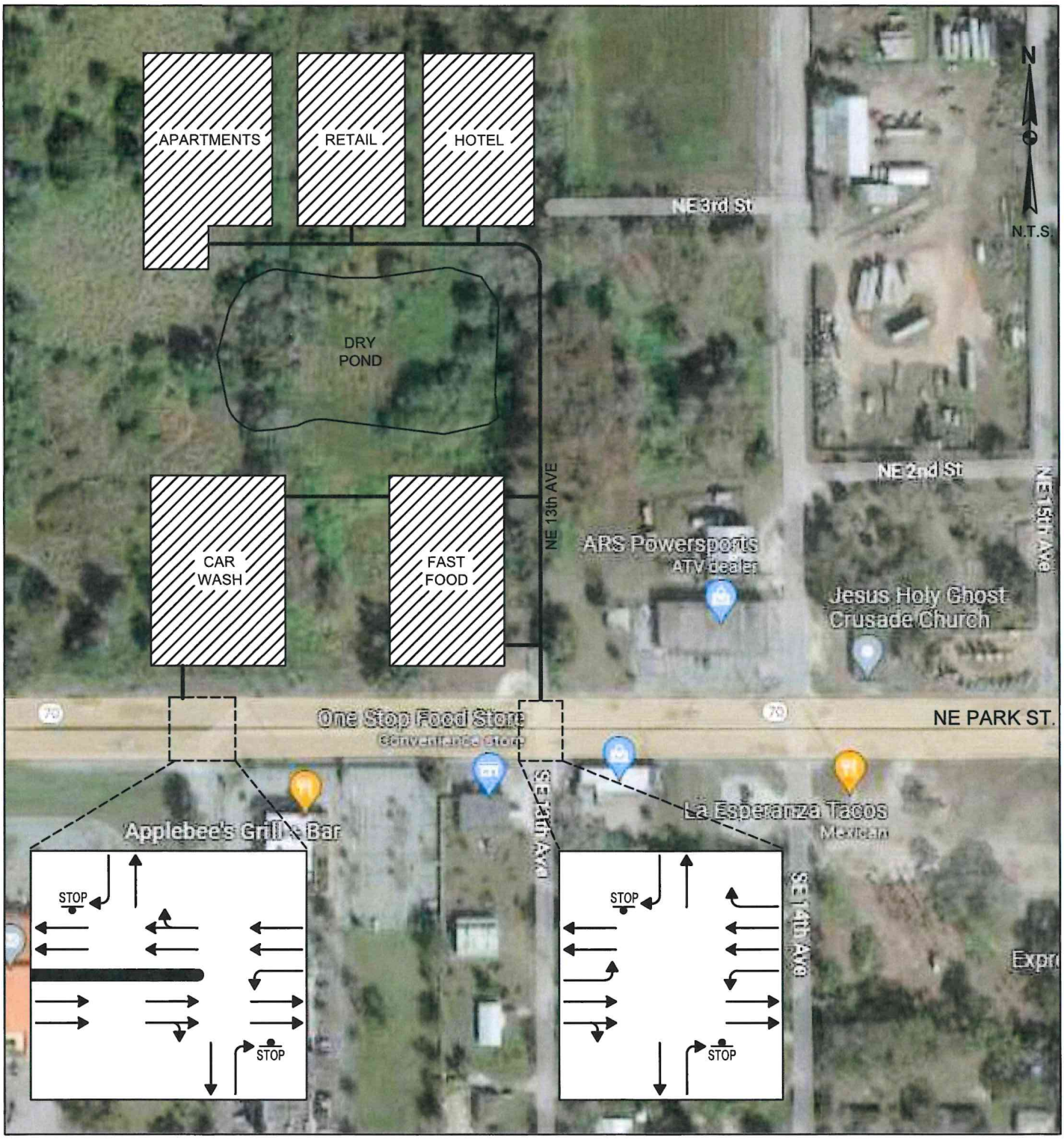
UNSIGNALIZED INTERSECTION CAPACITY ANALYSIS

The NE Park Street/13th Avenue intersection and the NE Park Street/Hampton Inn Driveway/NE 12th Avenue intersection were analyzed using the two-way stop control methodology contained in the year 2023 version of the Highway Capacity Software. The supporting calculations are provided in Appendix D. Table 6 summarizes the capacity analysis results under existing conditions while Table 7 summarizes the capacity analysis results under 2024 Build conditions.

All minor movements currently operate at level of service C or better during both weekday peak hours at the NE Park Street/SE 13th Avenue intersection with minimal queuing and a volume-to-capacity ratio well below one. Under 2024 Build conditions at the new NE Park Street/13th Avenue intersection with dual directional median opening all minor movements are expected to continue to operate at level of service C or better during both peak hours with minimal queuing and a volume-to-capacity ratio still well below one.

At the NE Park Street/Hampton Inn Driveway intersection all minor movements currently operate at level of service B or better during both weekday peak hours with minimal queuing and a volume-to-capacity ratio well below one.

Under 2024 Build conditions all minor movements at the NE Park Street/Hampton Inn Driveway/NE 12th Avenue intersection are expected to operate at level of service C or better during both weekday peak hours – with one exception. The westbound left turn is expected to operate at level of service F during the PM peak hour. However, only moderate queuing and a volume-to-capacity ratio below one are expected for this movement movements.



= DIRECTIONAL MEDIAN OPENING

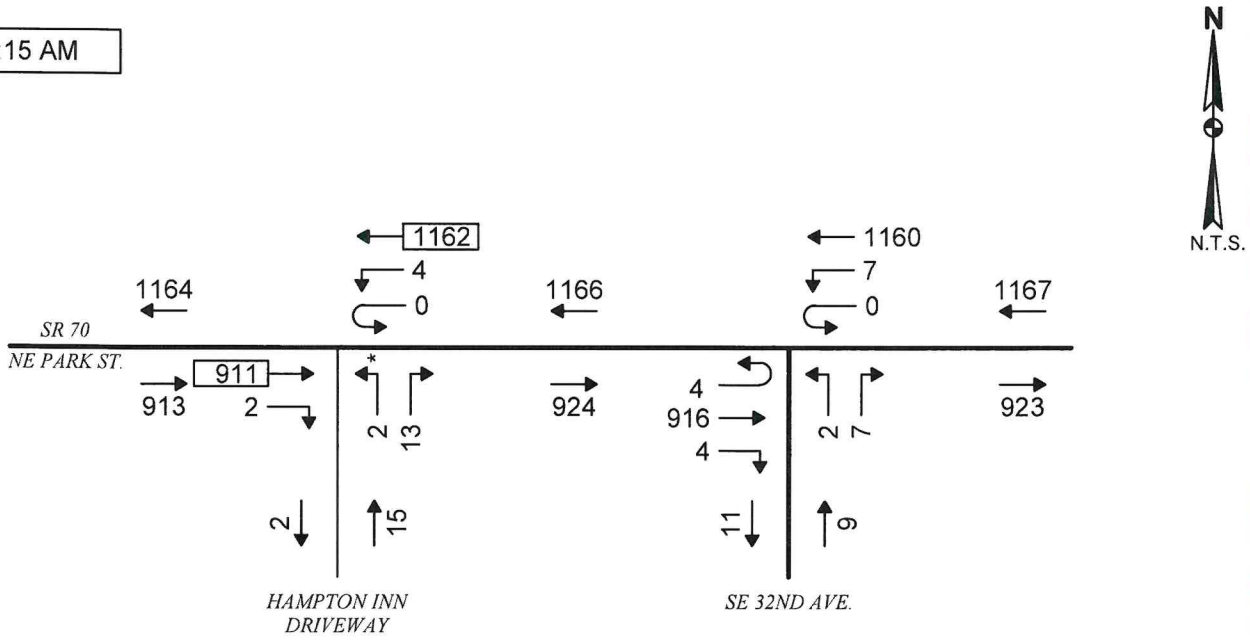
FIGURE 1

SITE LOCATION AND PROPOSED INTERSECTION LAYOUTS

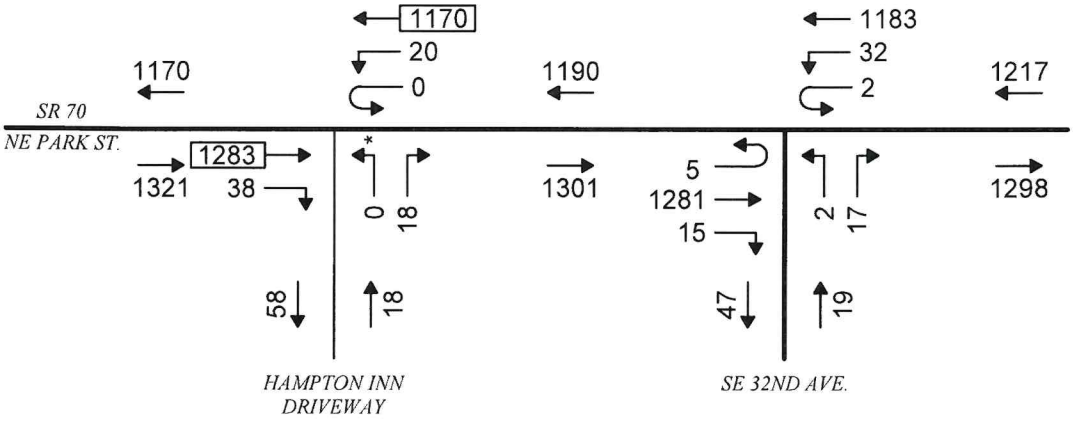
Buckholz Traffic

E:\23-1820\CAD2\FIG 01.DWG

7:15-8:15 AM



5:00-6:00 PM



XXX = CALCULATED VALUE

* = ILLEGAL TURN

Buckholz Traffic

FIGURE 2

TRAFFIC COUNTS

WEEKDAY PEAK HOURS

E:\23-1820\CAD\FIG_02.DWG

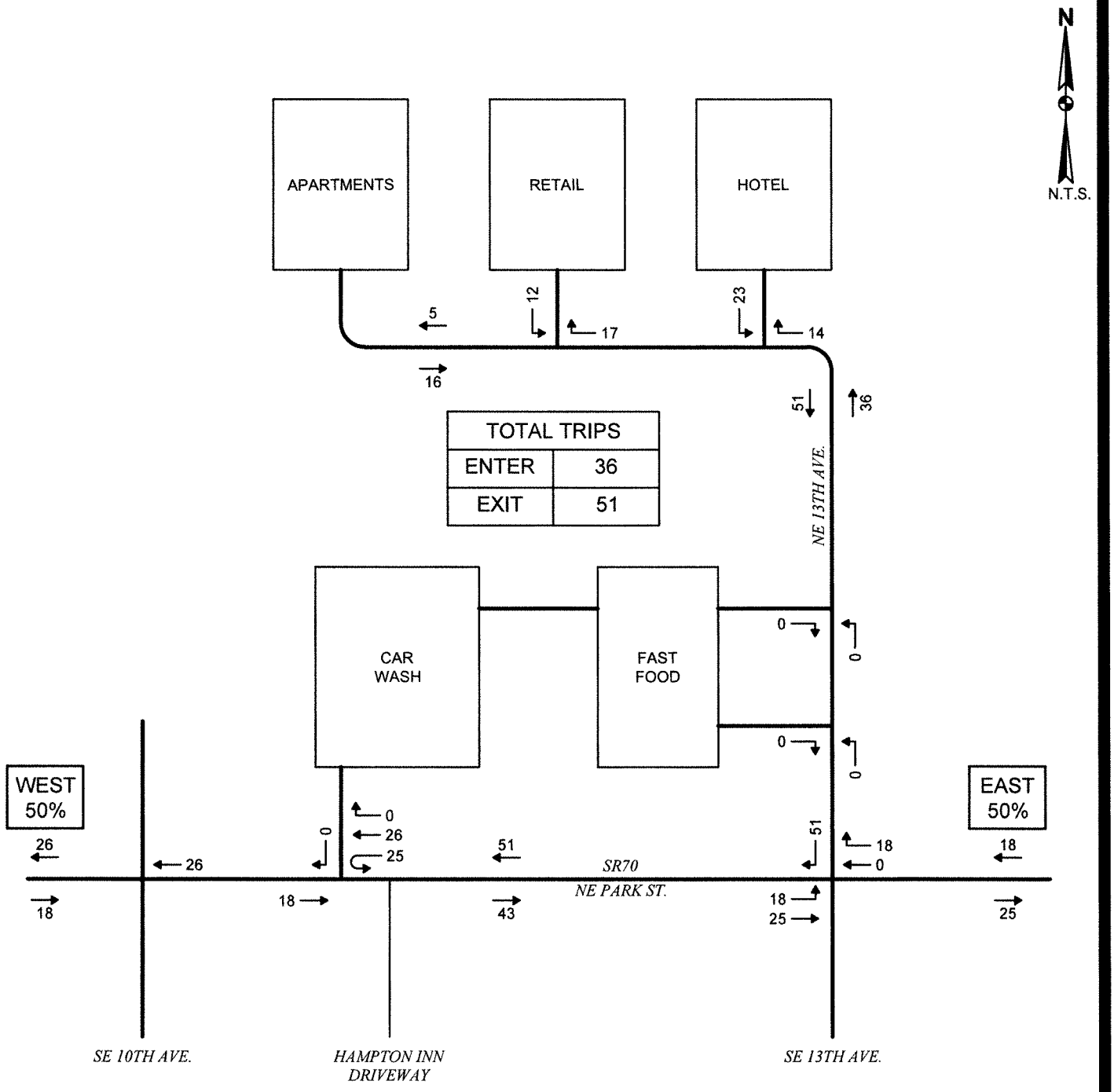


FIGURE 3

SITE TRAFFIC ASSIGNMENT

WEEKDAY AM PEAK HOUR

Buckholz Traffic

E:\23-1820\CAD2\FIG_03.DWG

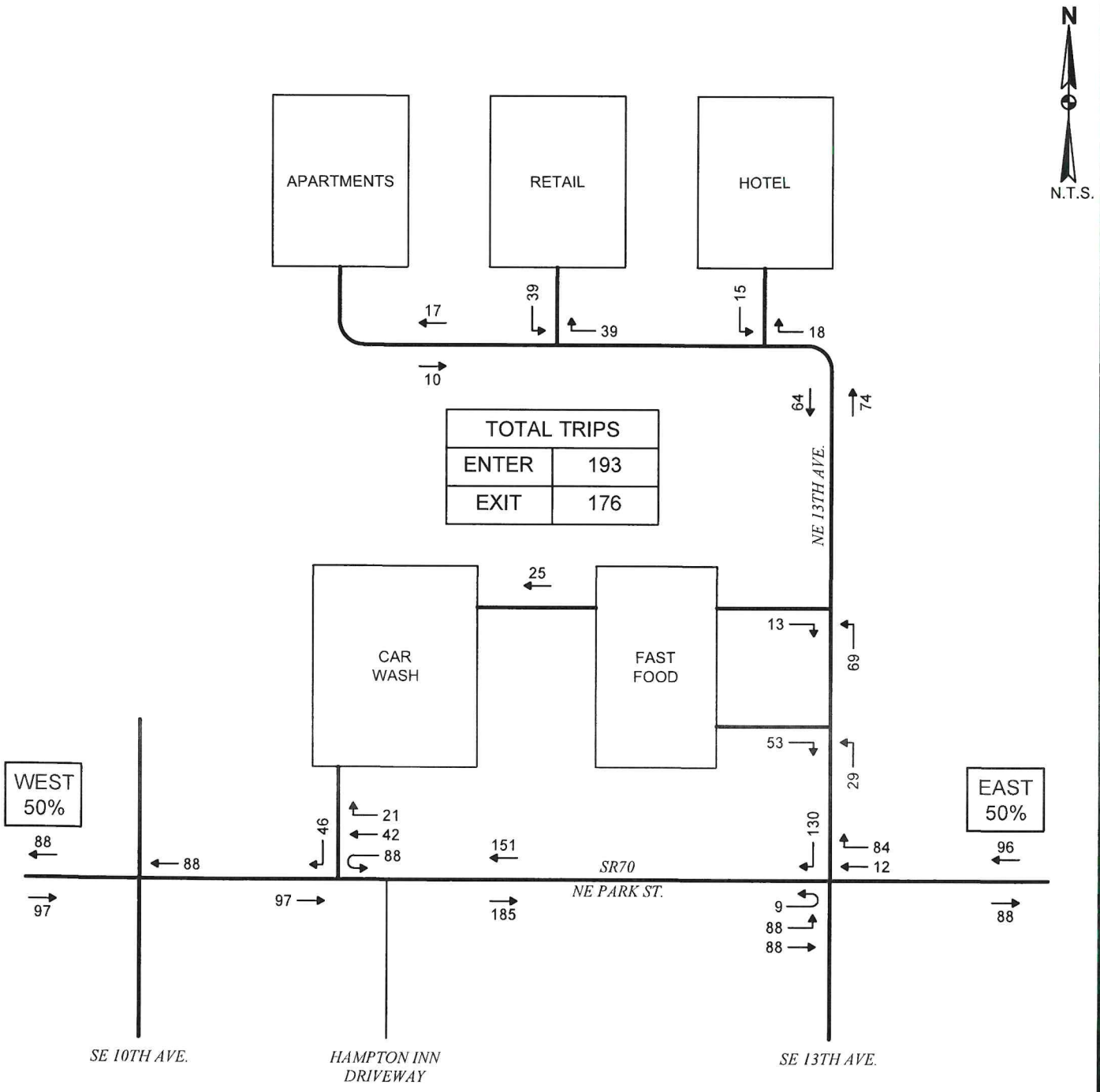


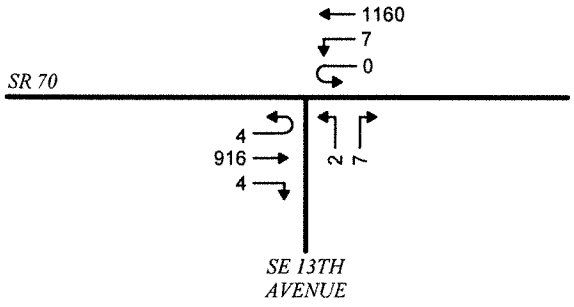
FIGURE 4

SITE TRAFFIC ASSIGNMENT

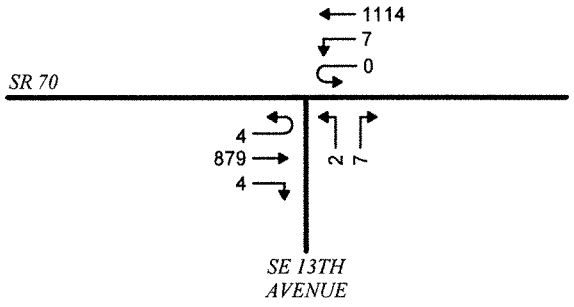
WEEKDAY PM PEAK HOUR

Buckholz Traffic

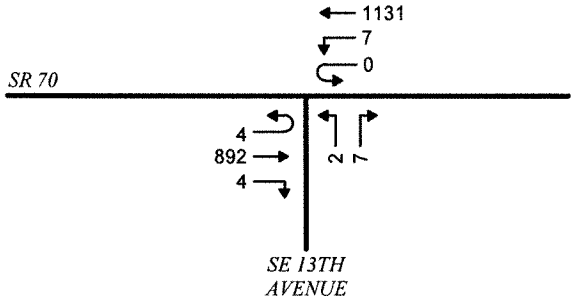
E:\23-1820\CAD2\FIG_04.DWG



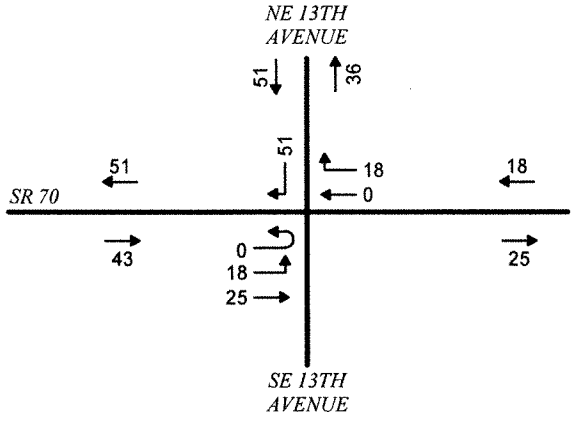
EXISTING TRAFFIC
02/13/23
7:15-8:15 AM



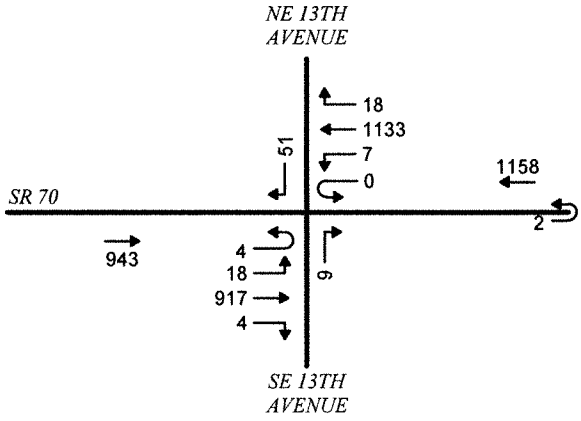
2023 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 0.96



2024 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 1.5%



SITE TRAFFIC



2024 BUILD TRAFFIC

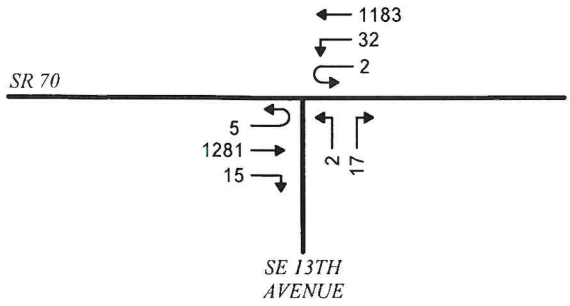
Buckholz Traffic

FIGURE 5

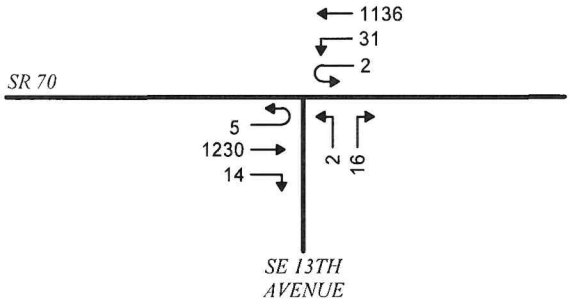
2024 BUILD TRAFFIC
SR 70 / 13TH AVENUE

WEEKDAY AM PEAK HOUR

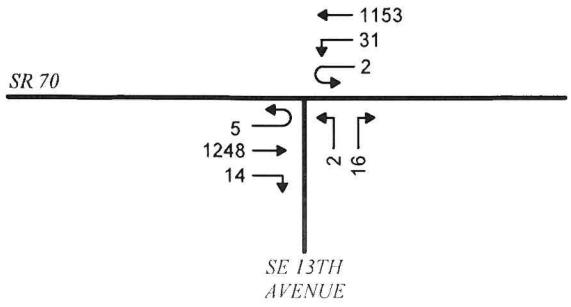
E:\23-1820\CAD2\FIG_05.DWG



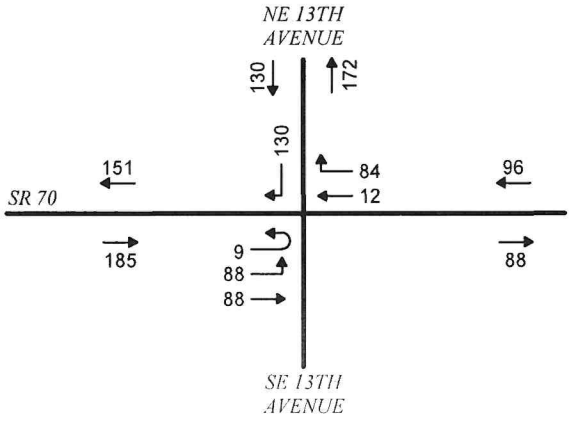
EXISTING TRAFFIC
02/13/23
5:00-6:00 PM



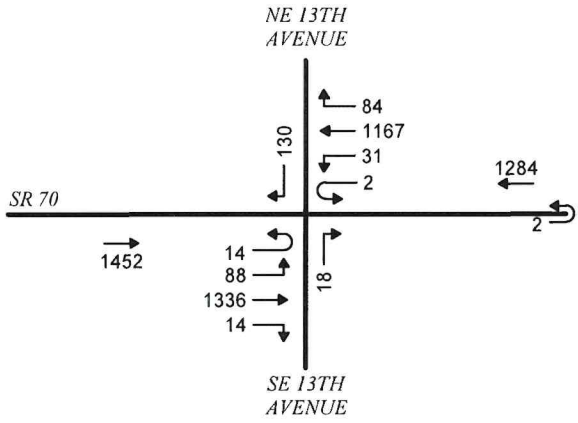
2023 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 0.96



2024 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 1.5%



SITE TRAFFIC



2024 BUILD TRAFFIC

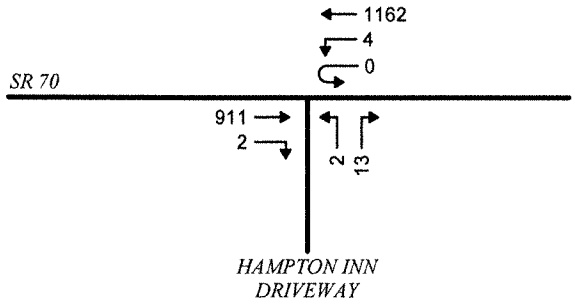
Buckholz Traffic

FIGURE 6

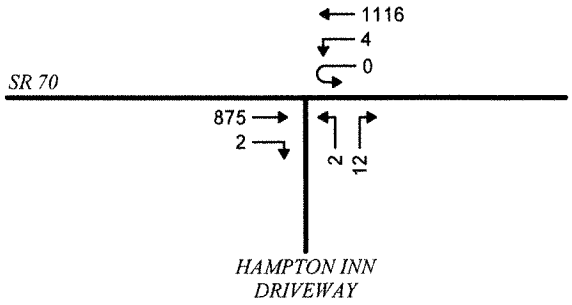
2024 BUILD TRAFFIC
SR 70 / 13TH AVENUE

WEEKDAY PM PEAK HOUR

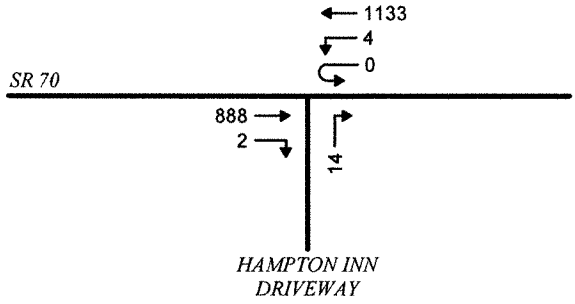
E:\23-1820\CAD2\FIG_06.DWG



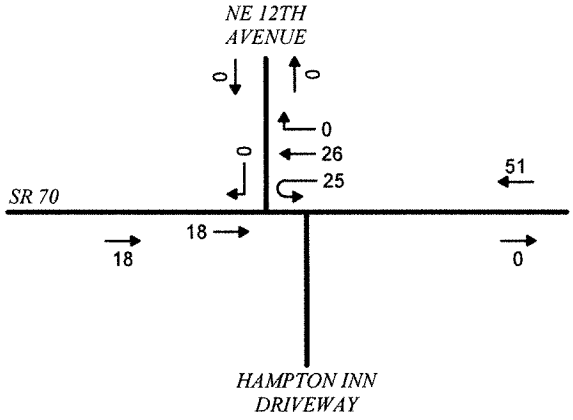
EXISTING TRAFFIC
02/13/23
7:15-8:15 AM



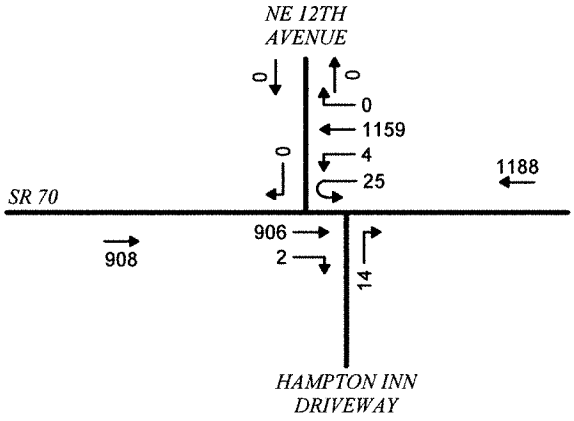
2023 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 0.96



2024 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 1.5%



SITE TRAFFIC



2024 BUILD TRAFFIC

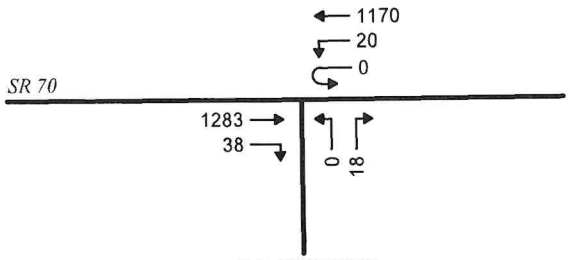
Buckholz Traffic

FIGURE 7

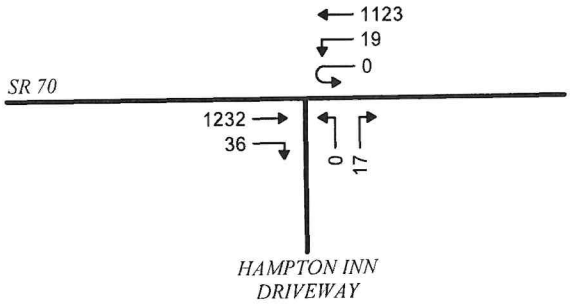
2024 BUILD TRAFFIC
SR 70 / HAMPTON DRIVEWAY

WEEKDAY AM PEAK HOUR

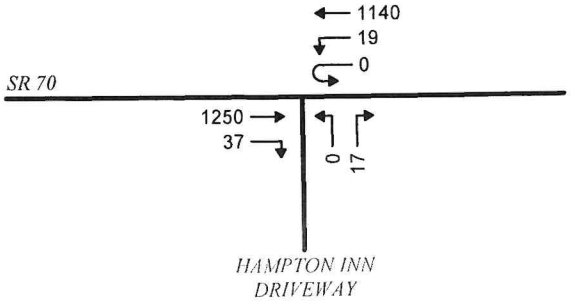
E:\23-1820\CAD2\FIG_07.DWG



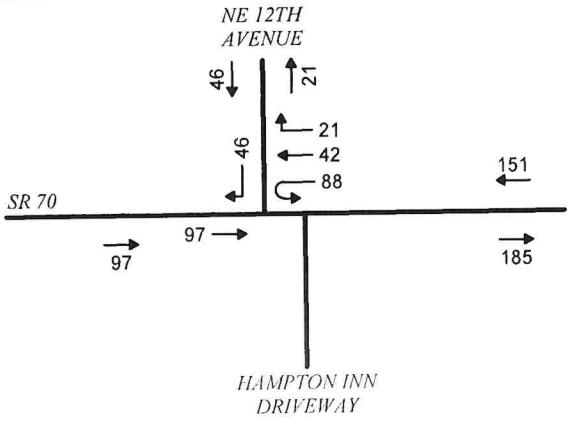
EXISTING TRAFFIC
02/13/23
5:00-6:00 PM



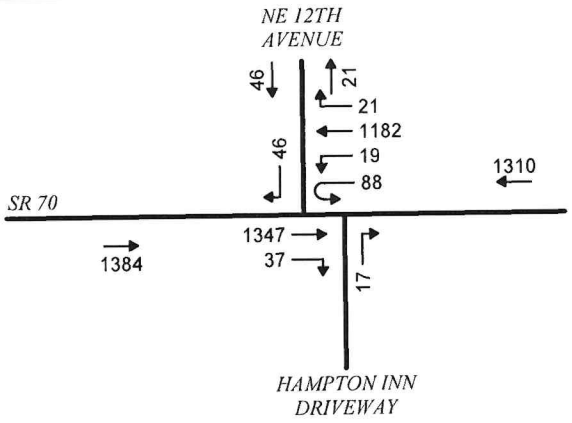
2023 SEASONALLY ADJUSTED TRAFFIC
FDOT SEASONAL CORRECTION FACTOR = 0.96



2024 NO BUILD TRAFFIC
AVERAGE ANNUAL GROWTH RATE = 1.5%



SITE TRAFFIC



2024 BUILD TRAFFIC

Buckholz Traffic

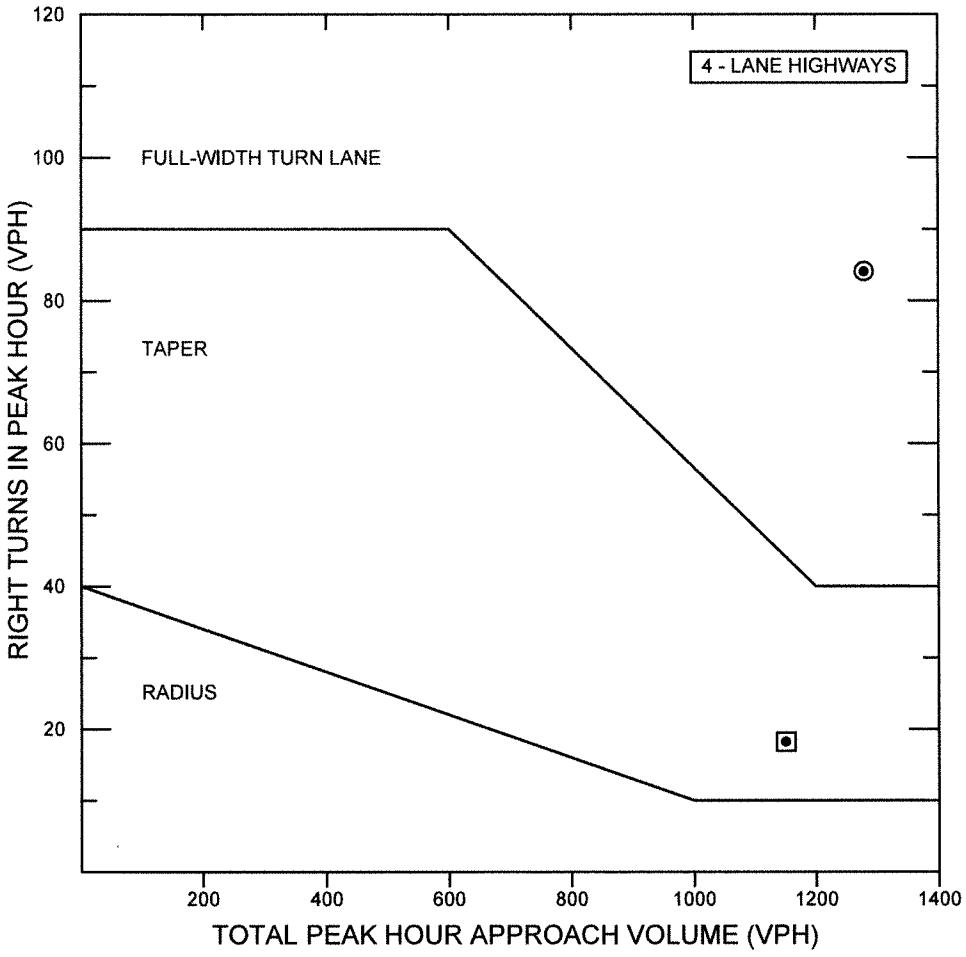
FIGURE 8

2024 BUILD TRAFFIC
SR 70 / HAMPTON DRIVEWAY

WEEKDAY PM PEAK HOUR

E:\23-1820\CAD2\FIG_08.DWG

WESTBOUND NE PARK STREET @ NE 13TH AVENUE



NOMOGRAPH FOR RIGHT TURN LANES

SOURCE: TRANSPORTATION RESEARCH BOARD NCHRP REPORT #279

▣ WEEKDAY AM PEAK HOUR

V_A	1158
V_R	18

◉ WEEKDAY PM PEAK HOUR

V_A	1284
V_R	84

NCHRP 420	
MULTI- LANE	≤ 45 MPH

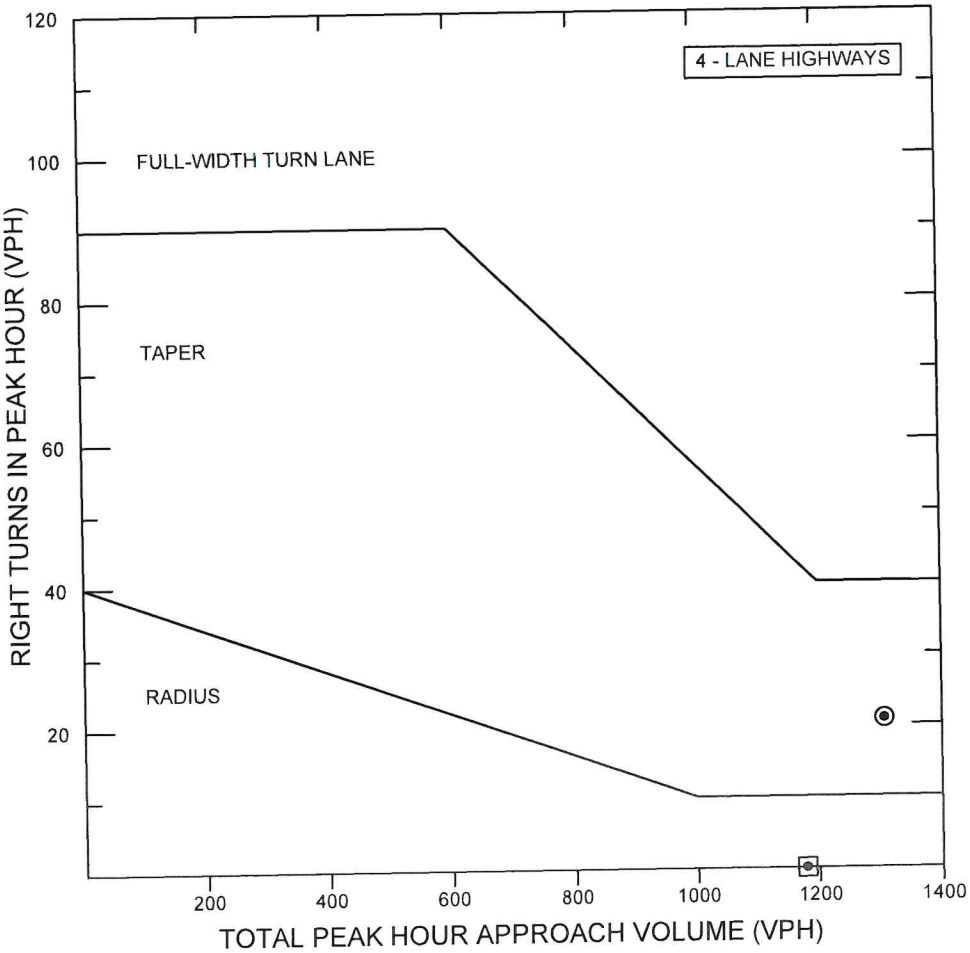
18 & 84 < 110 REQUIRED

FIGURE 9

RIGHT TURN LANE ANALYSIS

E:\23-1820\CAD2\FIG_09.DWG

WESTBOUND NE PARK STREET @ NE 12TH AVENUE



NOMOGRAPH FOR RIGHT TURN LANES

SOURCE: TRANSPORTATION RESEARCH BOARD NCHRP REPORT #279

▣ WEEKDAY AM PEAK HOUR

V_A	1188
V_R	0

◉ WEEKDAY PM PEAK HOUR ◉

V_A	1310
V_R	21

NCHRP 420	
MULTI-LANE	≤ 45 MPH

0 & 21 < 110 REQUIRED

FIGURE 10

RIGHT TURN LANE ANALYSIS

E:\23-1820\CAD2\FIG 10.DWG

TABLE 1

TRIP GENERATION CALCULATIONS

AUTOMATED CAR WASH

Land Use Code 948

T = Number of Vehicle Trip Ends

X = 4600 GSF = 4.6

TIME PERIOD	TOTAL TRIP GENERATION EQUATION	TOTAL TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	TOTAL TRIP ENDS ENTERING	TOTAL TRIP ENDS EXITING
AVERAGE WEEKDAY						
Daily	T = 14.2/8.7% (X)	750	50%	50%	375	375
AM Peak Hour	**NOT OPEN**					
PM Peak Hour	T = 14.20 (X)	66	50%	50%	33	33

SOURCE: Institute of Transportation Engineers, "Trip Generation", 11th Edition (2021)

Estimated Using ITE Hourly Percentages from LUC 949

TABLE 2

TRIP GENERATION CALCULATIONS

FAST-FOOD RESTAURANT WITH DRIVE-THRU WINDOW

Land Use Code 934

T = Number of Vehicle Trip Ends

Size of Building = 5000 (X = 5.0)

TIME PERIOD	TOTAL TRIP GENERATION EQUATION	TOTAL TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	TOTAL TRIP ENDS ENTERING	TOTAL TRIP ENDS EXITING
AVERAGE WEEKDAY						
Daily	T = 467.48 (X)	2338	50%	50%	1169	1169
AM Peak Hour			**NOT OPEN**			
PM Peak Hour	T = 33.03 (X)	165	52%	48%	86	79

SOURCE: Institute of Transportation Engineers, "Trip Generation", 11th Edition (2021)

NEW TRIPS TIME PERIOD	PERCENT NEW TRIPS	NEW TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	NEW TRIP ENDS ENTERING	NEW TRIP ENDS EXITING
AVERAGE WEEKDAY						
Daily	**52%**	1216	50%	50%	608	608
AM Peak Hour	**50%**		**NOT OPEN**			
PM Peak Hour	**55%**	91	52%	48%	47	44

SOURCE: ITE, "Trip Generation", 11th Edition (2021), Excel Pass-By Tables

Estimated Value

TABLE 3

TRIP GENERATION CALCULATIONS

BUSINESS HOTEL

Land Use Code 312

T = Number of Vehicle Trip Ends

X = Rooms = 100

TIME PERIOD	TOTAL TRIP GENERATION EQUATION	TOTAL TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	TOTAL TRIP ENDS ENTERING	TOTAL TRIP ENDS EXITING
AVERAGE WEEKDAY						
Daily	T = 2.90 (X) + 151.69	442	50%	50%	221	221
AM Peak Hour	T = 0.30 (X) + 6.94	37	39%	61%	14	23
PM Peak Hour	T = 0.21 (X) + 12.03	33	55%	45%	18	15

SOURCE: Institute of Transportation Engineers, "Trip Generation", 11th Edition (2021)

TABLE 4

TRIP GENERATION CALCULATIONS

MULTIFAMILY HOUSING (LOW-RISE)
Not Close to Rail Transit

Land Use Code 220

T = Number of Vehicle Trip Ends

X = Number of Dwelling Units = 52

TIME PERIOD	TRIP GENERATION EQUATION	TOTAL TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	TOTAL TRIP ENDS ENTERING	TOTAL TRIP ENDS EXITING
WEEKDAY						
Daily	T = 6.74 (X)	350	50%	50%	175	175
AM Peak Hour	T = 0.40 (X)	21	24%	76%	5	16
PM Peak Hour	T = 0.51 (X)	27	63%	37%	17	10

SOURCE: Institute of Transportation Engineers, "Trip Generation", 11th Edition (2021)

TABLE 5
TRIP GENERATION CALCULATIONS

STRIP RETAIL PLAZA (Less Than 40,000 gsf)

Land Use Code 822
T = Number of Vehicle Trip Ends
Size of Buildings = 10,000 gsf -----> X 10.0

TIME PERIOD	TOTAL TRIP GENERATION EQUATION	TOTAL TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	TOTAL TRIP ENDS ENTERING	TOTAL TRIP ENDS EXITING
AVERAGE WEEKDAY						
Daily	T = 54.45 X	544	50%	50%	272	272
AM Peak Hour	Ln(T) = 0.66Ln(X) + 1.84	29	60%	40%	17	12
PM Peak Hour	Ln(T) = 0.71Ln(X) + 2.72	78	50%	50%	39	39

SOURCE: Institute of Transportation Engineers, "Trip Generation", 11th Edition (2021)

NEW TRIPS

TIME PERIOD	PERCENT NEW TRIPS	NEW TRIP ENDS	PERCENT ENTERING	PERCENT EXITING	NEW TRIP ENDS ENTERING	NEW TRIP ENDS EXITING
AVERAGE WEEKDAY						
Daily	64.0%	348	50%	50%	174	174
AM Peak Hour	64.0%	18	60%	40%	11	7
PM Peak Hour	64.0%	50	50%	50%	25	25

SOURCE: ITE "Trip Generation Handbook", 3rd Edition, Table E.9

Estimated Value

TABLE 6
UNSIGNALIZED INTERSECTION CAPACITY RESULTS
EXISTING CONDITIONS

NE PARK STREET / SE 13TH AVENUE

	WEEKDAY AM PEAK HOUR			
Movement	LOS	Delay	V/C Ratio	95th % Queue (vehicles)
Eastbound U-Turn	C	21.9 sec/veh	0.02	1
Westbound Left Turn	B	11.0 sec/veh	0.01	1
Northbound Approach	C	15.6 sec/veh	0.03	1

	WEEKDAY PM PEAK HOUR			
Movement	LOS	Delay	V/C Ratio	95th % Queue (vehicles)
Eastbound U-Turn	C	20.8 sec/veh	0.02	1
Westbound Left Turn	B	13.7 sec/veh	0.08	1
Northbound Approach	C	16.6 sec/veh	0.06	1

NE PARK STREET / HAMPTON INN DRIVEWAY

	WEEKDAY AM PEAK HOUR			
Movement	LOS	Delay	V/C Ratio	95th % Queue (vehicles)
Westbound Left Turn	B	10.4 sec/veh	0.01	1
Northbound Right Turn	B	12.3 sec/veh	0.03	1

	WEEKDAY PM PEAK HOUR			
Movement	LOS	Delay	V/C Ratio	95th % Queue (vehicles)
Westbound Left Turn	B	12.7 sec/veh	0.04	1
Northbound Right Turn	B	14.9 sec/veh	0.05	1

TABLE 7
UNSIGNALIZED INTERSECTION CAPACITY RESULTS
2024 BUILD CONDITIONS

NE PARK STREET / 13TH AVENUE

	WEEKDAY AM PEAK HOUR			
Movement	LOS	Delay	V/C Ratio	95th % Queue (vehicles)
Eastbound Left Turn	C	15.1 sec/veh	0.07	1
Westbound Left Turn	B	11.3 sec/veh	0.01	1
Northbound Approach	B	13.7 sec/veh	0.02	1
Southbound Approach	C	15.4 sec/veh	0.15	1

	WEEKDAY PM PEAK HOUR			
Movement	LOS	Delay	V/C Ratio	95th % Queue (vehicles)
Eastbound Left Turn	C	18.9 sec/veh	0.30	1.3
Westbound Left Turn	B	14.9 sec/veh	0.09	1
Northbound Approach	C	15.5 sec/veh	0.05	1
Southbound Approach	C	18.1 sec/veh	0.34	1.5

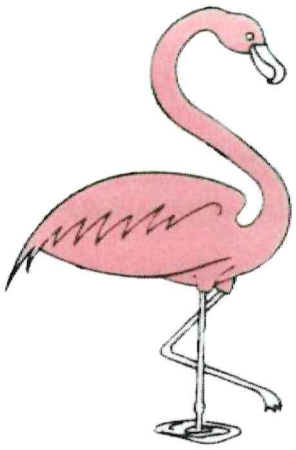
NE PARK STREET / NE 12TH AVENUE / HAMPTON INN DRIVEWAY

	WEEKDAY AM PEAK HOUR			
Movement	LOS	Delay	V/C Ratio	95th % Queue (vehicles)
Westbound Left Turn	C	17.6 sec/veh	0.11	1
Northbound Right Turn	B	12.5 sec/veh	0.03	1
Southbound Right Turn	B	14.0 sec/veh	0.00	1

	WEEKDAY PM PEAK HOUR			
Movement	LOS	Delay	V/C Ratio	95th % Queue (vehicles)
Westbound Left Turn	F	68.7 sec/veh	0.72	**4.3**
Northbound Right Turn	C	15.9 sec/veh	0.05	1
Southbound Right Turn	C	15.2 sec/veh	0.12	1

APPENDIX A

SITE PLAN



MASTER SITE PLANS OF:

PARK STREET COMMERCE CENTER

LOCATED IN SECTION 15; TOWNSHIP 37 SOUTH; RANGE 35 EAST
PARCEL ID: 2-15-37-35-0A00-00009-A000;
2-15-37-35-0A00-00009-0000; 2-15-37-35-0A00-00011-0000;
2-15-37-35-0A00-00010-0000; 2-15-37-35-0A00-00010-0010

LEGAL DESCRIPTION

PARCEL 1 (PER O.R.B. 527, PG. 869):

THE WEST HALF OF THE EAST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER LYING NORTH OF STATE ROAD NO. 70 (FORT PIERCE ROAD), IN SECTION 15, TOWNSHIP 37 SOUTH, RANGE 35 EAST, LESS THE FOLLOWING :

BEGINNING AT THE SOUTHWEST CORNER OF THE EAST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 15, RUN NORTH 594 FEET, EAST 186.3 FEET, SOUTH 594 FEET; WEST 186.3 FEET TO THE POINT OF BEGINNING.

ALSO LESS THE NORTH 50 FEET WHICH IS RESERVED FOR ROAD PURPOSES.

ALSO LESS: A STRIP OF LAND 7 FEET WIDE SITUATE ADJACENT TO AND NORTHERLY OF THE EXISTING 66 FOOT RIGHT OF WAY OF STATE ROAD 70, LYING, WITHIN THE WEST ½ OF THE EAST ½ OF SW 1/4 OF SE 1/4, SECTION 15, TOWNSHIP 37 SOUTH, RANGE 35 EAST, LESS THE WEST 186.3 FEET THEREOF; CONTAINING 0.02 OF AN ACRE, MORE OR LESS.

PARCEL 2 (PER O.R.B. 528, PG. 1342):

ALL OF LOTS 1 THROUGH 12, INCLUSIVE, LYING NORTH OF NORTH PARK STREET (A/K/A S.R. 70 F/K/A FORT PIERCE ROAD) AS NOW CONSTRUCTED, IN BLOCK 4, PRICE ADDITION TO OKEECHOBEE CITY, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 17, PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA.

PARCEL 3 (PER O.R.B. 528, PG. 1342):

COMMENCE AT THE NORTHEAST CORNER OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER OF SECTION 15, TOWNSHIP 37 SOUTH, RANGE 35 EAST, THENCE RUN SOUTH 00°18'26" EAST ALONG THE EASTERLY LINE THEREOF, 668.71 FEET TO THE POINT OF BEGINNING: THENCE CONTINUE SOUTH 00°18'26" EAST, 276.28 FEET TO THE NORTHEAST CORNER OF PRICE ADDITION TO OKEECHOBEE CITY ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 17; THENCE RUN SOUTH 89° 50'34" WEST, ALONG THE NORTHERLY LINE THEREOF, 336.76 FEET TO THE NORTHWEST CORNER OF SAID PRICE ADDITION; THENCE RUN NORTH 00°17'46" WEST, ALONG THE WEST LINE OF THE EAST ONE HALF OF THE EAST ONE-HALF OF THE SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE QUARTER OF SAID SECTION 15, A DISTANCE OF 273.38 FEET; THENCE RUN NORTH 89°20'47" EAST AND PARALLEL WITH THE NORTHERLY LINE OF PREVIOUSLY MENTIONED SOUTHWEST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER, A DISTANCE OF 336.71 FEET TO THE POINT OF BEGINNING.

PARCEL 4 (PER O.R.B. 528, PG. 1342):

THE ALLEY IN BLOCK 4, PRICE ADDITION TO OKEECHOBEE CITY, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 17, PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA, LYING BETWEEN LOTS 1-6 AND 7-12.

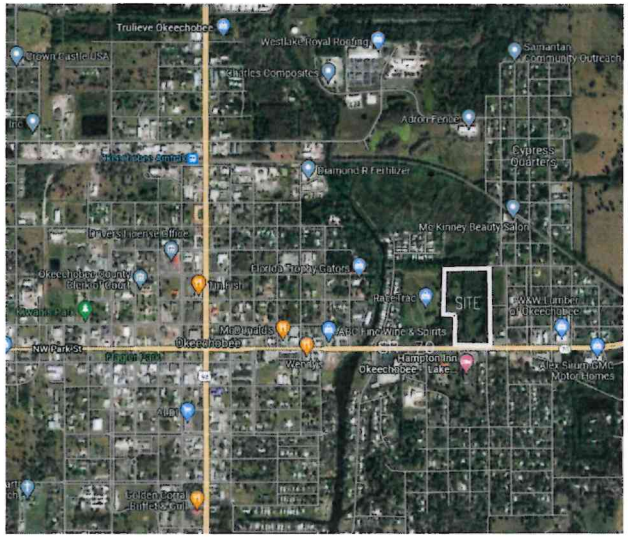
PARCEL 5 (PER O.R.B 528, PG 1342):

THE STREET KNOWN AS NORTHEAST 2ND STREET (F/K/A CENTER STREET) AS IT RUNS EAST FROM NORTHEAST 12TH AVENUE TO NORTHEAST 13TH AVENUE, PARTICULARLY LOCATED NORTH OF BLOCK 4, PRICE ADDITION TO OKEECHOBEE CITY, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 2, PAGE 17, PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA.

PARCEL 6 (PER O.R.B 554, PG. 338):

ALL THAT PART OF THE NORTH 668.71 FEET OF THE EAST ½ OF THE EAST ½ OF SW 1/4 OF SE 1/4 OF SECTION 15, TOWNSHIP 37 SOUTH, RANGE 35 EAST, LESS AND EXCEPT THE NORTH 50 FEET THEREOF.

SUBJECT TO THOSE EASEMENTS IN FAVOR OF FLORIDA POWER AND LIGHT RECORDED IN O.R. BOOK 109, PAGE 983 AND O.R. BOOK 23, PAGE 524 AND MATTERS CONTAINED ON THE PLAT OF PRICE ADDITION TO OKEECHOBEE CITY RECORDED IN PLAT BOOK 2, PAGE 17, ALL BEING IN THE PUBLIC RECORDS OF OKEECHOBEE COUNTY, FLORIDA.



NORTH

VICINITY MAP N.T.S.

UTILITY COMPANIES

SANITARY SEWER:	OKEECHOBEE UTILITY AUTHORITY (863) 763-9460
WATER DISTRIBUTION:	OKEECHOBEE UTILITY AUTHORITY (863) 763-9460
ELECTRICAL POWER:	FPL (863) 763-6441
TELEPHONE:	CENTURY LINK (855) 263-9576
FIRE:	OKEECHOBEE FIRE DEPARTMENT (863) 763-4423
GARBAGE:	WASTE MANAGEMENT (866) 909-4458

PROJECT DIRECTORY

OWNER: WILLIAM R. CROSBY, JR
10282 PAYNE ROAD
SEBRING, FLORIDA 33875

DEVELOPER: PARK STREET OKEECHOBEE, LLC
603 EAST FORT KING STREET
OCALA, FLORIDA 34471

ENGINEER: AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211
WINTER SPRINGS, FLORIDA 32708
JOHNNY HERBERT IV, P.E., JOHNNY@AMERICANCIVILENGINEERING.COM
CELL 407-376-1777 , OFFICE 407-327-7700,

SURVEYOR: BSM & ASSOCIATES, INC.
80 SE 31ST LANE
OKEECHOBEE, FLORIDA 34974
RICHARD BARNES II, RICKY.BARNES@BSMSURVEY.COM
(863) 494-8324 OFFICE

AUTHORIZED AGENT: KATIE EDWARDS-WALPOLE, ESQUIRE
9321 CHELSEA DRIVE SOUTH
PLANTATION, FLORIDA 33324
(305) 281-7323 OFFICE, KATE@FLFARMLAW.COM

PLANS ISSUED FOR: DATE

OKEECHOBEE. SITE PLAN REVIEW	1/15/2023

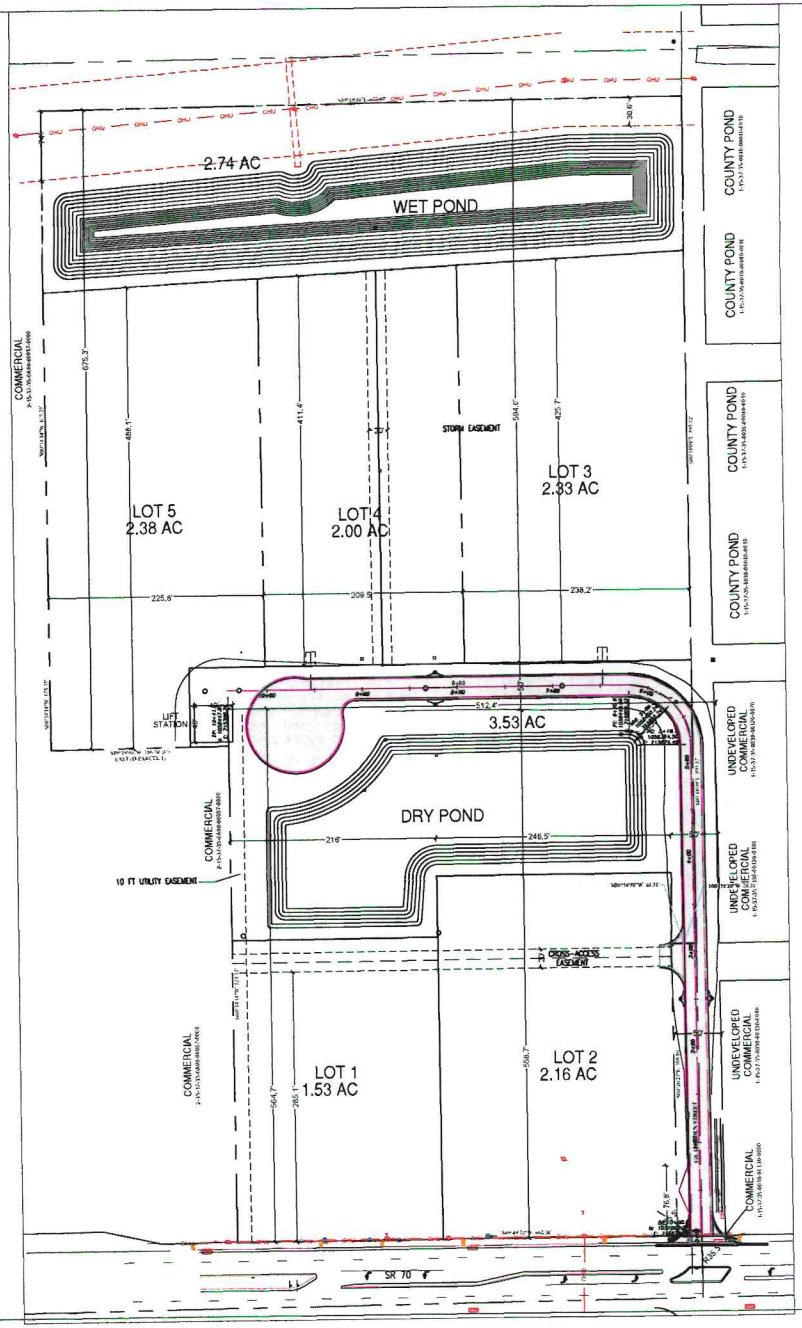
INDEX OF SHEETS

ENGINEER OF RECORD
JOHN J. HERBERT IV, P.E.
LIC # 84188

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS ROAD, SUITE 211 WINTER SPRINGS, FLORIDA 32708
(407) 327-7700

PLAN DATE: 1/17/2023

CERT. OF AUTHORIZATION NO. 8729



DEVELOPMENT INFORMATION

1.	PROJECT NAME:	PARK STREET COMMERCE CENTER
2.	TAX ID NUMBER:	2-15-37-35-0A00-00009-A000 0.485 AC 2-15-37-35-0A00-00009-0000 6.626 AC 2-15-37-35-0A00-00010-0000 2.129 AC 2-15-37-35-0A00-00011-0000 4.850 AC 2-15-37-35-0A00-00010-0010 2.028 AC
3.	TOTAL DEVELOPMENT AREA:	16.151 AC
5.	EXISTING USE:	VACANT
6.	PROPOSED USE:	MIXED USE COMMERCIAL
7.	EXISTING LAND USE:	COMMERCIAL
8.	EXISTING ZONING:	COMMERCIAL HEAVY DISTRICT (CHV)
9.	MAX. BUILDING HEIGHT:	45 FT.

10. 8" WATER UTILITY AND LIFT STATION CONNECTING TO GRAVITY SEWER SERVICE SERVED BY OKEECHOBEE UTILITY AUTHORITY
11. THIS PROJECT WILL BE CONSTRUCTED IN ONE PHASE. INDIVIDUAL LOTS TO BE PERMITTED INDIVIDUALLY AT SEPARATE DATE
12. ON-SITE SOILS CONSISTS OF #6 MANATEE LOAMY FINE SAND & #11 IMMOKALEE FINE SAND - HYDRAULIC GROUP B/D
13. DRAINAGE DESIGN TO MEET CITY OF OKEECHOBEE AND SFWMD REQUIREMENTS.
14. FREESTANDING MONUMENT SIGN ALLOWED PER 90-571 OF COUNTY CODE, 64 SF FACE, 8 FT HEIGHT

REQUIRED BUILDING SETBACKS

FRONT SETBACK BLDG	20 FT
FRONT SETBACK OTHER	10 FT
SIDE SETBACK	8 FT
REAR SETBACK	10 FT.

ADJACENT ZONING / LAND USE

NORTH	UNDEVELOPED HOLDING /	SINGLE FAMILY
SOUTH	COMMERCIAL HEAVY CHV /	COM COMMERCIAL
EAST	COUNTY COMMERCIAL /	COM COMMERCIAL
WEST	COMMERCIAL HEAVY CHV /	COM COMMERCIAL

North

W E

S

0' 30' 60' 120'

Scale: 1 inch = 60 feet

VICINITY MAP N.T.S.

NOTE: ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF AMERICAN CIVIL ENGINEERING CO. ALL RIGHTS RESERVED. COPY RIGHT 2022.

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TOM SKELTON, P.E.
TECHNICIAN: JAKE
PROJECT NO. 22940

DATE	REVISIONS

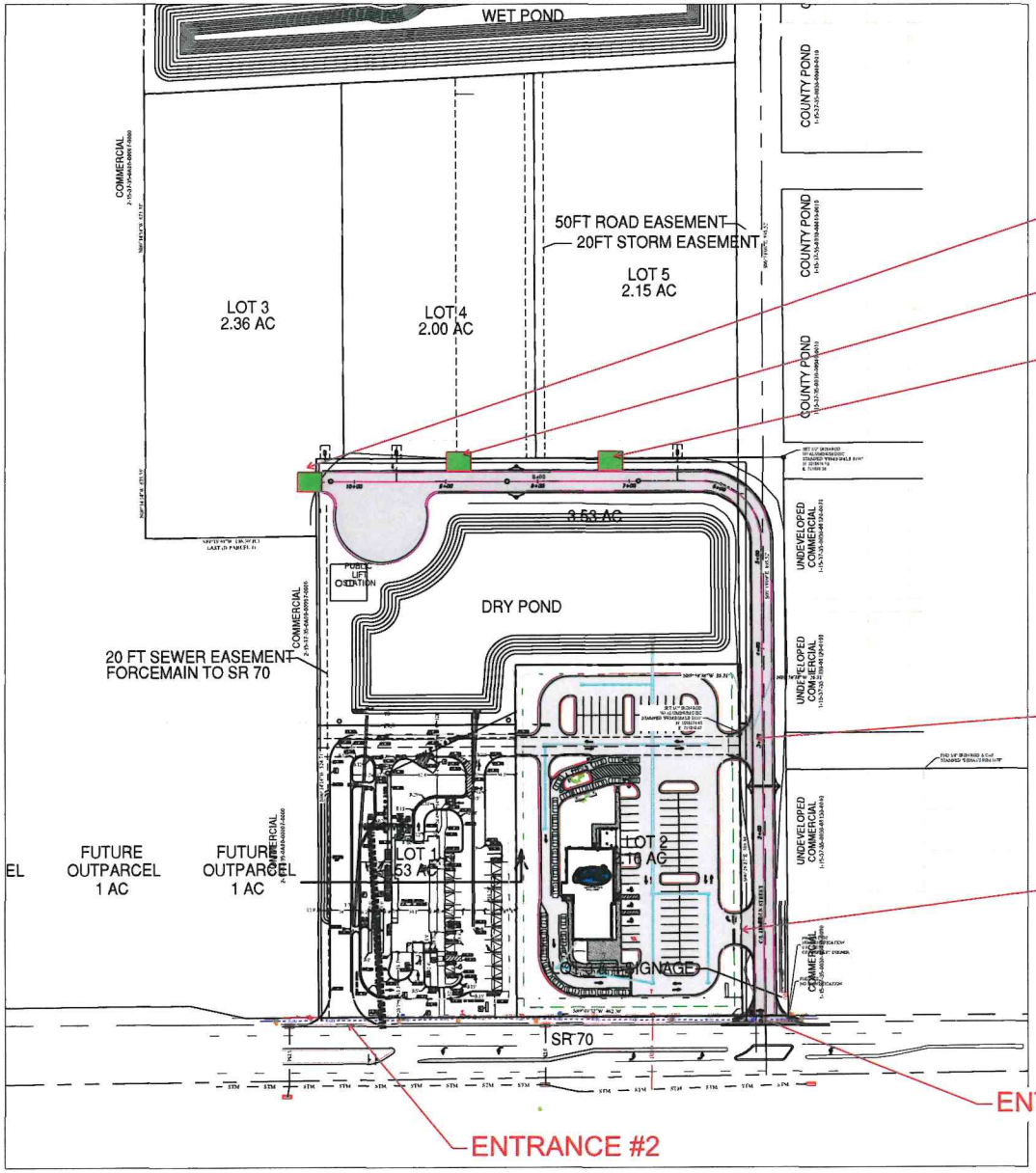
AMERICAN CIVIL ENGINEERING CO.
227 N. MOSS RD. SUITE 211, WINTER SPRINGS FLA 32708
(407) 327-7700
certificate of authorization number 27159

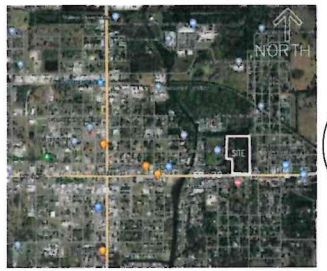
SITE PLAN
PARK STREET COMMERCE CENTER
1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84988

6/1/2023
SITE PLAN
PROJECT NO. 22940

C4.0





VICINITY MAP N.T.S.

ENGINEER: JOHN J. HERBERT IV, P.E.
CHECKED BY: TIM SKELTON, P.E.
TECHNICIAN: J.M.H.
PROJECT NO. 22140

DATE	REVISIONS

AMERICAN CIVIL ENGINEERING CO.
207 N. MOSS RD., SUITE 211, WINTER SPRINGS, FLA 32708
(407) 327-7700

TRAFFIC EXHIBIT

PARK STREET COMMERCE CENTER

1000 STATE ROAD 70 E, OKEECHOBEE, FLORIDA 34972

JOHN J. HERBERT IV, P.E.
LIC # 84598

7/7/2023

PROJECT NO. 22140

APPENDIX B

TURNING MOVEMENT COUNTS

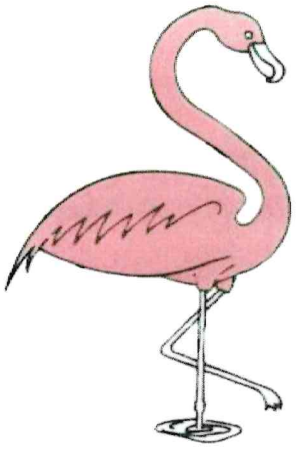


TABLE B-1
NE Park Street (SR 70) / Hampton inn Driveway
TURNING MOVEMENT COUNTS - ALL VEHICLES

Monday, February 13, 2023

	NE PARK STREET			HAMPTON INN DRIVEWAY		
	EB RightTurn	WB U-Turn	WB Left Turn	NB Left Turn	NB Right Turn	All
6:45-7:00 AM	0	0	1	0	0	1
7:00-7:15 AM	0	0	0	0	0	0
7:15-7:30 AM	**1**	**0**	**2**	**0**	**1**	**4**
7:30-7:45 AM	**1**	**0**	**0**	**0**	**4**	**5**
7:45-8:00 AM	**0**	**0**	**2**	**2**	**4**	**8**
8:00-8:15 AM	**0**	**0**	**0**	**0**	**4**	**4**
8:15-8:30 AM	3	0	0	0	3	6
8:30-8:45 AM	2	0	0	0	2	4
AM PEAK PERIOD:	**7**	**0**	**5**	**2**	**18**	**32**
AM PEAK HOUR: 7:15-8:15 AM	**2**	**0**	**4**	**2**	**13**	**21**

Monday, February 13, 2023

	NE PARK STREET			HAMPTON INN DRIVEWAY		
	EB RightTurn	WB U-Turn	WB Left Turn	NB Left Turn	NB Right Turn	All
3:45-4:00 PM	4	0	3	0	5	12
4:00-4:15 PM	4	1	7	0	5	17
4:15-4:30 PM	1	0	3	0	4	8
4:30-4:45 PM	3	0	5	0	9	17
4:45-5:00 PM	13	0	6	0	12	31
5:00-5:15 PM	**8**	**0**	**2**	**0**	**5**	**15**
5:15-5:30 PM	**7**	**0**	**5**	**0**	**4**	**16**
5:30-5:45 PM	**14**	**0**	**5**	**0**	**4**	**23**
5:45-6:00 PM	**9**	**0**	**8**	**0**	**5**	**22**
PM PEAK PERIOD:	**63**	**1**	**44**	**0**	**53**	**161**
PM PEAK HOUR: 5:00-6:00 PM	**38**	**0**	**20**	**0**	**18**	**76**

BUCKHOLZ TRAFFIC

JW BUCKHOLZ TRAFFIC ENGINEERING INC

DAY: MONDAY | MANUAL TURNING MOVEMENT COUNTS | Site Code : 44444444

DATE: 02/13/23 | NE PARK STREET @ SE 13TH AVENUE | Start Date: 02/13/23

WEATHER: CLEAR & DRY | OKEECHOBEE COUNTY, FLORIDA | File I.D. : 021323AM

BEGIN TIME (MILITARY):06:45 Hrs | Page : 1

AUTOMOBILES, COMMERCIAL VEHICLES

	From North				NE PARK STREET From East				SE 13TH AVENUE From South				NE PARK STREET From West				
	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Total
Date 02/13/23																	
06:45	0	0	0	0	1	220	0	0	0	0	2	0	0	218	1	1	443
07:00	0	0	0	0	0	169	1	1	0	0	3	0	0	249	1	1	425
07:15	0	0	0	0	4	220	0	0	0	0	2	0	0	209	1	1	437
07:30	0	0	0	0	1	314	0	0	0	0	2	0	0	217	1	2	537
Hr Total	0	0	0	0	6	923	1	1	0	0	9	0	0	893	4	5	1842
07:45	0	0	0	0	2	332	0	0	1	0	1	0	0	244	1	1	582
08:00	0	0	0	0	0	294	0	0	1	0	2	0	0	246	1	0	544
08:15	0	0	0	0	2	211	0	0	1	0	0	0	0	184	0	1	399
08:30	0	0	0	0	0	237	0	0	1	0	0	0	0	239	0	0	477
Hr Total	0	0	0	0	4	1074	0	0	4	0	3	0	0	913	2	2	2002
TOTAL	0	0	0	0	10	1997	1	1	4	0	12	0	0	1806	6	7	3844

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 02/13/23

Peak start	07:15				07:15				07:15				07:15				
Volume	0	0	0	0	7	1160	0	0	2	0	7	0	0	916	4	4	
Percent	0%	0%	0%	0%	1%	99%	0%	0%	22%	0%	78%	0%	0%	99%	0%	0%	
Pk total	0				1167				9				924				
Highest	06:45				07:45				08:00				08:00				
Volume	0	0	0	0	2	332	0	0	1	0	2	0	0	246	1	0	
Hi total	0				334				3				247				
PHF	.0				.87				.75				.94				

JW BUCKHOLZ TRAFFIC ENGINEERING INC

DAY: MONDAY | MANUAL TURNING MOVEMENT COUNTS | Site Code : 44444444

DATE: 02/13/23 | NE PARK STREET @ SE 13TH AVENUE | Start Date: 02/13/23

WEATHER: CLEAR & DRY | OKEECHOBEE COUNTY, FLORIDA | File I.D. : 021323AM

BEGIN TIME (MILITARY):06:45 Hrs | Page : 1

AUTOMOBILES

	From North				NE PARK STREET From East				SE 13TH AVENUE From South				NE PARK STREET From West				
	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Total
Date 02/13/23																	
06:45	0	0	0	0	1	186	0	0	0	0	1	0	0	174	1	1	364
07:00	0	0	0	0	0	143	1	1	0	0	2	0	0	208	1	1	357
07:15	0	0	0	0	3	195	0	0	0	0	1	0	0	176	0	1	376
07:30	0	0	0	0	1	266	0	0	0	0	2	0	0	177	1	2	449
Hr Total	0	0	0	0	5	790	1	1	0	0	6	0	0	735	3	5	1546
07:45	0	0	0	0	2	288	0	0	1	0	0	0	0	201	1	1	494
08:00	0	0	0	0	0	237	0	0	1	0	2	0	0	197	1	0	438
08:15	0	0	0	0	1	177	0	0	1	0	0	0	0	143	0	1	323
08:30	0	0	0	0	0	179	0	0	1	0	0	0	0	195	0	0	375
Hr Total	0	0	0	0	3	881	0	0	4	0	2	0	0	736	2	2	1630
TOTAL	0	0	0	0	8	1671	1	1	4	0	8	0	0	1471	5	7	3176

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 02/13/23

Peak start	07:15				07:15				07:15				07:15				
Volume	0	0	0	0	6	986	0	0	2	0	5	0	0	751	3	4	
Percent	0%	0%	0%	0%	1%	99%	0%	0%	29%	0%	71%	0%	0%	99%	0%	1%	
Pk total	0				992				7				758				
Highest	06:45				07:45				08:00				07:45				
Volume	0	0	0	0	2	288	0	0	1	0	2	0	0	201	1	1	
Hi total	0				290				3				203				
PHF	.0				.86				.58				.93				

JW BUCKHOLZ TRAFFIC ENGINEERING INC

DAY: MONDAY | MANUAL TURNING MOVEMENT COUNTS | Site Code : 44444444

DATE: 02/13/23 | NE PARK STREET @ SE 13TH AVENUE | Start Date: 02/13/23

WEATHER: CLEAR & DRY | OKEECHOBEE COUNTY, FLORIDA | File I.D. : 021323AM

BEGIN TIME (MILITARY):06:45 Hrs | Page : 1

COMMERCIAL VEHICLES

	From North				NE PARK STREET From East				SE 13TH AVENUE From South				NE PARK STREET From West				
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total
Date 02/13/23																	
06:45	0	0	0	0	0	34	0	0	0	0	1	0	0	44	0	0	79
07:00	0	0	0	0	0	26	0	0	0	0	1	0	0	41	0	0	68
07:15	0	0	0	0	1	25	0	0	0	0	1	0	1	33	1	0	62
07:30	0	0	0	0	0	48	0	0	0	0	0	0	0	40	0	0	88
Hr Total	0	0	0	0	1	133	0	0	0	0	3	0	1	158	1	0	297
07:45	0	0	0	0	0	44	0	0	0	0	1	0	0	43	0	0	88
08:00	0	0	0	0	0	57	0	0	0	0	0	0	0	49	0	0	106
08:15	0	0	0	0	1	34	0	0	0	0	0	0	0	41	0	0	76
08:30	0	0	0	0	0	58	0	0	0	0	0	0	0	44	0	0	102
Hr Total	0	0	0	0	1	193	0	0	0	0	1	0	0	177	0	0	372
TOTAL	0	0	0	0	2	326	0	0	0	0	4	0	1	335	1	0	669

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 02/13/23

Peak start	07:15				07:15				07:15				07:15				
Volume	0	0	0	0	1	174	0	0	0	0	2	0	1	165	1	0	
Percent	0%	0%	0%	0%	1%	99%	0%	0%	0%	0%	100%	0%	1%	99%	1%	0%	
Pk total	0				175				2				167				
Highest	06:45				08:00				07:15				08:00				
Volume	0	0	0	0	0	57	0	0	0	0	1	0	0	49	0	0	
Hi total	0				57				1				49				
PHF	.0				.77				.50				.85				

JW BUCKHOLZ TRAFFIC ENGINEERING INC

DAY: MONDAY | MANUAL TURNING MOVEMENT COUNTS | Site Code : 44444444

DATE: 02/13/23 | NE PARK STREET @ SE 13TH AVENUE | Start Date: 02/13/23

WEATHER: CLEAR & DRY | OKEECHOBEE COUNTY, FLORIDA | File I.D. : 021323AM

BEGIN TIME (MILITARY):06:45 Hrs | Page : 1

PEDESTRIAN & BICYCLE

	From North				NE PARK STREET From East				SE 13TH AVENUE From South				NE PARK STREET From West				
	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Total
Date 02/13/23																	
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	4
08:00	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	3
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	5	0	0	0	0	0	0	0	2	0	0	0	1	8
TOTAL	0	0	0	6	0	0	0	0	0	0	0	2	0	0	0	1	9

Peak Hour Analysis By Entire Intersection for the Period: 07:15 to 08:15 on 02/13/23

Peak start	07:15				07:15				07:15				07:15				
Volume	0	0	0	5	0	0	0	0	0	0	0	2	0	0	0	1	
Percent	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	
Pk total	5				0				2				1				
Highest	07:45				06:45				07:45				07:45				
Volume	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	
Hi total	2				0				1				1				
PHF	.62				.0				.50				.25				

JW BUCKHOLZ TRAFFIC ENGINEERING INC

MANUAL TURNING MOVEMENT COUNTS

NE PARK STREET @ SE 13TH AVENUE

OKEECHOBEE COUNTY, FLORIDA

DAY: MONDAY
DATE: 02/13/23
WEATHER: CLEAR & DRY
BEGIN TIME (MILITARY):15:45 Hrs

Site Code : 02132023
Start Date: 02/13/23
File I.D. : 021323PM
Page : 1

AUTOMOBILES, COMMERCIAL VEHICLES

	From North				NE PARK STREET From East				SE 13TH AVENUE From South				NE PARK STREET From West				
	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Total
Date 02/13/23																	
15:45	0	0	0	0	1	269	0	1	1	0	3	0	0	291	3	1	570
16:00	0	0	0	0	4	257	0	0	2	0	5	0	0	324	9	1	602
16:15	0	0	0	0	2	295	0	2	1	0	1	0	0	313	4	0	618
16:30	0	0	0	0	6	300	2	1	4	0	4	0	0	255	4	3	579
Hr Total	0	0	0	0	13	1121	2	4	8	0	13	0	0	1183	20	5	2369
16:45	0	0	0	0	6	289	0	1	2	0	2	0	0	265	0	2	567
17:00	0	0	0	0	12	306	0	0	0	0	2	0	0	375	1	2	698
17:15	0	0	0	0	10	289	0	0	0	0	4	0	0	332	2	1	638
17:30	0	0	0	0	4	277	0	0	1	0	4	0	0	301	5	2	594
Hr Total	0	0	0	0	32	1161	0	1	3	0	12	0	0	1273	8	7	2497
17:45	0	0	0	0	6	311	0	2	1	0	7	0	0	273	7	0	607
Hr Total	0	0	0	0	6	311	0	2	1	0	7	0	0	273	7	0	607
TOTAL	0	0	0	0	51	2593	2	7	12	0	32	0	0	2729	35	12	5473

Peak Hour Analysis By Entire Intersection for the Period: 17:00 to 18:00 on 02/13/23

Peak start 17:00					17:00				17:00				17:00				
Volume	0	0	0	0	32	1183	0	2	2	0	17	0	0	1281	15	5	
Percent	0%	0%	0%	0%	3%	97%	0%	0%	11%	0%	89%	0%	0%	98%	1%	0%	
Pk total	0				1217				19				1301				
Highest	15:45				17:45				17:45				17:00				
Volume	0	0	0	0	6	311	0	2	1	0	7	0	0	375	1	2	
Hi total	0				319				8				378				
PHF	.0				.95				.59				.86				

JW BUCKHOLZ TRAFFIC ENGINEERING INC

DAY: MONDAY | MANUAL TURNING MOVEMENT COUNTS | Site Code : 02132023

DATE: 02/13/23 | NE PARK STREET @ SE 13TH AVENUE | Start Date: 02/13/23

WEATHER: CLEAR & DRY | OKEECHOBEE COUNTY, FLORIDA | File I.D. : 021323PM

BEGIN TIME (MILITARY):15:45 Hrs | Page : 1

AUTOMOBILES

	From North				NE PARK STREET From East				SE 13TH AVENUE From South				NE PARK STREET From West				
	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Left	Thru	Right	Other	Left	Thru	Right	U-TURN	Total
Date 02/13/23																	
15:45	0	0	0	0	1	236	0	1	1	0	3	0	0	261	3	1	507
16:00	0	0	0	0	4	214	0	0	2	0	5	0	0	284	9	1	519
16:15	0	0	0	0	2	252	0	2	1	0	1	0	0	267	4	0	529
16:30	0	0	0	0	6	258	2	1	4	0	4	0	0	222	4	3	504
Hr Total	0	0	0	0	13	960	2	4	8	0	13	0	0	1034	20	5	2059
16:45	0	0	0	0	6	257	0	1	2	0	2	0	0	221	0	2	491
17:00	0	0	0	0	11	279	0	0	0	0	2	0	0	337	1	2	632
17:15	0	0	0	0	10	259	0	0	0	0	4	0	0	293	2	1	569
17:30	0	0	0	0	4	254	0	0	1	0	4	0	0	276	5	2	546
Hr Total	0	0	0	0	31	1049	0	1	3	0	12	0	0	1127	8	7	2238
17:45	0	0	0	0	6	282	0	2	1	0	7	0	0	247	7	0	552
Hr Total	0	0	0	0	6	282	0	2	1	0	7	0	0	247	7	0	552
TOTAL	0	0	0	0	50	2291	2	7	12	0	32	0	0	2408	35	12	4849

Peak Hour Analysis By Entire Intersection for the Period: 17:00 to 18:00 on 02/13/23

Peak start	17:00				17:00				17:00				17:00				
Volume	0	0	0	0	31	1074	0	2	2	0	17	0	0	1153	15	5	
Percent	0%	0%	0%	0%	3%	97%	0%	0%	11%	0%	89%	0%	0%	98%	1%	0%	
Pk total	0				1107				19				1173				
Highest	15:45				17:00				17:45				17:00				
Volume	0	0	0	0	11	279	0	0	1	0	7	0	0	337	1	2	
Hi total	0				290				8				340				
PHF	.0				.95				.59				.86				

JW BUCKHOLZ TRAFFIC ENGINEERING INC

DAY: MONDAY | MANUAL TURNING MOVEMENT COUNTS | Site Code : 02132023

DATE: 02/13/23 | NE PARK STREET @ SE 13TH AVENUE | Start Date: 02/13/23

WEATHER: CLEAR & DRY | OKEECHOBEE COUNTY, FLORIDA | File I.D. : 021323PM

BEGIN TIME (MILITARY):15:45 Hrs | Page : 1

COMMERCIAL VEHICLES

	From North				NE PARK STREET From East				SE 13TH AVENUE From South				NE PARK STREET From West				
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Total
Date 02/13/23																	
15:45	0	0	0	0	0	33	0	0	0	0	0	0	0	30	0	0	63
16:00	0	0	0	0	0	43	0	0	0	0	0	0	0	40	0	0	83
16:15	0	0	0	0	0	43	0	0	0	0	0	0	0	46	0	0	89
16:30	0	0	0	0	0	42	0	0	0	0	0	0	0	33	0	0	75
Hr Total	0	0	0	0	0	161	0	0	0	0	0	0	0	149	0	0	310
16:45	0	0	0	0	0	32	0	0	0	0	0	0	0	44	0	0	76
17:00	0	0	0	0	1	27	0	0	0	0	0	0	0	38	0	0	66
17:15	0	0	0	0	0	30	0	0	0	0	0	0	0	39	0	0	69
17:30	0	0	0	0	0	23	0	0	0	0	0	0	0	25	0	0	48
Hr Total	0	0	0	0	1	112	0	0	0	0	0	0	0	146	0	0	259
17:45	0	0	0	0	0	29	0	0	0	0	0	0	0	26	0	0	55
Hr Total	0	0	0	0	0	29	0	0	0	0	0	0	0	26	0	0	55
TOTAL	0	0	0	0	1	302	0	0	0	0	0	0	0	321	0	0	624

Peak Hour Analysis By Entire Intersection for the Period: 17:00 to 18:00 on 02/13/23

Peak start	17:00				17:00				17:00				17:00				
Volume	0	0	0	0	1	109	0	0	0	0	0	0	0	128	0	0	
Percent	0%	0%	0%	0%	1%	99%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	
Pk total	0				110				0				128				
Highest	15:45				17:15				15:45				17:15				
Volume	0	0	0	0	0	30	0	0	0	0	0	0	0	39	0	0	
Hi total	0				30				0				39				
PHF	.0				.92				.0				.82				

JW BUCKHOLZ TRAFFIC ENGINEERING INC

DAY: MONDAY | MANUAL TURNING MOVEMENT COUNTS | Site Code : 02132023

DATE: 02/13/23 | NE PARK STREET @ SE 13TH AVENUE | Start Date: 02/13/23

WEATHER: CLEAR & DRY | OKEECHOBEE COUNTY, FLORIDA | File I.D. : 021323PM

BEGIN TIME (MILITARY):15:45 Hrs | Page : 1

PEDESTRIAN & BICYCLE

	From North				NE PARK STREET From East				SE 13TH AVENUE From South				NE PARK STREET From West				
	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Left	Thru	Right	PEDS	Total
Date 02/13/23																	
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
17:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
17:45	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Hr Total	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
TOTAL	0	0	0	6	0	0	0	1	0	0	0	1	0	0	0	0	8

Peak Hour Analysis By Entire Intersection for the Period: 17:00 to 18:00 on 02/13/23

Peak start	17:00				17:00				17:00				17:00				
Volume	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	
Percent	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Pk total	6				0				0				0				
Highest	17:45				15:45				15:45				15:45				
Volume	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
Hi total	3				0				0				0				
PHF	.50				.0				.0				.0				

APPENDIX C

FDOT TRAFFIC DATA

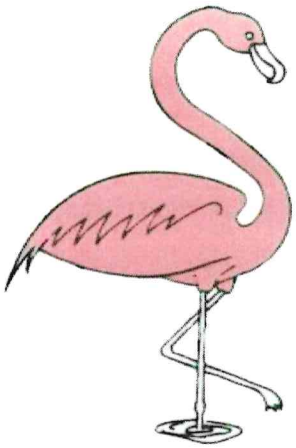
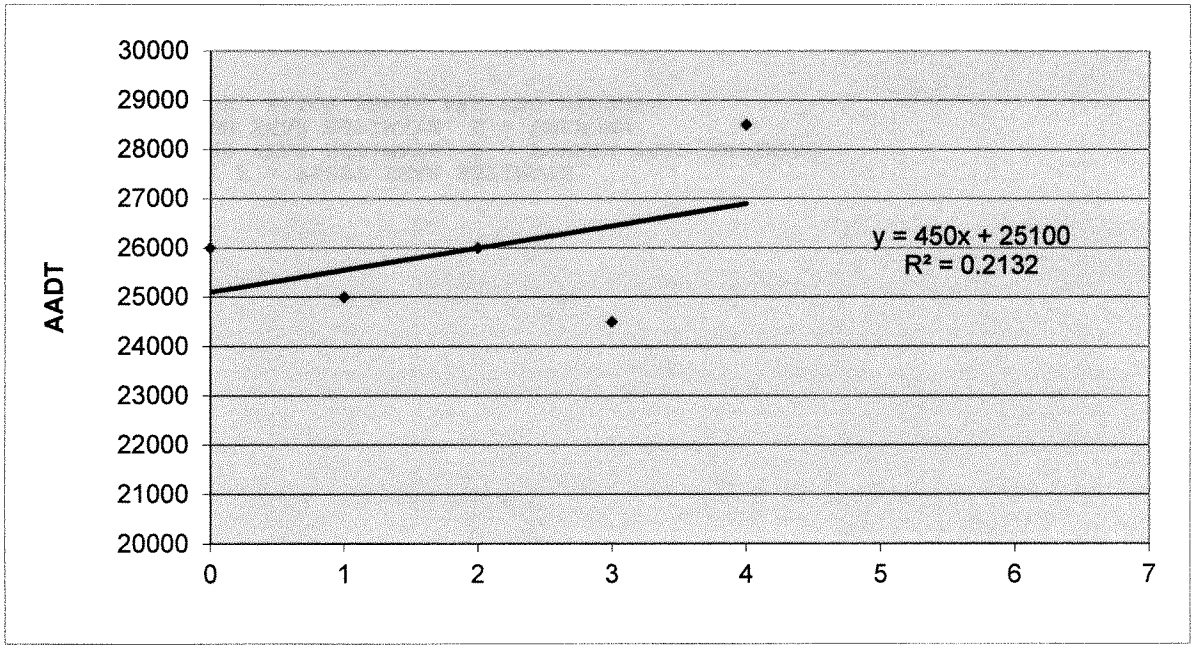


TABLE C-1
LINEAR REGRESSION ANALYSIS

SR 70, West of SR 710

Year	X	Actual AADT (Y)	**Predicted AADT**
2017	0	26000	**25100**
2018	1	25000	25550
2019	2	26000	26000
2020	3	24500	26450
2021	4	28500	26900
2022	5		27350
2023	6		27800
2024	7		**28250**

i = 1.7%



BUCKHOLZ TRAFFIC

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2021 HISTORICAL AADT REPORT

COUNTY: 91 - OKEECHOBEE

SITE: 0007 - SR 70, WEST OF SR 710/EAST OF OKEECHOBEE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	28500 C	E 14000	W 14500	9.00	58.00	18.20
2020	24500 C	E 12000	W 12500	9.00	57.20	16.50
2019	26000 C	E 13000	W 13000	9.00	57.30	14.80
2018	25000 C	E 12500	W 12500	9.00	57.90	17.90
2017	26000 C	E 13000	W 13000	9.00	58.80	15.30
2016	25500 C	E 12500	W 13000	9.00	57.40	13.00
2015	20000 C	E 10000	W 10000	9.00	56.60	13.60
2014	21000 S	E 10500	W 10500	9.00	58.10	14.40
2013	21000 F	E 10500	W 10500	9.00	58.10	14.40
2012	21000 C	E 10500	W 10500	9.00	57.50	14.40
2011	22500 F	E 11000	W 11500	9.00	56.90	11.60
2010	22500 C	E 11000	W 11500	10.99	56.24	11.60
2009	22000 C	E 11000	W 11000	10.97	57.93	13.60
2008	23000 C	E 11500	W 11500	11.05	57.88	16.50
2007	23500 C	E 11500	W 12000	10.65	60.38	15.70
2006	23500 C	E 11500	W 12000	10.64	58.36	15.50

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

COUNTY: 91
STATION: 0007
DESCRIPTION: SR 70, WEST OF SR 710/EAST OF OKEECHOBEE
START DATE: 08/11/2021
START TIME: 1730

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	22	22	14	15	73	30	23	12	14	79	152
0100	11	15	8	11	45	8	12	27	14	61	106
0200	9	8	6	8	31	17	17	15	21	70	101
0300	11	12	14	17	54	19	11	18	23	71	125
0400	36	25	46	62	169	15	24	36	50	125	294
0500	66	106	137	162	471	56	79	77	106	318	789
0600	175	188	175	204	742	123	130	203	233	689	1431
0700	209	193	193	182	777	167	239	268	324	998	1775
0800	213	180	186	166	745	221	190	207	212	830	1575
0900	161	161	148	178	648	179	172	157	196	704	1352
1000	172	170	170	161	673	194	183	191	181	749	1422
1100	183	159	191	179	712	206	198	227	188	819	1531
1200	211	204	179	200	794	184	171	195	212	762	1556
1300	197	179	174	201	751	181	187	192	192	752	1503
1400	195	209	201	222	827	184	209	227	240	860	1687
1500	254	252	202	223	931	213	239	258	212	922	1853
1600	314	255	248	243	1060	212	262	274	274	1022	2082
1700	312	300	282	223	1117	279	272	224	236	1011	2128
1800	223	188	166	129	706	252	227	175	181	835	1541
1900	154	122	125	113	514	138	149	133	115	535	1049
2000	114	145	116	115	490	132	107	81	78	398	888
2100	106	65	60	53	284	79	70	55	63	267	551
2200	60	43	48	51	202	50	39	35	49	173	375
2300	50	36	22	20	128	32	24	25	17	98	226
24-HOUR TOTALS:					12944					13148	26092

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	645	799	715	1052	715	1833
P.M.	1645	1137	1630	1099	1630	2202
DAILY	1645	1137	1630	1099	1630	2202

TRUCK PERCENTAGE 18.25 18.22 18.23

CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	174	6138	4243	64	1045	259	41	257	673	21	0	2	0	0	27	2362	12944
W	148	6049	4048	55	897	383	24	279	730	23	2	1	1	0	508	2395	13148

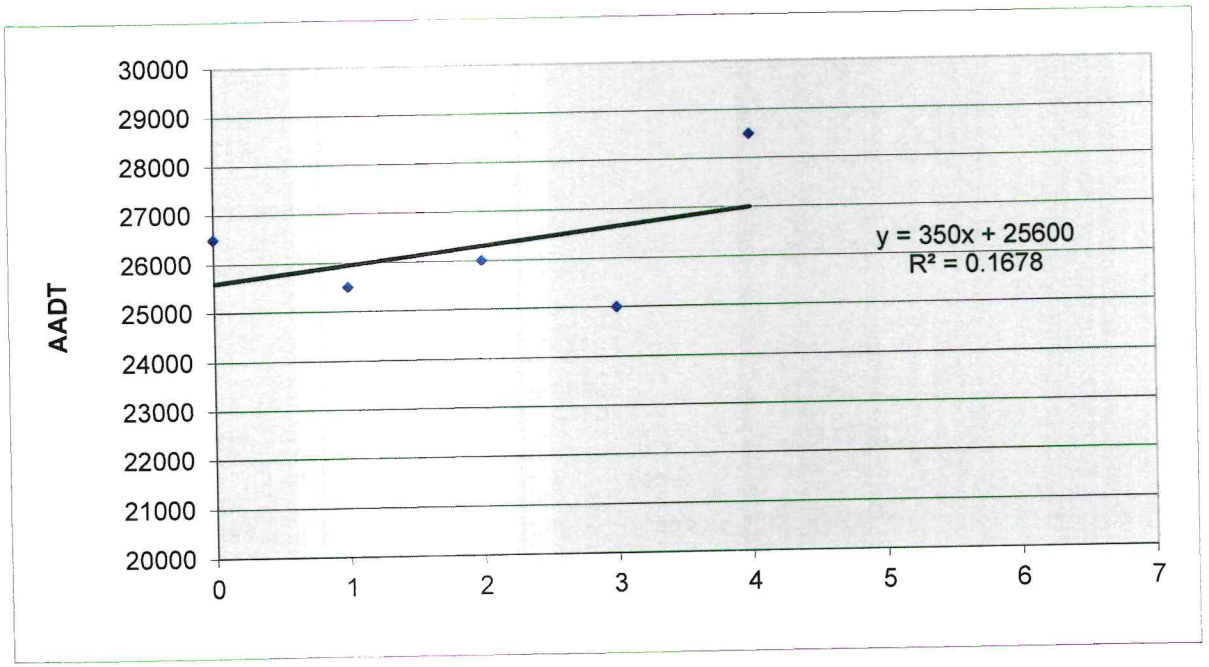
GENERATED BY SPS 5.0.55P

TABLE C-2
LINEAR REGRESSION ANALYSIS

SR 70, East of US 441

Year	X	Actual AADT (Y)	**Predicted AADT**
2017	0	26500	**25600**
2018	1	25500	25950
2019	2	26000	26300
2020	3	25000	26650
2021	4	28500	27000
2022	5		27350
2023	6		27700
2024	7		**28050**

i = 1.3%



BUCKHOLZ TRAFFIC

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2021 HISTORICAL AADT REPORT

COUNTY: 91 - OKEECHOBEE

SITE: 5012 - SR 70, EAST OF SR 15/700/US 98/441

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	28500 C	E 14000	W 14500	9.00	58.00	15.60
2020	25000 C	E 12500	W 12500	9.00	57.20	18.00
2019	26000 C	E 13000	W 13000	9.00	57.30	16.40
2018	25500 C	E 13000	W 12500	9.00	57.90	17.60
2017	26500 C	E 13500	W 13000	9.00	58.80	14.00
2016	25500 C	E 13000	W 12500	9.00	57.40	13.50
2015	27000 C	E 13500	W 13500	9.00	56.60	13.00
2014	28000 C	E 14000	W 14000	9.00	58.10	13.20
2013	26000 F	E 13000	W 13000	9.00	58.10	11.30
2012	26000 C	E 13000	W 13000	9.00	57.50	11.30
2011	29500 F	E 14500	W 15000	9.00	56.90	8.20
2010	29500 C	E 14500	W 15000	10.99	56.24	8.20
2009	31500 C	E 16000	W 15500	10.97	57.93	8.70
2008	29500 C	E 15000	W 14500	11.05	57.88	8.00
2007	31500 C	E 16000	W 15500	10.65	60.38	8.40
2006	35000 C	E 18000	W 17000	10.64	58.36	7.50

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

COUNTY: 91
STATION: 5012
DESCRIPTION: SR 70, EAST OF SR 15/700/US 98/441
START DATE: 08/11/2021
START TIME: 1645

	DIRECTION: E					DIRECTION: W					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	24	20	14	17	75	30	23	12	16	81	156
0100	12	13	6	10	41	7	11	26	18	62	103
0200	10	6	9	6	31	16	17	14	19	66	97
0300	11	13	14	19	57	21	12	17	23	73	130
0400	32	27	47	65	171	14	27	30	49	120	291
0500	69	111	141	159	480	58	76	73	102	309	789
0600	170	194	187	203	754	121	136	204	232	693	1447
0700	209	195	193	185	782	166	227	268	331	992	1774
0800	215	192	177	175	759	219	199	201	218	837	1596
0900	153	165	154	176	648	170	176	157	200	703	1351
1000	180	174	176	165	695	191	190	187	189	757	1452
1100	182	165	192	182	721	202	204	220	186	812	1533
1200	218	212	179	201	810	195	163	208	216	782	1592
1300	205	182	177	201	765	184	171	205	196	756	1521
1400	196	216	202	231	845	175	201	231	234	841	1686
1500	268	252	210	226	956	225	239	260	221	945	1901
1600	303	267	239	226	1035	217	259	261	264	1001	2036
1700	300	274	278	222	1074	256	274	221	242	993	2067
1800	224	187	163	137	711	250	235	171	187	843	1554
1900	150	124	131	109	514	149	142	142	117	550	1064
2000	118	144	120	108	490	124	103	84	79	390	880
2100	108	64	61	54	287	79	65	59	67	270	557
2200	54	48	46	57	205	43	42	31	48	164	369
2300	46	35	20	22	123	39	27	26	15	107	230
24-HOUR TOTALS:					13029					13147	26176

PEAK VOLUME INFORMATION

	DIRECTION: E		DIRECTION: W		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	645	800	715	1045	715	1833
P.M.	1645	1078	1630	1055	1630	2094
DAILY	1645	1078	1630	1055	1630	2094

TRUCK PERCENTAGE 14.63 16.56 15.60

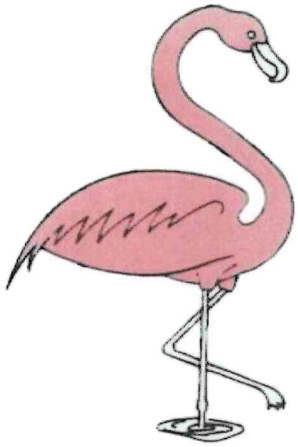
CLASSIFICATION SUMMARY DATABASE

DIR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	TOTTRK	TOTVOL
E	138	7300	3611	50	665	198	40	200	723	27	0	2	1	0	74	1906	13029
W	141	6641	4132	45	874	247	20	220	743	24	2	1	1	0	56	2177	13147

GENERATED BY SPS 5.0.55P

APPENDIX D

CAPACITY CALCULATIONS
UNSIGNALIZED INTERSECTIONS



AM PEAK HOUR

HCS Two-Way Stop-Control Report

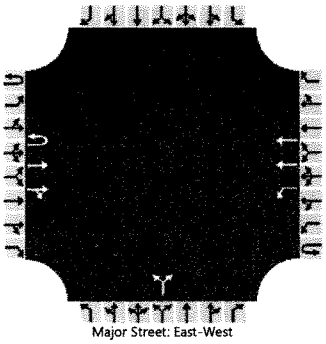
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	2/14/2023
Analysis Year	2023
Time Analyzed	Weekday AM Peak Hour
Intersection Orientation	East-West
Project Description	#23-1820

Site Information

Intersection	NE Park Street / SE 13th Avenue
Jurisdiction	Okeechobee County
East/West Street	NE Park Street
North/South Street	SE 13th Avenue
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	1	0	2	0	0	1	2	0		0	1	0		0	0	0
Configuration	U		T	TR		L	T				LR					
Volume (veh/h)	4		879	4	0	7	1114			2		7				
Percent Heavy Vehicles (%)	0				0	14				0		29				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	6.4					4.1				7.5		6.9				
Critical Headway (sec)	6.40					4.38				6.80		7.48				
Base Follow-Up Headway (sec)	2.5					2.2				3.5		3.3				
Follow-Up Headway (sec)	2.50					2.34				3.50		3.59				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)	5					8					10					
Capacity, c (veh/h)	218					605					350					
v/c Ratio	0.02					0.01					0.03					
95% Queue Length, Q_{95} (veh)	0.1					0.0					0.1					
Control Delay (s/veh)	21.9					11.0					15.6					
Level of Service (LOS)	C					B					C					
Approach Delay (s/veh)	0.1				0.1				15.6							
Approach LOS	A				A				C							

HCS Two-Way Stop-Control Report

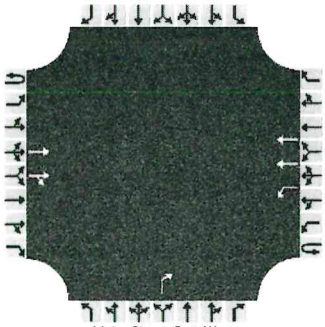
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	2/14/2023
Analysis Year	2023
Time Analyzed	Weekday AM Peak Hour
Intersection Orientation	East-West
Project Description	#23-1820

Site Information

Intersection	NE Park Street / Hampton Inn Driveway
Jurisdiction	Okeechobee County
East/West Street	NE Park Street
North/South Street	Hampton Inn Driveway
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	1		0	0	0
Configuration			T	TR		L	T					R				
Volume (veh/h)			875	2	0	4	1116					14				
Percent Heavy Vehicles (%)					0	2						2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized										No						
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1						6.9				
Critical Headway (sec)						4.14						6.94				
Base Follow-Up Headway (sec)						2.2						3.3				
Follow-Up Headway (sec)						2.22						3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						5						16				
Capacity, c (veh/h)						676						509				
v/c Ratio						0.01						0.03				
95% Queue Length, Q_{95} (veh)						0.0						0.1				
Control Delay (s/veh)						10.4						12.3				
Level of Service (LOS)						B						B				
Approach Delay (s/veh)					0.0				12.3							
Approach LOS					A				B							

HCS Two-Way Stop-Control Report

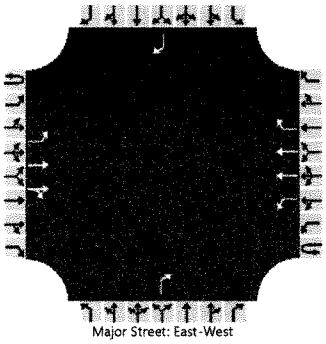
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	7/7/2023
Analysis Year	2024
Time Analyzed	AM Peak Hr. BUILD Traffic
Intersection Orientation	East-West
Project Description	#23-1820

Site Information

Intersection	NE Park Street / SE 13th Avenue
Jurisdiction	Okeechobee County
East/West Street	NE Park Street
North/South Street	SE 13th Avenue
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	0	1		0	0	1
Configuration		L	T	TR		L	T	R				R				R
Volume (veh/h)	4	18	917	4	0	7	1133	18				9				51
Percent Heavy Vehicles (%)	0	2			0	14						29				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No				No				No			
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	6.4	4.1				4.1						6.9				6.9
Critical Headway (sec)	6.40	4.14				4.38						7.48				6.94
Base Follow-Up Headway (sec)	2.5	2.2				2.2						3.3				3.3
Follow-Up Headway (sec)	2.50	2.22				2.34						3.59				3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		26				8						10				59
Capacity, c (veh/h)		383				580						425				406
v/c Ratio		0.07				0.01						0.02				0.15
95% Queue Length, Q_{95} (veh)		0.2				0.0						0.1				0.5
Control Delay (s/veh)		15.1				11.3						13.7				15.4
Level of Service (LOS)		C				B						B				C
Approach Delay (s/veh)	0.4				0.1				13.7				15.4			
Approach LOS	A				A				B				C			

HCS Two-Way Stop-Control Report

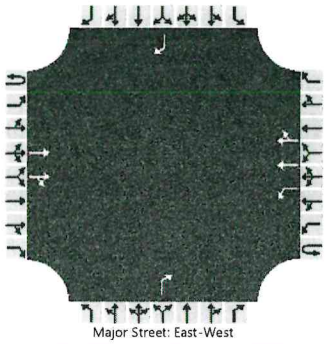
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	7/7/2023
Analysis Year	2024
Time Analyzed	AM Peak Hr. BUILD Traffic
Intersection Orientation	East-West
Project Description	#23-1820

Site Information

Intersection	NE Park St. / Hampton Inn / NE 12th Ave.
Jurisdiction	Okeechobee County
East/West Street	NE Park Street
North/South Street	Hampton Inn Drive / NE 12th Avenue
Peak Hour Factor	0.86
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	1		0	0	1
Configuration			T	TR		L	T	TR				R				R
Volume (veh/h)			906	2	25	4	1159	0				14				1
Percent Heavy Vehicles (%)					2	2						2				0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.44	4.14						6.94				6.90
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.52	2.22						3.32				3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						34						16				1
Capacity, c (veh/h)						320						495				402
v/c Ratio						0.11						0.03				0.00
95% Queue Length, Q_{95} (veh)						0.4						0.1				0.0
Control Delay (s/veh)						17.6						12.5				14.0
Level of Service (LOS)						C						B				B
Approach Delay (s/veh)					0.4				12.5				14.0			
Approach LOS					A				B				B			

PM PEAK HOUR

HCS Two-Way Stop-Control Report

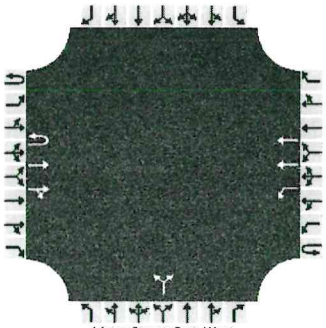
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	2/14/2023
Analysis Year	2023
Time Analyzed	Weekday PM Peak Hour
Intersection Orientation	East-West
Project Description	#23-1820

Site Information

Intersection	NE Park Street / SE 13th Avenue
Jurisdiction	Okeechobee County
East/West Street	NE Park Street
North/South Street	SE 13th Avenue
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	1	0	2	0	0	1	2	0		0	1	0		0	0	0
Configuration	U		T	TR		L	T				LR					
Volume (veh/h)	5		1230	14	2	31	1136			2		16				
Percent Heavy Vehicles (%)	0				0	3				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	6.4				6.4	4.1				7.5		6.9				
Critical Headway (sec)	6.40				6.40	4.16				6.80		6.90				
Base Follow-Up Headway (sec)	2.5				2.5	2.2				3.5		3.3				
Follow-Up Headway (sec)	2.50				2.50	2.23				3.50		3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)	5					36					20					
Capacity, c (veh/h)	234					449					329					
v/c Ratio	0.02					0.08					0.06					
95% Queue Length, Q_{95} (veh)	0.1					0.3					0.2					
Control Delay (s/veh)	20.8					13.7					16.6					
Level of Service (LOS)	C					B					C					
Approach Delay (s/veh)	0.1				0.4				16.6							
Approach LOS	A				A				C							

HCS Two-Way Stop-Control Report

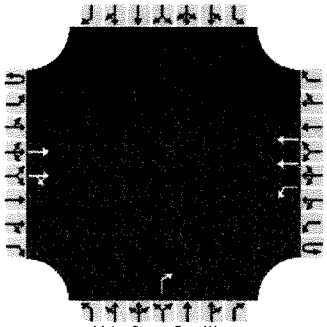
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	2/14/2023
Analysis Year	2023
Time Analyzed	Weekday PM Peak Hour
Intersection Orientation	East-West
Project Description	#23-1820

Site Information

Intersection	NE Park Street / Hampton Inn Driveway
Jurisdiction	Okeechobee County
East/West Street	NE Park Street
North/South Street	Hampton Inn Driveway
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	1		0	0	0
Configuration			T	TR		L	T					R				
Volume (veh/h)			1232	36	0	19	1123					17				
Percent Heavy Vehicles (%)					0	2						2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized										No						
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1						6.9				
Critical Headway (sec)						4.14						6.94				
Base Follow-Up Headway (sec)						2.2						3.3				
Follow-Up Headway (sec)						2.22						3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						21						19				
Capacity, c (veh/h)						487						384				
v/c Ratio						0.04						0.05				
95% Queue Length, Q_{95} (veh)						0.1						0.2				
Control Delay (s/veh)						12.7						14.9				
Level of Service (LOS)						B						B				
Approach Delay (s/veh)					0.2				14.9							
Approach LOS					A				B							

HCS Two-Way Stop-Control Report

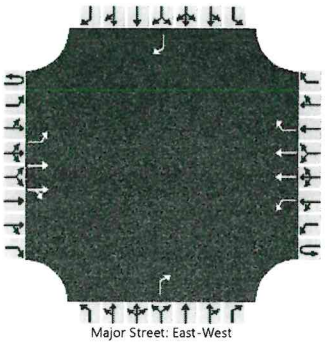
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	7/7/2023
Analysis Year	2024
Time Analyzed	PM Peak Hr. BUILD Traffic
Intersection Orientation	East-West
Project Description	#23-1820

Site Information

Intersection	NE Park Street / SE 13th Avenue
Jurisdiction	Okeechobee County
East/West Street	NE Park Street
North/South Street	SE 13th Avenue
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	2	0	0	1	2	1		0	0	1		0	0	1
Configuration		L	T	TR		L	T	R				R				R
Volume (veh/h)	14	88	1336	14	2	31	1167	84				18				130
Percent Heavy Vehicles (%)	2	2			0	3						0				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized					No				No				No			
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)	6.4	4.1			6.4	4.1						6.9				6.9
Critical Headway (sec)	6.44	4.14			6.40	4.16						6.90				6.94
Base Follow-Up Headway (sec)	2.5	2.2			2.5	2.2						3.3				3.3
Follow-Up Headway (sec)	2.52	2.22			2.50	2.23						3.30				3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		112				36						20				143
Capacity, c (veh/h)		370				400						363				417
v/c Ratio		0.30				0.09						0.05				0.34
95% Queue Length, Q_{95} (veh)		1.3				0.3						0.2				1.5
Control Delay (s/veh)		18.9				14.9						15.5				18.1
Level of Service (LOS)		C				B						C				C
Approach Delay (s/veh)	1.3				0.4				15.5				18.1			
Approach LOS	A				A				C				C			

HCS Two-Way Stop-Control Report

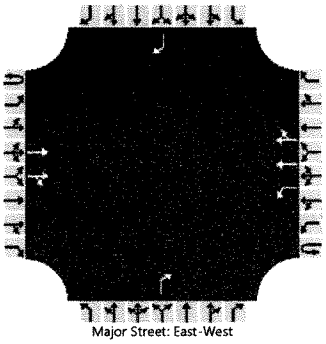
General Information

Analyst	J. Buckholz
Agency/Co.	BUCKHOLZ TRAFFIC
Date Performed	7/7/2023
Analysis Year	2024
Time Analyzed	PM Peak Hr. BUILD Traffic
Intersection Orientation	East-West
Project Description	#23-1820

Site Information

Intersection	NE Park St. / Hampton Inn / NE 12th Ave.
Jurisdiction	Okeechobee County
East/West Street	NE Park Street
North/South Street	Hampton Inn Driveway / NE 12th Avenue
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	2	0	0	1	2	0		0	0	1		0	0	1
Configuration			T	TR		L	T	TR				R				R
Volume (veh/h)			1347	37	88	19	1182	21				17				46
Percent Heavy Vehicles (%)					2	2						2				2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized									No				No			
Median Type | Storage	Left Only								1							

Critical and Follow-up Headways

Base Critical Headway (sec)					6.4	4.1						6.9				6.9
Critical Headway (sec)					6.44	4.14						6.94				6.94
Base Follow-Up Headway (sec)					2.5	2.2						3.3				3.3
Follow-Up Headway (sec)					2.52	2.22						3.32				3.32

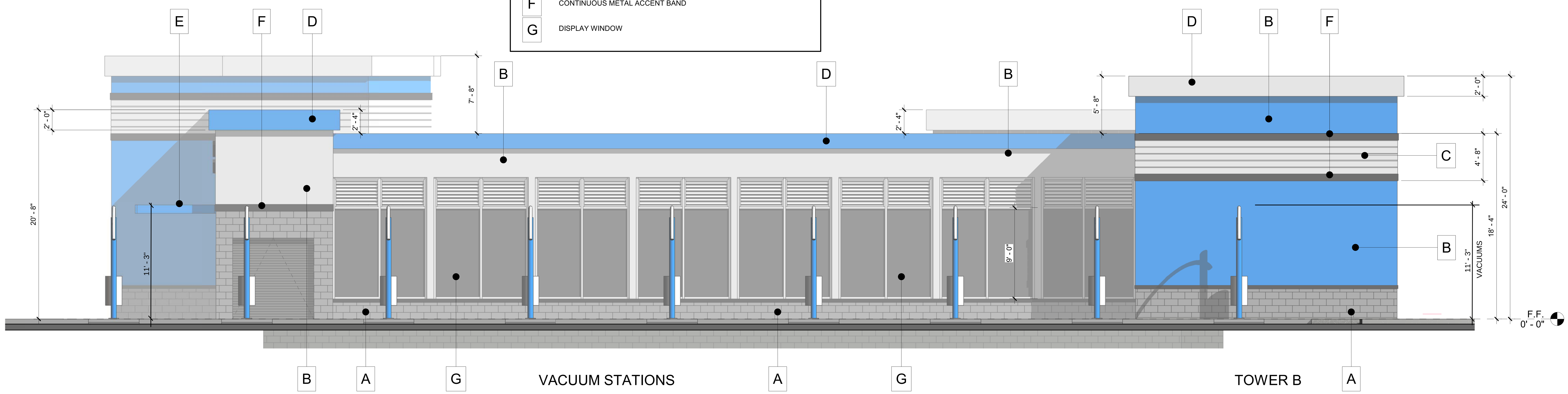
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						118						19				51
Capacity, c (veh/h)						164						348				405
v/c Ratio						0.72						0.05				0.12
95% Queue Length, Q_{95} (veh)						4.3						0.2				0.4
Control Delay (s/veh)						68.7						15.9				15.2
Level of Service (LOS)						F						C				C
Approach Delay (s/veh)					5.6				15.9				15.2			
Approach LOS					A				C				C			

IF PLOTTED AT 11" X 17", SCALE IS ONE HALF AS NOTED.

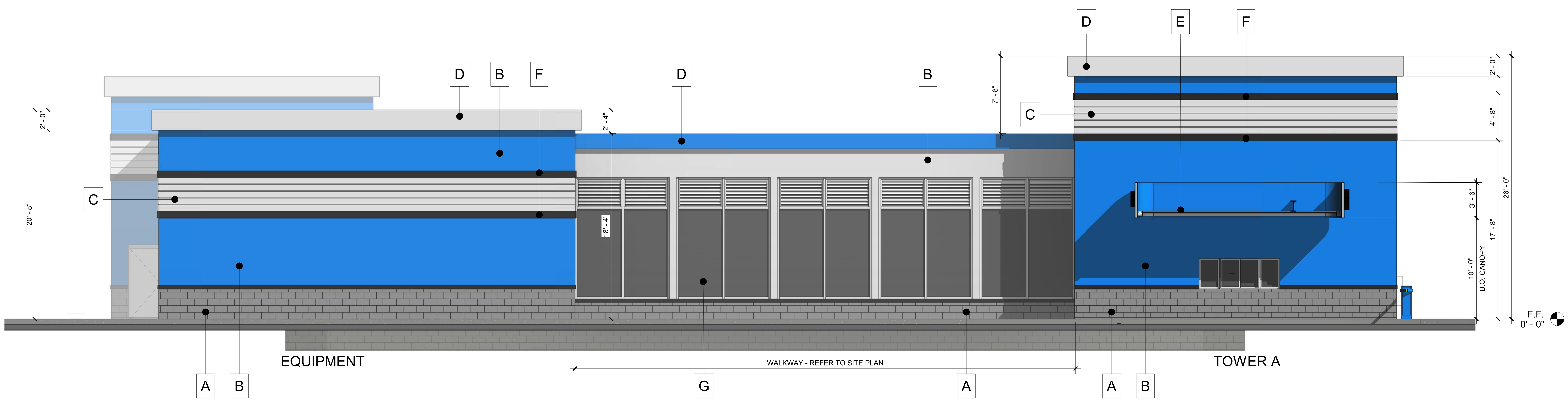
ELEVATION NOTES:

A	SPLIT FACE BLOCK
B	SAND FINISH STUCCO
C	STUCCO FINISH HORIZONTAL BANDS
D	CONTINUOUS PARAPET CORNICE - REFER TO ELEVATIONS FOR SIZE.
E	AWNING - REFER TO BUILDING PLANS
F	CONTINUOUS METAL ACCENT BAND
G	DISPLAY WINDOW



2 PROPOSED ELEVATION - WEST

Scale: 3/16" = 1'-0"



1 PROPOSED ELEVATION - EAST

Scale: 3/16" = 1'-0"

C:\Project Files\Car Wash Concept - 22014 - 6525 E COLONIAL - SD_Craig.rvt

IF PLOTTED AT 11" X 17", SCALE IS ONE HALF AS NOTED.

ARCHITECTURE
ENGINEERING
PLANNING
SARASOTA, FLORIDA
941-366-2477 FAX: 941-365-5446
www.pwg.net
Parker Walter GROUP INC

CAR WASH CONCEPT

6525 E COLONIAL DRIVE
ORLANDO, FL 32807

Issue Dates

Revisions

1	10-06-22	RESPONSE COMMENTS

DESIGN - EXTERIOR ELEVATION

Scale : As indicated

Plot Date
10/6/2022 9:54:11 AM

Project No.
22013

Drawn By
CT

DS-5.10

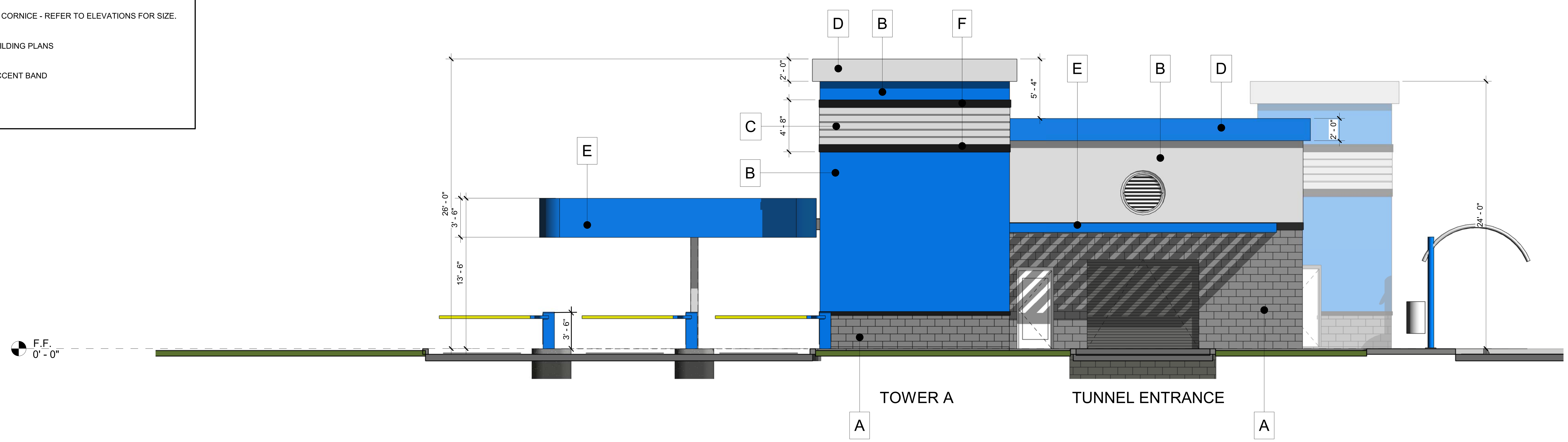
STATE OF FLORIDA
THOMAS R WALTER
7305
REGISTERED ARCHITECT

Date of Issue

IF PLOTTED AT 11" X 17", SCALE IS ONE HALF AS NOTED.

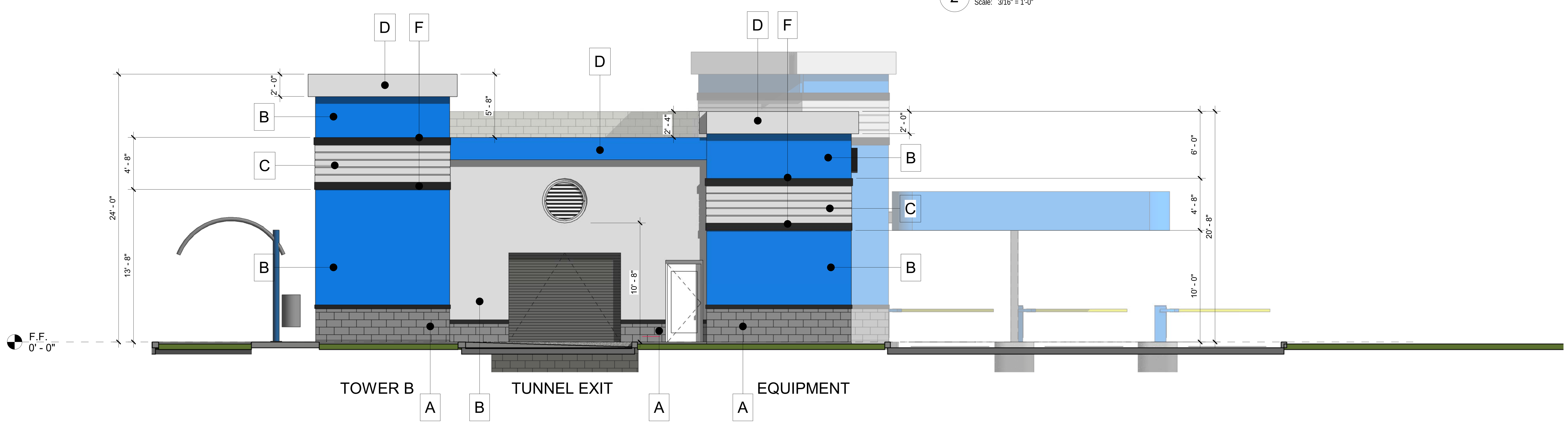
ELEVATION NOTES:

A	SPLIT FACE BLOCK
B	SAND FINISH STUCCO
C	STUCCO FINISH HORIZONTAL BANDS
D	CONTINUOUS PARAPET CORNICE - REFER TO ELEVATIONS FOR SIZE.
E	AWNING - REFER TO BUILDING PLANS
F	CONTINUOUS METAL ACCENT BAND
G	DISPLAY WINDOW



2 PROPOSED ELEVATION - NORTH

Scale: 3/16" = 1'-0"



1 PROPOSED ELEVATION - SOUTH

Scale: 3/16" = 1'-0"

C:\Project Files\Car Wash Concept - 22014 - 6525 E COLONIAL - SD_Craig.rvt

IF PLOTTED AT 11" X 17", SCALE IS ONE HALF AS NOTED.

Parker Walter GROUP INC.
ARCHITECTURE
ENGINEERING
PLANNING
SARASOTA, FLORIDA
941-366-2477 FAX: 941-365-5446
Brent A. Parker AR 7299 Tom Thornburgh PE 38293
Thomas R. Walter AR 7305 AA 2839 / CA 27268
www.pwg.net

CAR WASH CONCEPT

6525 E COLONIAL DRIVE
ORLANDO, FL 32807

Issue Dates

Revisions

1	10-06-22	RESPONSE COMMENTS

DESIGN - EXTERIOR ELEVATION

Scale : As indicated

Plot Date
10/6/2022 9:54:25 AM

Project No.
22013

Drawn By
CT

DS-5.20

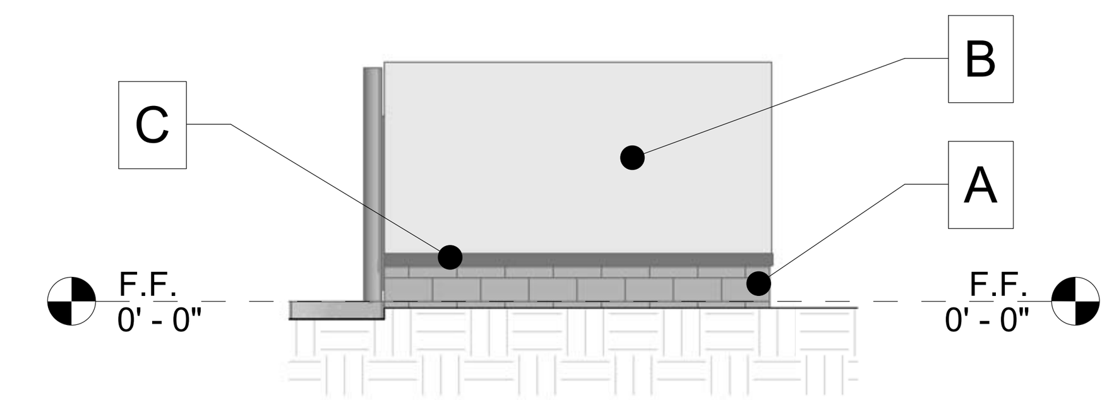
STATE OF FLORIDA
THOMAS R WALTER
7305
REGISTERED ARCHITECT

Date of Issue

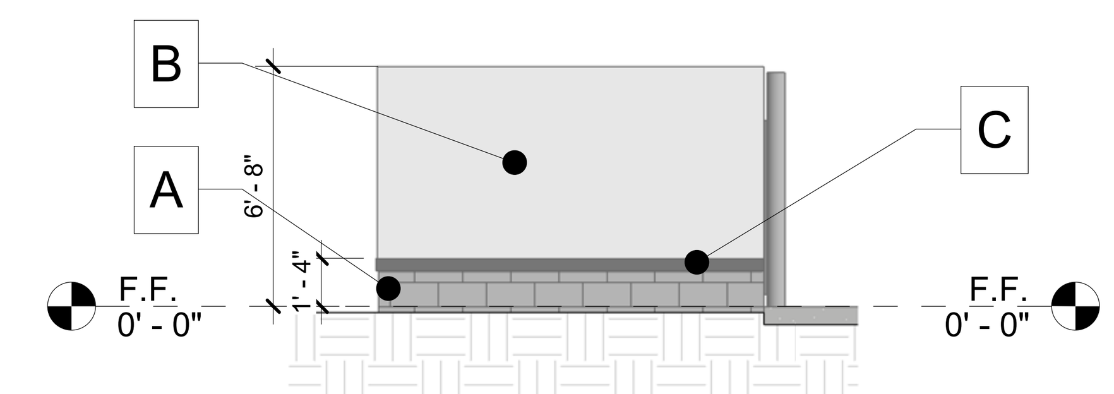
IF PLOTTED AT 11" X 17", SCALE IS ONE HALF AS NOTED.

ELEVATION NOTES:

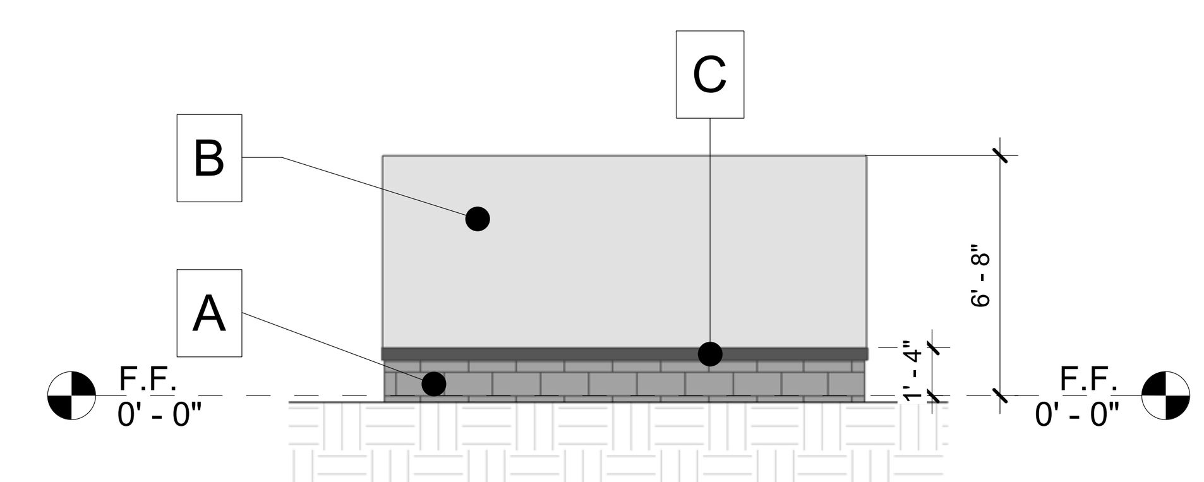
A	SPLIT FACE BLOCK
B	SAND FINISH STUCCO
C	STUCCO FINISH HORIZONTAL BANDS
D	CONTINUOUS PARAPET CORNICE - REFER TO ELEVATIONS FOR SIZE.
E	AWNING - REFER TO BUILDING PLANS
F	CONTINUOUS METAL ACCENT BAND
G	DISPLAY WINDOW



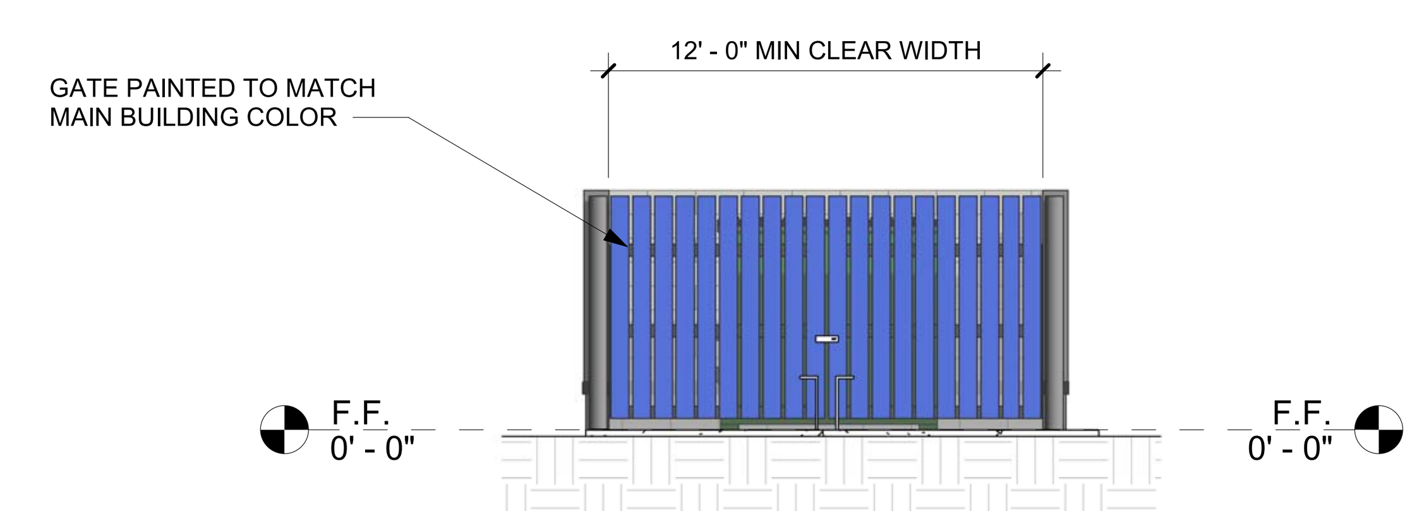
4 TRASH ENCLOSURE - WEST ELEVATION
Scale: 3/16" = 1'-0"



3 TRASH ENCLOSURE - EAST ELEVATION
Scale: 3/16" = 1'-0"



2 TRASH ENCLOSURE - SOUTH ELEVATION
Scale: 3/16" = 1'-0"



1 TRASH ENCLOSURE - NORTH ELEVATION
Scale: 3/16" = 1'-0"

C:\Project Files\Car Wash Concept - 22014 - 6525 E COLONIAL - SD_Craig.rvt

IF PLOTTED AT 11" X 17", SCALE IS ONE HALF AS NOTED.

ARCHITECTURE
ENGINEERING
PLANNING
SARASOTA, FLORIDA
941-366-2477 FAX: 941-365-5446
Brent A. Parker AR7739 Tom Thornburgh PE 38293
Thomas R. Walter AR7305 AA 2839 / CA 27268
www.pwg.net
Parker Walter GROUP INC

CAR WASH CONCEPT
6525 E COLONIAL DRIVE
ORLANDO, FL 32807

Issue Dates

Revisions		
1	10-06-22	RESPONSE COMMENTS

TRASH ENCLOSURE ELEVATIONS

Scale : As indicated

Plot Date
10/6/2022 9:54:33 AM

Project No.
22013

Drawn By
CT

DS-5.30

STATE OF FLORIDA
THOMAS R WALTER
7305
REGISTERED ARCHITECT

Date of Issue

IF PLOTTED AT 11" X 17", SCALE IS ONE HALF AS NOTED.

3 OVERALL SITE
Scale: 12" = 1'-0"

2 SITE - ENTRY
Scale: 12" = 1'-0"

1 ENTRY - TUNNEL
Scale: 12" = 1'-0"

C:\Project Files\Car Wash Concept - 22014 - 6525 E COLONIAL - SD_Craig.rvt

IF PLOTTED AT 11" X 17", SCALE IS ONE HALF AS NOTED.

ARCHITECTURE
ENGINEERING
PLANNING
SARASOTA, FLORIDA
941-366-2477 FAX: 941-365-5446
Brent A. Parker AR 7299 Tom Thornburgh PE 38293
Thomas R. Walter AR 7305 AA 2839 / CA 27268
www.pwg.net
Parker Walter GROUP INC.

CAR WASH CONCEPT
6525 E COLONIAL DRIVE
ORLANDO, FL 32807

Issue Dates

Revisions

DESIGN - 3D VIEWS

Scale : 12" = 1'-0"

Plot Date
10/6/2022 9:54:50 AM
Project No.
22013
Drawn By
CT

DS-11.10

STATE OF FLORIDA
THOMAS R WALTER
7305
REGISTERED ARCHITECT

Date of Issue

OKEECHOBEE UTILITY AUTHORITY
100 SW 5th Avenue
Okeechobee, Florida 34974-4221

(863) 763-9460
FAX: (863) 467-4335

November 29, 2022

Mr. Johnny Herbert IV, P.E.
American Civil Engineering Co.
207 N. Moss Road, Suite 211
Winter Springs, Florida 32708

Ref: **Water Capacity Request**

Parcel ID: 2-15-37-35-0A00-00009-0000
2-15-37-35-0A00-00009-A000
2-15-37-35-0A00-00010-0000
2-15-37-35-0A00-00010-0010
2-15-37-35-0A00-00011-0000

Dear Mr. Herbert:

In reference to a request for the availability of water capacity to the subject property, I submit the following information for your use in meeting the potable water demand requirements for the project.

The Okeechobee Utility Authority owns and operates two water treatment plants with a combined treatment capacity of 6 MGD. During the twelve month period from June 2021 to May 2022, the maximum daily flow was 3.86 MGD, or about 64% of capacity. At the present time, the OUA has excess capacity at the treatment plants. The OUA does have a potable water distribution main in the State Road 70E right-of-way. Any upgrade requirements to the water main infrastructure due to the design or demands of the proposed project will be at the property owners' expense.

Should you have any questions, comments or concerns with regards to the water system capacity, please contact the OUA at 863-763-9460.

Sincerely,

John F. Hayford
Executive Director
Okeechobee Utility Authority

OKEECHOBEE UTILITY AUTHORITY
100 SW 5th Avenue
Okeechobee, Florida 34974-4221

(863) 763-9460
FAX: (863) 467-4335

November 29, 2022

Mr. Johnny Herbert IV, P.E.
American Civil Engineering Co.
207 N. Moss Road, Suite 211
Winter Springs, Florida 32708

Ref: **Wastewater Capacity Request**

Parcel ID: 2-15-37-35-0A00-00009-0000
2-15-37-35-0A00-00009-A000
2-15-37-35-0A00-00010-0000
2-15-37-35-0A00-00010-0010
2-15-37-35-0A00-00011-0000

Dear Mr. Herbert:

In reference to a request of the availability of wastewater capacity to the subject property, I submit the following information for your use in the permitting for the above referenced project.

The Okeechobee Utility Authority owns and operates one regional wastewater treatment plant with a FDEP permitted capacity of 3.0 MGD.

During the twelve month period from June 2021 to May 2022, the annual average daily demand was 0.956 MGD, or about 32% of the current 3.0 MGD treatment capacity. The OUA has wastewater service near the subject property. Any extensions or upgrade requirements to the wastewater system due to the designs or demands of the proposed project will be at the project owner's expense.

Should you have any other questions, comments or concerns with regards to the wastewater system capacity, please contact the OUA at 863.763.9460.

Sincerely,

John F. Hayford, P.E.
Executive Director

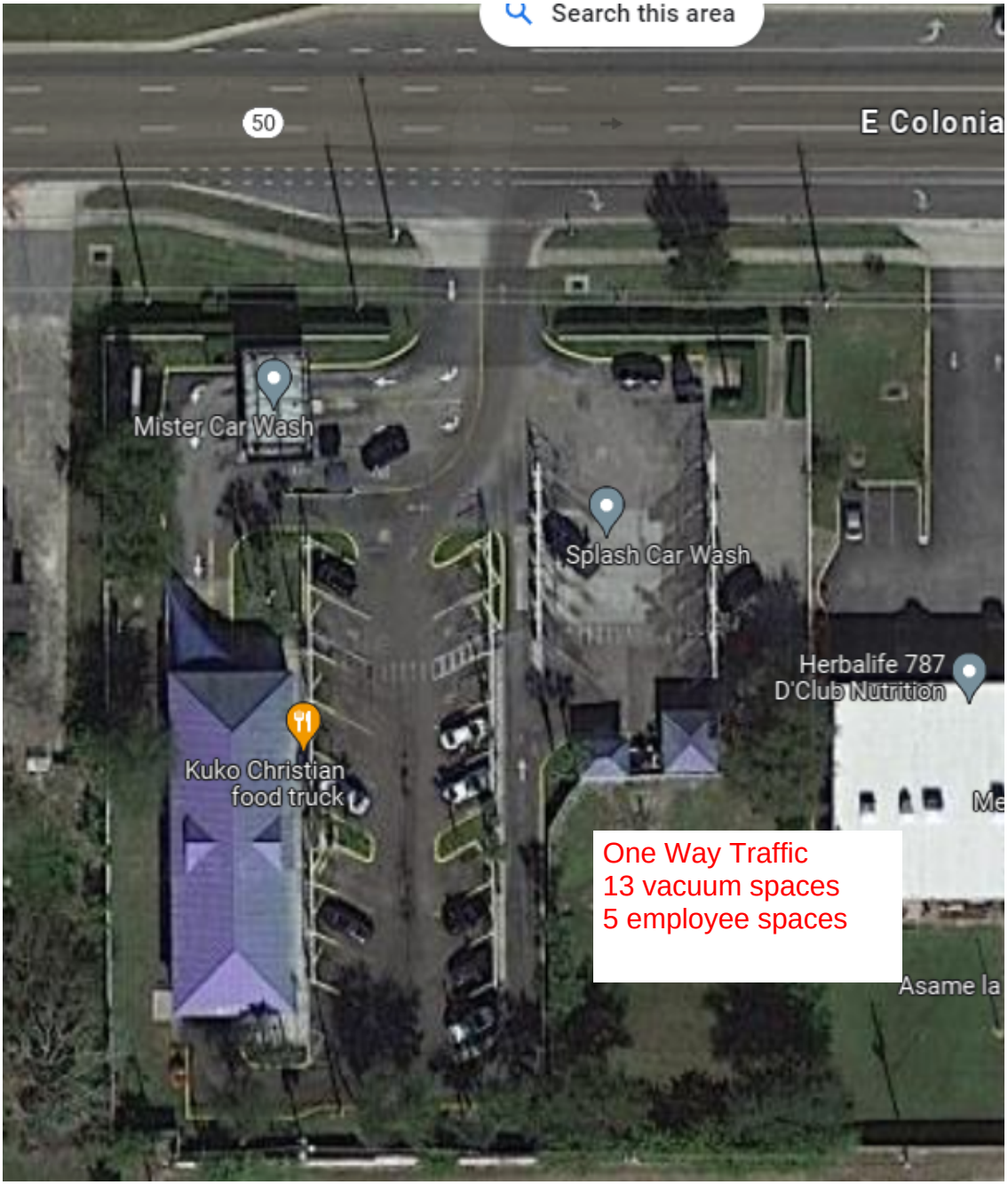
SEC 90-483 Modification of Parking Requirements

Per Code 90-512(2) 1-space per 150SF
4,600 / 150 = 31 spaces

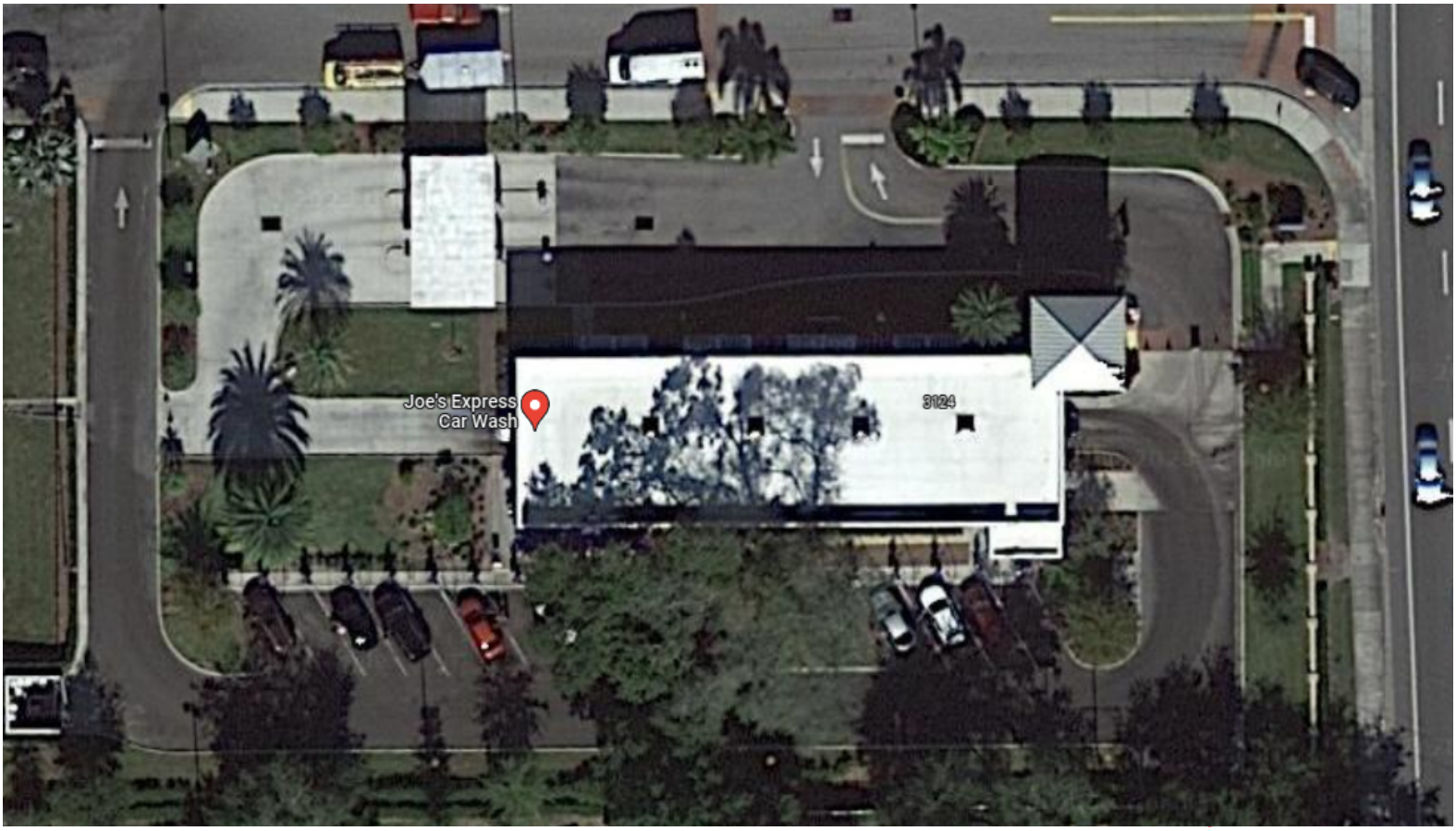
Max reduction allowed per 90-483 in CHV zoned 20%
24/31 = 0.77
Proposed spaces = 24
justification based on equivalent peers throughout state

	Spaces	
EXH	Vacuum	Employee
1	13	5
2	14	0
3	16	1
4	19	0
5	18	1
6	20	4
7	17	2
8	19	6
AVG	17	2.4
PROPOSED	19	5

Proposed carwash exceeds the peer average in both vacuums and employee parking.


Search this area
50
E Colonia
Mister Car Wash
Splash Car Wash
Herbalife 787
D'Club Nutrition
Kuko Christian
food truck
One Way Traffic
13 vacuum spaces
5 employee spaces
Asame la

EXH #1



14 vacuum spaces
0 employee spaces

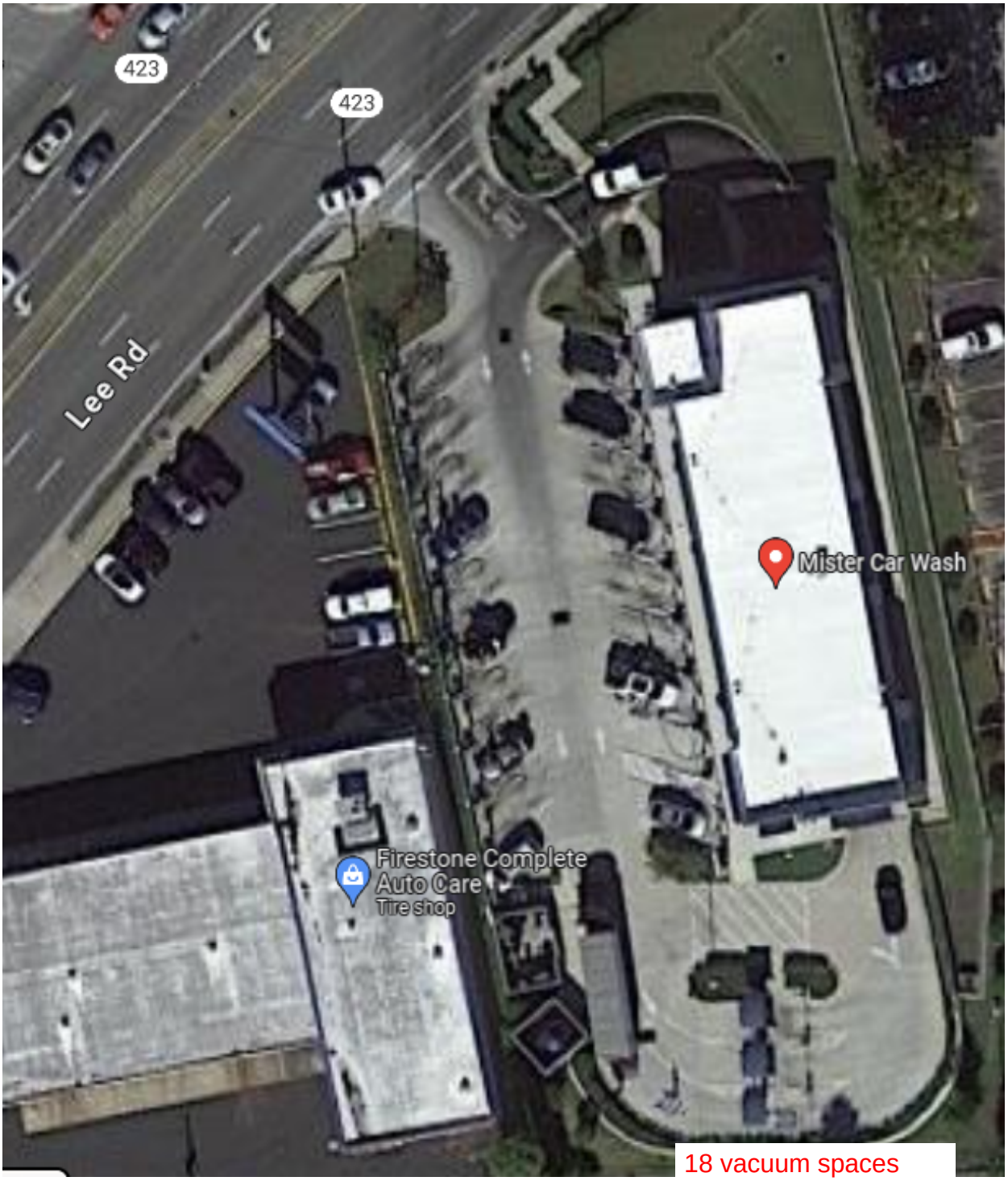
EXH #2


Mister Car Wash
Blue Water Express Wash
14652
14542
One Way Traffic
16 vacuum spaces
1 employee spaces
Old Cheney Hwy
Google

EXH #3

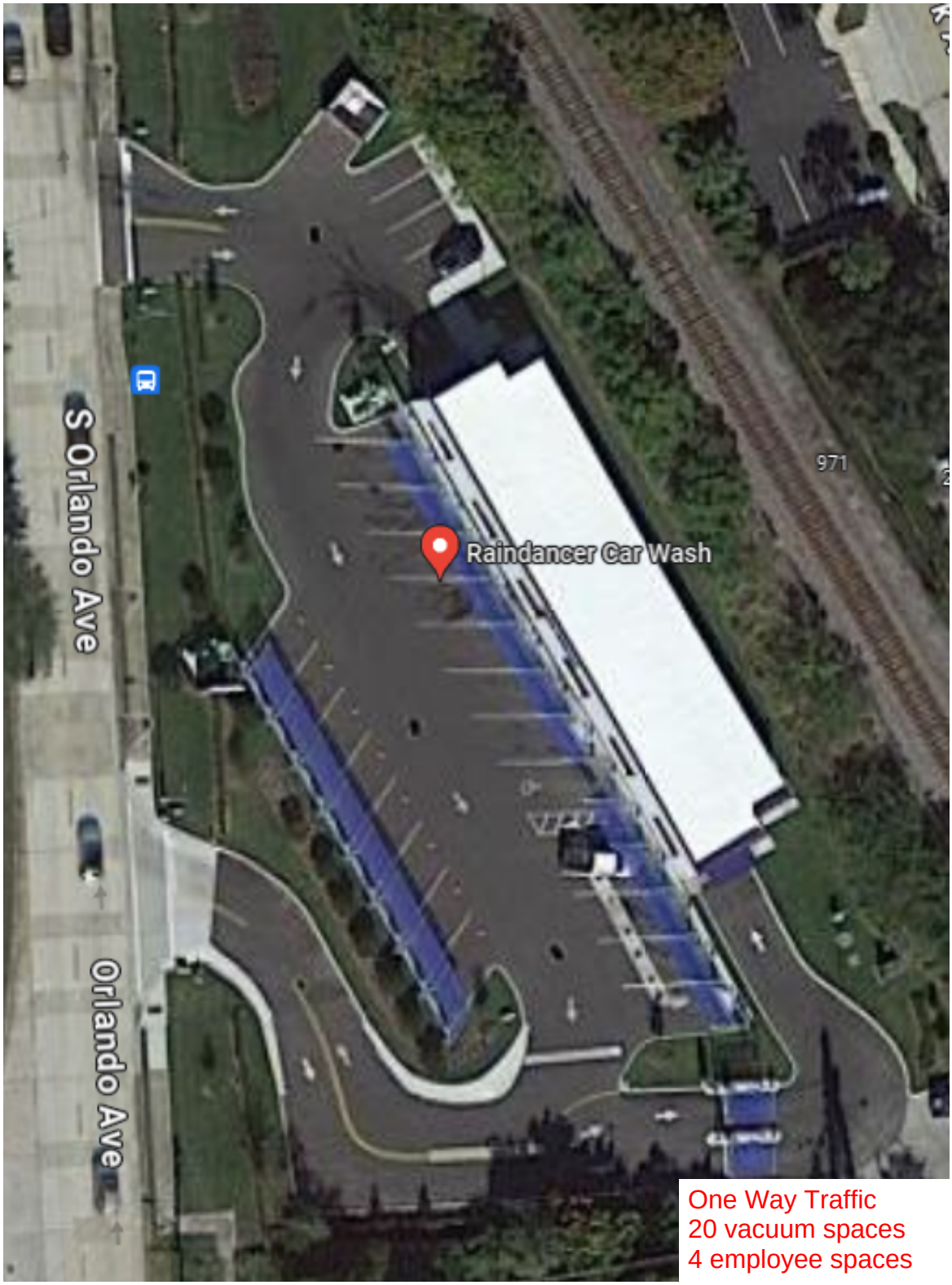

Aloma Self Storage
3629
One Way Traffic
19 vacuum spaces
0 employee spaces

EXH #4



18 vacuum spaces
1 employee spaces

EXH #5

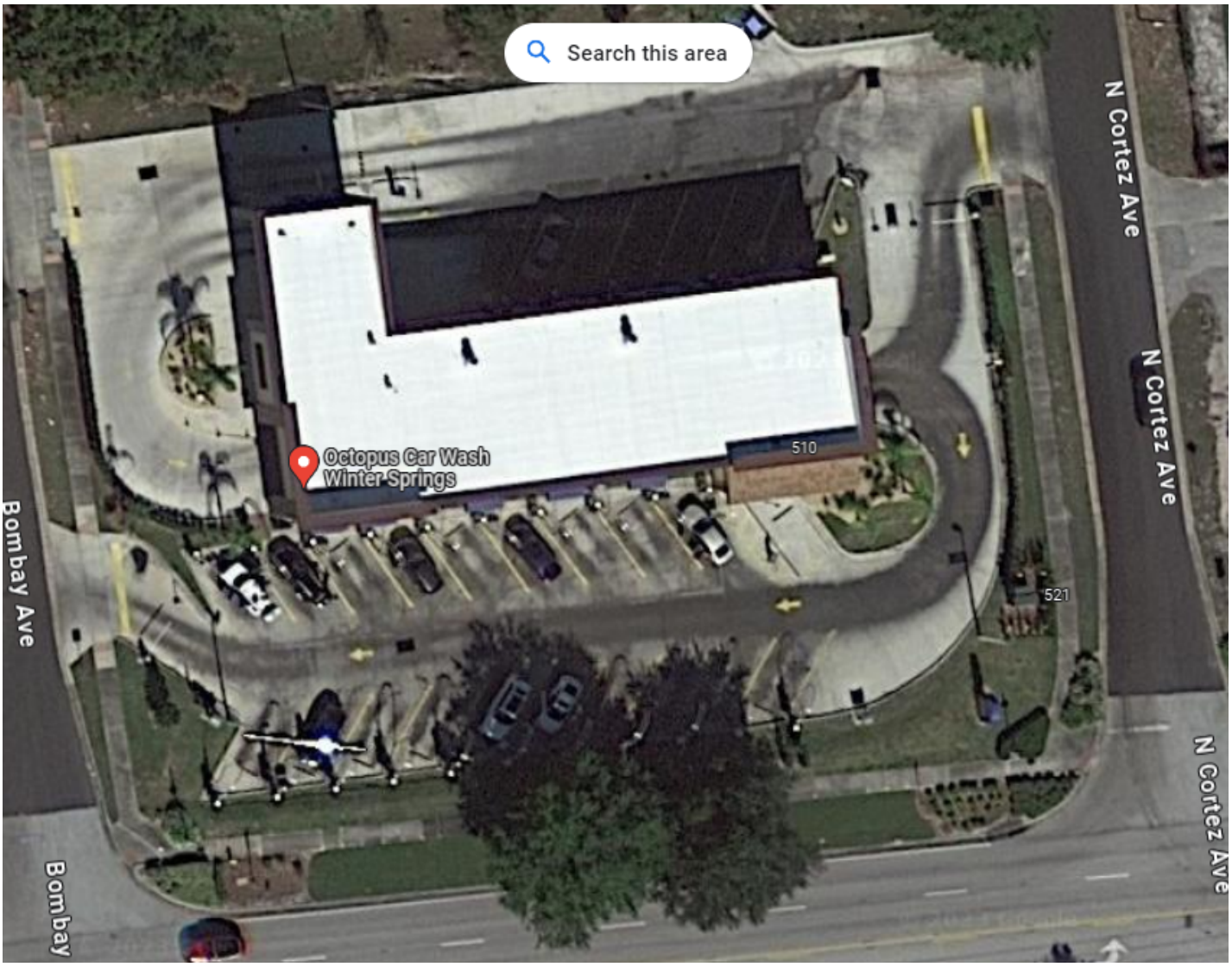


One Way Traffic
20 vacuum spaces
4 employee spaces

EXH #6

One Way Traffic
17 vacuum spaces
2 employee spaces

EXH #7



One Way Traffic
19 vacuum spaces
6 employee spaces

EXH #8